# Model

Package in package "

Model Version Phase 1.0 Proposed km created on 11.02.2025. Last modified 11.02.2025

# **Requirements Model**

Package in package 'Model'

Requirements Model

Author:

Requirements Model Version Phase 1.0 Proposed created on 08.11.2012. Last modified 08.11.2012

# **Requirements Model diagram**

Custom diagram in package 'Requirements Model'

Requirements Model Version 1.0 seid.maglajlic created on 19.11.2005. Last modified 27.05.2013

seid.maglajlic Created: 19.11.2005 00:00:00 Updated: 27.05.2013 07:59:18 business partners about the + Through-Going coaches (through-coaches) Planning reference for path planning manage Through-Going coaches (through-coaches) IM path construction Referncing the business cases in object model (ex.

Figure 1: Requirements Model

#### IM

Actor «business actor» in package 'Stakeholders'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### CONNECTORS

UseCaseLink Source -> Destination

From: IM : Actor, Public

To: PathMgmt : UseCase, Public

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) Conference (e.g. FTE,

RNE) «business use case»

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) IM-IM Coordination

«business use case»

# RU

Actor «business actor» in package 'Stakeholders'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# CONNECTORS

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: Conference (e.g. FTE, RNE) : UseCase, Public

UseCaseLink Source -> Destination

From: RU: Actor, Public

To: RU-RU coordination : UseCase, Public

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: PathMgmt : UseCase, Public

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#### CONNECTORS

Dependency Source -> Destination
From: Applicant : Actor, Public

To: RU: Actor, Public

# Note

Note in package 'Requirements Model'

Communication between business partners about the particular business case

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012
Extends

### **Business**

Package in package 'Requirements Model'

Business Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **Text**

Text in package 'Requirements Model'

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012
Extends

# **Business communication**

Requirement «Functional» in package 'Business'

Business communication Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### INCOMING STRUCTURAL RELATIONSHIPS

→ Realization from «business use case» RU-RU coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

→ Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» IM-IM Coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

# **IM** path construction

Requirement «Functional» in package 'Business'

TG1/TG4

IM path construction Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# INCOMING STRUCTURAL RELATIONSHIPS

Realization from «business use case» PathMgmt to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

⇒ Realization from «business use case» IM-IM Coordination to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

# Planning reference for path planning management

Requirement «Functional» in package 'Business'

FTE

Planning reference for path planning management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Planning reference for path planning management

[ Direction is 'Source -> Destination'. ]

# Referncing the business cases in object model (ex. "translation layer" issue)

Requirement «Functional» in package 'Business'

Referncing the business cases in object model (ex. "translation layer" issue)

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

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#### INCOMING STRUCTURAL RELATIONSHIPS

Realization from «business use case» RU-RU coordination to «Functional» Referring the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» IM-IM Coordination to «Functional» Referring the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

# Through-Going coaches (through-coaches)

Requirement «Functional» in package 'Business'

TG1

Through-Going coaches (through-coaches)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» PathMgmt to «Functional» Through-Going coaches (through-coaches)

[ Direction is 'Source -> Destination'. ]

# Conference (e.g. FTE, RNE)

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

Conference (e.g. FTE, RNE) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

ELEMENTS OWNED BY Conference (e.g. FTE, RNE)	
business case identification : Activity «business use case»	
common review : Activity «business use case»	
defining of volumes (trains/wagons): Activity «business use case»	
IM Coordination : Activity «business use case»	
negotiation : Activity «business use case»	

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# ELEMENTS OWNED BY Conference (e.g. FTE, RNE)

RU coordination: Activity «business use case»

ActivityFinal : ActivityFinal «business use case»

ActivityInitial: ActivityInitial «business use case»

#### **EXTERNAL REQUIREMENTS**

Requirement. Business communication

[ Stereotype is «Functional» ]

Requirement. Planning reference for path planning management

FTE

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Planning reference for path planning management

[ Direction is 'Source -> Destination'. ]

realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

UseCaseLink Se

Source -> Destination

From: RU: Actor, Public

To: Conference (e.g. FTE, RNE): UseCase, Public

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) Conference (e.g. FTE, RNE) «business use case»

# business case identification

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

business case identification Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### STRUCTURAL PART OF business case identification

ObjectNode2: ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

- Object Flow from business case identification to Business Case
- ControlFlow from business case identification to defining of volumes (trains/wagons)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from negotiation to business case identification

# ObjectNode2

ActionPin owned by 'business case identification', in package 'Main Workflows'

#### common review

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

common review Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# OUTGOING BEHAVIORAL RELATIONSHIPS

**←** ControlFlow from common review to RU coordination

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from defining of volumes (trains/wagons) to common review

# defining of volumes (trains/wagons)

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

defining of volumes (trains/wagons)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY defining of volumes (trains/wagons)
create train object : Action
Relate to business case : Action
BusinessCase : Activity
define the transport volume : Activity
detect number of trains : Activity
detect throughgoing coaches: Activity
Train Lifecycle Overview : Activity
☐ Train-Global : Activity
ActivityInitial : ActivityInitial
ActivityFinal: ActivityFinal

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from defining of volumes (trains/wagons) to common review

Name: create/update

Object Flow from defining of volumes (trains/wagons) to Coach

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from business case identification to defining of volumes (trains/wagons)

# create train object

Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

create train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

OUTGOING	<b>REHAVIORAL</b>	RELATIONSHIPS

- ◆ Object Flow from create train object to Train (Plan)
- ControlFlow from create train object to Relate to business case

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from as many as needed to create train object

#### Relate to business case

Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Relate to business case Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Relate to business case to Synchronization

Name: link

Object Flow from Relate to business case to Business Case

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from create train object to Relate to business case

#### **BusinessCase**

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

BusinessCase Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to BusinessCase

### define the transport volume

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

how many coaches? throughgoing coaches? complete/block trains?

> define the transport volume Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from define the transport volume to detect throughgoing coaches

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to define the transport volume

#### detect number of trains

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect number of trains Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from detect number of trains to as many as needed

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from detect throughgoing coaches to detect number of trains

### detect throughgoing coaches

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect throughgoing coaches Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: create

◆ Object Flow from detect throughgoing coaches to Coach

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from detect throughgoing coaches to detect number of trains

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from define the transport volume to detect throughgoing coaches

# **Train Lifecycle Overview**

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train Lifecycle Overview
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train Lifecycle Overview

#### **Train-Global**

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train-Global Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train-Global

# **ActivityInitial**

ActivityInitial owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to define the transport volume

#### **ActivityFinal**

ActivityFinal owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

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#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Synchronization to ActivityFinal

#### **IM Coordination**

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from IM Coordination to Synchronize the activities

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start path management and notify IMs to IM Coordination

# negotiation

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

negotiation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.06.2013

#### STRUCTURAL PART OF negotiation

SobjectNode1 : ActionPin

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from negotiation to business case identification

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to negotiation

# ObjectNode1

ActionPin owned by 'negotiation', in package 'Main Workflows'

# **RU** coordination

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from RU coordination to Start path management and notify IMs

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from common review to RU coordination

# **ActivityFinal**

ActivityFinal owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Synchronize the activities to ActivityFinal

# **ActivityInitial**

ActivityInitial owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to negotiation

# **IM-IM Coordination**

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

IM-IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

### **ELEMENTS OWNED BY IM-IM Coordination**

IM-IM coordination : Activity «business use case»

EXTERNAL REQUIREMENTS	
☑ Requirement. Business communication	
	[ Stereotype is «Functional» ]
☑ Requirement. IM path construction	
TG1/TG4	[ Stereotype is «Functional» ]
Requirement. Referncing the business cases in object model (ex. "translation layer" issue)	
	[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» IM-IM Coordination to «Functional» Referncing the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» IM-IM Coordination to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» IM-IM Coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) IM-IM Coordination «business use case»

#### **IM-IM** coordination

Activity owned by 'IM-IM Coordination', in package 'Main Workflows'

IM-IM coordination Version 1.0 Phase 1.0 Proposed Hantak created on 25.03.2013. Last modified 19.06.2013

# **ELEMENTS OWNED BY IM-IM coordination**

Path : Activity

#### **Path**

Activity owned by 'IM-IM coordination', in package 'Main Workflows'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Path

# **PathMgmt**

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

PathMgmt Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# ELEMENTS OWNED BY PathMgmt

Path Management : Activity «business use case»

#### EXTERNAL REQUIREMENTS

Requirement. IM path construction

TG1/TG4

[ Stereotype is «Functional» ]

Requirement. Through-Going coaches (through-coaches)

TG1

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» PathMgmt to «Functional» Through-Going coaches (through-coaches)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» PathMgmt to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

✓ UseCaseLink Source -> Destination

From: IM : Actor, Public

To: PathMgmt : UseCase, Public

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: PathMgmt : UseCase, Public

# **Path Management**

Activity owned by 'PathMgmt', in package 'Main Workflows'

Path Management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

Dossier: Activity  Path: Activity  IM: ActivityPartition  RU: ActivityPartition  IM coordination: InterruptibleActivityRegion	ELEMENTS OWNED BY Path Management
■ IM : ActivityPartition  ■ RU : ActivityPartition	Dossier : Activity
RU: ActivityPartition	Path : Activity
	IM: ActivityPartition
IM coordination: InterruptibleActivityRegion	■ RU : ActivityPartition
	IM coordination : InterruptibleActivityRegion
FlowFinal: FlowFinal	FlowFinal : FlowFinal

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from Path Management to FlowFinal
- ControlFlow from Path Management to Synchronize the activities

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start path management and notify IMs to Path Management

Model Report 12 February, 2025 INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from train adaption to Path Management ControlFlow from solution? to Path Management Guard: path **Dossier** Activity owned by 'Path Management', in package 'Main Workflows' Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from Dossier to Dossier **Path** Activity owned by 'Path Management', in package 'Main Workflows' Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from Path (Plan) to Path IM ActivityPartition owned by 'Path Management', in package 'Main Workflows' IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012 **ELEMENTS OWNED BY IM** deck capacity: Activity **B** book path : Activity ■ CaseReference : Activity

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ELEMENTS OWNED BY IM	
PathRequest : Activity	
Train : Activity	
IM: Event	
Start IM Activity : ActivityInitial	
check capacity  Activity owned by 'IM', in package 'Main Workflows'	
	check capacity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.11.2013. Last modified 13.11.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from check capacity to EXIT: Answer Guard: capacity not available	not possible
ControlFlow from check capacity to construct path Guard: capacity available	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from Check path request to check capa	city
book path  Activity owned by 'IM', in package 'Main Workflows'	
	book path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 13.11.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from book path to FlowFinal	
INCOMING BEHAVIORAL RELATIONSHIPS	

Name: PathID

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from Path Confirmed Message to book path
- ControlFlow from send answer to book path

# CaseReference

Activity owned by 'IM', in package 'Main Workflows'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

→ Object Flow from CaseReference to CaseReference

### **PathRequest**

Activity owned by 'IM', in package 'Main Workflows'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to PathRequest

#### **Train**

Activity owned by 'IM', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

#### IM

Event owned by 'IM', in package 'Main Workflows'

IM Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message : Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

# **Start IM Activity**

ActivityInitial owned by 'IM', in package 'Main Workflows'

# RU

ActivityPartition owned by 'Path Management', in package 'Main Workflows'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY RU
harmonize train : Action
init train ressource planning: Action
planning the path needed : Action
3 4.6 Planning Activity: Activity
check offered path : Activity
planning the ressources : Activity
planning the train section : Activity
Request path : Activity

Model Report 12 February, 2025 **ELEMENTS OWNED BY RU** request path : Activity review with partners: Activity **B** send answer : Activity ■ ActivityInitial : ActivityInitial harmonize train Action owned by 'RU', in package 'Main Workflows' harmonize train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from harmonize train to planning the ressources Name: update ◆ Object Flow from harmonize train to Coach Name: update ◆ Object Flow from harmonize train to Train (Plan) INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from planning the train section to harmonize train Object Flow from Train (Plan) to harmonize train

# init train ressource planning

Action owned by 'RU', in package 'Main Workflows'

init train ressource planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from init train ressource planning to CaseReference

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to init train ressource planning

# planning the path needed

Action owned by 'RU', in package 'Main Workflows'

planning the path needed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### STRUCTURAL PART OF planning the path needed

ActionPin1 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

Object Flow from planning the path needed to PathRequest

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from planning the ressources to planning the path needed

#### ActionPin1

ActionPin owned by 'planning the path needed', in package 'Main Workflows'

# 4.6 Planning Activity

Activity owned by 'RU', in package 'Main Workflows'

4.6 Planning Activity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from 4.6 Planning Activity to Check path request

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Request path to 4.6 Planning Activity

# check offered path

Activity owned by 'RU', in package 'Main Workflows'

check offered path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from check offered path to review with partners

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from PathDetails Message to check offered path
- ControlFlow from offer path to check offered path

### planning the ressources

Activity owned by 'RU', in package 'Main Workflows'

Loco, Driver, RCP

planning the ressources Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from planning the ressources to planning the path needed

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize train to planning the ressources

# planning the train section

Activity owned by 'RU', in package 'Main Workflows'

planning the train section Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013 Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** ◆ ControlFlow from planning the train section to harmonize train INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from CaseReference to planning the train section Request path Activity owned by 'RU', in package 'Main Workflows' Request path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** 🖛 Information Flow from Request path to PathRequest Message ControlFlow from Request path to 4.6 Planning Activity INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from PathRequest to Request path request path Activity owned by 'RU', in package 'Main Workflows' request path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from request path to construct path ♣ Information Flow from request path to PathRequest Message

INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to request path

# review with partners

Activity owned by 'RU', in package 'Main Workflows'

review with partners Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from review with partners to send answer

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check offered path to review with partners

#### send answer

Activity owned by 'RU', in package 'Main Workflows'

send answer Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 Information Flow from send answer to Path Confirmed Message
- ControlFlow from send answer to book path

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from review with partners to send answer

# **ActivityInitial**

ActivityInitial owned by 'RU', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to init train ressource planning

### **IM** coordination

InterruptibleActivityRegion owned by 'Path Management', in package 'Main Workflows'

IM coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY IM coordination	
Check path request: Activity	
Construct path : Activity	
harmonize path : Activity	
offer path : Activity	
EXIT: Answer not possible : FlowFinal	
Further with booking procedure: ActivityFinal	
Path request came : ActivityInitial	
Pre-Constructed product needed: ActivityInitial	

# Check path request

Activity owned by 'IM coordination', in package 'Main Workflows'

Check path request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check path request to check capacity
- ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from 4.6 Planning Activity to Check path request

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Path request came to Check path request
- Information Flow from PathRequest Message to Check path request

# construct path

Activity owned by 'IM coordination', in package 'Main Workflows'

construct path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 Object Flow from construct path to Path (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from request path to construct path
- ControlFlow from Pre-Constructed product needed to construct path
- ControlFlow from check capacity to construct path Guard: capacity available

# harmonize path

Activity owned by 'IM coordination', in package 'Main Workflows'

harmonize path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from harmonize path to offer path

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to harmonize path

# offer path

Activity owned by 'IM coordination', in package 'Main Workflows'

offer path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from offer path to PathDetails Message
- ControlFlow from offer path to check offered path
- ControlFlow from offer path to Further with booking procedure...

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize path to offer path

# EXIT: Answer not possible

FlowFinal owned by 'IM coordination', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from check capacity to EXIT: Answer not possible Guard: capacity not available
- ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

# Further with booking procedure...

ActivityFinal owned by 'IM coordination', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from offer path to Further with booking procedure...

# Path request came

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

OUTCOING	DEHLAMIODAL	RELATIONSHIPS

ControlFlow from Path request came to Check path request

# Pre-Constructed product needed

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

# OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from Pre-Constructed product needed to construct path

#### **FlowFinal**

FlowFinal owned by 'Path Management', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from book path to FlowFinal

# **RU-RU** coordination

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

RU-RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **ELEMENTS OWNED BY RU-RU coordination**

RU coordination: Activity «business use case»

### EXTERNAL REQUIREMENTS

Requirement. Business communication

[ Stereotype is «Functional» ]

Requirement. Referncing the business cases in object model (ex. "translation layer" issue)

 $[\ Stereotype\ is\ «Functional»\ ]$ 

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» RU-RU coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» RU-RU coordination to «Functional» Referring the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

UseCaseLink

Source -> Destination

From: RU: Actor, Public

To: RU-RU coordination : UseCase, Public

# **RU** coordination

Activity owned by 'RU-RU coordination', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY RU coordination	
identifies the affected objects : Action	
analyze the situation : Activity	
BusinessCase : Activity	
find solution : Activity	
identifies the affected objects : Activity	
need for coordination : Activity	
Train: Activity	
∃ train adaption : Activity	

ELEMENTS OWNED BY RU coordination
■ solution? : DecisionNode
∃ FlowFinal : FlowFinal
☐ ActivityInitial : ActivityInitial

# identifies the affected objects

Action owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: identify

- ♦ Object Flow from identifies the affected objects to Business Case
- ControlFlow from identifies the affected objects to find solution

Name: identify

Object Flow from identifies the affected objects to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

# analyze the situation

Activity owned by 'RU coordination', in package 'Main Workflows'

what is affected? what causes the problems?

analyze the situation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from analyze the situation to identifies the affected objects

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from analyze the situation to identifies the affected objects

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from need for coordination to analyze the situation

#### **BusinessCase**

Activity owned by 'RU coordination', in package 'Main Workflows'

BusinessCase
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

→ Object Flow from Business Case to BusinessCase

#### find solution

Activity owned by 'RU coordination', in package 'Main Workflows'

find solution
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from find solution to solution?

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from identifies the affected objects to find solution

# identifies the affected objects

Activity owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

#### need for coordination

Activity owned by 'RU coordination', in package 'Main Workflows'

- optimization of own ressources
- operational issues
- customer needs
- load exeeds reg. cap.
- timing
- ....

need for coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from need for coordination to analyze the situation

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to need for coordination

### **Train**

Activity owned by 'RU coordination', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

# train adaption

Activity owned by 'RU coordination', in package 'Main Workflows'

train adaption
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from train adaption to Path Management
- ← ControlFlow from train adaption to FlowFinal

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#### INCOMING BEHAVIORAL RELATIONSHIPS

--> ControlFlow from solution? to train adaption

Guard: train

### solution?

DecisionNode owned by 'RU coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from solution? to FlowFinal Guard: nothing

ControlFlow from solution? to train adaption Guard: train

ControlFlow from solution? to Path Management Guard: path

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from find solution to solution?

#### **FlowFinal**

FlowFinal owned by 'RU coordination', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Path Management to FlowFinal
- ControlFlow from solution? to FlowFinal Guard: nothing
- ControlFlow from train adaption to FlowFinal

# **ActivityInitial**

ActivityInitial owned by 'RU coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to need for coordination

# **Business**

Package in package 'Requirements Model'

Business Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **Business communication**

Requirement «Functional» in package 'Business'

Business communication Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» RU-RU coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

⇒ Realization from «business use case» IM-IM Coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

# **IM** path construction

Requirement «Functional» in package 'Business'

TG1/TG4

IM path construction Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# INCOMING STRUCTURAL RELATIONSHIPS

→ Realization from «business use case» PathMgmt to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» IM-IM Coordination to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

# Planning reference for path planning management

Requirement «Functional» in package 'Business'

FTE

Planning reference for path planning management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# INCOMING STRUCTURAL RELATIONSHIPS

→ Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Planning reference for path planning management

[ Direction is 'Source -> Destination'. ]

# Referncing the business cases in object model (ex. "translation layer" issue)

Requirement «Functional» in package 'Business'

Referencing the business cases in object model (ex. "translation layer" issue)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### INCOMING STRUCTURAL RELATIONSHIPS

⇒ Realization from «business use case» RU-RU coordination to «Functional» Referncing the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» IM-IM Coordination to «Functional» Referncing the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

# Through-Going coaches (through-coaches)

Requirement «Functional» in package 'Business'

TG1

Through-Going coaches (through-coaches)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

## INCOMING STRUCTURAL RELATIONSHIPS

→ Realization from «business use case» PathMgmt to «Functional» Through-Going coaches (through-coaches)

[ Direction is 'Source -> Destination'. ]

# **Business Process Model**

Package in package 'Model'

Business Process Model Version Phase 1.0 Proposed created on 08.11.2012. Last modified 08.11.2012

## **Overview**

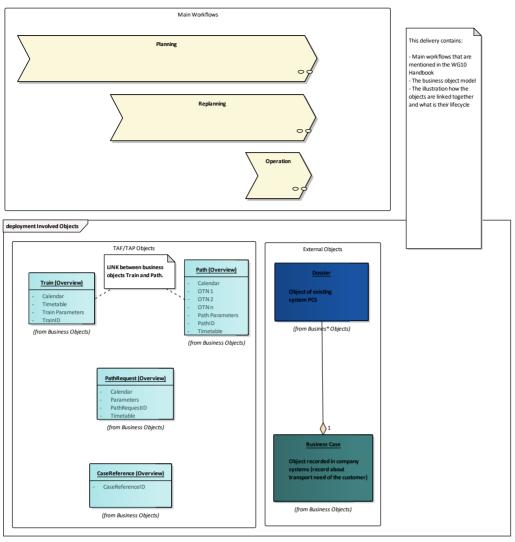
Package in package 'Business Process Model'

Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

# **Overview diagram**

CompositeStructure diagram in package 'Overview'

Overview Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 24.06.2013



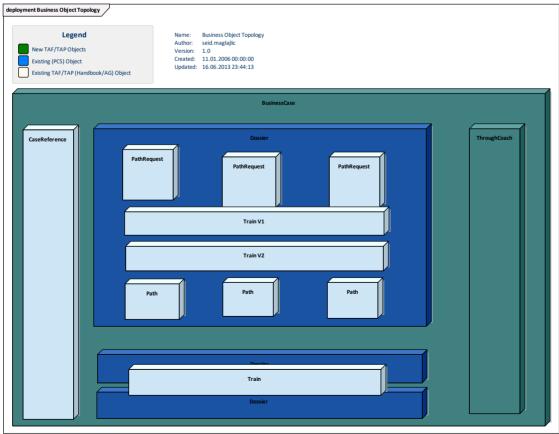


Figure 2: Overview

#### Note

Note in package 'Overview'

This delivery contains:

- Main workflows that are mentioned in the WG10 Handbook
- The business object model
- The illustration how the objects are linked together and what is their lifecycle

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

# Replanning

Activity «process» in package 'Target Audience'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# **Business Object Topology**

UMLDiagram in package 'Target Audience'

Business Object Topology Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013 Extends

# **Involved Objects**

UMLDiagram in package 'Target Audience'

Involved Objects
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

Extends

# **Operation**

Activity «process» owned by 'Overview', in package 'Target Audience'

Operation
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# **Planning**

Activity «process» owned by 'Overview', in package 'Target Audience'

Planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# **Structure Explanation**

Package in package 'Overview'

Structure Explanation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

## **Structure Explanation diagram**

Deployment diagram in package 'Structure Explanation'

Structure Explanation Version 1.0 seid.maglajlic created on 24.06.2013. Last modified 18.11.2013

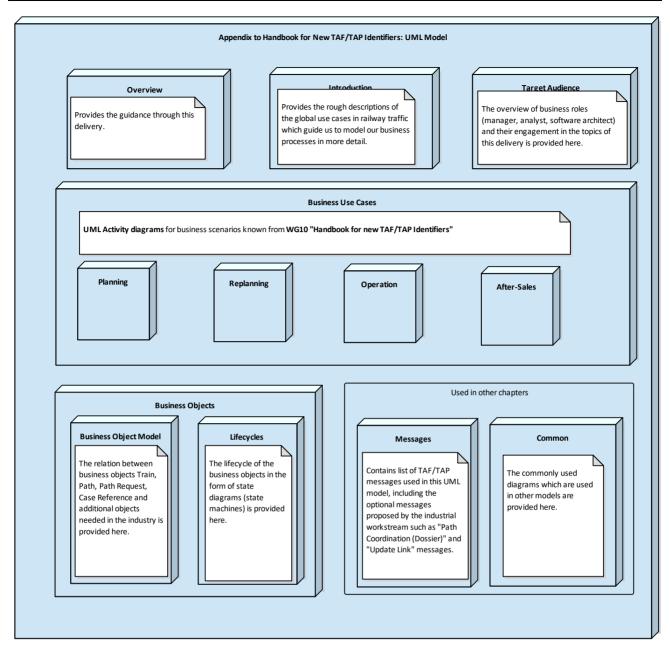


Figure 3: Structure Explanation

#### Note

Note in package 'Structure Explanation'

UML Activity diagrams for business scenarios known from WG10 "Handbook for new TAF/TAP Identifiers"

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013 Extends

#### **Note**

Note in package 'Structure Explanation'

Provides the guidance through this delivery.

Note

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Note

Note in package 'Structure Explanation'

The commonly used diagrams which are used in other models are provided here.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

#### Note

Note in package 'Structure Explanation'

Contains list of TAF/TAP messages used in this UML model, including the optional messages proposed by the industrial workstream such as "Path Coordination (Dossier)" and "Update Link" messages.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

#### Note

Note in package 'Structure Explanation'

The relation between business objects Train, Path, Path Request, Case Reference and additional objects needed in the industry is provided here.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013 Extends

#### Note

Note in package 'Structure Explanation'

Provides the rough descriptions of the global use cases in railway traffic which guide us to model our business processes in more detail.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

## Note

Note in package 'Structure Explanation'

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The lifecycle of the business objects in the form of state diagrams (state machines) is provided here.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

#### Note

Note in package 'Structure Explanation'

The overview of business roles (manager, analyst, software architect) and their engagement in the topics of this delivery is provided here.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

# Appendix to Handbook for New TAF/TAP Identifiers: UML Model

Node in package 'Elements'

Appendix to Handbook for New TAF/TAP Identifiers: UML Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 28.06.2013

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ELEMENTS OWNED BY Appendix to Handbook for New TAF/TAP Identifiers: UML Model		
Operation : Node		
Overview : Node		
Planning: Node		
Replanning: Node		
Target Audience : Node		

## **After-Sales**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

After-Sales
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Object Model**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Objects**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Use Cases**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Use Cases Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Common

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Common Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Introduction

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Introduction
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Lifecycles

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Lifecycles Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Messages

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Messages
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Operation**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Operation
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

# Overview

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Planning**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Replanning

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Target Audience**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Target Audience Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Used in other chapters**

Boundary owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Used in other chapters
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

#### **After-Sales**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

After-Sales Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Object Model**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Objects**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Use Cases**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Use Cases Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Common

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Common Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Introduction

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Introduction Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Lifecycles

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Lifecycles
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Messages

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Operation

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Operation
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### **Overview**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Planning**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Planning
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Replanning

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

# **Target Audience**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Target Audience Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

# **Notation diagram**

Activity diagram in package 'Structure Explanation'

Notation Version 1.0 seid.maglajlic created on 27.06.2013. Last modified 18.11.2013

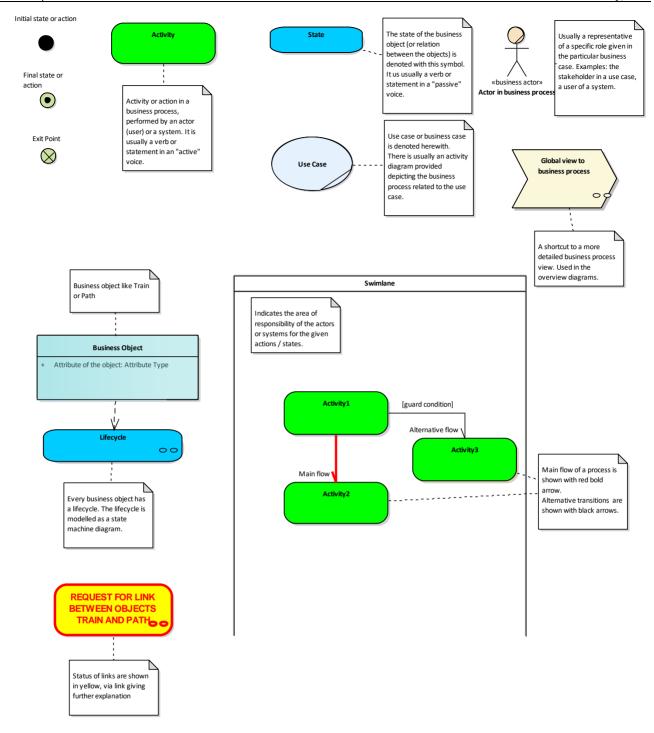


Figure 4: Notation

#### Note

Note in package 'Handbook-Planning'

Status of links are shown in yellow, via link giving further explanation

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 18.11.2013
Extends

## REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Planning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 30.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Path Request processing started to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONNECTORS

Dependency

Source -> Destination

From: PathRequest Message: Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

#### **Note**

Note in package 'Structure Explanation'

Indicates the area of responsibility of the actors or systems for the given actions / states.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013 Extends

#### Note

Note in package 'Structure Explanation'

Use case or business case is denoted herewith. There is usually an activity diagram provided depicting the business process related to the use case.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
Extends

## **Note**

Note in package 'Structure Explanation'

Usually a representative of a specific role given in the particular business case. Examples: the stakeholder in a use case, a user of a system.

Note

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### Note

Note in package 'Structure Explanation'

Every business object has a lifecycle. The lifecycle is modelled as a state machine diagram.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
Extends

#### Note

Note in package 'Structure Explanation'

Business object like Train or Path

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013 Extends

#### Note

Note in package 'Structure Explanation'

Activity or action in a business process, performed by an actor (user) or a system. It is usually a verb or statement in an "active" voice.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
Extends

#### Note

Note in package 'Structure Explanation'

The state of the business object (or relation between the objects) is denoted with this symbol. It us usually a verb or statement in a "passive" voice.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013 Extends

#### **Note**

Note in package 'Structure Explanation'

A shortcut to a more detailed business process view. Used in the overview diagrams.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

Extends

#### Note

Note in package 'Structure Explanation'

Main flow of a process is shown with red bold arrow. Alternative transitions are shown with black arrows.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
Extends

## **Activity**

Activity in package 'Elements'

Activity
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## Activity1

Activity in package 'Elements'

Activity1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: Alternative flow

ControlFlow from Activity1 to Activity3

Guard: guard condition

Name: Main flow

ControlFlow from Activity1 to Activity2

# Activity2

Activity in package 'Elements'

Activity2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: Main flow

ControlFlow from Activity1 to Activity2

## Global view to business process

Activity «process» in package 'Elements'

Global view to business process Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

#### **Swimlane**

ActivityPartition in package 'Elements'

Swimlane
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

#### **ELEMENTS OWNED BY Swimlane**

Activity3 : Activity

## Activity3

Activity owned by 'Swimlane', in package 'Elements'

Activity3 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: Alternative flow

ControlFlow from Activity1 to Activity3

Guard: guard condition

## **Actor in business process**

Actor «business actor» in package 'Elements'

Actor in business process Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## **Business Object**

Object in package 'Elements'

Business Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## CONNECTORS

**Dependency** Source -> Destination
From: Business Object : Object, Public
To: Lifecycle : StateMachine, Public

#### **ATTRIBUTES**

Attribute of the object : Attribute Type Public

[ Is static True. Containment is Not Specified. ]

## **State**

State in package 'Elements'

State
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## Lifecycle

StateMachine in package 'Elements'

Lifecycle Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY Lifecycle
Archived: State
Created: State
Operated : State
Updated: State
Final state: Final State
☐ Initial state : Initial State

Model Report \_\_\_\_\_\_ 12 February, 2025

## CONNECTORS

Pependency Source -> Destination
From: Business Object : Object, Public
To: Lifecycle : StateMachine, Public

## **Archived**

State owned by 'Lifecycle', in package 'Elements'

Archived Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Archived to Final state

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Operated to Archived

#### Created

State owned by 'Lifecycle', in package 'Elements'

Created Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Created to Updated

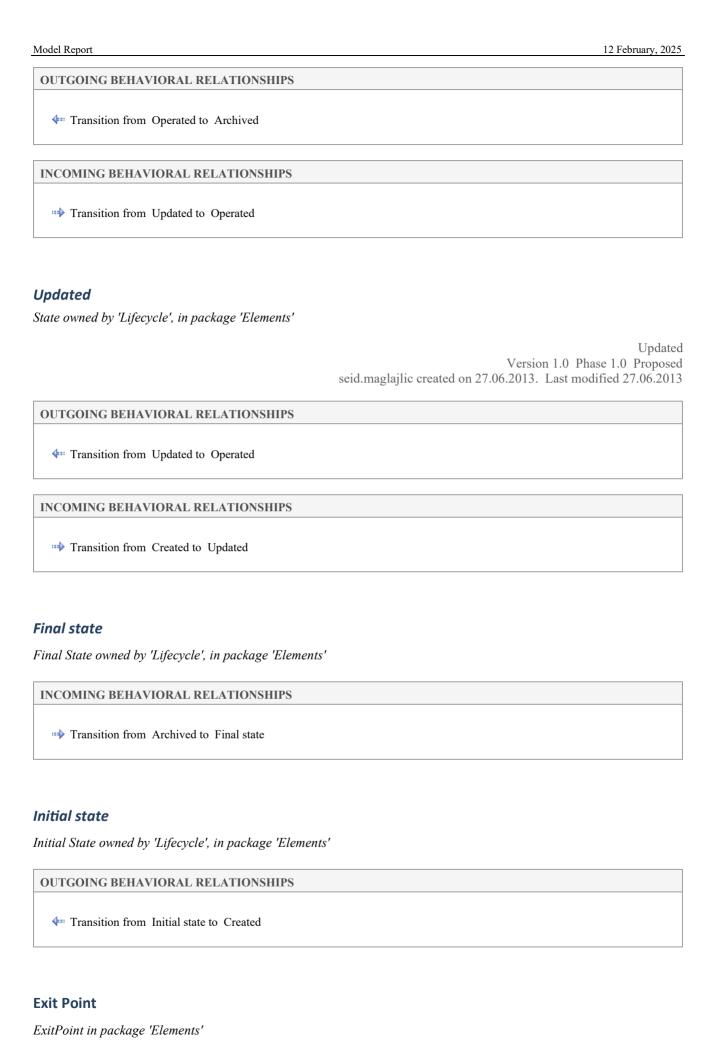
## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Initial state to Created

## **Operated**

State owned by 'Lifecycle', in package 'Elements'

Operated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013



#### Final state or action

Final State in package 'Elements'

## Initial state or action

Initial State in package 'Elements'

## **Use Case**

UseCase «business use case» in package 'Elements'

Use Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## Activity3

Activity owned by 'Swimlane', in package 'Elements'

Activity3 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: Alternative flow

ControlFlow from Activity1 to Activity3

Guard: guard condition

## **Elements**

Package in package 'Structure Explanation'

Elements
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

## Actor in business process

Actor «business actor» in package 'Elements'

Actor in business process Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

#### Use Case

UseCase «business use case» in package 'Elements'

Use Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## **Business Object**

Object in package 'Elements'

Business Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## CONNECTORS

Pependency Source -> Destination
From: Business Object : Object, Public
To: Lifecycle : StateMachine, Public

#### ATTRIBUTES

Attribute of the object : Attribute Type Public

[ Is static True. Containment is Not Specified. ]

## Appendix to Handbook for New TAF/TAP Identifiers: UML Model

Node in package 'Elements'

Appendix to Handbook for New TAF/TAP Identifiers: UML Model

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY Appendix to Handbook for New TAF/TAP Identifiers: UML Model
After-Sales : Node
Business Object Model : Node
Business Objects : Node
Business Use Cases : Node
Common: Node

ELEMENTS OWNED BY Appendix to Handbook for New TAF/TAP Identifiers: UML Model
☐ Introduction : Node
Lifecycles: Node
■ Messages : Node
Operation : Node
Overview : Node
Planning: Node
Replanning: Node
Target Audience : Node

## **After-Sales**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

After-Sales
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Object Model**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Business Objects**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### **Business Use Cases**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Business Use Cases Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Common

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Common Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### Introduction

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Introduction
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Lifecycles

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Lifecycles
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Messages

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Operation**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Operation
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Overview

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Planning**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## Replanning

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

## **Target Audience**

Node owned by 'Appendix to Handbook for New TAF/TAP Identifiers: UML Model', in package 'Elements'

Target Audience Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

#### State

State in package 'Elements'

State
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## **Activity**

Activity in package 'Elements'

Activity
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## Activity1

Activity in package 'Elements'

Activity1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: Alternative flow

ControlFlow from Activity1 to Activity3

## OUTGOING BEHAVIORAL RELATIONSHIPS

Guard: guard condition

Name: Main flow

ControlFlow from Activity1 to Activity2

## Activity2

Activity in package 'Elements'

Activity2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: Main flow

ControlFlow from Activity1 to Activity2

## Global view to business process

Activity «process» in package 'Elements'

Global view to business process Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## Global view to business process diagram

Activity diagram in package 'Elements'

Global view to business process

Version 1.0
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

There is usually the sequence of actions or the list of use cases related to this business process given in a subdiagram.

Figure 5: Global view to business process

## **Exit Point**

ExitPoint in package 'Elements'

## Final state or action

Final State in package 'Elements'

#### Initial state or action

Initial State in package 'Elements'

# Lifecycle

StateMachine in package 'Elements'

Lifecycle Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY Lifecycle
Archived : State
Created : State
Operated : State
Updated : State
Final state : Final State
☐ Initial state: Initial State

## **CONNECTORS**

**Dependency** Source -> Destination
From: Business Object : Object, Public
To: Lifecycle : StateMachine, Public

# Lifecycle diagram

StateMachine diagram in package 'Elements'

Lifecycle Version 1.0 seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

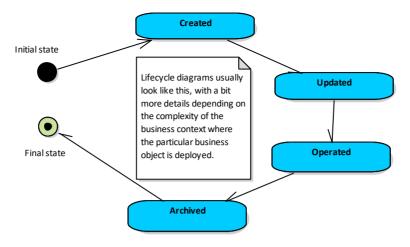


Figure 6: Lifecycle

## **Archived**

State owned by 'Lifecycle', in package 'Elements'

Archived Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Archived to Final state

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Operated to Archived

#### Created

State owned by 'Lifecycle', in package 'Elements'

Created Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Created to Updated

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Initial state to Created

## **Operated**

State owned by 'Lifecycle', in package 'Elements'

Operated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 Transition from Operated to Archived

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Updated to Operated

## **Updated**

State owned by 'Lifecycle', in package 'Elements'

Updated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Updated to Operated

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Created to Updated

## Final state

Final State owned by 'Lifecycle', in package 'Elements'

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Archived to Final state

## Initial state

Initial State owned by 'Lifecycle', in package 'Elements'

# OUTGOING BEHAVIORAL RELATIONSHIPS

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Initial state to Created

## **Swimlane**

ActivityPartition in package 'Elements'

Swimlane Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 28.06.2013

## **ELEMENTS OWNED BY Swimlane**

Activity3 : Activity

## Activity3

Activity owned by 'Swimlane', in package 'Elements'

Activity3 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

Name: Alternative flow

ControlFlow from Activity1 to Activity3

Guard: guard condition

## Introduction

Package in package 'Overview'

Introduction
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

#### **Main Workflows**

Package in package 'Introduction'

Main Workflows Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# Overview of European Rail Business

UseCase «business use case» in package 'Main Workflows'

Overview of European Rail Business Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 14.06.2013

ELEMENTS OWNED BY Overview of European Rail Business
Conference (e.g. FTE, RNE): UseCase «business use case»
IM-IM Coordination : UseCase «business use case»
PathMgmt : UseCase «business use case»
RU-RU coordination : UseCase «business use case»
Operation : UseCase «business use case»

## Conference (e.g. FTE, RNE)

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

Conference (e.g. FTE, RNE) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

ELEMENTS OWNED BY Conference (e.g. FTE, RNE)	
business case identification : Activity «business use case»	

ELEMENTS OWNED BY Conference (e.g. FTE, RNE)
common review : Activity «business use case»
defining of volumes (trains/wagons): Activity «business use case»
IM Coordination : Activity «business use case»
negotiation : Activity «business use case»
RU coordination : Activity «business use case»
ActivityFinal : ActivityFinal «business use case»
ActivityInitial : ActivityInitial «business use case»
FYTERNAL REQUIREMENTS

#### EXTERNAL REQUIREMENTS

Market Requirement. Business communication

[ Stereotype is «Functional» ]

Requirement. Planning reference for path planning management

FTE

[ Stereotype is «Functional» ]

## OUTGOING STRUCTURAL RELATIONSHIPS

Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Planning reference for path planning management

[ Direction is 'Source -> Destination'. ]

realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

## CONNECTORS

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: Conference (e.g. FTE, RNE): UseCase, Public

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## ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) Conference (e.g. FTE, RNE) «business use case»

## Conference (e.g. FTE, RNE) diagram

Activity diagram in package 'Main Workflows'

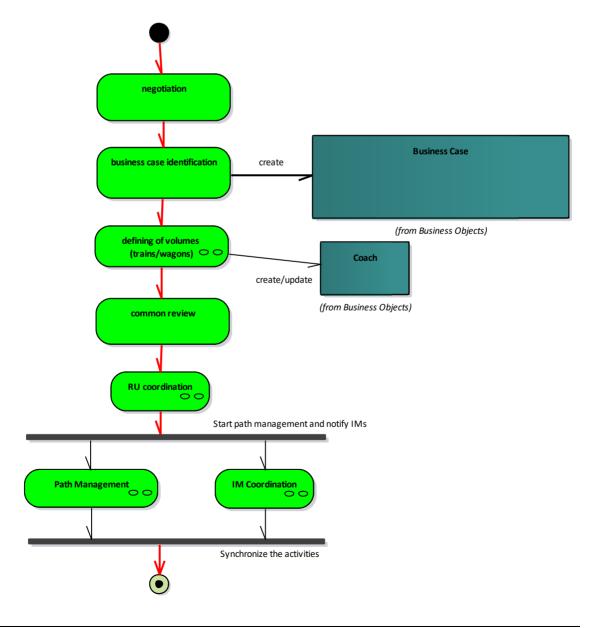
Conference (e.g. FTE, RNE) Version 1.0 seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

Name: Conference (e.g. FTE, RNE)

Author: seid.maglajlic

Version: 1.0

Created: 08.11.2012 14:56:08 Updated: 19.06.2013 14:03:06



## Figure 7: Conference (e.g. FTE, RNE)

## **Business Case**

Object in package 'Business Objects'

Business Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

INCOMING STRUCTURAL RELATIONSHIPS	
→ Aggregation from CaseReference to Business Case	[ Direction is 'Source -> Destination'. ]
→ Aggregation from Dossier to Business Case	[ Direction is 'Source -> Destination'. ]
ATTRIBUTES	
BusinessCaseID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
CommercialParamters : Complex Private	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

# Coach

Object in package 'Business Objects'

Coach
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# ASSOCIATIONS Association (direction: Unspecified) Source: Public (Object) ThroughCoach Target: Public (Object) Coach

#### business case identification

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

business case identification Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### STRUCTURAL PART OF business case identification

♣ ObjectNode2 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

- Object Flow from business case identification to Business Case
- ControlFlow from business case identification to defining of volumes (trains/wagons)

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from negotiation to business case identification

## ObjectNode2

ActionPin owned by 'business case identification', in package 'Main Workflows'

## common review

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

common review Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from common review to RU coordination

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from defining of volumes (trains/wagons) to common review

## defining of volumes (trains/wagons)

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

defining of volumes (trains/wagons)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY defining of volumes (trains/wagons)
create train object : Action
Relate to business case : Action
BusinessCase : Activity
define the transport volume : Activity
detect number of trains : Activity
detect throughgoing coaches: Activity
Train Lifecycle Overview : Activity
Train-Global : Activity
ActivityInitial : ActivityInitial
ActivityFinal : ActivityFinal
OUTGOING BEHAVIORAL RELATIONSHIPS
◆ ControlFlow from defining of volumes (trains/wagons) to common review

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from defining of volumes (trains/wagons) to Coach

Name: create/update

ControlFlow from business case identification to defining of volumes (trains/wagons)

# defining of volume (wagons/trains) diagram

Activity diagram in package 'Main Workflows'

defining of volume (wagons/trains)

Version 1.0
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

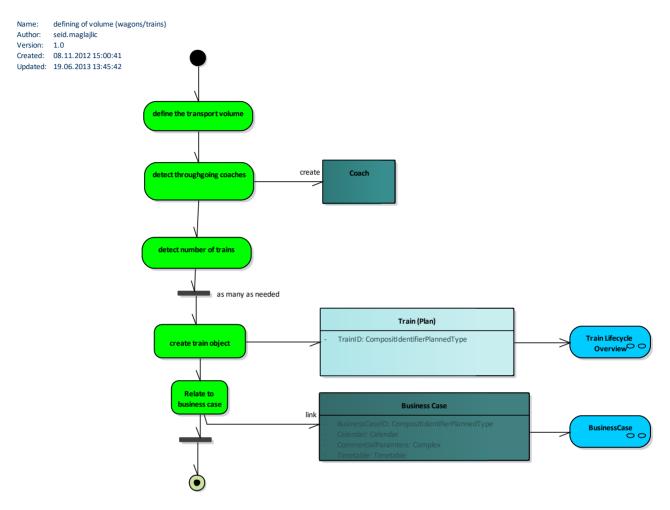


Figure 8: defining of volume (wagons/trains)

# **Business Case**

Object in package 'Business Objects'

Business Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

INCOMING STRUCTURAL RELATIONSHIPS	
→ Aggregation from CaseReference to Business Case	[ Direction is 'Source -> Destination'. ]
→ Aggregation from Dossier to Business Case	[ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
CommercialParamters : Complex Private	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

#### Coach

Object in package 'Business Objects'

Coach Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) ThroughCoach Target: Public (Object) Coach

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

# INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

# ATTRIBUTES

▼ TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

# create train object

Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

create train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# OUTGOING BEHAVIORAL RELATIONSHIPS

◆ Object Flow from create train object to Train (Plan)

◆ ControlFlow from create train object to Relate to business case

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from as many as needed to create train object

#### Relate to business case

Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Relate to business case Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from Relate to business case to Synchronization

Name: link

♦ Object Flow from Relate to business case to Business Case

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from create train object to Relate to business case

#### **BusinessCase**

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

BusinessCase
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to BusinessCase

#### define the transport volume

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

how many coaches? throughgoing coaches? complete/block trains?

> define the transport volume Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from define the transport volume to detect throughgoing coaches

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to define the transport volume

#### detect number of trains

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect number of trains Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from detect number of trains to as many as needed

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from detect throughgoing coaches to detect number of trains

#### detect throughgoing coaches

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect throughgoing coaches Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

- Object Flow from detect throughgoing coaches to Coach
- ControlFlow from detect throughgoing coaches to detect number of trains

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from define the transport volume to detect throughgoing coaches

#### Train Lifecycle Overview

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train Lifecycle Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train Lifecycle Overview

#### Train-Global

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train-Global Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train-Global

# **ActivityInitial**

ActivityInitial owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to define the transport volume

# **ActivityFinal**

ActivityFinal owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Synchronization to ActivityFinal

# **IM Coordination**

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from IM Coordination to Synchronize the activities

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start path management and notify IMs to IM Coordination

#### negotiation

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

negotiation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.06.2013

#### STRUCTURAL PART OF negotiation

ObjectNode1 : ActionPin

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from negotiation to business case identification

#### INCOMING BEHAVIORAL RELATIONSHIPS

# ObjectNode1

ActionPin owned by 'negotiation', in package 'Main Workflows'

#### **RU** coordination

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from RU coordination to Start path management and notify IMs

Model Report 12 February, 2025 INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from common review to RU coordination **ActivityFinal** ActivityFinal owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows' INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Synchronize the activities to ActivityFinal **ActivityInitial** ActivityInitial owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows' **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from ActivityInitial to negotiation **IM-IM** Coordination UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows' **IM-IM** Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013 **ELEMENTS OWNED BY IM-IM Coordination** IM-IM coordination : Activity «business use case» **EXTERNAL REQUIREMENTS** Requirement. Business communication [ Stereotype is «Functional» ] M Requirement. IM path construction

[ Stereotype is «Functional» ]

TG1/TG4

#### EXTERNAL REQUIREMENTS

Requirement. Referncing the business cases in object model (ex. "translation layer" issue)

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» IM-IM Coordination to «Functional» Referncing the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

realization from «business use case» IM-IM Coordination to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

realization from «business use case» IM-IM Coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) IM-IM Coordination «business use case»

# **IM-IM Coordination diagram**

Use Case diagram in package 'Main Workflows'

IM-IM Coordination Version 1.0 seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

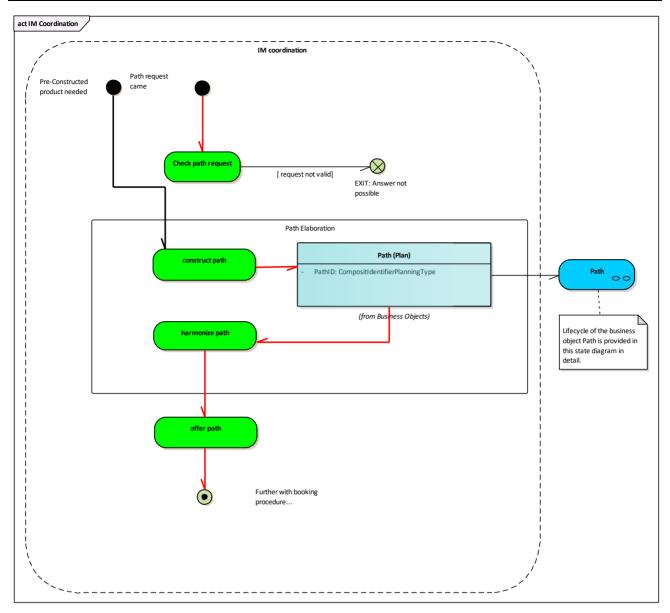


Figure 9: IM-IM Coordination

# **IM-IM** coordination

Activity owned by 'IM-IM Coordination', in package 'Main Workflows'

IM-IM coordination Version 1.0 Phase 1.0 Proposed Hantak created on 25.03.2013. Last modified 19.06.2013

ELEMENTS OWNED BY IM-IM coordination
Path : Activity

# **IM Coordination diagram**

Activity diagram in package 'Main Workflows'

IM Coordination
Version 1.0
Hantak created on 25.03.2013. Last modified 19.06.2013

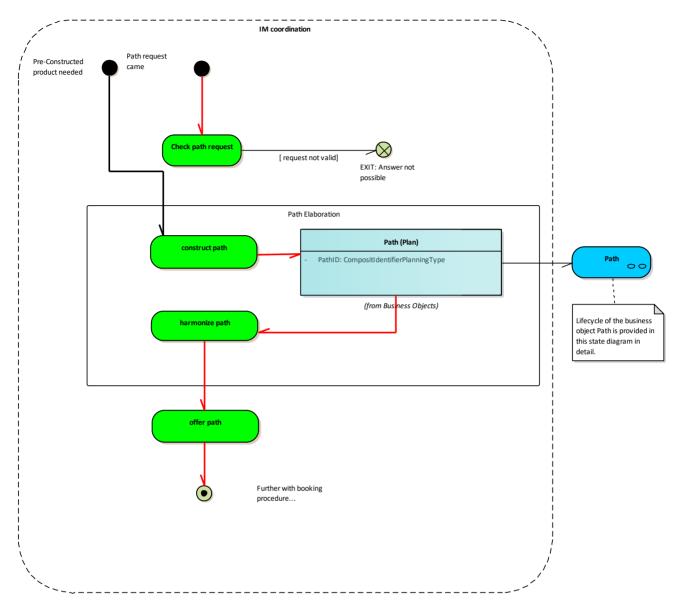


Figure 10: IM Coordination

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

# INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from Path (OP) to Path (Plan) [ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Path (Plan): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [1]

Target: Public (Object) PathInformation

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [\*]

Target: Public (Object) CaseReference

Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

Activity owned by 'IM-IM coordination', in package 'Main Workflows'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Path

# **PathMgmt**

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

PathMgmt Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **ELEMENTS OWNED BY PathMgmt**

Path Management : Activity «business use case»

#### **EXTERNAL REQUIREMENTS**

Requirement. IM path construction

TG1/TG4

[ Stereotype is «Functional» ]

Requirement. Through-Going coaches (through-coaches)

TG1

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» PathMgmt to «Functional» Through-Going coaches (through-coaches)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» PathMgmt to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

✓ UseCaseLink Source

Source -> Destination

From: IM : Actor, Public

To: PathMgmt : UseCase, Public

# CONNECTORS

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: PathMgmt : UseCase, Public

# PathMgmt diagram

Use Case diagram in package 'Main Workflows'

PathMgmt Version 1.0 seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

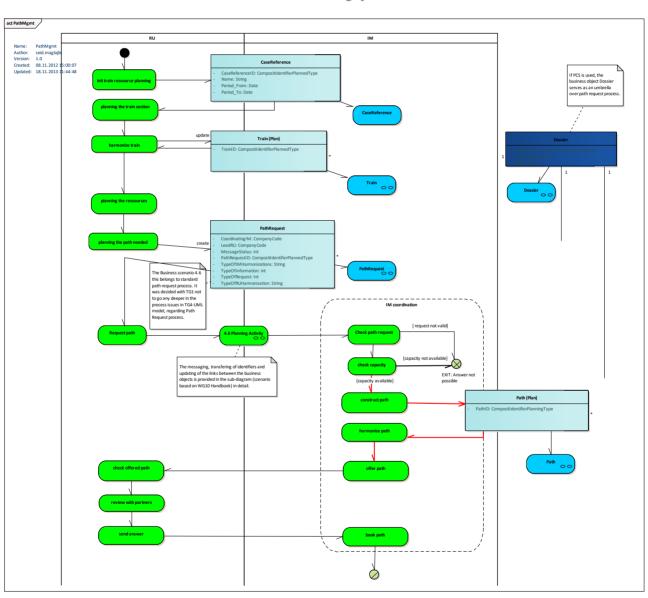


Figure 11: PathMgmt

# **Path Management**

Activity owned by 'PathMgmt', in package 'Main Workflows'

Path Management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

ELEMENTS OWNED BY Path Management
Dossier : Activity
Path : Activity
IM: ActivityPartition
RU: ActivityPartition
IM coordination: InterruptibleActivityRegion
☐ FlowFinal : FlowFinal
OUTGOING BEHAVIORAL RELATIONSHIPS
OCTOOMS BEHAVIORAL RELATIONSHIPS
← ControlFlow from Path Management to FlowFinal
♣ ControlFlow from Path Management to Synchronize the activities
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from Start path management and notify IMs to Path Management
ControlFlow from train adaption to Path Management
ControlFlow from solution? to Path Management Guard: path

# PathMgmt diagram

Activity diagram in package 'Main Workflows'

PathMgmt Version 1.0 seid.maglajlic created on 08.11.2012. Last modified 18.11.2013

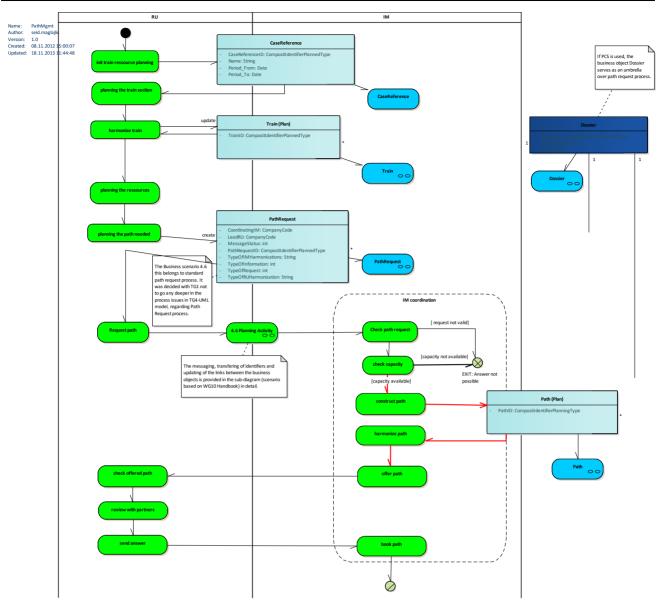


Figure 12: PathMgmt

#### Note

Note in package 'Business Objects'

The Business scenario 4.6 this belongs to standard path request process. It was decided with TG1 not to go any deeper in the process issues in TG4-UML model, regarding Path Request process.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 18.11.2013
Extends

# CaseReference

Object in package 'Business Objects'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from CaseReference to Business Case

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** Source -> Destination

From: Updated : State, Public

To: CaseReference : Object, Public

#### ATTRIBUTES

CaseReferenceID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

Name: String Private

[ Is static True. Containment is Not Specified. ]

Period From : Date Private

[ Is static True. Containment is Not Specified. ]

Period\_To : Date Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) CaseReference Target: Public (Object) Dossier

Association (direction: Source -> Destination)

Source: Public (Object) PathRequest

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) CaseReference (Overview) Target: Public (Object) CaseReference

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [\*]

Target: Public (Object) CaseReference

Cardinality: [1]

#### Dossier

Object in package 'Business Objects'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Dossier to Business Case

[ Direction is 'Source -> Destination'. ]

#### **ATTRIBUTES**

DossierID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

♦ TimetableYear : int Private

[ Is static True. Containment is Not Specified. ]

▼ Title : String Private

[ Is static True. Containment is Not Specified. ]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Dossier

Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier

Target: Public (Object) PathRequest

Cardinality: [1] Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) CaseReference Target: Public (Object) Dossier

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Cardinality: [\*]

Target: Public (Object) Dossier

Cardinality: [1]

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

**Dependency** Source -> Destination

From: Path (Plan): Object, Public Path: Object, Public To:

Dependency

Source -> Destination

synchronize actions: Synchronization, Public From:

Path (Plan): Object, Public

Dependency Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

Path (Plan): Object, Public To:

# **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [1]

Target: Public (Object) PathInformation

Cardinality: [1]

Association (direction: Source -> Destination)

SSOCIATIONS	
Source: Public (Object) Path (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]

# **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
TypeOfInformation: int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]

# 

ASSOCIATIONS	
Association (direction: Source -> Destination)  Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) TrainInformation  Cardinality: [1]
Association (direction: Source -> Destination)  Source: Public (Object) PathRequest  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Source -> Destination)  Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter  Cardinality: [*]
Association (direction: Source -> Destination)  Source: Public (Object) PathRequest  Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]
Association (direction: Unspecified)  Source: Public (Object) Dossier  Cardinality: [1]	Target: Public (Object) PathRequest  Cardinality: [*]
Association (direction: Unspecified)  Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Destination -> Source)  Source: Public (Object) Train (Plan)  Cardinality: [1]	Target: Public (Object) PathRequest  Cardinality: [*]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

▼ TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Train (Plan)  Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan)  Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)  Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

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#### Dossier

Activity owned by 'Path Management', in package 'Main Workflows'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Dossier to Dossier

#### Path

Activity owned by 'Path Management', in package 'Main Workflows'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Path

# IM

ActivityPartition owned by 'Path Management', in package 'Main Workflows'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY IM	
check capacity: Activity	
book path : Activity	
CaseReference : Activity	
PathRequest: Activity	
Train: Activity	

Model Report	12 February, 2025
ELEMENTS OWNED BY IM	
IM: Event	
Start IM Activity : ActivityInitial	
check capacity Activity owned by 'IM', in package 'Main Workflows'	
	check capacity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.11.2013. Last modified 13.11.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from check capacity to EXIT: Answer Guard: capacity not available	not possible
♣ ControlFlow from check capacity to construct path Guard: capacity available	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from Check path request to check capa	city
<b>book path</b> Activity owned by 'IM', in package 'Main Workflows'	book path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 13.11.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
← ControlFlow from book path to FlowFinal	
INCOMING BEHAVIORAL RELATIONSHIPS	
Name: PathID  Information Flow from Path Confirmed Message to	book path
ControlFlow from send answer to book path	

# CaseReference

Activity owned by 'IM', in package 'Main Workflows'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from CaseReference to CaseReference

#### **PathRequest**

Activity owned by 'IM', in package 'Main Workflows'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to PathRequest

#### **Train**

Activity owned by 'IM', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

#### IM

Event owned by 'IM', in package 'Main Workflows'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

# CONNECTORS

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message : Trigger, Public

To: IM : Event, Public

# **Start IM Activity**

ActivityInitial owned by 'IM', in package 'Main Workflows'

# RU

ActivityPartition owned by 'Path Management', in package 'Main Workflows'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY RU
harmonize train : Action
init train ressource planning: Action
planning the path needed : Action
4.6 Planning Activity : Activity
check offered path : Activity
planning the ressources : Activity
planning the train section : Activity
Request path : Activity
request path : Activity
review with partners: Activity

Model Report	12 February, 2025
ELEMENTS OWNED BY RU	
send answer: Activity	
■ ActivityInitial : ActivityInitial	
harmonize train  Action owned by 'RU', in package 'Main Workflows'	
	harmonize train  Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from harmonize train to planning the	ressources
Name: update  Object Flow from harmonize train to Coach	
Name: update  Object Flow from harmonize train to Train (Plan)	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from planning the train section to harm	monize train
Object Flow from Train (Plan) to harmonize train	
init train ressource planning Action owned by 'RU', in package 'Main Workflows'	
	init train ressource planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
◆ Object Flow from init train ressource planning to C	CaseReference
INCOMING REHAVIORAL RELATIONSHIPS	

ControlFlow from ActivityInitial to init train ressource planning

#### INCOMING BEHAVIORAL RELATIONSHIPS

# planning the path needed

Action owned by 'RU', in package 'Main Workflows'

planning the path needed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

# STRUCTURAL PART OF planning the path needed

ActionPin1 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

Object Flow from planning the path needed to PathRequest

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from planning the ressources to planning the path needed

#### ActionPin1

ActionPin owned by 'planning the path needed', in package 'Main Workflows'

#### 4.6 Planning Activity

Activity owned by 'RU', in package 'Main Workflows'

4.6 Planning Activity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from 4.6 Planning Activity to Check path request

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Request path to 4.6 Planning Activity

# check offered path

Activity owned by 'RU', in package 'Main Workflows'

check offered path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from check offered path to review with partners

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from PathDetails Message to check offered path
- ControlFlow from offer path to check offered path

#### planning the ressources

Activity owned by 'RU', in package 'Main Workflows'

Loco, Driver, RCP

planning the ressources Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from planning the ressources to planning the path needed

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize train to planning the ressources

#### planning the train section

Activity owned by 'RU', in package 'Main Workflows'

planning the train section Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from planning the train section to harmonize train

# INCOMING BEHAVIORAL RELATIONSHIPS

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from CaseReference to planning the train section

# Request path

Activity owned by 'RU', in package 'Main Workflows'

Request path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from Request path to PathRequest Message
- ControlFlow from Request path to 4.6 Planning Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to Request path

# request path

Activity owned by 'RU', in package 'Main Workflows'

request path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- **←** ControlFlow from request path to construct path
- ♣ Information Flow from request path to PathRequest Message

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to request path

# review with partners

Activity owned by 'RU', in package 'Main Workflows'

review with partners Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from review with partners to send answer

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check offered path to review with partners

#### send answer

Activity owned by 'RU', in package 'Main Workflows'

send answer Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 Information Flow from send answer to Path Confirmed Message
- ControlFlow from send answer to book path

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from review with partners to send answer

#### **ActivityInitial**

ActivityInitial owned by 'RU', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to init train ressource planning

#### **IM** coordination

InterruptibleActivityRegion owned by 'Path Management', in package 'Main Workflows'

IM coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# Check path request

Activity owned by 'IM coordination', in package 'Main Workflows'

Check path request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Check path request to check capacity
- ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

# INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from 4.6 Planning Activity to Check path request
- ControlFlow from Path request came to Check path request
- Information Flow from PathRequest Message to Check path request

# construct path

Activity owned by 'IM coordination', in package 'Main Workflows'

construct path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from construct path to Path (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from request path to construct path
- ControlFlow from Pre-Constructed product needed to construct path
- ControlFlow from check capacity to construct path Guard: capacity available

# harmonize path

Activity owned by 'IM coordination', in package 'Main Workflows'

harmonize path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize path to offer path

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to harmonize path

### offer path

Activity owned by 'IM coordination', in package 'Main Workflows'

offer path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- Information Flow from offer path to PathDetails Message
- ControlFlow from offer path to check offered path
- ControlFlow from offer path to Further with booking procedure...

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize path to offer path

#### EXIT: Answer not possible

FlowFinal owned by 'IM coordination', in package 'Main Workflows'

# INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from check capacity to EXIT: Answer not possible Guard: capacity not available
- ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

#### Further with booking procedure...

ActivityFinal owned by 'IM coordination', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from offer path to Further with booking procedure...

# Path request came

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from Path request came to Check path request

#### Pre-Constructed product needed

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Pre-Constructed product needed to construct path

#### **FlowFinal**

FlowFinal owned by 'Path Management', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from book path to FlowFinal

#### **RU-RU** coordination

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

RU-RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# **ELEMENTS OWNED BY RU-RU coordination**

B RU coordination : Activity «business use case»

#### **EXTERNAL REQUIREMENTS**

Requirement. Business communication

[ Stereotype is «Functional» ]

Requirement. Referncing the business cases in object model (ex. "translation layer" issue)

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

realization from «business use case» RU-RU coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» RU-RU coordination to «Functional» Referencing the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

CONNECTORS

UseCaseLink Source -> Destination

From: RU: Actor, Public

To: RU-RU coordination : UseCase, Public

### **RU-RU** coordination diagram

Use Case diagram in package 'Main Workflows'

RU-RU coordination Version 1.0 seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

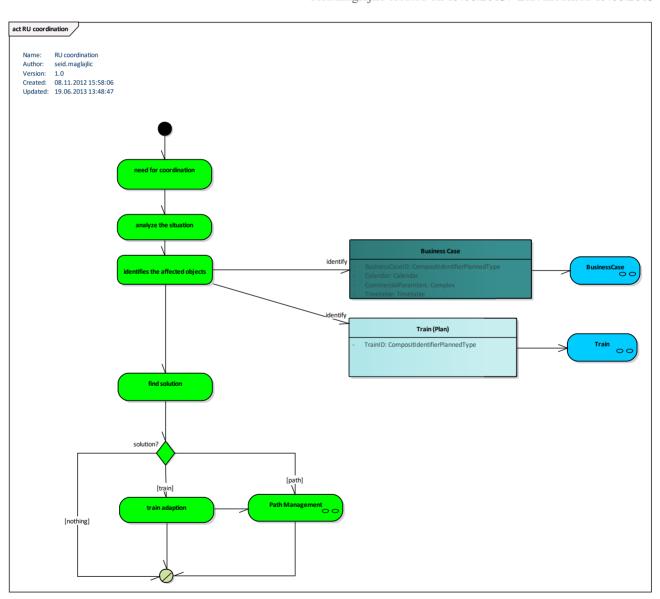


Figure 13: RU-RU coordination

### **RU** coordination

Activity owned by 'RU-RU coordination', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY RU coordination
identifies the affected objects : Action
analyze the situation : Activity
BusinessCase : Activity
find solution: Activity
identifies the affected objects : Activity
need for coordination : Activity
☐ Train : Activity
🗄 train adaption : Activity
solution?: DecisionNode
☐ FlowFinal : FlowFinal
ActivityInitial : ActivityInitial

### **RU** coordination diagram

Activity diagram in package 'Main Workflows'

RU coordination Version 1.0 seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

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RU coordination seid.maglajlic Version: Created: 1.0

08.11.2012 15:58:06 Updated: 19.06.2013 13:48:47

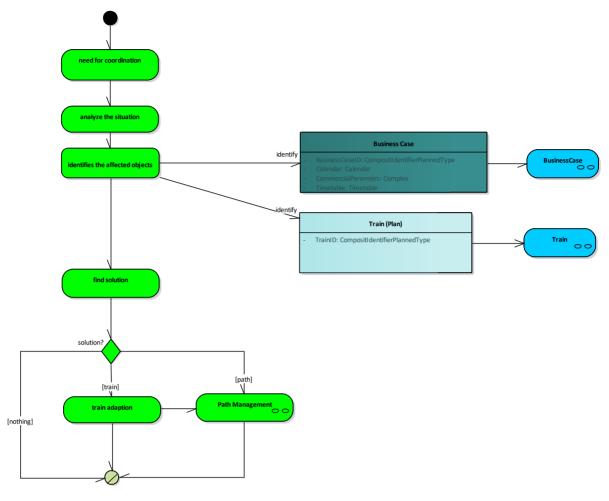


Figure 14: RU coordination

### **Business Case**

Object in package 'Business Objects'

**Business Case** Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

### INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from CaseReference to Business Case [ Direction is 'Source -> Destination'. ] → Aggregation from Dossier to Business Case [ Direction is 'Source -> Destination'. ]

### **ATTRIBUTES**

BusinessCaseID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

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## ✔ Calendar : Calendar Private [ Is static True. Containment is Not Specified. ] ✔ CommercialParamters : Complex Private [ Is static True. Containment is Not Specified. ] ✔ Timetable : Timetable Private [ Is static True. Containment is Not Specified. ]

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**Dependency** Source -> Destination From: Train (Plan) : Object, Public To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [1]

### **ASSOCIATIONS** Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Dossier Cardinality: [\*] Cardinality: [1]

### identifies the affected objects

Action owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### Name: identify In Object Flow from identifies the affected objects to Business Case In ControlFlow from identifies the affected objects to find solution Name: identify In Object Flow from identifies the affected objects to Train (Plan)

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

### analyze the situation

Activity owned by 'RU coordination', in package 'Main Workflows'

what is affected? what causes the problems?

analyze the situation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from analyze the situation to identifies the affected objects
- ControlFlow from analyze the situation to identifies the affected objects

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from need for coordination to analyze the situation

### **BusinessCase**

Activity owned by 'RU coordination', in package 'Main Workflows'

BusinessCase Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to BusinessCase

### find solution

Activity owned by 'RU coordination', in package 'Main Workflows'

find solution
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from find solution to solution?

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from identifies the affected objects to find solution

### identifies the affected objects

Activity owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

### need for coordination

Activity owned by 'RU coordination', in package 'Main Workflows'

- optimization of own ressources
- operational issues
- customer needs
- load exeeds reg. cap.
- timing
- ....

need for coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from need for coordination to analyze the situation

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to need for coordination

### **Train**

Activity owned by 'RU coordination', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

### train adaption

Activity owned by 'RU coordination', in package 'Main Workflows'

train adaption

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

OUTGOING	REHAVIORAL.	RELATIONSHIPS
DUIGOING		KELAHUNSHIIS

- ControlFlow from train adaption to Path Management
- ◆ ControlFlow from train adaption to FlowFinal

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from solution? to train adaption Guard: train

### solution?

DecisionNode owned by 'RU coordination', in package 'Main Workflows'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from solution? to FlowFinal Guard: nothing
- ControlFlow from solution? to train adaption Guard: train
- ControlFlow from solution? to Path Management Guard: path

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from find solution to solution?

### **FlowFinal**

FlowFinal owned by 'RU coordination', in package 'Main Workflows'

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Path Management to FlowFinal
- ControlFlow from solution? to FlowFinal Guard: nothing

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INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from train adaption to FlowFinal
ActivityInitial
ActivityInitial owned by 'RU coordination', in package 'Main Workflows'
OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from ActivityInitial to need for coordination
Operation
UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'
Operation  Version 1.0 Phase 1.0 Proposes seid.maglajlic created on 19.06.2013. Last modified 19.06.2013
ELEMENTS OWNED BY Operation
Operation : Activity «business use case»
Operation
Activity owned by 'Operation', in package 'Main Workflows'
Operation  Version 1.0 Phase 1.0 Proposes seid.maglajlic created on 24.06.2013. Last modified 24.06.2013.
ELEMENTS OWNED BY Operation
Process operational messages : Activity
IMs and their systems : ActivityPartition
RUs and their systems : ActivityPartition
Operaional Messages diagram
Activity diagram in package 'Main Workflows'

Operaional Messages
Version 1.0
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

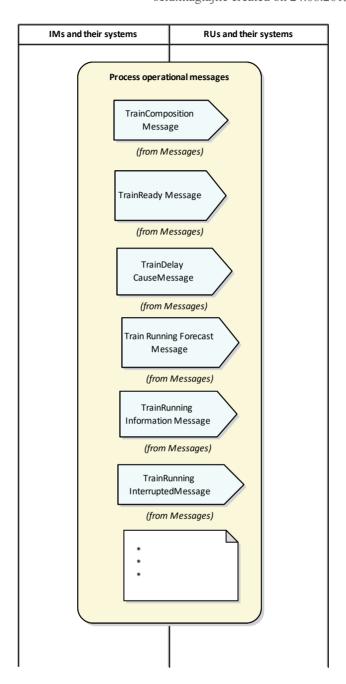


Figure 15: Operaional Messages

### **TrainComposition Message**

Trigger in package 'Messages'

TrainComposition Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** Source -> Destination

From: TRain Composition Message procession started: Synchronization, Public

To: TrainComposition Message : Trigger, Public

### TrainDelay CauseMessage

Trigger in package 'Messages'

TrainDelay CauseMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Delay Cause Message processing started : Synchronization, Public

To: TrainDelay CauseMessage : Trigger, Public

### TrainReady Message

Trigger in package 'Messages'

TrainReady Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

### CONNECTORS

Dependency Source -> Destination
 From: TrainReady Message : Trigger, Public
 To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Train Ready Message processing started : Synchronization, Public

To: TrainReady Message: Trigger, Public

### Train Running Forecast Message

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

### **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

### CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Running Information Message processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

### TrainRunning InterruptedMessage

Trigger in package 'Messages'

TrainRunning InterruptedMessage
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 21.05.2013

### CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning InterruptedMessage: Trigger, Public

To: Interrupted : State, Public

**Dependency** Source -> Destination

From: Train Running Interrupted Message processing started : Synchronization, Public

To: TrainRunning InterruptedMessage : Trigger, Public

### **Process operational messages**

Activity owned by 'Operation', in package 'Main Workflows'

Process operational messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

### IMs and their systems

ActivityPartition owned by 'Operation', in package 'Main Workflows'

IMs and their systems Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

### RUs and their systems

ActivityPartition owned by 'Operation', in package 'Main Workflows'

RUs and their systems Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

### **ELEMENTS OWNED BY RUs and their systems**

Process RU-RU messages : Activity

### **Process RU-RU messages**

Activity owned by 'RUs and their systems', in package 'Main Workflows'

Process RU-RU messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

### **IM-IM** Coordination

UMLDiagram in package 'Main Workflows'

IM-IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

### **Path Management**

UMLDiagram in package 'Main Workflows'

Path Management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

### **RU-RU** coordination

UMLDiagram in package 'Main Workflows'

**RU-RU** coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

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### **Main Objects and LINKs**

Package in package 'Introduction'

Main Objects and LINKs Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### Involved Objects, IDs, Basic Attributes and Links

Object in package 'Main Objects and LINKs'

Involved Objects, IDs, Basic Attributes and Links

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

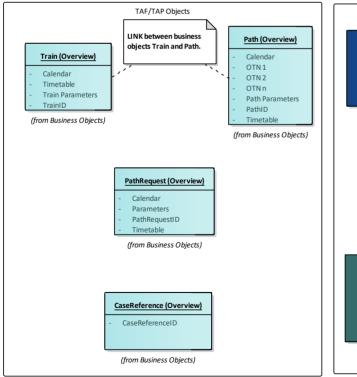
ELEMENTS OWNED BY Involved Objects, IDs, Basic Attributes and Links

Business Case: Node

### **Involved Objects diagram**

Deployment diagram in package 'Main Objects and LINKs'

Involved Objects
Version 1.0
seid.maglajlic created on 24.05.2013. Last modified 16.06.2013



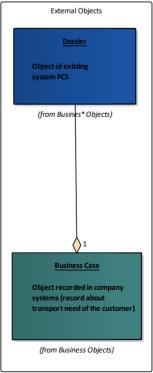


Figure 16: Involved Objects

### **Text**

Text in package 'Main Objects and LINKs'

### Object recorded in company systems (record about transport need of the customer)

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

### **Text**

Text in package 'Main Objects and LINKs'

### Object of existing system PCS

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

### **Business Case**

Object in package 'Business Objects'

Business Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

INCOMING STRUCTURAL RELATIONSHIPS	
→ Aggregation from CaseReference to Business Case	[ Direction is 'Source -> Destination'. ]
→ Aggregation from Dossier to Business Case	[ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
BusinessCaseID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
Calendar : Calendar Private	[ Is static True. Containment is Not Specified. ]
CommercialParamters : Complex Private	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

### CaseReference (Overview)

Object in package 'Business Objects'

CaseReference (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### 

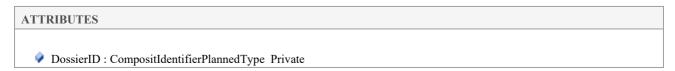
ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) PathRequest (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Train (Overview)

### Dossier

Object in package 'Business Objects'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

OUTGOING STRUCTURAL RELATIONSHIPS	
Aggregation from Dossier to Business Case	[ Direction is 'Source -> Destination'. ]



ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
TimetableYear : int Private	[ Is static True. Containment is Not Specified. ]
Title: String Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Object) Dossier  Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)  Source: Public (Object) Dossier  Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)  Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Unspecified)  Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

### Path (Overview)

Object in package 'Business Objects'

Path (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ELEMENTS OWNED BY Path (Overview)
OperationalTrainNumber (OTN): Artifact
Path (OP): Object

### ELEMENTS OWNED BY Path (Overview) Path (Plan): Object

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
OTN 1 : Private	[ Is static True. Containment is Not Specified. ]
♦ OTN 2 : Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
Path Parameters: Private	[ Is static True. Containment is Not Specified. ]
PathID : Private	[ Is static True. Containment is Not Specified. ]
Timetable: Private	[ Is static True. Containment is Not Specified. ]

# Association (direction: Unspecified) Source: Public (Object) Path (Overview) Target: Public (Object) Path Association (direction: Unspecified) Source: Public (Object) CaseReference (Overview) Target: Public (Object) Path (Overview) Association (direction: Unspecified) Source: Public (Object) PathRequest (Overview) Target: Public (Object) Path (Overview)

### **ASSOCIATIONS**

Source: Public (Object) Train (Overview) Target: Public (Object) Path (Overview)

### OperationalTrainNumber (OTN)

Artifact owned by 'Path (Overview)', in package 'Business Objects'

OTN is contained on each path section. Indication of the OTN on one location means that the OTN is valid for the section starting at this location until the next subsequent one.

On the subsequent path segment (i.e. between next two locations), the OTN can be changed.

OperationalTrainNumber (OTN) Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 06.03.2015

### CONNECTORS

Dependency

Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

Path (OP): Object, Public To:

Dependency

Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public From:

PlannedJourenyLocation: Object, Public

Dependency Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public

Path (Plan): Object, Public To:

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Dependency

Source -> Destination

Path (OP): Object, Public From:

Train Running Forecast Message: Trigger, Public To:

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### CONNECTORS

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Path : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Path (Plan): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

### CONNECTORS

Dependency

Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public From:

Path (Plan): Object, Public To:

### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [1]

Target: Public (Object) PathInformation

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [\*]

Target: Public (Object) CaseReference

Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

### PathRequest (Overview)

Object in package 'Business Objects'

PathRequest (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### **ELEMENTS OWNED BY PathRequest (Overview)**

■ PathRequest : Object

### **ATTRIBUTES**

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
Parameters: Private	[ Is static True. Containment is Not Specified. ]
PathRequestID: Private	[ Is static True. Containment is Not Specified. ]
Timetable: Private	[ Is static True. Containment is Not Specified. ]

I
ic (Object) PathRequest
ic (Object) Train (Overview)
ic (Object) Path (Overview)
ic (Object) PathRequest (Overview)
i

### **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM: CompanyCode Private	[ Is static True. Containment is Not Specified. ]
↓ LeadRU : CompanyCode Private	

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]
	[ is state True. Containment is Not Specified. ]
PathRequestID : CompositIdentifierPlannedType Private	
r aunicequesus : compositacinineri immedi ; pe i i i i i i	[ Is static True. Containment is Not Specified. ]
TypeOfIMHarmonizations : String Private	
	[ Is static True. Containment is Not Specified. ]
TypeOfInformation : int Private	
TypeOnnioniation . Int Trivate	[ Is static True. Containment is Not Specified. ]
TypeOfRequest : int Private	
	[ Is static True. Containment is Not Specified. ]
TypeOfDI Harmonization · String Private	
TypeOfRUHarmonization : String Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) CaseReference
Cardinality: [*]	Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) NetworkSpecificParameter
Cardinality: [0]	Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) PathInformation
Cardinality: [1]	Cardinality: [1]
Association (direction: Unspecified)	

SSOCIATIONS	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]

### Train (Overview)

ASSOCIATIONS

Association (direction: Unspecified)

Object in package 'Business Objects'

**ELEMENTS OWNED BY Train (Overview)** 

Train (Overview)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

Train (OP): Object	
Train (Plan): Object	
ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Source: Public (Object) Train (Overview)	Target: Public (Object) Train
Association (direction: Unspecified)	
Source: Public (Object) Train (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Train (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Train (Overview)

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Prom: Train (OP) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Target: Public (Object) TrainInformation

Cardinality: [1] Cardinality: [1]

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

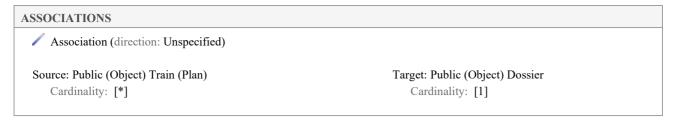
Pependency Source -> Destination
From: Train (Plan): Object, Public
To: Train: Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Target: Public (Object) TrainInformation Cardinality: [1] Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Target: Public (Object) PathRequest Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1]



### **Business Object Topology diagram**

Deployment diagram in package 'Main Objects and LINKs'

Business Object Topology Version 1.0 seid.maglajlic created on 11.01.2006. Last modified 16.06.2013

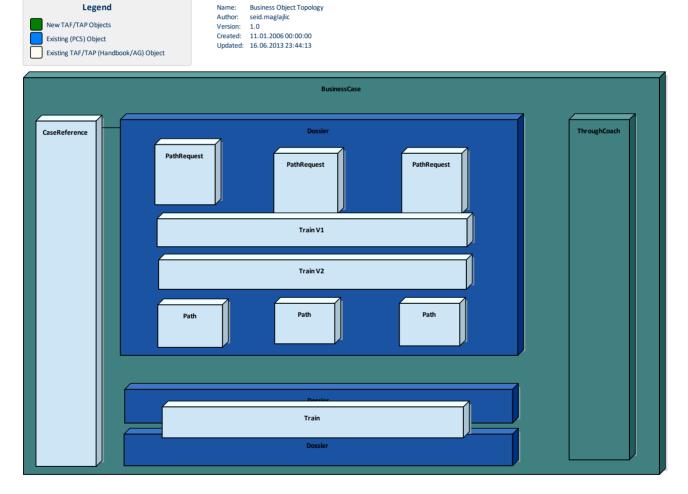


Figure 17: Business Object Topology

### **BusinessCase**

Node in package 'Topology'

BusinessCase Version 1.0 Phase 1.0 Proposed created on 11.01.2006. Last modified 18.02.2013

ELEMENTS OWNED BY BusinessCase
CaseReference : Node
Dossier : Node
Dossier : Node
Dossier : Node
Path: Node
Path: Node
Path : Node
☐ ThroughCoach : Node
Train: Node

### CaseReference

Node owned by 'BusinessCase', in package 'Topology'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

Target: Public (Node) Dossier
Target: Public (Node) PathRequest
Target: Public (Node) Train

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### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) ThroughCoach

### **Dossier**

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### **Dossier**

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### **Dossier**

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

ELEMENTS OWNED BY Dossier
PathRequest : Node
PathRequest : Node
PathRequest : Node
Train V1 : Node
☐ Train V2 : Node

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) Dossier

### **ASSOCIATIONS**

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) PathRequest

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Train V1

Node owned by 'Dossier', in package 'Topology'

Train V1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### **ASSOCIATIONS**



Association (direction: Unspecified)

Source: Public (Node) ThroughCoach

Target: Public (Node) Train V1

### Train V2

Node owned by 'Dossier', in package 'Topology'

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Train V2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

### **Path**

Node owned by 'BusinessCase', in package 'Topology'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **Path**

Node owned by 'BusinessCase', in package 'Topology'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **Path**

Node owned by 'BusinessCase', in package 'Topology'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### ThroughCoach

Node owned by 'BusinessCase', in package 'Topology'

ThroughCoach Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train V1
Association (direction: Unspecified)  Source: Public (Node) ThroughCoach	Target: Public (Node) Train
Association (direction: Unspecified)  Source: Public (Node) CaseReference	Target: Public (Node) ThroughCoach

### **Train**

Node owned by 'BusinessCase', in package 'Topology'

Train
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) Train
Association (direction: Unspecified)  Source: Public (Node) ThroughCoach	Target: Public (Node) Train

### CaseReference

Node owned by 'BusinessCase', in package 'Topology'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) Dossier
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) PathRequest
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) Train
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) ThroughCoach

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier

> Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

ELEMENTS OWNED BY Dossier
PathRequest : Node
PathRequest : Node
PathRequest : Node
Train V1 : Node
Train V2 : Node

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) Dossier

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **ASSOCIATIONS**

Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) PathRequest

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

> PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **Train V1**

Node owned by 'Dossier', in package 'Topology'

Train V1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Node) ThroughCoach

Target: Public (Node) Train V1

### **Train V2**

Node owned by 'Dossier', in package 'Topology'

Train V2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### Path

Node owned by 'BusinessCase', in package 'Topology'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Path

Node owned by 'BusinessCase', in package 'Topology'

Path

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Path

Node owned by 'BusinessCase', in package 'Topology'

Path

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **ThroughCoach**

Node owned by 'BusinessCase', in package 'Topology'

ThroughCoach Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train V1
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) ThroughCoach

### Train

Node owned by 'BusinessCase', in package 'Topology'

Train
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) Train

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) ThroughCoach Target: Public (Node) Train

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) PathRequest

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Train V1

Node owned by 'Dossier', in package 'Topology'

Train V1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Node) ThroughCoach

Target: Public (Node) Train V1

### Train V2

Node owned by 'Dossier', in package 'Topology'

Train V2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

### Text

Text in package 'Main Objects and LINKs'

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.02.2013. Last modified 18.02.2013
Extends

### **Business Case**

Node owned by 'Involved Objects, IDs, Basic Attributes and Links', in package 'Main Objects and LINKs'

Business Case
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 14.06.2013

ELEMENTS OWNED BY Business Case
Case Reference : Node
Case Reference : Node
Case Reference : Node
Dossier : Node
Path : Node
Path : Node
Path : Node
Path Request : Node

ELEMENTS OWNED BY Business Case
Path Request : Node
PathRequest : Node
Train: Node
Train: Node

### **Case Reference**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Case Reference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### **Case Reference**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Case Reference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### **Case Reference**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Case Reference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### **Dossier**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### **Path**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified) LINK	
Source: Public (Node) Train	Target: Public (Node) Path
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Path

### **Path**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS		
Association (direction: Unspecified)		
Source: Public (Node) PathRequest	Target: Public (Node) Path	
Association (direction: Unspecified) LINK		
Source: Public (Node) Train	Target: Public (Node) Path	

### **Path**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS		
Association (direction: Unspecified)		
Source: Public (Node) Path Request	Target: Public (Node) Path	
Association (direction: Unspecified) LINK		
Source: Public (Node) Train	Target: Public (Node) Path	

### **Path Request**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Path Request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Path
Source. I done (Node) I am request	raiget. I done (ivode) i am
Association (direction: Unspecified)	
Source: Public (Node) Path Request	Target: Public (Node) Train

### **Path Request**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Path Request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Train
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Path

### **PathRequest**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
C DIL OLIVBAD	T ( DIF OF IND (
Source: Public (Node) PathRequest	Target: Public (Node) Path

## ASSOCIATIONS Association (direction: Unspecified) Source: Public (Node) PathRequest Target: Public (Node) Train

### **Train**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified) LINK Source: Public (Node) Train	Target: Public (Node) Path
Association (direction: Unspecified) LINK Source: Public (Node) Train	Target: Public (Node) Path
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Train
Association (direction: Unspecified)  Source: Public (Node) PathRequest	Target: Public (Node) Train

### **Train**

Node owned by 'Business Case', in package 'Main Objects and LINKs'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

ASSOCIATIONS	
Association (direction: Unspecified) LINK Source: Public (Node) Train	Target: Public (Node) Path
Association (direction: Unspecified)  Source: Public (Node) Path Request	Target: Public (Node) Train

ASSOCIATIONS		

### Legend

Text in package 'Main Objects and LINKs'

Legend
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.02.2013. Last modified 18.02.2013
Extends

### **Target Audience**

Package in package 'Overview'

Target Audience Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.05.2013. Last modified 24.05.2013

### **Target Audience diagram**

Analysis diagram in package 'Target Audience'

Target Audience Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 28.06.2013

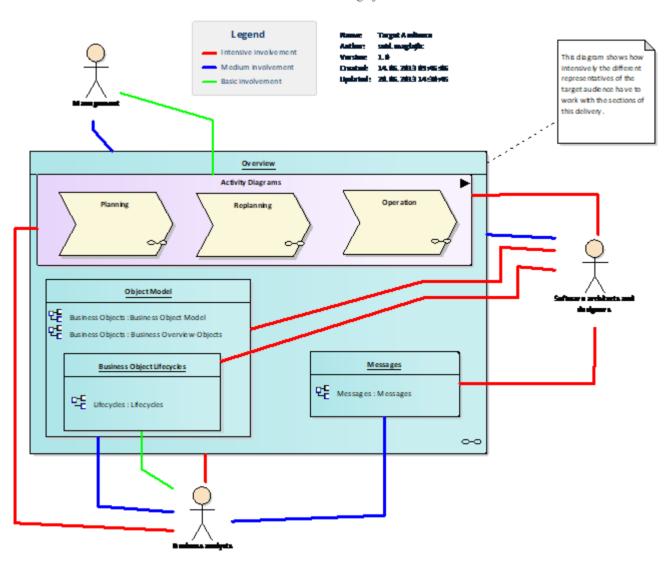


Figure 18: Target Audience

### Note

Note in package 'Target Audience'

This diagram shows how intensively the different representatives of the target audience have to work with the sections of this delivery.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

### **Text**

Text in package 'Target Audience'

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

### **Business analysts**

Actor in package 'Target Audience'

Business analysts Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (Object) Object Model
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (InformationItem) Messages
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (InformationItem) Activity Diagrams
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (Object) Overview
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (Object) Messages
Association (direction: Unspecified)	

ASSOCIATIONS	
Source: Public (Actor) Business analysts	Target: Public (Object) Business Object Lifecycles

### Management

Actor in package 'Target Audience'

Management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Actor) Management	Target: Public (InformationItem) Activity Diagrams
Association (direction: Unspecified)  Source: Public (Actor) Management	Target: Public (Object) Overview

### Software architects and designers

Actor in package 'Target Audience'

Software architects and designers Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Actor) Software architects and designers	Target: Public (InformationItem) Activity Diagrams
Association (direction: Unspecified)	
Source: Public (Actor) Software architects and designers	Target: Public (Object) Business Object Lifecycles
Association (direction: Unspecified)	
Source: Public (Actor) Software architects and designers	Target: Public (Object) Overview
Association (direction: Unspecified)	
Source: Public (Actor) Software architects and designers	Target: Public (Object) Object Model

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### **Object Model**

Object in package 'Target Audience'

Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### ELEMENTS OWNED BY Object Model Business Object Lifecycles: Object



### **Object Model diagram**

CompositeStructure diagram in package 'Target Audience'

Object Model Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

Figure 19: Object Model

### **Business Object Lifecycles**

Object owned by 'Object Model', in package 'Target Audience'

Business Object Lifecycles Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Actor) Software architects and designers	Target: Public (Object) Business Object Lifecycles
Association (direction: Unspecified)  Source: Public (Actor) Business analysts	Target: Public (Object) Business Object Lifecycles

### **Overview**

Object in package 'Target Audience'

Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ELEMENTS OWNED BY Overview
Operation : Activity «process»
Planning : Activity «process»
Messages : Object

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Actor) Business analysts	Target: Public (Object) Overview
Association (direction: Unspecified)	
Source: Public (Actor) Software architects and designers	Target: Public (Object) Overview
Association (direction: Unspecified)	
Source: Public (Actor) Management	Target: Public (Object) Overview

ASSOCIATIONS

### **Operation**

Activity «process» owned by 'Overview', in package 'Target Audience'

Operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### **Operation diagram**

Activity diagram in package 'Target Audience'

Operation Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 19.06.2013

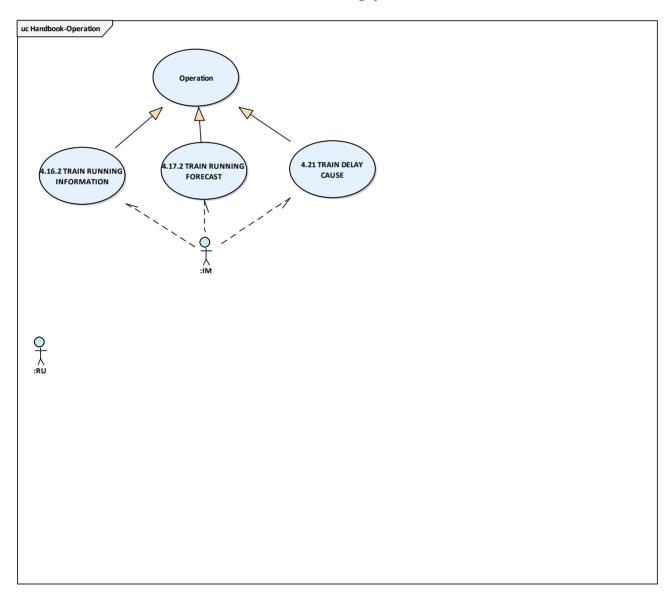


Figure 20: Operation

### **Planning**

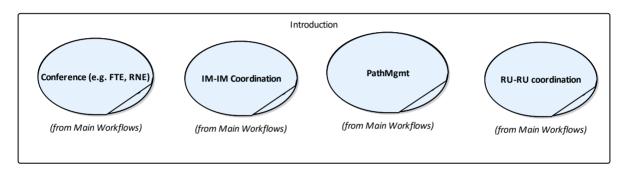
Activity «process» owned by 'Overview', in package 'Target Audience'

Planning
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### Planning diagram

Activity diagram in package 'Target Audience'

Planning Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 14.06.2013



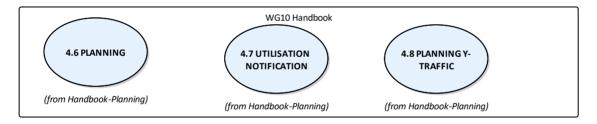


Figure 21: Planning

### 4.6 PLANNING

UseCase in package 'Handbook-Planning'

4.6 PLANNING Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 14.06.2013

## ELEMENTS OWNED BY 4.6 PLANNING © c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o : Activity PL-Activity : Activity

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by '4.6 PLANNING', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 28.06.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID o

### **PL-Activity**

Activity owned by '4.6 PLANNING', in package 'Handbook-Planning'

PL-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

### 4.7 UTILISATION NOTIFICATION

UseCase in package 'Handbook-Planning'

4.7 UTILISATION NOTIFICATION

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 21.05.2013

### **ELEMENTS OWNED BY 4.7 UTILISATION NOTIFICATION**

U-Activity: Activity

### **U-Activity**

Activity owned by '4.7 UTILISATION NOTIFICATION', in package 'Handbook-Planning'

U-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

### **ELEMENTS OWNED BY U-Activity**

■ c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o: Activity

### **ELEMENTS OWNED BY U-Activity**

**E** LINK TO BE CHECKED : Activity

### c21-SendMessage-IM-RU-TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'U-Activity', in package 'Handbook-Planning'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o

### LINK TO BE CHECKED

Activity owned by 'U-Activity', in package 'Handbook-Planning'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK TO BE CHECKED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

### 4.8 PLANNING Y-TRAFFIC

UseCase in package 'Handbook-Planning'

4.8 PLANNING Y-TRAFFIC Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

■ PL Y Activity : Activity

### **PLY Activity**

Activity owned by '4.8 PLANNING Y-TRAFFIC', in package 'Handbook-Planning'

PL Y Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY PL Y Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m- PR_m-OTN_o-RelID_o : Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity

ELEMENTS OWNED BY PL Y Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
LINK HAS BEEN REFUSED : Activity	
LINK NOT CONFIRMED : Activity	
PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity	
PathRequest: Object	
PathConfirmed Message : Trigger	
PathConfirmed Message : Trigger	
PathDetails Message : Trigger	
PathDetails Message Status booked : Trigger	

### c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 21.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o to IM
- Information Flow from c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message to c01-SendMessage-RU-IM -TR m-CR m-PR m-OTN o-RelID o

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 23.08.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathConfirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 06.06.2013

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 06.06.2013

# ELEMENTS OWNED BY CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathConfirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 06.06.2013

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 28.06.2013

### ELEMENTS OWNED BY LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

🗄 LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions
- ← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

- information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)
- information Flow from Error Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK HAS BEEN REFUSED

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK HAS BEEN REFUSED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### ELEMENTS OWNED BY LINK HAS BEEN REFUSED

■ LINK HAS BEEN REFUSED : Activity

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK HAS BEEN REFUSED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to LINK HAS BEEN REFUSED

### LINK HAS BEEN REFUSED

Activity owned by 'LINK HAS BEEN REFUSED', in package 'Handbook-Planning'

LINK HAS BEEN REFUSED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK HAS BEEN REFUSED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to LINK HAS BEEN REFUSED

### LINK NOT CONFIRMED

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK NOT CONFIRMED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK NOT CONFIRMED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to LINK NOT CONFIRMED

### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 06.06.2013

### ELEMENTS OWNED BY PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

■ PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### **PathRequest**

Object owned by 'PL Y Activity', in package 'Handbook-Planning'

PathRequest Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 14.06.2013. Last modified 08.09.2013

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
Parameters: Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
Timetable: Private	[ Is static True. Containment is Not Specified. ]

### **PathConfirmed Message**

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### **PathConfirmed Message**

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

Dependency

Source -> Destination

Path Confirmed Processing started: Synchronization, Public

To: PathConfirmed Message: Trigger, Public

### PathDetails Message

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

### PathDetails Message Status booked

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

### Conference (e.g. FTE, RNE)

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

Conference (e.g. FTE, RNE) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

ELEMENTS OWNED BY Conference (e.g. FTE, RNE)	
business case identification : Activity «business use case»	
common review : Activity «business use case»	
defining of volumes (trains/wagons): Activity «business use case»	
IM Coordination : Activity «business use case»	
negotiation : Activity «business use case»	
RU coordination : Activity «business use case»	
ActivityFinal : ActivityFinal «business use case»	
ActivityInitial : ActivityInitial «business use case»	
EXTERNAL REQUIREMENTS	
☑ Requirement. Business communication	
	[ Stereotype is «Functional» ]
☑ Requirement. Planning reference for path planning management	
FTE	[ Stereotype is «Functional» ]

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Planning reference for path planning management

[ Direction is 'Source -> Destination'. ]

FRealization from «business use case» Conference (e.g. FTE, RNE) to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**✓ UseCaseLink** Source → Destination

From: RU: Actor, Public

To: Conference (e.g. FTE, RNE): UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target:

Target: Public (UseCase) Conference (e.g. FTE, RNE) «business use case»

### business case identification

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

business case identification Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### STRUCTURAL PART OF business case identification

ObjectNode2 : ActionPin

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

Object Flow from business case identification to Business Case

← ControlFlow from business case identification to defining of volumes (trains/wagons)

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from negotiation to business case identification

### ObjectNode2

ActionPin owned by 'business case identification', in package 'Main Workflows'

### common review

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

common review Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**◆** ControlFlow from common review to RU coordination

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from defining of volumes (trains/wagons) to common review

### defining of volumes (trains/wagons)

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

defining of volumes (trains/wagons)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ELEMENTS OWNED BY defining of volumes (trains/wagons)
create train object : Action
Relate to business case : Action
BusinessCase : Activity
define the transport volume : Activity
detect number of trains : Activity
detect throughgoing coaches: Activity
Train Lifecycle Overview: Activity

Model Report 12 February, 2025 ELEMENTS OWNED BY defining of volumes (trains/wagons) ■ Train-Global : Activity ■ ActivityInitial : ActivityInitial ■ ActivityFinal : ActivityFinal **OUTGOING BEHAVIORAL RELATIONSHIPS** - ControlFlow from defining of volumes (trains/wagons) to common review Name: create/update Object Flow from defining of volumes (trains/wagons) to Coach INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from business case identification to defining of volumes (trains/wagons) create train object Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows' create train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012 OUTGOING BEHAVIORAL RELATIONSHIPS ◆ Object Flow from create train object to Train (Plan) ♣ ControlFlow from create train object to Relate to business case

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from as many as needed to create train object

### Relate to business case

Action owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Relate to business case Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ ControlFlow from Relate to business case to Synchronization

Name: link

♦ Object Flow from Relate to business case to Business Case

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from create train object to Relate to business case

### **BusinessCase**

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

BusinessCase Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to BusinessCase

### define the transport volume

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

how many coaches? throughgoing coaches? complete/block trains?

> define the transport volume Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from define the transport volume to detect throughgoing coaches

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to define the transport volume

### detect number of trains

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect number of trains Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from detect number of trains to as many as needed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from detect throughgoing coaches to detect number of trains

### detect throughgoing coaches

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

detect throughgoing coaches Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

- ◆ Object Flow from detect throughgoing coaches to Coach
- ControlFlow from detect throughgoing coaches to detect number of trains

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from define the transport volume to detect throughgoing coaches

### Train Lifecycle Overview

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train Lifecycle Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train Lifecycle Overview

### Train-Global

Activity owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

Train-Global Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train-Global

### **ActivityInitial**

ActivityInitial owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to define the transport volume

### **ActivityFinal**

ActivityFinal owned by 'defining of volumes (trains/wagons)', in package 'Main Workflows'

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Synchronization to ActivityFinal

### **IM Coordination**

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**←** ControlFlow from IM Coordination to Synchronize the activities

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start path management and notify IMs to IM Coordination

### negotiation

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

negotiation

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.06.2013

#### STRUCTURAL PART OF negotiation

ObjectNode1 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from negotiation to business case identification

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to negotiation

# ObjectNode1

ActionPin owned by 'negotiation', in package 'Main Workflows'

#### **RU** coordination

Activity owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU coordination to Start path management and notify IMs

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from common review to RU coordination

# **ActivityFinal**

ActivityFinal owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Synchronize the activities to ActivityFinal

Model Report \_\_\_\_\_\_ 12 February, 2025

#### **ActivityInitial**

ActivityInitial owned by 'Conference (e.g. FTE, RNE)', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to negotiation

#### **IM-IM Coordination**

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

IM-IM Coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# ELEMENTS OWNED BY IM-IM Coordination IM-IM coordination : Activity «business use case»

EXTERNAL REQUIREMENTS	
Requirement. Business communication	
	[ Stereotype is «Functional» ]
☑ Requirement. IM path construction	
TG1/TG4	
	[ Stereotype is «Functional» ]
Requirement. Referncing the business cases in object model (ex. "translation layer" issue)	
	[ Stereotype is «Functional» ]

# **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» IM-IM Coordination to «Functional» Referring the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

- ← Realization from «business use case» IM-IM Coordination to «Functional» IM path construction

  [ Direction is 'Source -> Destination'. ]
- Realization from «business use case» IM-IM Coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor»

Target: Public (UseCase) IM-IM Coordination «business use case»

# **IM-IM** coordination

Activity owned by 'IM-IM Coordination', in package 'Main Workflows'

IM-IM coordination Version 1.0 Phase 1.0 Proposed Hantak created on 25.03.2013. Last modified 19.06.2013

#### **ELEMENTS OWNED BY IM-IM coordination**

■ Path : Activity

#### Path

Activity owned by 'IM-IM coordination', in package 'Main Workflows'

Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Path

# **PathMgmt**

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

PathMgmt Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# **ELEMENTS OWNED BY PathMgmt**

Path Management : Activity «business use case»

EXTERNAL REQUIREMENTS	
☑ Requirement. IM path construction	
Requirement. In pain construction	
TG1/TG4	
	[ Stereotype is «Functional» ]
☑ Requirement. Through-Going coaches (through-coaches)	
TG1	
10.	[ Stereotype is «Functional» ]

# **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from «business use case» PathMgmt to «Functional» Through-Going coaches (through-coaches)

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» PathMgmt to «Functional» IM path construction

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

UseCaseLink Source -> Destination

From: IM : Actor, Public

To: PathMgmt : UseCase, Public

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: PathMgmt : UseCase, Public

# **Path Management**

Activity owned by 'PathMgmt', in package 'Main Workflows'

Path Management Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# ELEMENTS OWNED BY Path Management Dossier : Activity Path : Activity IM : ActivityPartition

Model Report 12 February, 2025 **ELEMENTS OWNED BY Path Management B** RU: ActivityPartition IM coordination : InterruptibleActivityRegion **■** FlowFinal : FlowFinal **OUTGOING BEHAVIORAL RELATIONSHIPS** ← ControlFlow from Path Management to FlowFinal ControlFlow from Path Management to Synchronize the activities INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Start path management and notify IMs to Path Management ControlFlow from train adaption to Path Management ControlFlow from solution? to Path Management Guard: path

#### Dossier

Activity owned by 'Path Management', in package 'Main Workflows'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Dossier to Dossier

#### **Path**

Activity owned by 'Path Management', in package 'Main Workflows'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

Model Report	12 February, 2025
INCOMING BEHAVIORAL RELATIONSHIPS	
Object Flow from Path (Plan) to Path	
M	
ActivityPartition owned by 'Path Management', in pack	age 'Main Workflows'
	Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012
ELEMENTS OWNED BY IM	
check capacity: Activity	
book path : Activity	
CaseReference : Activity	
PathRequest : Activity	
Train : Activity	
IM: Event	
Start IM Activity : ActivityInitial	
heck capacity	
Activity owned by 'IM', in package 'Main Workflows'	1 1 2
	check capacity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.11.2013. Last modified 13.11.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from check capacity to EXIT: Answer r Guard: capacity not available	not possible
ControlFlow from check capacity to construct path	

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check path request to check capacity

# book path

Activity owned by 'IM', in package 'Main Workflows'

book path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 13.11.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from book path to FlowFinal

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: PathID

- Information Flow from Path Confirmed Message to book path
- ControlFlow from send answer to book path

# CaseReference

Activity owned by 'IM', in package 'Main Workflows'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from CaseReference to CaseReference

#### **PathRequest**

Activity owned by 'IM', in package 'Main Workflows'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to PathRequest

#### Train

Activity owned by 'IM', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

#### IM

Event owned by 'IM', in package 'Main Workflows'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

# **Start IM Activity**

ActivityInitial owned by 'IM', in package 'Main Workflows'

# RU

ActivityPartition owned by 'Path Management', in package 'Main Workflows'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# ELEMENTS OWNED BY RU

la harmonize train: Action

ELEMENTS OWNED BY RU
init train ressource planning : Action
planning the path needed : Action
3.6 Planning Activity: Activity
check offered path: Activity
planning the ressources : Activity
planning the train section : Activity
Request path: Activity
request path: Activity
review with partners: Activity
send answer : Activity
ActivityInitial : ActivityInitial

# harmonize train

Action owned by 'RU', in package 'Main Workflows'

harmonize train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS ControlFlow from harmonize train to planning the ressources Name: update Object Flow from harmonize train to Coach Name: update



#### OUTGOING BEHAVIORAL RELATIONSHIPS

◆ Object Flow from harmonize train to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from planning the train section to harmonize train
- Object Flow from Train (Plan) to harmonize train

#### init train ressource planning

Action owned by 'RU', in package 'Main Workflows'

init train ressource planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from init train ressource planning to CaseReference

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to init train ressource planning

# planning the path needed

Action owned by 'RU', in package 'Main Workflows'

planning the path needed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### STRUCTURAL PART OF planning the path needed

ActionPin1 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: create

Object Flow from planning the path needed to PathRequest

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from planning the ressources to planning the path needed

#### INCOMING BEHAVIORAL RELATIONSHIPS

# ActionPin1

ActionPin owned by 'planning the path needed', in package 'Main Workflows'

# 4.6 Planning Activity

Activity owned by 'RU', in package 'Main Workflows'

4.6 Planning Activity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from 4.6 Planning Activity to Check path request

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Request path to 4.6 Planning Activity

# check offered path

Activity owned by 'RU', in package 'Main Workflows'

check offered path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from check offered path to review with partners

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from PathDetails Message to check offered path
- ControlFlow from offer path to check offered path

#### planning the ressources

Activity owned by 'RU', in package 'Main Workflows'

Loco, Driver, RCP

planning the ressources Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from planning the ressources to planning the path needed

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize train to planning the ressources

# planning the train section

Activity owned by 'RU', in package 'Main Workflows'

planning the train section Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**4** ControlFlow from planning the train section to harmonize train

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from CaseReference to planning the train section

# Request path

Activity owned by 'RU', in package 'Main Workflows'

Request path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♣ Information Flow from Request path to PathRequest Message
- ControlFlow from Request path to 4.6 Planning Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to Request path

# request path

Activity owned by 'RU', in package 'Main Workflows'

request path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 15.03.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from request path to construct path
- ♣ Information Flow from request path to PathRequest Message

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from PathRequest to request path

# review with partners

Activity owned by 'RU', in package 'Main Workflows'

review with partners Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from review with partners to send answer

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check offered path to review with partners

#### send answer

Activity owned by 'RU', in package 'Main Workflows'

send answer Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 Information Flow from send answer to Path Confirmed Message

Model Report **OUTGOING BEHAVIORAL RELATIONSHIPS** ← ControlFlow from send answer to book path INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from review with partners to send answer **ActivityInitial** ActivityInitial owned by 'RU', in package 'Main Workflows' **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from ActivityInitial to init train ressource planning **IM** coordination Interruptible Activity Region owned by 'Path Management', in package 'Main Workflows' IM coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012 **ELEMENTS OWNED BY IM coordination** E Check path request: Activity a construct path : Activity larmonize path : Activity lactivity **EXIT:** Answer not possible : FlowFinal Further with booking procedure...: ActivityFinal Path request came : ActivityInitial ■ Pre-Constructed product needed : ActivityInitial

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# Check path request

Activity owned by 'IM coordination', in package 'Main Workflows'

Check path request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check path request to check capacity
- ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from 4.6 Planning Activity to Check path request
- ControlFlow from Path request came to Check path request
- Information Flow from PathRequest Message to Check path request

# construct path

Activity owned by 'IM coordination', in package 'Main Workflows'

construct path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from construct path to Path (Plan)

# INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from request path to construct path
- ControlFlow from Pre-Constructed product needed to construct path
- ControlFlow from check capacity to construct path Guard: capacity available

# harmonize path

Activity owned by 'IM coordination', in package 'Main Workflows'

harmonize path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**←** ControlFlow from harmonize path to offer path

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to harmonize path

# offer path

Activity owned by 'IM coordination', in package 'Main Workflows'

offer path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 Information Flow from offer path to PathDetails Message
- ControlFlow from offer path to check offered path
- ControlFlow from offer path to Further with booking procedure...

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from harmonize path to offer path

# EXIT: Answer not possible

FlowFinal owned by 'IM coordination', in package 'Main Workflows'

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check capacity to EXIT: Answer not possible Guard: capacity not available

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check path request to EXIT: Answer not possible Guard: request not valid

# Further with booking procedure...

ActivityFinal owned by 'IM coordination', in package 'Main Workflows'

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from offer path to Further with booking procedure...

# Path request came

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Path request came to Check path request

# Pre-Constructed product needed

ActivityInitial owned by 'IM coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Pre-Constructed product needed to construct path

# **FlowFinal**

FlowFinal owned by 'Path Management', in package 'Main Workflows'

# INCOMING BEHAVIORAL RELATIONSHIPS

--- ControlFlow from book path to FlowFinal

#### **RU-RU** coordination

UseCase «business use case» owned by 'Overview of European Rail Business', in package 'Main Workflows'

RU-RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 19.06.2013

#### **ELEMENTS OWNED BY RU-RU coordination**

RU coordination : Activity «business use case»

#### **EXTERNAL REQUIREMENTS**

Requirement. Business communication

[ Stereotype is «Functional» ]

Requirement. Referring the business cases in object model (ex. "translation layer" issue)

[ Stereotype is «Functional» ]

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

realization from «business use case» RU-RU coordination to «Functional» Business communication

[ Direction is 'Source -> Destination'. ]

Realization from «business use case» RU-RU coordination to «Functional» Referring the business cases in object model (ex. "translation layer" issue)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

UseCaseLink Source -> Destination

From: RU: Actor, Public

To: RU-RU coordination : UseCase, Public

# **RU** coordination

Activity owned by 'RU-RU coordination', in package 'Main Workflows'

RU coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# ${\bf ELEMENTS} \ {\bf OWNED} \ {\bf BY} \ {\bf RU} \ {\bf coordination}$

identifies the affected objects: Action

analyze the situation : Activity

BusinessCase : Activity

ELEMENTS OWNED BY RU coordination
find solution : Activity
identifies the affected objects: Activity
need for coordination : Activity
Train : Activity
train adaption : Activity
solution?: DecisionNode
☐ FlowFinal : FlowFinal
ActivityInitial: ActivityInitial

# identifies the affected objects

Action owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: identify

♦ Object Flow from identifies the affected objects to Business Case

ControlFlow from identifies the affected objects to find solution

Name: identify

• Object Flow from identifies the affected objects to Train (Plan)

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

#### analyze the situation

Activity owned by 'RU coordination', in package 'Main Workflows'

what is affected? what causes the problems?

analyze the situation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from analyze the situation to identifies the affected objects
- ControlFlow from analyze the situation to identifies the affected objects

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from need for coordination to analyze the situation

#### **BusinessCase**

Activity owned by 'RU coordination', in package 'Main Workflows'

BusinessCase Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to BusinessCase

#### find solution

Activity owned by 'RU coordination', in package 'Main Workflows'

find solution
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from find solution to solution?

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from identifies the affected objects to find solution

# identifies the affected objects

Activity owned by 'RU coordination', in package 'Main Workflows'

identifies the affected objects Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from analyze the situation to identifies the affected objects

# need for coordination

Activity owned by 'RU coordination', in package 'Main Workflows'

- optimization of own ressources
- operational issues
- customer needs
- load exeeds reg. cap.
- timing
- ....

need for coordination Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from need for coordination to analyze the situation

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from ActivityInitial to need for coordination

# Train

Activity owned by 'RU coordination', in package 'Main Workflows'

Train
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Train

#### train adaption

Activity owned by 'RU coordination', in package 'Main Workflows'

train adaption
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

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- ← ControlFlow from train adaption to Path Management
- ControlFlow from train adaption to FlowFinal

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from solution? to train adaption
Guard: train

#### solution?

DecisionNode owned by 'RU coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from solution? to FlowFinal Guard: nothing
- ControlFlow from solution? to train adaption Guard: train
- ControlFlow from solution? to Path Management Guard: path

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from find solution to solution?

#### **FlowFinal**

FlowFinal owned by 'RU coordination', in package 'Main Workflows'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Path Management to FlowFinal

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# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from solution? to FlowFinal Guard: nothing

ControlFlow from train adaption to FlowFinal

# **ActivityInitial**

ActivityInitial owned by 'RU coordination', in package 'Main Workflows'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from ActivityInitial to need for coordination

# Messages

Object owned by 'Overview', in package 'Target Audience'

Messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Business analysts Target: Public (Object) Messages

Association (direction: Unspecified)

Source: Public (Actor) Software architects and designers Target: Public (Object) Messages

# Replanning

Activity «process» in package 'Target Audience'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

# Handbook-Replanning diagram

Use Case diagram in package 'Target Audience'

Handbook-Replanning
Version 1.0
seid.maglajlic created on 18.03.2013. Last modified 14.06.2013

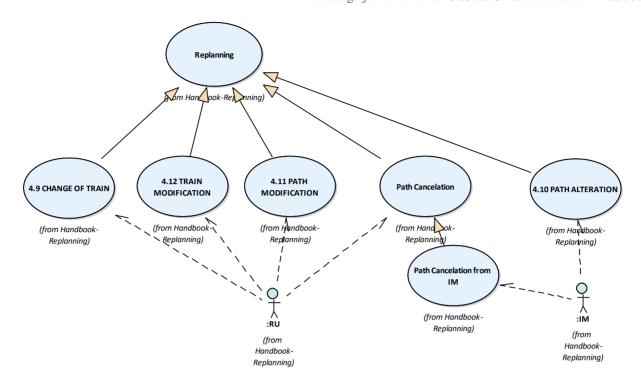


Figure 22: Handbook-Replanning

# 4.9 CHANGE OF TRAIN

UseCase in package 'Handbook-Replanning'

4.9 CHANGE OF TRAIN Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.08.2014

# **ELEMENTS OWNED BY 4.9 CHANGE OF TRAIN**

■ COT-Activity : Activity

# OUTGOING STRUCTURAL RELATIONSHIPS

Generalization from 4.9 CHANGE OF TRAIN to Replanning

[ Direction is 'Source -> Destination'. ]

# **CONNECTORS**

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.9 CHANGE OF TRAIN: UseCase, Public

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#### **COT-Activity**

Activity owned by '4.9 CHANGE OF TRAIN', in package 'Handbook-Replanning'

COT-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY COT-Activity
■ BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ c04-SendMessage-RU-IM -TR_m-PA_m-OTN_o : Activity
■ c05-SendMessage-IM-RU -TR_m-PA_m-OTN_o : Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ LINK TO BE CHECKED : Activity

# **BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 02.09.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

# c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 09.09.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c04-SendMessage-RU-IM -TR m-PA m-OTN o

# c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c05-SendMessage-IM-RU-TR m-PA m-OTN o

#### CONNECTORS

**Dependency** Source -> Destination

From: UpdateLink Message : Trigger, Public

To: c05-SendMessage-IM-RU-TR m-PA m-OTN o: Activity, Public

# c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### **LINK TO BE CHECKED**

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK TO BE CHECKED to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

#### 4.10 PATH ALTERATION

UseCase in package 'Handbook-Replanning'

4.10 PATH ALTERATION Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

# ELEMENTS OWNED BY 4.10 PATH ALTERATION

■ PA- Activity : Activity

# **OUTGOING STRUCTURAL RELATIONSHIPS**

← Generalization from 4.10 PATH ALTERATION to Replanning

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.10 PATH ALTERATION : UseCase, Public

# PA- Activity

Activity owned by '4.10 PATH ALTERATION', in package 'Handbook-Replanning'

PA- Activity
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

ELEMENTS OWNED BY PA- Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m-PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m-PR_m-PA_m-OTN_o-RelID_o : Activity
■ LINK NOT CONFIRMED : Activity
IM: ActivityPartition

ELEMENTS OWNED BY PA- Activity	
RU: ActivityPartition	
RU: Event	

# c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 29.05.2013. Last modified 09.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

# c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 27.05.2013. Last modified 27.05.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to c02-SendMessage-IM-RU-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.09.2013. Last modified 09.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathNotAvailable Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.05.2013. Last modified 09.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.05.2013. Last modified 09.09.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

# c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

#### **LINK NOT CONFIRMED**

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

LINK NOT CONFIRMED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Model Report 12 February, 2025
OUTGOING BEHAVIORAL RELATIONSHIPS
◆ ControlFlow from LINK NOT CONFIRMED to synchronize actions
INCOMING BEHAVIORAL RELATIONSHIPS
□→ Information Flow from Path Details Refused Message to LINK NOT CONFIRMED
IM
ActivityPartition owned by 'PA- Activity', in package 'Handbook-Replanning'
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013
ELEMENTS OWNED BY IM
Allocate path: Activity
Provide alternative path : Activity
Allocate path
Activity owned by 'IM', in package 'Handbook-Replanning'
Allocate path
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 09.04.2013
OUTGOING BEHAVIORAL RELATIONSHIPS
◆ ControlFlow from Allocate path to Acknowledged
◆ ControlFlow from Allocate path to Acknowledged
Name: [after switch from pl. to op.]
Information Flow from Allocate path to Path (OP)
♣ Information Flow from Allocate path to Path
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from CONFIRMATION OF LINK to Allocate path

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to Allocate path

# Provide alternative path

Activity owned by 'IM', in package 'Handbook-Replanning'

Provide alternative path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- Object Flow from Provide alternative path to Path (OP) Guard: after switch from planning to operation
- 🖛 Information Flow from Provide alternative path to Path
- ControlFlow from Provide alternative path to Path processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Link processing started to Provide alternative path

# CONNECTORS

Dependency Source -> Destination

Provide alternative path: Activity, Public PathDetails Message: Trigger, Public To:

#### RU

ActivityPartition owned by 'PA- Activity', in package 'Handbook-Replanning'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# **ELEMENTS OWNED BY RU**

**E**vent1 : Event

#### ELEMENTS OWNED BY RU

Offer accepted : State

# Event1

Event owned by 'RU', in package 'Handbook-Replanning'

Event1

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# Offer accepted

State owned by 'RU', in package 'Handbook-Replanning'

Offer accepted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# CONNECTORS

Dependency Source -> Destination

Check alternative path offer: Activity, Public

To: Offer accepted: State, Public

# RU

Event owned by 'PA- Activity', in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

# 4.11 PATH MODIFICATION

UseCase in package 'Handbook-Replanning'

4.11 PATH MODIFICATION Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY 4.11 PATH MODIFICATION**

**■** PM-Activity : Activity

# OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from 4.11 PATH MODIFICATION to Replanning

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.11 PATH MODIFICATION : UseCase, Public

# PM-Activity

Activity owned by '4.11 PATH MODIFICATION', in package 'Handbook-Replanning'

PM-Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY PM-Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c06-SendMessage- RU-IM -TR_m-CR_m-PR_m- PA_m(old)-OTN_o-RelID_o : Activity
ActivityFinal : ActivityFinal
■ REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity

#### **ELEMENTS OWNED BY PM-Activity**

- c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o : Activity
- c03-SendMessage-RU-IM-TR m-CR m-PR m-PA m-OTN o-RelID o: Activity
- c03-SendMessage-RU-IM -TR m-CR m- PR m-PA m-OTN o-RelID o : Activity
- End of Path Request NO PATH BOOKED : ActivityFinal

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.09.2013. Last modified 09.09.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID o

# c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 28.06.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c06-SendMessage- RU-IM -TR m-CR m-PR m- PA m(old)-OTN o-RelID o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message to c06-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o

#### **ActivityFinal**

ActivityFinal owned by 'PM-Activity', in package 'Handbook-Replanning'

#### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathConfirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.06.2013

#### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 09.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

#### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.06.2013

#### c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathConfirmed Message to c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

#### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.06.2013

#### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.06.2013

#### **End of Path Request - NO PATH BOOKED**

ActivityFinal owned by 'PM-Activity', in package 'Handbook-Replanning'

#### **4.12 TRAIN MODIFICATION**

UseCase in package 'Handbook-Replanning'

4.12 TRAIN MODIFICATION Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY 4.12 TRAIN MODIFICATION**

**■** TM-Activity : Activity

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from 4.12 TRAIN MODIFICATION to Replanning

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.12 TRAIN MODIFICATION : UseCase, Public

#### TM-Activity

Activity owned by '4.12 TRAIN MODIFICATION', in package 'Handbook-Replanning'

TM-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY TM-Activity**

Train (Plan): Object

#### Train (Plan)

Object owned by 'TM-Activity', in package 'Handbook-Replanning'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

#### **ATTRIBUTES**

Calendar : PlannedCalendar Private

[ Is static True. Containment is Not Specified. ]

JourneyLocations : PlannedJourneyLocation Private

[ Is static True. Containment is Not Specified. ]

ReferenceLocation : LocationIdent Private

[ Is static True. Containment is Not Specified. ]

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#### **ATTRIBUTES**

▼ TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

#### **Path Cancelation**

UseCase in package 'Handbook-Replanning'

Path Cancelation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Path Cancelation to Replanning

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from Path Cancelation from IM to Path Cancelation

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: Path Cancelation : UseCase, Public

#### Path Cancelation from IM

UseCase in package 'Handbook-Replanning'

Path Cancelation from IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Path Cancelation from IM to Path Cancelation

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** So

Source -> Destination

From: Object : Object, Public

To: Path Cancelation from IM: UseCase, Public

#### Replanning

UseCase in package 'Handbook-Replanning'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from 4.12 TRAIN MODIFICATION to Replanning	[ Direction is 'Source -> Destination'. ]
⇒ Generalization from Path Cancelation to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from 4.11 PATH MODIFICATION to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from 4.10 PATH ALTERATION to Replanning	[ Direction is 'Source -> Destination'. ]
⇒ Generalization from 4.9 CHANGE OF TRAIN to Replanning	[ Direction is 'Source -> Destination'. ]

#### **Object**

Object «business actor» in package 'Handbook-Replanning'

Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### CONNECTORS

**Dependency** So

Source -> Destination

From: Object : Object, Public

To: Path Cancelation from IM: UseCase, Public

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#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.10 PATH ALTERATION : UseCase, Public

#### **Object**

Object «business actor» in package 'Handbook-Replanning'

Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.12 TRAIN MODIFICATION: UseCase, Public

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.11 PATH MODIFICATION : UseCase, Public

**Dependency** Source -> Destination

From: Object : Object, Public

To: Path Cancelation : UseCase, Public

**Dependency** Source -> Destination From: Object : Object, Public

To: 4.9 CHANGE OF TRAIN: UseCase, Public

#### **Activity Diagrams**

InformationItem in package 'Target Audience'

Activity Diagrams
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Software architects and designers

Target: Public (InformationItem) Activity Diagrams

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## Association (direction: Unspecified) Source: Public (Actor) Business analysts Target: Public (InformationItem) Activity Diagrams Association (direction: Unspecified) Source: Public (Actor) Management Target: Public (InformationItem) Activity Diagrams

#### **Business Object Model**

UMLDiagram in package 'Target Audience'

Business Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013 Extends

#### **Business Object Topology**

UMLDiagram in package 'Target Audience'

Business Object Topology Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013 Extends

#### **Business Object Topology**

UMLDiagram in package 'Target Audience'

Business Object Topology Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013 Extends

#### **Content Overview**

InformationItem in package 'Target Audience'

Content Overview Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

#### **Handbook-Operation**

UMLDiagram in package 'Target Audience'

Handbook-Operation Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

#### **Involved Objects**

UMLDiagram in package 'Target Audience'

Involved Objects
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

#### Legend

Text in package 'Target Audience'

Legend
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

#### **Messages**

InformationItem in package 'Target Audience'

Messages
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

## Association (direction: Unspecified) Source: Public (Actor) Business analysts Target: Public (InformationItem) Messages Association (direction: Unspecified) Source: Public (Actor) Software architects and designers Target: Public (InformationItem) Messages

#### **Object Lifecycles**

InformationItem in package 'Target Audience'

Object Lifecycles Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

#### **Object Model**

InformationItem in package 'Target Audience'

Object Model Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

#### **Business Use Cases**

Package in package 'Business Process Model'

Business Use Cases Version 1.0 Phase 1.0 Proposed created on 05.01.2006. Last modified 14.03.2013

#### **Frameworks**

Package in package 'Business Use Cases'

Frameworks

Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### **Case Reference Framework**

Package in package 'Frameworks'

Case Reference Framework Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### Case Reference Framework diagram

Interaction diagram in package 'Case Reference Framework'

Case Reference Framework
Version 1.0
seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

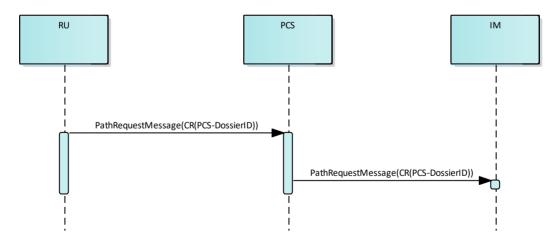


Figure 23: Case Reference Framework

#### INTERACTION MESSAGES

■ 1.0 'PathRequestMessage' from 'RU' sent to 'PCS'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

■ 1.1 'PathRequestMessage' from 'PCS' sent to 'IM'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

#### **IM-Offer diagram**

Interaction diagram in package 'Case Reference Framework'

IM-Offer Version 1.0 seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

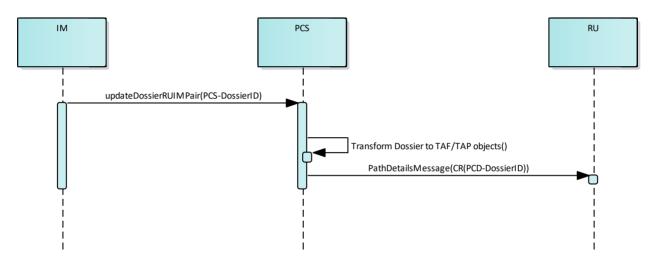


Figure 24: IM-Offer

# INTERACTION MESSAGES 2 1.0 'updateDossierRUIMPair' from 'IM' sent to 'PCS'. Synchronous Call. Returns void. [Return is False. Iteration is False. New group is False.] 1.1 'Transform Dossier to TAF/TAP objects' from 'PCS' sent to 'PCS'. Synchronous Call. Returns void. [Return is False. Iteration is False. New group is False.] 1.2 'PathDetailsMessage' from 'PCS' sent to 'RU'. Synchronous Call. Returns void. [Return is False. Iteration is False. New group is False.]

Sequence in package 'Case Reference Framework'

IM
Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: PathRequestMessage

→ Sequence from PCS to IM

#### IM

Sequence in package 'Case Reference Framework'

IM
Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### **SCENARIOS**

Alternate. IM

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: updateDossierRUIMPair

Sequence from IM to PCS

#### Object1

Sequence in package 'Case Reference Framework'

Object1 Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### **PCS**

Sequence in package 'Case Reference Framework'

PCS Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: PathRequestMessage

Sequence from PCS to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: PathRequestMessage

Sequence from RU to PCS

#### PCS

Sequence in package 'Case Reference Framework'

PCS Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: Transform Dossier to TAF/TAP objects

◆ Sequence from PCS to PCS

Name: PathDetailsMessage

Sequence from PCS to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: Transform Dossier to TAF/TAP objects

→ Sequence from PCS to PCS

Name: updateDossierRUIMPair

Sequence from IM to PCS

#### RU

Sequence in package 'Case Reference Framework'

RU Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### **SCENARIOS**

Alternate. RU

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

 $Name:\ Path Request Message$ 

← Sequence from RU to PCS

#### RU

Sequence in package 'Case Reference Framework'

 $$\rm RU$$  Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 09.03.2015. Last modified 09.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

#### **ObjectInfo-Framework**

Package in package 'Frameworks'

ObjectInfo-Framework
Version 1.0 Phase 1.0 Proposed
seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### ObjectInfo-Framework-I diagram

Interaction diagram in package 'ObjectInfo-Framework'

ObjectInfo-Framework-I Version 1.0 seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

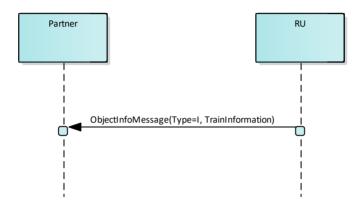


Figure 25: ObjectInfo-Framework-I

#### INTERACTION MESSAGES

■ 1.0 'ObjectInfoMessage' from 'RU' sent to 'Partner'.

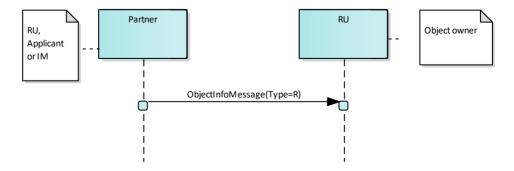
Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

#### ObjectInfo-Framework-R diagram

Interaction diagram in package 'ObjectInfo-Framework'

ObjectInfo-Framework-R Version 1.0 seidmaglajlic created on 06.03.2015. Last modified 06.03.2015



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Figure 26: ObjectInfo-Framework-R

#### Note

Note in package 'ObjectInfo-Framework'

RU, Applicant or IM

Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015 Extends

#### Note

Note in package 'ObjectInfo-Framework'

Object owner

Note Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015 Extends

#### INTERACTION MESSAGES

■ 1.0 'ObjectInfoMessage' from 'Partner' sent to 'RU'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

#### ObjectInfo-Framework-U diagram

Interaction diagram in package 'ObjectInfo-Framework'

ObjectInfo-Framework-U Version 1.0 seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

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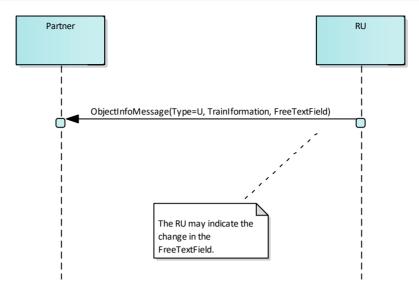


Figure 27: ObjectInfo-Framework-U

#### Note

Note in package 'ObjectInfo-Framework'

The RU may indicate the change in the FreeTextField.

Note Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015 Extends

#### INTERACTION MESSAGES

☑ 1.0 'ObjectInfoMessage' from 'RU' sent to 'Partner'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

#### **Partner**

Sequence in package 'ObjectInfo-Framework'

Partner Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

← Sequence from Partner to RU

#### **Partner**

Sequence in package 'ObjectInfo-Framework'

Partner Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

Sequence from RU to Partner

#### **Partner**

Sequence in package 'ObjectInfo-Framework'

Partner Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

Sequence from RU to Partner

#### RU

Sequence in package 'ObjectInfo-Framework'

RU Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

◆ Sequence from RU to Partner

#### RU

Sequence in package 'ObjectInfo-Framework'

RU Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

◆ Sequence from RU to Partner

#### RU

Sequence in package 'ObjectInfo-Framework'

RU Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

Sequence from Partner to RU

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#### **OTN-Framework**

Package in package 'Frameworks'

OTN-Framework Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 08.03.2015. Last modified 08.03.2015

#### OTN-Framework diagram

Interaction diagram in package 'OTN-Framework'

OTN-Framework
Version 1.0
seidmaglajlic created on 08.03.2015. Last modified 08.03.2015

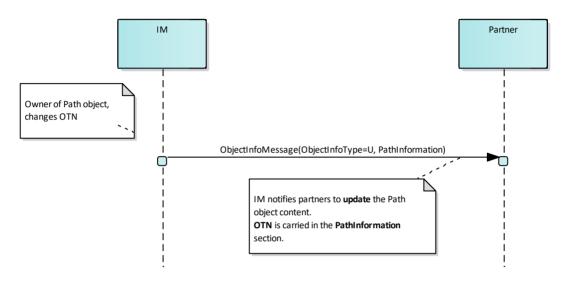


Figure 28: OTN-Framework

#### Note

Note in package 'OTN-Framework'

IM notifies partners to **update** the Path object content. **OTN** is carried in the **PathInformation** section.

Note Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 08.03.2015. Last modified 08.03.2015 Extends

#### Note

Note in package 'OTN-Framework'

Owner of Path object, changes OTN

Note Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 08.03.2015. Last modified 08.03.2015 Extends

#### INTERACTION MESSAGES

■ 1.0 'ObjectInfoMessage' from 'IM' sent to 'Partner'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

#### IM

Sequence in package 'OTN-Framework'

IM
Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 08.03.2015. Last modified 08.03.2015

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: ObjectInfoMessage

◆ Sequence from IM to Partner

#### **Partner**

Sequence in package 'OTN-Framework'

Partner Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 08.03.2015. Last modified 08.03.2015

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: ObjectInfoMessage

→ Sequence from IM to Partner

#### **Planning**

Package in package 'Business Use Cases'

Planning
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

#### Handbook-Planning

Package in package 'Planning'

Handbook-Planning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### 4.6 PLANNING

UseCase in package 'Handbook-Planning'

4.6 PLANNING Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 14.06.2013

ELEMENTS OWNED BY 4.6 PLANNING
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
PL-Activity : Activity

#### 4.6 Planning Activity diagram

Activity diagram in package 'Handbook-Planning'

4.6 Planning Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 03.08.2014

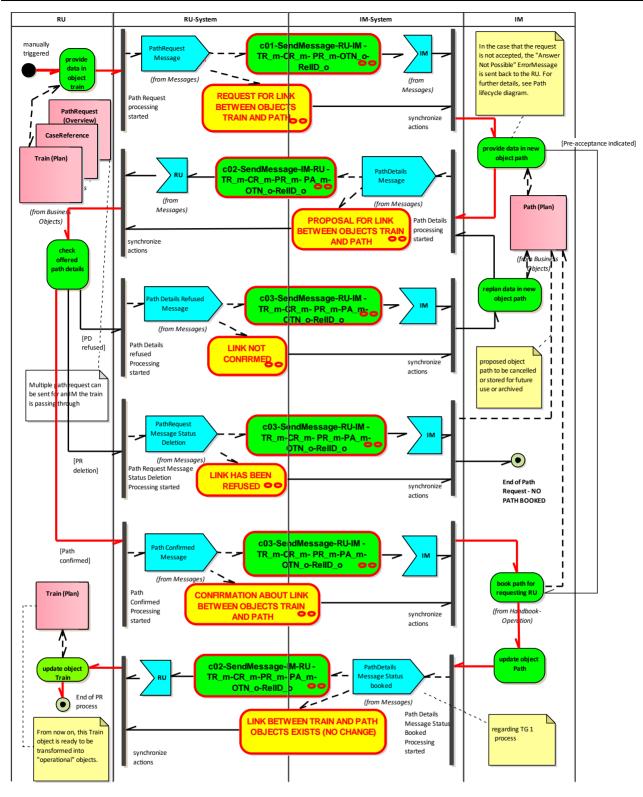


Figure 29: 4.6 Planning Activity

#### Note

Note in package 'Handbook-Planning'

proposed object path to be cancelled or stored for future use or archived

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 11.06.2013
Extends

#### book path for requesting RU

Activity owned by 'RU', in package 'Handbook-Operation'

book path for requesting RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.06.2013. Last modified 02.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from book path for requesting RU to update object Path
- Information Flow from book path for requesting RU to Path (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to book path for requesting RU
- ControlFlow from provide data in new object path to book path for requesting RU Guard: Pre-acceptance indicated

#### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

RU
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

#### **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

Dependency [path offer accepted] Source -> Destination
 From: Check alternative path offer: Activity, Public
 To: Path Confirmed Message: Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message: Trigger, Public

#### PathDetails Message

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

#### CONNECTORS

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public To: Finally offered : State, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Offered: State, Public

#### CONNECTORS

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Drafted : State, Public

PathDetails Message: Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

**Dependency** PathID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

Path Details Message: Trigger, Public
To: Path for the Train offered: State, Public

**Dependency** TrainID Source → Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination

From: Path processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message : Trigger, Public

#### PathDetails Message Status booked

Trigger in package 'Messages'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public

To: Booked: State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

**Dependency** Source -> Destination From: Accepted: State, Public

To: PathDetails Message Status booked : Trigger, Public

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked : Trigger, Public

#### Path Details Refused Message

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

#### PathRequest Message

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

#### CONNECTORS

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: Issued (requested) : State, Public

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: In planning by IM : State, Public

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

#### CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: Start : Initial State, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o: Activity, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message: Trigger, Public

#### **PathRequest Message Status Deletion**

Trigger in package 'Messages'

PathRequest Message Status Deletion Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathRequest Message Status Deletion: Trigger, Public

To: Withdrawn : State, Public

#### CONNECTORS

Dependency Source -> Destination

Path Request Message Status Deletion Processing started: Synchronization, Public

To: PathRequest Message Status Deletion: Trigger, Public

#### Note

Note in package 'Business Objects'

Multiple path request can be sent for an IM the train is passing through

Note Version 1.0 Phase 1.0 Proposed Hantak created on 18.11.2013. Last modified 18.11.2013 Extends

#### CaseReference

Object in package 'Business Objects'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from CaseReference to Business Case

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Dependency

Source -> Destination

Updated: State, Public From:

To: CaseReference: Object, Public

#### **ATTRIBUTES**

CaseReferenceID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

Name: String Private

[ Is static True. Containment is Not Specified. ]

Period From : Date Private

[ Is static True. Containment is Not Specified. ]

Period To : Date Private

### ATTRIBUTES [ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]

#### PathRequest (Overview)

Object in package 'Business Objects'

PathRequest (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ELEMENTS OWNED BY PathRequest (Overview)
PathRequest: Object



ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Unspecified)  Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Train (Overview)
Association (direction: Unspecified)  Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)  Source: Public (Object) CaseReference (Overview)	Target: Public (Object) PathRequest (Overview)

#### **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
▼ TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfInformation : int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]
TypeOfRUHarmonization : String Private	[ Is static True. Containment is Not Specified. ]

SOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]

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## ASSOCIATIONS Association (direction: Unspecified) Source: Public (Object) PathRequest (Overview) Target: Public (Object) PathRequest Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Target: Public (Object) PathRequest

#### Path (Plan)

Cardinality: [1]

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

Cardinality: [\*]

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Path (Plan): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan) : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan) : Object, Public

#### ATTRIBUTES

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

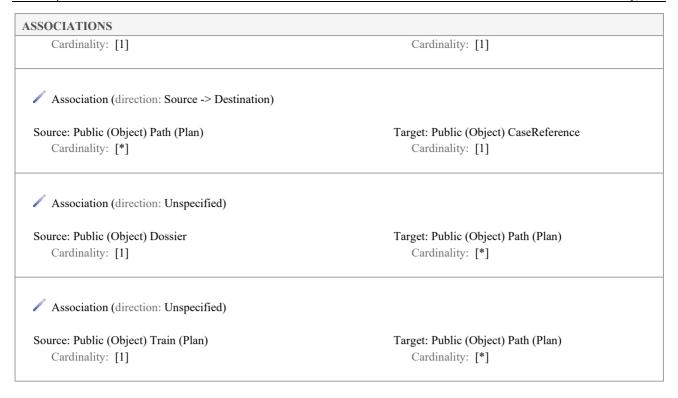
#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

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### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Target: Public (Object) TrainInformation

SOCIATIONS	
Cardinality: [1]	Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan)	Target: Public (Object) PathRequest
Cardinality: [1]	Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) Path (Plan)
Cardinality: [1]	Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) CaseReference
Cardinality: [*]	Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) Dossier
Cardinality: [*]	Cardinality: [1]

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by '4.6 PLANNING', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 08.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

### **PL-Activity**

Activity owned by '4.6 PLANNING', in package 'Handbook-Planning'

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PL-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

### 4.7 UTILISATION NOTIFICATION

UseCase in package 'Handbook-Planning'

4.7 UTILISATION NOTIFICATION

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 21.05.2013

ELEMENTS OWNED BY 4.7 UTILISATION NOTIFICATION
U-Activity: Activity

### **U-Activity**

Activity owned by '4.7 UTILISATION NOTIFICATION', in package 'Handbook-Planning'

U-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY U-Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
LINK TO BE CHECKED : Activity

### 4.7 UtilisationNotification Activity diagram

Activity diagram in package 'Handbook-Planning'

4.7 UtilisationNotification Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 22.11.2013

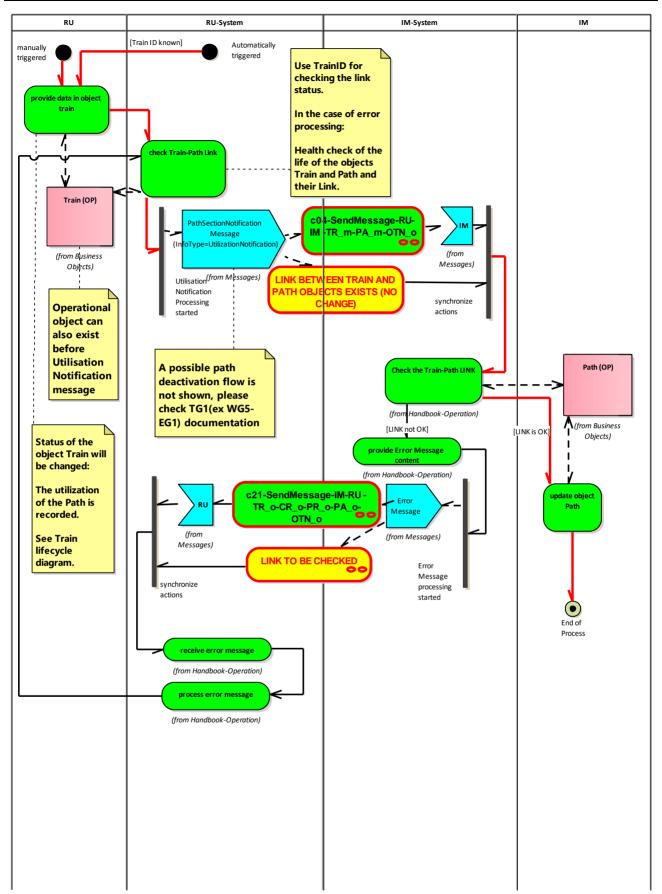


Figure 30: 4.7 UtilisationNotification Activity

### process error message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process error message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

OUT	TGOING BEHAVIORAL RELATIONSHIPS
4:	ControlFlow from process error message to check Train-Path Link
4:	ControlFlow from process error message to check Train Path Link
4:	ControlFlow from process error message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from receive error message to process error message
- ControlFlow from receive error message to process error message

### receive error message

Activity owned by 'RU-System', in package 'Handbook-Operation'

receive error message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 18.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 ControlFlow from receive error message to process error message
- 4 ControlFlow from receive error message to process error message
- ♣ ControlFlow from receive error message to Process error message

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to receive error message
- ControlFlow from synchronize actions to receive error message
- ControlFlow from synchronize actions to receive error message

# INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from synchronize actions to receive error message ControlFlow from synchronize actions to receive error message

### provide Error Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide Error Message content Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from provide Error Message content to Error Message processing started
ControlFlow from provide Error Message content to Error Message processing started
ControlFlow from provide Error Message content to Error Message processing started
◆ ControlFlow from provide Error Message content to Error Message processing started

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from provide Error Message content to Error Message processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK

### **Check the Train-Path LINK**

Activity owned by 'IM-System', in package 'Handbook-Operation'

Check the Train-Path LINK Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 16.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Check the Train-Path LINK to provide data in new object path Guard: LINK is OK
- ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK
- ControlFlow from Check the Train-Path LINK to update object Path Guard: LINK is OK
- ControlFlow from Check the Train-Path LINK to provide update link message content Guard: LINK is OK
- ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
- ControlFlow from Check the Train-Path LINK to process Train Parking Message Guard: LINK is OK
- 4 ControlFlow from Check the Train-Path LINK to Provide Train Running Forecast Message content
- ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
- EntrolFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content

### **OUTGOING BEHAVIORAL RELATIONSHIPS** r ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message ← ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK ← ControlFlow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content • Object Flow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content • Object Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Train (OP) w ControlFlow from Check the Train-Path LINK to Provide TrainDelayPerformance Message content r ControlFlow from Check the Train-Path LINK to Provide TrainRunningInformation Message content rontrolFlow from Check the Train-Path LINK to take data into object Path Guard: LINK is OK Information Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) End of the ControlFlow from Check the Train-Path LINK to link train to already existing path Guard: LINK OK ← ControlFlow from Check the Train-Path LINK to Provide Train Delay Cause Message content + ControlFlow from Check the Train-Path LINK to Provide Train Running Information Message content

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from Check the Train-Path LINK to provide Train Running Interrupted Message content
- Information Flow from Check the Train-Path LINK to Path (OP)
- 4 ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message



- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from Process error message to Check the Train-Path LINK
- ControlFlow from process TrainRunningInformation Message to Check the Train-Path LINK
- ControlFlow from Process error message to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from Process error message to Check the Train-Path LINK
- Information Flow from Path (OP) to Check the Train-Path LINK
- ControlFlow from Process error message to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- Information Flow from Path (OP) to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK

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### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from Manually triggered to Check the Train-Path LINK
- ControlFlow from synchronize actions to Check the Train-Path LINK
- ControlFlow from Automatically triggered to Check the Train-Path LINK Guard: Train ID known
- ControlFlow from Process TrainRunningForecast Message to Check the Train-Path LINK

### Note

Note in package 'Messages'

A possible path deactivation flow is not shown, please check TG1(ex WG5-EG1) documentation

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.09.2013. Last modified 18.09.2013
Extends

### IM

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

### CONNECTORS

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### **CONNECTORS**

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message: Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message: Trigger, Public

To: RU: Event, Public

### CONNECTORS

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### PathSectionNotification Message (InfoType=UtilizationNotification)

Trigger in package 'Messages'

PathSectionNotification Message (InfoType=UtilizationNotification)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 18.02.2015

### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Produce the operational object : Action, Public

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### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Utilisation Notification Processing started: Synchronization, Public

To: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

### Note

Note in package 'Business Objects'

Operational object can also exist before Utilisation Notification message

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.09.2013. Last modified 18.09.2013
Extends

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Path (OP): Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP): Object, Public
To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**



Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Dependency Source -> Destination

Train (OP): Object, Public From: To: Train: Object, Public

### **ATTRIBUTES**



TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS



Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'U-Activity', in package 'Handbook-Planning'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o

### **LINK TO BE CHECKED**

Activity owned by 'U-Activity', in package 'Handbook-Planning'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK TO BE CHECKED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

### 4.8 PLANNING Y-TRAFFIC

UseCase in package 'Handbook-Planning'

4.8 PLANNING Y-TRAFFIC Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

### ELEMENTS OWNED BY 4.8 PLANNING Y-TRAFFIC

■ PL Y Activity : Activity

### PL Y Activity

Activity owned by '4.8 PLANNING Y-TRAFFIC', in package 'Handbook-Planning'

PL Y Activity

Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY PL Y Activity	
■ c01-SendMessage-RU-IM -TR_m-CR_m- PR_m-OTN_o-RelID_o : Activity	
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity	
c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity	
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity	
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity	
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity	
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity	
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity	

12 February, 2025 Model Report **ELEMENTS OWNED BY PL Y Activity** ■ c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o: Activity ■ CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity ■ LINK HAS BEEN REFUSED : Activity ■ LINK NOT CONFIRMED : Activity ■ PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity PathRequest: Object PathConfirmed Message: Trigger PathConfirmed Message: Trigger PathDetails Message: Trigger

### 4.8 Planning-YTraffic Activity diagram

Activity diagram in package 'Handbook-Planning'

PathDetails Message Status booked : Trigger

4.8 Planning-YTraffic Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 28.11.2013

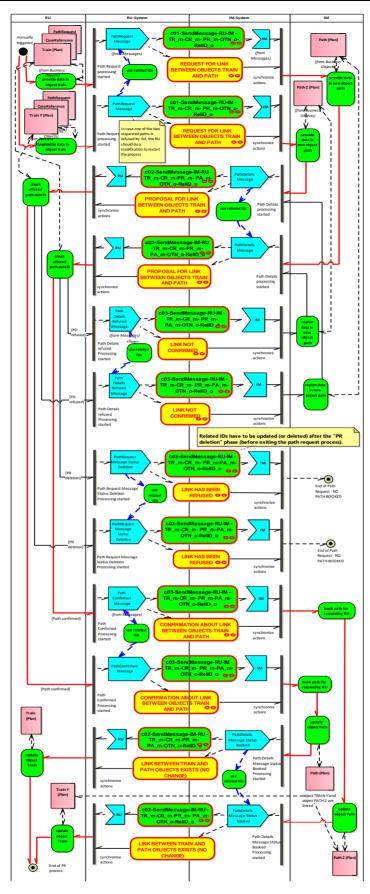


Figure 31: 4.8 Planning-YTraffic Activity

### Note

Note in package 'Handbook-Planning'

In case one of the two requested paths is refused by IM, the RU should do a modification to restart the process

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.09.2013. Last modified 18.09.2013
Extends

### Note

Note in package 'Handbook-Planning'

Related IDs have to be updated (or deleted) after the "PR deletion" phase (before exiting the path request process).

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

IM

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

Pependency [path offer accepted] Source -> Destination
From: Check alternative path offer : Activity, Public
To: Path Confirmed Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed processing started : Synchronization, Public

To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message: Trigger, Public

### **Path Details Refused Message**

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

### **PathRequest Message**

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

### CONNECTORS

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: Issued (requested) : State, Public

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: In planning by IM : State, Public

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message : Trigger, Public

To: IM : Event, Public

PathRequest Message : Trigger, Public

To: Start : Initial State, Public

PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o: Activity, Public

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### **CONNECTORS**

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message: Trigger, Public

### CaseReference

Object in package 'Business Objects'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from CaseReference to Business Case

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Prom: Updated : State, Public

To: CaseReference : Object, Public

### **ATTRIBUTES**

CaseReferenceID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

Name: String Private

[ Is static True. Containment is Not Specified. ]

Period\_From : Date Private

[ Is static True. Containment is Not Specified. ]

Period\_To : Date Private

[ Is static True. Containment is Not Specified. ]

### ATTRIBUTES

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]

### Path Z (Plan)

Object in package 'Business Objects'

Path Z (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

### PathRequest (Overview)

Object in package 'Business Objects'

PathRequest (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ELEMENTS OWN	ED BY PathRequest (Overview)
PathRequest:	Object

ATTRIBUTES	
Calendar : Private	[ Is static True. Containment is Not Specified. ]
Parameters: Private	[ Is static True. Containment is Not Specified. ]
PathRequestID: Private	[ Is static True. Containment is Not Specified. ]
Timetable: Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Train (Overview)
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) PathRequest (Overview)

### **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### ATTRIBUTES CoordinatingIM: CompanyCode Private [ Is static True. Containment is Not Specified. ]

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]
PathRequestID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
TypeOfInformation : int Private	[ Is static True. Containment is Not Specified. ]
TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]
TypeOfRUHarmonization: String Private	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]

## ASSOCIATIONS Association (direction: Unspecified) Source: Public (Object) Dossier Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) PathRequest (Overview) Target: Public (Object) PathRequest Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) PathRequest Cardinality: [\*]

### Train Y (Plan)

Object in package 'Business Objects'

Train Y (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Pependency Source -> Destination
From: Path (Plan): Object, Public
To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

### CONNECTORS

Dependency

Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public

Path (Plan): Object, Public To:

### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [1]

Target: Public (Object) PathInformation

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [\*]

Target: Public (Object) CaseReference

Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan) Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS** Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Target: Public (Object) TrainInformation Cardinality: [1] Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Dossier Cardinality: [\*] Cardinality: [1]

### c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 21.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o to IM
- Information Flow from c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message to c01-SendMessage-RU-IM -TR m-CR m-PR m-OTN o-RelID o

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

 $Figure~32:~c01-SendMessage-RU-IM~-TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o$ 

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 23.08.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 34: c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 35: c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0

km created on 06.06.2013. Last modified 06.06.2013

Figure 36: c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 37: c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 38: c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR m-CR m- PR m-PA m-OTN o-RelID o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 39: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message Status Deletion to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 40: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 41: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 42: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

#### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 43: c03-SendMessage-RU-IM -TR m-CR m- PR m-PA m-OTN o-RelID o

## c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 44: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 45: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

#### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathConfirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 46: c03-SendMessage-RU-IM-TR m-CR m-PR m-PA m-OTN o-RelID o

# c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

#### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

 $Figure~47:~c03-SendMessage-RU-IM~-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o~-RelI$ 

# **CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

# ELEMENTS OWNED BY CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity

# ELEMENTS OWNED BY CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathConfirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

# CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

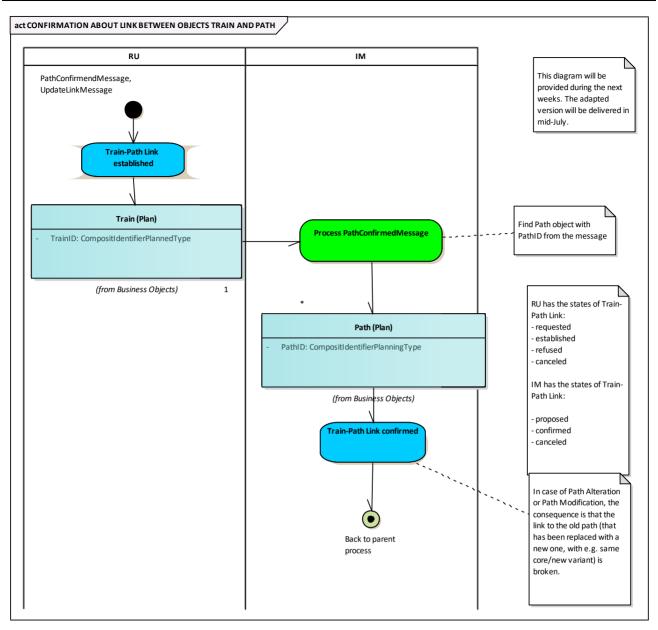


Figure 48: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 06.06.2013

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0
km created on 06.06.2013. Last modified 06.06.2013

#### Figure 49: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 06.06.2013. Last modified 06.06.2013

Figure 50: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

# CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

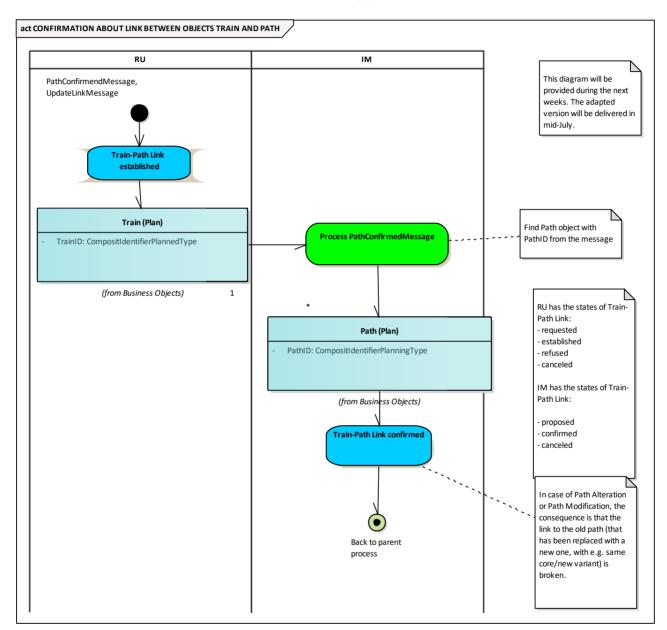


Figure 51: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 06.06.2013

# CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 06.06.2013. Last modified 06.06.2013

Figure 52: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 28.06.2013

#### ELEMENTS OWNED BY LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

🗄 LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions
- ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)
- information Flow from Error Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 km created on 06.06.2013. Last modified 06.06.2013

Figure 53: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 06.06.2013. Last modified 06.06.2013

Figure 54: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### **LINK HAS BEEN REFUSED**

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK HAS BEEN REFUSED

Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

#### ELEMENTS OWNED BY LINK HAS BEEN REFUSED

**■** LINK HAS BEEN REFUSED : Activity

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK HAS BEEN REFUSED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to LINK HAS BEEN REFUSED

#### LINK HAS BEEN REFUSED diagram

Activity diagram in package 'Handbook-Planning'

LINK HAS BEEN REFUSED Version 1.0 seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

Model Report \_\_\_\_\_\_ 12 February, 2025

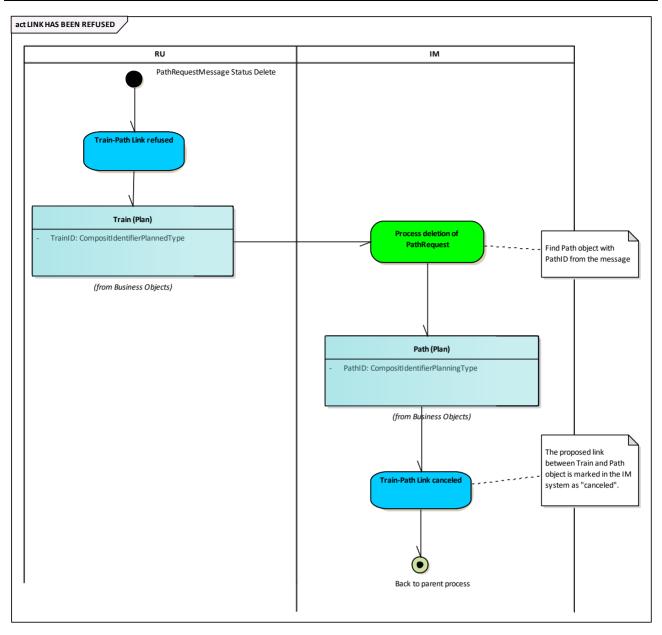


Figure 55: LINK HAS BEEN REFUSED

# LINK HAS BEEN REFUSED

Activity owned by 'LINK HAS BEEN REFUSED', in package 'Handbook-Planning'

LINK HAS BEEN REFUSED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK HAS BEEN REFUSED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to LINK HAS BEEN REFUSED

#### INCOMING BEHAVIORAL RELATIONSHIPS

# LINK HAS BEEN REFUSED diagram

Activity diagram in package 'Handbook-Planning'

LINK HAS BEEN REFUSED

Version 1.0

seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

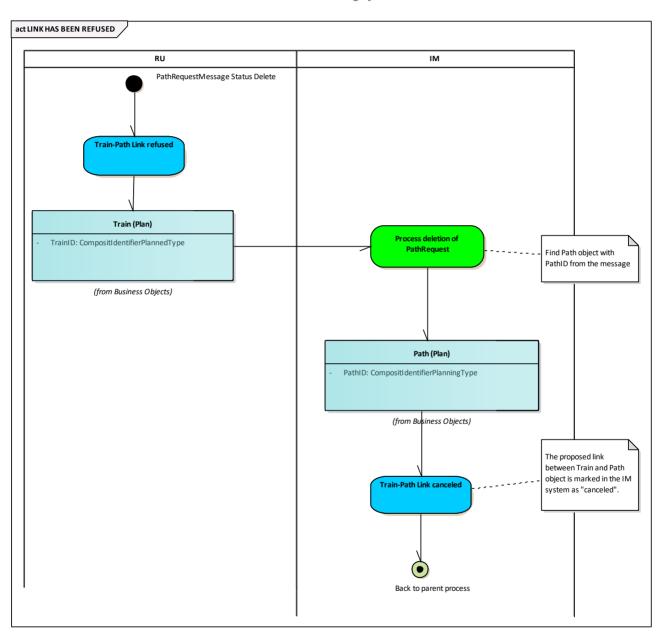


Figure 56: LINK HAS BEEN REFUSED

# LINK NOT CONFIRMED

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

LINK NOT CONFIRMED

Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK NOT CONFIRMED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to LINK NOT CONFIRMED

#### LINK NOT CONFIRMED diagram

Activity diagram in package 'Handbook-Planning'

LINK NOT CONFIRMED Version 1.0 seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

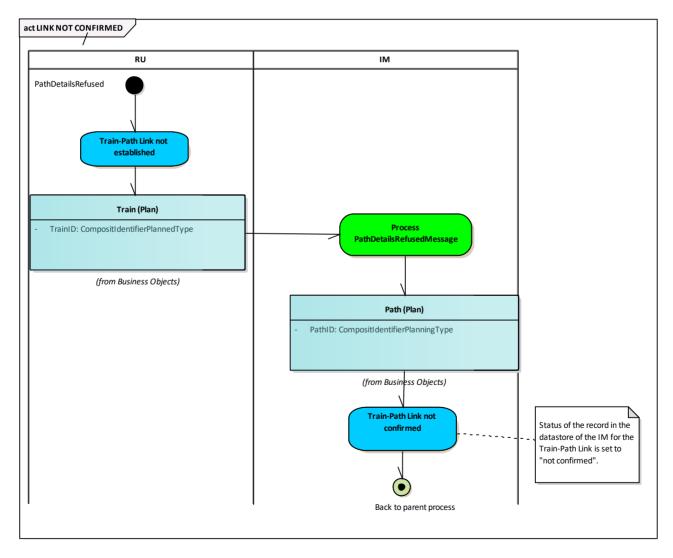


Figure 57: LINK NOT CONFIRMED

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PL Y Activity', in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 30.05.2013. Last modified 06.06.2013

#### ELEMENTS OWNED BY PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

🗄 PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity

# OUTGOING BEHAVIORAL RELATIONSHIPS

◆ ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0
seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

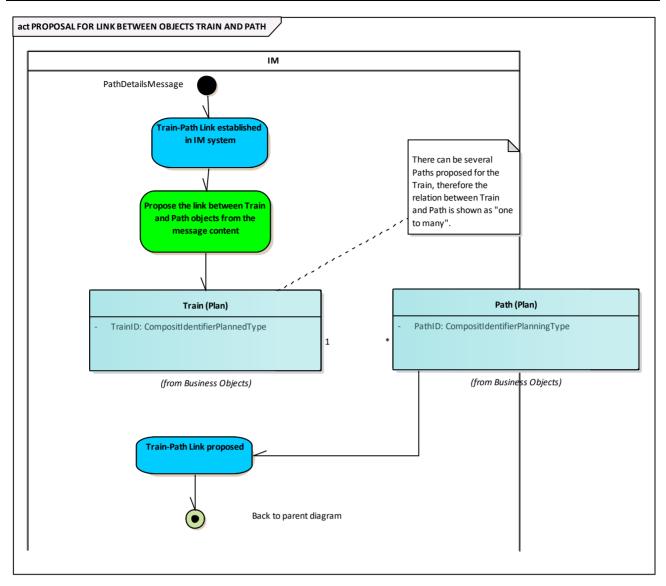


Figure 58: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

# PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH', in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

# PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

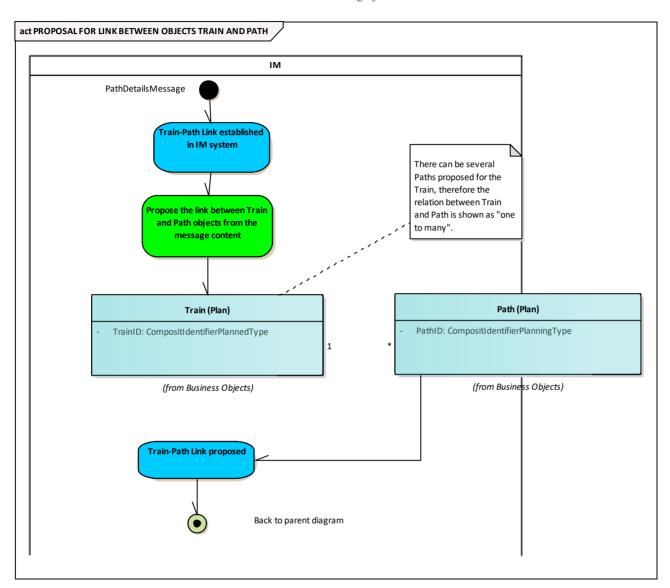


Figure 59: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

# **PathRequest**

Object owned by 'PL Y Activity', in package 'Handbook-Planning'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 08.09.2013

TTRIBUTES

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
Parameters: Private	[ Is static True. Containment is Not Specified. ]
PathRequestID : Private	[ Is static True. Containment is Not Specified. ]
Timetable : Private	[ Is static True. Containment is Not Specified. ]

# **PathConfirmed Message**

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# **PathConfirmed Message**

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# **CONNECTORS**

Dependency

Source -> Destination

From: Path Confirmed Processing started : Synchronization, Public

To: PathConfirmed Message : Trigger, Public

#### **PathDetails Message**

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

#### PathDetails Message Status booked

Trigger owned by 'PL Y Activity', in package 'Handbook-Planning'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

UMLDiagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

UMLDiagram in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

#### LINK HAS BEEN REFUSED

UMLDiagram in package 'Handbook-Planning'

LINK HAS BEEN REFUSED
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

#### LINK HAS BEEN REFUSED

UMLDiagram in package 'Handbook-Planning'

LINK HAS BEEN REFUSED
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

#### LINK NOT CONFIRMED

UMLDiagram in package 'Handbook-Planning'

LINK NOT CONFIRMED
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

#### LINK NOT CONFIRMED

UMLDiagram in package 'Handbook-Planning'

LINK NOT CONFIRMED

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013 Extends

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

UMLDiagram in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

UMLDiagram in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

# REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

UMLDiagram in package 'Handbook-Planning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

#### IM

ActivityPartition in package 'Handbook-Planning'

IM
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 18.06.2013

ELEMENTS OWNED BY IM
■ book path for requesting RU : Activity
■ book path for requesting RU : Activity
■ LINK NOT CONFIRMED : Activity
provide data in new object path : Activity

ELEMENTS OWNED BY IM
provide data in new object path : Activity
replan data in new object path : Activity
replan data in new object path : Activity
replan data in new object path : Activity
update object Path : Activity
update object Path : Activity
Path (Plan): Object
Path Z (Plan): Object
End of Path Request - NO PATH BOOKED : ActivityFinal
End of Path Request - NO PATH BOOKED : ActivityFinal
End of Path Request - NO PATH BOOKED : ActivityFinal
■ End of Process : ActivityFinal
PathConfirmed Message : Trigger

# book path for requesting RU

Activity owned by 'IM', in package 'Handbook-Planning'

book path for requesting RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.06.2013. Last modified 10.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

4 ControlFlow from book path for requesting RU to update object Path

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to book path for requesting RU

# book path for requesting RU

Activity owned by 'IM', in package 'Handbook-Planning'

book path for requesting RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.06.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from book path for requesting RU to Path Details Message Status Booked Processing started
- ControlFlow from book path for requesting RU to update object Path

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to book path for requesting RU

#### LINK NOT CONFIRMED

Activity owned by 'IM', in package 'Handbook-Planning'

LINK NOT CONFIRMED

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 06.06.2013

# **LINK NOT CONFIRMED diagram**

Activity diagram in package 'Handbook-Planning'

LINK NOT CONFIRMED

Version 1.0
km created on 06.06.2013. Last modified 06.06.2013

Figure 60: LINK NOT CONFIRMED

# provide data in new object path

Activity owned by 'IM', in package 'Handbook-Planning'

provide data in new object path Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 30.05.2013

# STRUCTURAL PART OF provide data in new object path

ObjectNode2 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from provide data in new object path to replan data in new object path
- ControlFlow from provide data in new object path to Path Details processing started
- EntrolFlow from provide data in new object path to Path Details processing started
- 🖛 Information Flow from provide data in new object path to TrainAccepted Message
- Object Flow from provide data in new object path to Path (Plan)
- EntrolFlow from provide data in new object path to Path Details processing started
- ControlFlow from provide data in new object path to book path for requesting RU Guard: Pre-acceptance indicated

# INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from Path (Plan) to provide data in new object path
- ControlFlow from synchronize actions to provide data in new object path

# ObjectNode2

ActionPin owned by 'provide data in new object path', in package 'Handbook-Planning'

# provide data in new object path

Activity owned by 'IM', in package 'Handbook-Planning'

provide data in new object path Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 10.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 ControlFlow from provide data in new object path to Path Details processing started
- ← ControlFlow from provide data in new object path to Path Details processing started
- rontrolFlow from provide data in new object path to replan data in new object path

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to provide data in new object path
- Information Flow from Path Z (Plan) to provide data in new object path

# replan data in new object path

Activity owned by 'IM', in package 'Handbook-Planning'

replan data in new object path
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 31.05.2013

# STRUCTURAL PART OF replan data in new object path

SobjectNode1: ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from replan data in new object path to Path Details processing started
- ♣ Information Flow from replan data in new object path to Path (Plan)
- 📭 Information Flow from replan data in new object path to Path Z (Plan)
- EntrolFlow from replan data in new object path to Path Details processing started
- ControlFlow from replan data in new object path to Path Details processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to replan data in new object path
- ControlFlow from synchronize actions to replan data in new object path

# ObjectNode1

ActionPin owned by 'replan data in new object path', in package 'Handbook-Planning'

# replan data in new object path

Activity owned by 'IM', in package 'Handbook-Planning'

replan data in new object path
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from replan data in new object path to Path Details processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from provide data in new object path to replan data in new object path

# replan data in new object path

Activity owned by 'IM', in package 'Handbook-Planning'

replan data in new object path
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 10.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

- 🖛 ControlFlow from replan data in new object path to Path Details processing started
- Information Flow from replan data in new object path to Path (Plan)
- ControlFlow from replan data in new object path to Path Details processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from provide data in new object path to replan data in new object path
- ControlFlow from synchronize actions to replan data in new object path

# update object Path

Activity owned by 'IM', in package 'Handbook-Planning'

update object Path
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
← ControlFlow from update object Path to End of Process
◆ ControlFlow from update object Path to Path Details Message Status Booked Processing started
♣ Information Flow from update object Path to Path Z (Plan)
↓ Information Flow from update object Path to Path (OP)
ControlFlow from update object Path to Path Details Message Status Booked Processing started

# INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to update object Path Guard: LINK is OK
- ControlFlow from book path for requesting RU to update object Path
- ControlFlow from book path for requesting RU to update object Path

# update object Path

Activity owned by 'IM', in package 'Handbook-Planning'

update object Path Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

- ♣ Information Flow from update object Path to Path (Plan)
- ControlFlow from update object Path to Path Details Message Status Booked Processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from book path for requesting RU to update object Path

# Path (Plan)

Object owned by 'IM', in package 'Handbook-Planning'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 10.06.2013

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
◆ PathID : CompositIdentifierPlanningType Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

# Path Z (Plan)

Object owned by 'IM', in package 'Handbook-Planning'

Path Z (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

# **End of Path Request - NO PATH BOOKED**

ActivityFinal owned by 'IM', in package 'Handbook-Planning'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to End of Path Request - NO PATH BOOKED

ControlFlow from synchronize actions to End of Path Request - NO PATH BOOKED

# **End of Path Request - NO PATH BOOKED**

ActivityFinal owned by 'IM', in package 'Handbook-Planning'

#### CONNECTORS

Dependency

Source -> Destination

From: synchronize actions: Synchronization, Public

To: End of Path Request - NO PATH BOOKED: ActivityFinal, Public

# **End of Path Request - NO PATH BOOKED**

ActivityFinal owned by 'IM', in package 'Handbook-Planning'

#### CONNECTORS

Dependency Source -> Destination

synchronize actions: Synchronization, Public

End of Path Request - NO PATH BOOKED: ActivityFinal, Public

# **End of Process**

ActivityFinal owned by 'IM', in package 'Handbook-Planning'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from update object Path to End of Process

# **PathConfirmed Message**

Trigger owned by 'IM', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 06.06.2013

# **IM-System**

ActivityPartition in package 'Handbook-Planning'

IM-System
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 18.06.2013

ELEMENTS OWNED BY IM-System
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity
LINK NOT CONFIRMED : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
use related IDs : Activity
use related IDs : Activity
■ PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
☐ IM : Event
■ IM : Event

ELEMENTS OWNED BY IM-System
■ IM : Event
IM : Event
■ IM : Event
■ IM : Event
■ IM : Event
∃ IM : Event
■ IM : Event
IM: Event
PathDetails Message: Trigger
PathDetails Message: Trigger
PathDetails Message Status booked: Trigger
PathDetails Message Status booked : Trigger

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'IM-System', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# LINK NOT CONFIRMED

Activity owned by 'IM-System', in package 'Handbook-Planning'

LINK NOT CONFIRMED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK NOT CONFIRMED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to LINK NOT CONFIRMED

# **LINK NOT CONFIRMED diagram**

Activity diagram in package 'Handbook-Planning'

LINK NOT CONFIRMED Version 1.0 seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

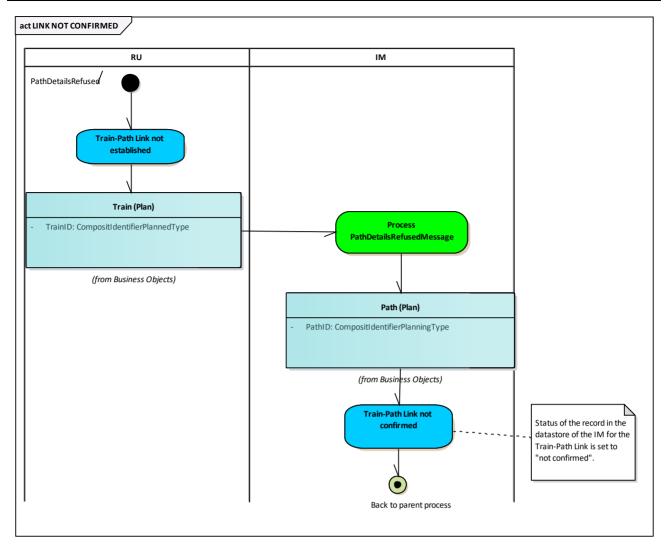


Figure 61: LINK NOT CONFIRMED

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 23.08.2013. Last modified 08.09.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

## c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN o

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

#### use related IDs

Activity owned by 'IM-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

🖛 Information Flow from use related IDs to PathDetails Message

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to use related IDs

# use related IDs

Activity owned by 'IM-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 12.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 Information Flow from use related IDs to PathDetails Message Status booked

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to use related IDs

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'IM-System', in package 'Handbook-Planning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 30.05.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Path Details processing started to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### **CONNECTORS**

Dependency Source -> Destination
From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

# c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 04.06.2013

# c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 04.06.2013

# c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 04.06.2013

# c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o

Activity owned by 'IM-System', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 04.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 30.05.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

# IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### IM

Event owned by 'IM-System', in package 'Handbook-Planning'

IN

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 30.05.2013

# PathDetails Message

Trigger owned by 'IM-System', in package 'Handbook-Planning'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

#### CONNECTORS

PathDetails Message: Trigger, Public
To: PathDetails Message: Trigger, Public

PathDetails Message : Trigger, Public
To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message : Trigger, Public

#### PathDetails Message

Trigger owned by 'IM-System', in package 'Handbook-Planning'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: Path Details processing started : Synchronization, Public

To: PathDetails Message: Trigger, Public

### CONNECTORS

PathDetails Message: Trigger, Public
To: PathDetails Message: Trigger, Public

Dependency Source -> Destination
 From: PathDetails Message : Trigger, Public
 To: PathDetails Message : Trigger, Public

### PathDetails Message Status booked

Trigger owned by 'IM-System', in package 'Handbook-Planning'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 06.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked : Trigger, Public

### PathDetails Message Status booked

Trigger owned by 'IM-System', in package 'Handbook-Planning'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 06.06.2013

### **CONNECTORS**

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked : Trigger, Public

### RU

ActivityPartition in package 'Handbook-Planning'

RU
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 18.06.2013

check offered path details: Activity  check offered path details: Activity  check offered path details: Activity  provide data in object train: Activity  provide data in object train: Activity  update object Train: Activity  Actorl: Actor  Train (Plan): Object
check offered path details: Activity  provide data in object train: Activity  provide data in object train: Activity  update object Train: Activity  Actorl: Actor
provide data in object train: Activity  provide data in object train: Activity  update object Train: Activity  Actorl: Actor
provide data in object train: Activity  update object Train: Activity  update object Train: Activity  Actorl: Actor
update object Train : Activity  update object Train : Activity  Actor1 : Actor
update object Train : Activity  Actor1 : Actor
Actor1 : Actor
Train (Plan): Object
End of PR process : ActivityFinal
manually triggered : ActivityInitial
CaseReference: Object
Train Y (Plan): Object

### CONNECTORS

▶ DependencySource -> DestinationFrom:RU: ActivityPartition, PublicTo:RU: ActivityPartition, Public

✓ DependencySource -> DestinationFrom:RU : ActivityPartition, PublicTo:RU : ActivityPartition, Public

### check offered path details

Activity owned by 'RU', in package 'Handbook-Planning'

check offered path details Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 30.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from check offered path details to Path Details refused Processing started Guard: PD refused
- ControlFlow from check offered path details to Path Confirmed Processing started Guard: Path confirmed
- ControlFlow from check offered path details to Path Request Message Status Deletion Processing started Guard: PR deletion

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to check offered path details
- ControlFlow from synchronize actions to check offered path details

### check offered path details

Activity owned by 'RU', in package 'Handbook-Planning'

check offered path details

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from check offered path details to Path Confirmed Processing started Guard: Path confirmed
- 🖛 Information Flow from check offered path details to Train Y (Plan)
- ControlFlow from check offered path details to Path Request Message Status Deletion Processing started Guard: PR deletion
- ControlFlow from check offered path details to Path Details refused Processing started Guard: PD refused

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to check offered path details

### check offered path details

Activity owned by 'RU', in package 'Handbook-Planning'

check offered path details

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from check offered path details to Path Confirmed Processing started Guard: Path confirmed
- ControlFlow from check offered path details to Path Details refused Processing started Guard: PD refused
- 📭 Information Flow from check offered path details to Train (Plan)
- ControlFlow from check offered path details to Path Request Message Status Deletion Processing started Guard: PR deletion

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to check offered path details

### provide data in object train

Activity owned by 'RU', in package 'Handbook-Planning'

provide data in object train Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 Information Flow from provide data in object train to Train Y (Plan)
- 🖛 ControlFlow from provide data in object train to check Train-Path Link
- 4 Information Flow from provide data in object train to Train (OP)

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- EntrolFlow from provide data in object train to Path Request processing started
- ControlFlow from provide data in object train to Path Request processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from manually triggered to provide data in object train
- ControlFlow from manually triggered to provide data in object train
- ControlFlow from Automatically triggered to provide data in object train Guard: Train ID known
- Information Flow from Train (Plan) to provide data in object train

### provide data in object train

Activity owned by 'RU', in package 'Handbook-Planning'

provide data in object train Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

EntrolFlow from provide data in object train to Path Request processing started

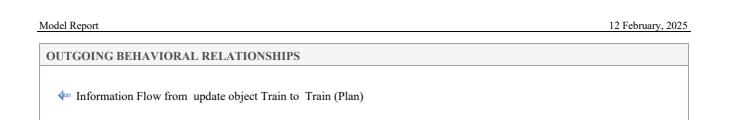
### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from Train Y (Plan) to provide data in object train
- ControlFlow from manually triggered to provide data in object train

### update object Train

Activity owned by 'RU', in package 'Handbook-Planning'

update object Train Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 11.06.2013



### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to update object Train

ControlFlow from update object Train to End of PR process

ControlFlow from synchronize actions to update object Train

### update object Train

Activity owned by 'RU', in package 'Handbook-Planning'

update object Train
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♣ Information Flow from update object Train to Train Y (Plan)
- ControlFlow from update object Train to End of PR process

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to update object Train

### Actor1

Actor owned by 'RU', in package 'Handbook-Planning'

Actor1 Version 1.0 Phase 1.0 Proposed Hantak created on 02.08.2014. Last modified 02.08.2014

### Train (Plan)

Object owned by 'RU', in package 'Handbook-Planning'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

### **End of PR process**

ActivityFinal owned by 'RU', in package 'Handbook-Planning'

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from update object Train to End of PR process
- ControlFlow from update object Train to End of PR process

### manually triggered

ActivityInitial owned by 'RU', in package 'Handbook-Planning'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from manually triggered to check Train Path Link
- ControlFlow from manually triggered to provide data in object train
- ♣ ControlFlow from manually triggered to provide data in object train
- ← ControlFlow from manually triggered to provide data in object train

### CaseReference

Object owned by 'RU', in package 'Handbook-Planning'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013

## ATTRIBUTES CaseReferenceID : CompositIdentifierPlannedType Private [ Is static True. Containment is Not Specified. ] Name : String Private [ Is static True. Containment is Not Specified. ] Period\_From : Date Private [ Is static True. Containment is Not Specified. ]

### ATTRIBUTES Period\_To: Date Private [Is static True. Containment is Not Specified.]

### Train Y (Plan)

Object owned by 'RU', in package 'Handbook-Planning'

Train Y (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

### **RU-System**

ActivityPartition in package 'Handbook-Planning'

RU-System Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 18.06.2013

ELEMENTS OWNED BY RU-System
c01-SendMessage-RU-IM -TR_m-CR_m- PR_m-OTN_o-RelID_o : Activity
c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
c03-SendMessage-RU-IM -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c04-SendMessage-RU-IM -TR_m-PA_m-OTN_o : Activity
check Train-Path Link : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
LINK BETWEEN TRAIN AND PATH OBJECTS EXIST ( NOMESSAGE : Activity

ELEMENTS OWNED BY RU-System
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK HAS BEEN REFUSED : Activity
■ LINK NOT CONFIRMED : Activity
provide Update Link Message content : Activity
■ REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
use related IDs : Activity
use related IDs : Activity
use related IDs : Activity
use related IDs: Activity
RU: Event
■ RU : Event
■ RU : Event
Automatically triggered : ActivityInitial
■ RU : Event
■ RU : Event
PathConfirmed Message : Trigger

ELEMENTS OWNED BY RU-System
Path Details Refused Message: Trigger
PathDetailsRefused Message: Trigger
PathDetailsRefused Message: Trigger
PathRequest Message : Trigger
PathRequest Message Status Deletion : Trigger
PathRequest Message Status Deletion : Trigger

### c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message to c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

### **CONNECTORS**

Dependency Source -> Destination PathRequest Message: Trigger, Public

To: c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o : Activity, Public

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

### c04-SendMessage-RU-IM-TR m-PA m-OTN o

Activity owned by 'RU-System', in package 'Handbook-Planning'

c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c04-SendMessage-RU-IM -TR m-PA m-OTN o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathSectionNotification Message (InfoType=UtilizationNotification) to c04-SendMessage-RU-IM -TR m-PA m-OTN o

### check Train-Path Link

Activity owned by 'RU-System', in package 'Handbook-Planning'

check Train-Path Link Version 1.0 Phase 1.0 Proposed Hantak created on 12.06.2013. Last modified 12.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 Information Flow from check Train-Path Link to Train (OP)
- ControlFlow from check Train-Path Link to Utilisation Notification Processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from process error message to check Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from provide data in object train to check Train-Path Link

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Planning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 02.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Path Confirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### LINK BETWEEN TRAIN AND PATH OBJECTS EXIST ( NOMESSAGE

Activity owned by 'RU-System', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXIST (NOMESSAGE Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 31.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXIST ( NOMESSAGE to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

➡ Information Flow from PathSectionNotification Message (InfoType=UtilizationNotification) to LINK BETWEEN TRAIN AND PATH OBJECTS EXIST ( NOMESSAGE

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'RU-System', in package 'Handbook-Planning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathSectionNotification Message (InfoType=UtilizationNotification) to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK HAS BEEN REFUSED

Activity owned by 'RU-System', in package 'Handbook-Planning'

LINK HAS BEEN REFUSED Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 31.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK HAS BEEN REFUSED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message Status Deletion to LINK HAS BEEN REFUSED

### LINK NOT CONFIRMED

Activity owned by 'RU-System', in package 'Handbook-Planning'

LINK NOT CONFIRMED

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 31.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from LINK NOT CONFIRMED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to LINK NOT CONFIRMED

### provide Update Link Message content

Activity owned by 'RU-System', in package 'Handbook-Planning'

provide Update Link Message content

Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Planning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 30.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Path Request processing started to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### **CONNECTORS**

Dependency

Source -> Destination

From:

PathRequest Message: Trigger, Public

To:

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Planning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 06.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

📫 Information Flow from PathRequest Message to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Planning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0

seid.maglajlic created on 06.06.2013. Last modified 28.06.2013

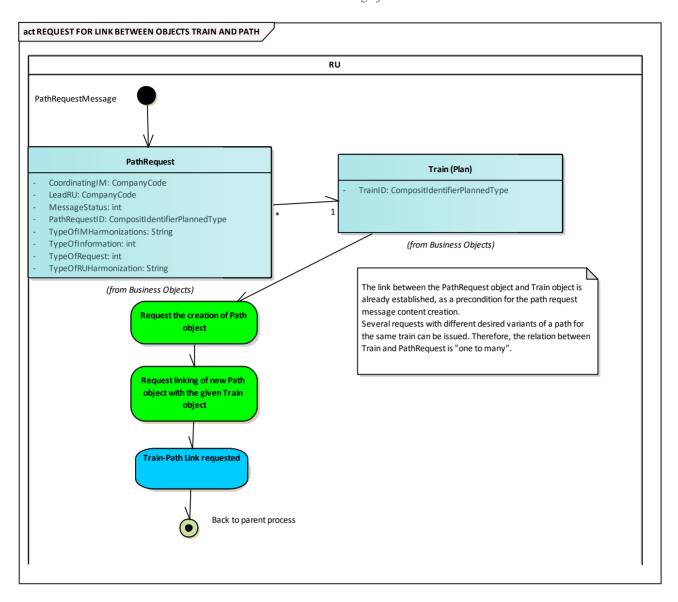


Figure 62: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### use related IDs

Activity owned by 'RU-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from use related IDs to PathRequest Message Status Deletion

### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from PathRequest Message Status Deletion to use related IDs

### use related IDs

Activity owned by 'RU-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 12.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

♦ Information Flow from use related IDs to PathConfirmed Message

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to use related IDs

### use related IDs

Activity owned by 'RU-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 Information Flow from use related IDs to Path Details Refused Message

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to use related IDs

### use related IDs

Activity owned by 'RU-System', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from use related IDs to PathRequest Message

### INCOMING BEHAVIORAL RELATIONSHIPS

Model Report \_\_\_\_\_\_ 12 February, 2025

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message to use related IDs

### RU

Event owned by 'RU-System', in package 'Handbook-Planning'

RU Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.02.2013. Last modified 30.05.2013

### **ELEMENTS OWNED BY RU**

use related IDs: Object

### use related IDs

Object owned by 'RU', in package 'Handbook-Planning'

use related IDs Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

### RU

Event owned by 'RU-System', in package 'Handbook-Planning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### RU

Event owned by 'RU-System', in package 'Handbook-Planning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### CONNECTORS

Dependency

Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

### Automatically triggered

ActivityInitial owned by 'RU-System', in package 'Handbook-Planning'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Automatically triggered to check Train Path Link Guard: Train ID known

ControlFlow from Automatically triggered to provide data in object train Guard: Train ID known

### RU

Event owned by 'RU-System', in package 'Handbook-Planning'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### RU

Event owned by 'RU-System', in package 'Handbook-Planning'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### **PathConfirmed Message**

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 06.06.2013

### Path Details Refused Message

Trigger owned by 'RU-System', in package 'Handbook-Planning'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details refused Processing started : Synchronization, Public

To: Path Details Refused Message: Trigger, Public

### PathDetailsRefused Message

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathDetailsRefused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### PathDetailsRefused Message

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathDetailsRefused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### PathRequest Message

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 06.06.2013

### CONNECTORS

Dependency

Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

### PathRequest Message Status Deletion

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathRequest Message Status Deletion Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 06.06.2013

### CONNECTORS

Dependency Source -> Destination

From: Path Request Message Status Deletion Processing started: Synchronization, Public

To: PathRequest Message Status Deletion: Trigger, Public

### PathRequest Message Status Deletion

Trigger owned by 'RU-System', in package 'Handbook-Planning'

PathRequest Message Status Deletion Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 06.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Request Message Status Deletion Processing started: Synchronization, Public

To: PathRequest Message Status Deletion : Trigger, Public

### Replanning

Package in package 'Business Use Cases'

Replanning
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

### Handbook-Replanning

Package in package 'Replanning'

Handbook-Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### 4.9 CHANGE OF TRAIN

UseCase in package 'Handbook-Replanning'

4.9 CHANGE OF TRAIN
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.03.2013. Last modified 18.08.2014

### **ELEMENTS OWNED BY 4.9 CHANGE OF TRAIN**

**■** COT-Activity : Activity

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from 4.9 CHANGE OF TRAIN to Replanning

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.9 CHANGE OF TRAIN: UseCase, Public

### **COT-Activity**

Activity owned by '4.9 CHANGE OF TRAIN', in package 'Handbook-Replanning'

COT-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

### **ELEMENTS OWNED BY COT-Activity**

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH: Activity

ELEMENTS OWNED BY COT-Activity
■ c04-SendMessage-RU-IM -TR_m-PA_m-OTN_o : Activity
■ c05-SendMessage-IM-RU -TR_m-PA_m-OTN_o : Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ LINK TO BE CHECKED : Activity

### 4.9 ChangeofTrain Activity diagram

Activity diagram in package 'Handbook-Replanning'

4.9 ChangeofTrain Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 22.11.2013

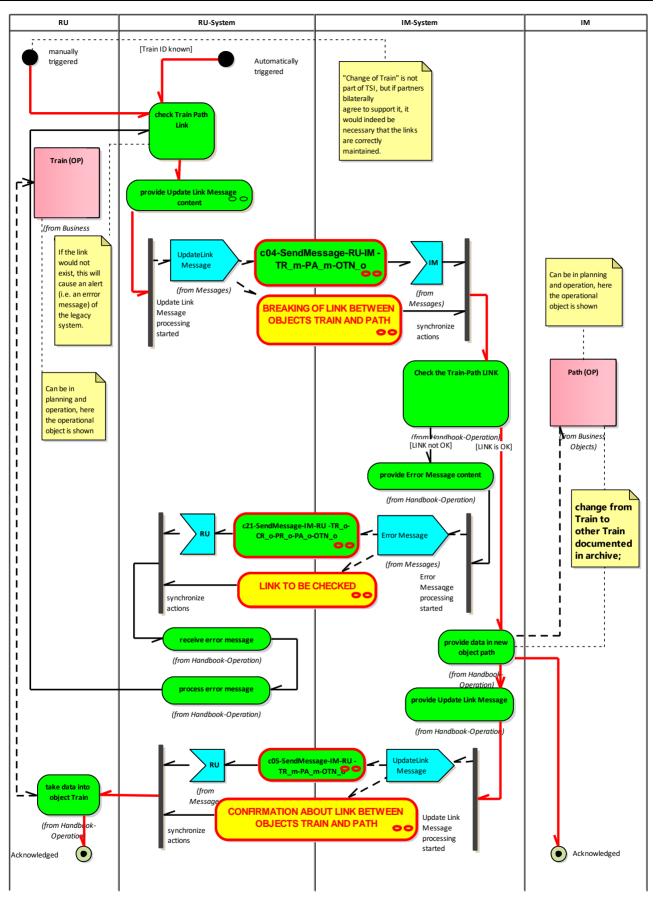


Figure 63: 4.9 ChangeofTrain Activity

### Note

Note in package 'Handbook-Planning'

"Change of Train" is not part of TSI, but if partners bilaterally agree to support it, it would indeed be necessary that the links are correctly maintained.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 18.11.2013
Extends

### Automatically triggered

ActivityInitial owned by 'RU-System', in package 'Handbook-Planning'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Automatically triggered to check Train Path Link Guard: Train ID known
- ControlFlow from Automatically triggered to provide data in object train Guard: Train ID known

### manually triggered

ActivityInitial owned by 'RU', in package 'Handbook-Planning'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from manually triggered to check Train Path Link
- ControlFlow from manually triggered to provide data in object train
- ← ControlFlow from manually triggered to provide data in object train
- ◆ ControlFlow from manually triggered to provide data in object train

### provide Update Link Message

Activity in package 'Handbook-Operation'

provide Update Link Message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from provide Update Link Message to Update Link Message processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from provide data in new object path to provide Update Link Message

### process error message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process error message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from process error message to check Train-Path Link
- ← ControlFlow from process error message to check Train Path Link
- ControlFlow from process error message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from receive error message to process error message
- ControlFlow from receive error message to process error message

### receive error message

Activity owned by 'RU-System', in package 'Handbook-Operation'

receive error message
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 18.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from receive error message to process error message
- ControlFlow from receive error message to process error message

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from receive error message to Process error message

INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message

### Acknowledged

ActivityFinal owned by 'IM', in package 'Handbook-Operation'

### INCOMING BEHAVIORAL RELATIONSHIPS

INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from take details into data to Acknowledged

ControlFlow from take data into object Train to Acknowledged

ControlFlow from take info into object train to Acknowledged

ControlFlow from take data into object Train to Acknowledged

ControlFlow from take data into object Train to Acknowledged

→ Object Flow from ObjectNode6 to Acknowledged

### provide Error Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide Error Message content Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS In ControlFlow from provide Error Message content to Error Message processing started In ControlFlow from provide Error Message content to Error Message processing started In ControlFlow from provide Error Message content to Error Message processing started In ControlFlow from provide Error Message content to Error Message processing started In ControlFlow from provide Error Message content to Error Message processing started In ControlFlow from provide Error Message content to Error Message processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK

### **Check the Train-Path LINK**

Activity owned by 'IM-System', in package 'Handbook-Operation'

Check the Train-Path LINK Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 16.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
← ControlFlow from Check the Train-Path LINK to provide data in new object path Guard: LINK is OK
← ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK
← ControlFlow from Check the Train-Path LINK to update object Path Guard: LINK is OK
← ControlFlow from Check the Train-Path LINK to provide update link message content Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to take data into object Train  Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to process Train Parking Message Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to Provide Train Running Forecast Message content
ControlFlow from Check the Train-Path LINK to take data into object Train  Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content
ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message
ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK
← ControlFlow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content
◆ Object Flow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content

### **OUTGOING BEHAVIORAL RELATIONSHIPS** ← ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content • Object Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Train (OP) ← ControlFlow from Check the Train-Path LINK to Provide TrainDelayPerformance Message content + ControlFlow from Check the Train-Path LINK to Provide TrainRunningInformation Message content ← ControlFlow from Check the Train-Path LINK to take data into object Path Guard: LINK is OK Information Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) ← ControlFlow from Check the Train-Path LINK to link train to already existing path Guard: LINK OK rontrolFlow from Check the Train-Path LINK to Provide Train Delay Cause Message content + ControlFlow from Check the Train-Path LINK to Provide Train Running Information Message content ControlFlow from Check the Train-Path LINK to provide Train Running Interrupted Message content Information Flow from Check the Train-Path LINK to Path (OP) r ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to Check the Train-Path LINK

### INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from process TrainRunningInformation Message to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK Information Flow from Path (OP) to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK Information Flow from Path (OP) to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Manually triggered to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Automatically triggered to Check the Train-Path LINK Guard: Train ID known

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Process TrainRunningForecast Message to Check the Train-Path LINK

### provide data in new object path

Activity owned by 'RU', in package 'Handbook-Operation'

provide data in new object path Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 10.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from provide data in new object path to provide Update Link Message
♣ Information Flow from provide data in new object path to Path (OP)
ControlFlow from provide data in new object path to Path Details processing started
ControlFlow from provide data in new object path to Acknowledged

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to provide data in new object path Guard: LINK is OK
- ControlFlow from synchronize actions to provide data in new object path

### **Acknowledged**

ActivityFinal owned by 'RU', in package 'Handbook-Operation'

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from take data into object Train to Acknowledged
- ControlFlow from provide data in new object path to Acknowledged
- ControlFlow from take data into object Path to Acknowledged
- ControlFlow from take data into object Train to Acknowledged

### take data into object Train

Activity owned by 'Train (OP)', in package 'Handbook-Operation'

take data into object Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
Information Flow from take data into object Train to Path (OP)
◆ ControlFlow from take data into object Train to Acknowledged
← ControlFlow from take data into object Train to ActivityFinal
◆ Information Flow from take data into object Train to Train (OP)
ControlFlow from take data into object Train to Acknowledged
♣ Information Flow from take data into object Train to Train (OP)
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from synchronize actions to take data into object Train
ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
ControlFlow from synchronize actions to take data into object Train
ControlFlow from Check the Train-Path Link to take data into object Train Guard: LINK is OK

### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**▶ Dependency** Path ID: Mandatory Source → Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

✓ DependencySource -> DestinationFrom:Error Message : Trigger, PublicTo:Refused by IM : State, Public

### CONNECTORS

**Dependency** Source -> Destination From: Error Message: Trigger, Public

To: Receive error message: Activity, Public

**Dependency** PathID Source -> Destination

From: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

### CONNECTORS

Prom: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR m-PA m-OTN m : Activity, Public

Prom: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

### Note

Note in package 'Business Objects'

Can be in planning and operation, here the operational object is shown

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

### Note

Note in package 'Business Objects'

Can be in planning and operation, here the operational object is shown

Note

Version 1.0 Phase 1.0 Proposed Hantak created on 22.11.2013. Last modified 22.11.2013 Extends

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Path (OP): Object, Public

To: Train Running Forecast Message : Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public To: Path : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

▼ TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 02.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

➡ Information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

### c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c04-SendMessage-RU-IM -TR m-PA m-OTN o

### c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c05-SendMessage-IM-RU -TR m-PA m-OTN o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c05-SendMessage-IM-RU-TR m-PA m-OTN o

### CONNECTORS

**Dependency** Source -> Destination
From: UpdateLink Message : Trigger, Public

To: c05-SendMessage-IM-RU-TR m-PA m-OTN o: Activity, Public

### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o

### **CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### LINK TO BE CHECKED

Activity owned by 'COT-Activity', in package 'Handbook-Replanning'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK TO BE CHECKED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from Error Message to LINK TO BE CHECKED

### 4.10 PATH ALTERATION

UseCase in package 'Handbook-Replanning'

4.10 PATH ALTERATION Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

### **ELEMENTS OWNED BY 4.10 PATH ALTERATION**

PA- Activity: Activity

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Generalization from 4.10 PATH ALTERATION to Replanning

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination

Object : Object, Public

To: 4.10 PATH ALTERATION : UseCase, Public

### PA- Activity

Activity owned by '4.10 PATH ALTERATION', in package 'Handbook-Replanning'

PA- Activity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

# ELEMENTS OWNED BY PA- Activity ☐ c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o : Activity ☐ c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o : Activity ☐ c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o : Activity ☐ c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o : Activity

ELEMENTS OWNED BY PA- Activity

LINK NOT CONFIRMED : Activity

IM : ActivityPartition

RU : ActivityPartition

### 4.10 PathAlteration Activity diagram

Model Report

Activity diagram in package 'Handbook-Replanning'

4.10 PathAlteration Activity
Version 1.0
seid.maglajlic created on 18.03.2013. Last modified 18.11.2013

12 February, 2025

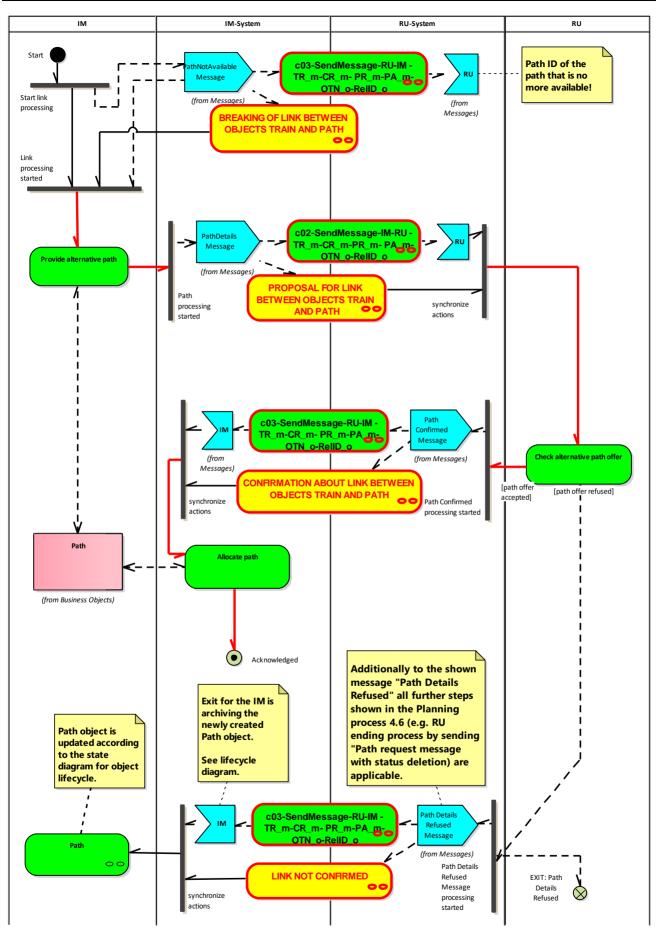


Figure 64: 4.10 PathAlteration Activity

### **EXIT: Path Details Refused**

FlowFinal in package 'Handbook-Replanning'

### **CONNECTORS**

**Dependency** Source

Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: EXIT: Path Details Refused: FlowFinal, Public

### Note

Note in package 'Messages'

Additionally to the shown message "Path Details Refused" all further steps shown in the Planning process 4.6 (e.g. RU ending process by sending "Path request message with status deletion) are applicable.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.09.2013. Last modified 18.09.2013
Extends

### IM

Event in package 'Messages'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### **CONNECTORS**

Dependency

Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

Dependency PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

### CONNECTORS

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

### **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

▶ Dependency [path offer accepted] Source → Destination
 From: Check alternative path offer : Activity, Public
 To: Path Confirmed Message : Trigger, Public

### CONNECTORS

Dependency Source -> Destination

Path Confirmed processing started: Synchronization, Public From:

To: Path Confirmed Message: Trigger, Public

Dependency Source -> Destination

Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

Dependency Source -> Destination

Path Confirmed Processing started: Synchronization, Public

Path Confirmed Message: Trigger, Public

Dependency Source -> Destination

Planned: State, Public

To: Path Confirmed Message: Trigger, Public

### **PathDetails Message**

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

### CONNECTORS

Dependency Source -> Destination PathDetails Message: Trigger, Public

Finally offered: State, Public To:

**Dependency** PathRequestID Source -> Destination

PathDetails Message: Trigger, Public From:

RU : Event, Public To:

**Dependency** TrainID Source -> Destination PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Source -> Destination PathDetails Message: Trigger, Public

Offered: State, Public To:

### CONNECTORS

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Drafted : State, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

**Dependency** PathID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

Path Details Message: Trigger, Public
To: Path for the Train offered: State, Public

 ▶ Dependency
 TrainID
 Source → Destination

 From:
 PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination

From: Path processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

### **Path Details Refused Message**

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

### PathNotAvailable Message

Trigger in package 'Messages'

PathNotAvailable Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

### CONNECTORS

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: EntryPoint: Path Alteration Process : EntryPoint, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message : Trigger, Public
To: Link processing started : Synchronization, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

Dependency Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path Alteration Process Source -> Destination

From: Booked : State, Public

To: PathNotAvailable Message: Trigger, Public

**Dependency** Source -> Destination

From: Start link processing : Synchronization, Public To: PathNotAvailable Message : Trigger, Public

### **Path**

Object in package 'Business Objects'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### **CONNECTORS**

Path : Object, Public

Path: Object, Public

### CONNECTORS

Path (OP): Object, Public

To: Path : Object, Public

### ATTRIBUTES

JourneyLocations: PlannedJourneyLocation Protected

[ Is static True. Containment is Not Specified. ]

PathParameters: PlannedTrainParameters Protected

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Path (Overview) Target: Public (Object) Path

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

### c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o-RelID o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 29.05.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.09.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathNotAvailable Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.05.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-

### INCOMING BEHAVIORAL RELATIONSHIPS

RelID o

### c03-SendMessage-RU-IM -TR m-CR m- PR m-PA m-OTN o-RelID o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.05.2013. Last modified 09.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Details Refused Message to c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 27.05.2013. Last modified 27.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PA- Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 27.05.2013. Last modified 27.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from c03-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o to IM

Model Report	12 February, 2025
OUTGOING BEHAVIORAL RELATIONSHIPS	
INCOMING BEHAVIORAL RELATIONSHIPS	
Information Flow from Path Details Refused Message t OTN_o-RelID_o	o c03-SendMessage-RU-IM -TR_m-CR_m-PR_m-PA_m-
INK NOT CONFIRMED	
lctivity owned by 'PA- Activity', in package 'Handbook-Ro	eplanning'
	LINK NOT CONFIRMED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013
OUTGOING BEHAVIORAL RELATIONSHIPS	
◆ ControlFlow from LINK NOT CONFIRMED to synchr	ronize actions
INCOMING BEHAVIORAL RELATIONSHIPS	
■ Information Flow from Path Details Refused Message t	o LINK NOT CONFIRMED
<b>M</b> activityPartition owned by 'PA- Activity', in package 'Han	dbook-Replanning'
S	Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

Allocate path : Activity

Provide alternative path : Activity

### Allocate path

Activity owned by 'IM', in package 'Handbook-Replanning'

Allocate path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 09.04.2013

OUTGOING BEHAVIORAL RELATIONSHIPS

Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** ♣ ControlFlow from Allocate path to Acknowledged ◆ ControlFlow from Allocate path to Acknowledged Name: [after switch from pl. to op.] ◆ Information Flow from Allocate path to Path (OP) 4 Information Flow from Allocate path to Path INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from CONFIRMATION OF LINK to Allocate path ControlFlow from synchronize actions to Allocate path ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to Allocate path Provide alternative path Activity owned by 'IM', in package 'Handbook-Replanning' Provide alternative path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** • Object Flow from Provide alternative path to Path (OP) Guard: after switch from planning to operation ◆ Information Flow from Provide alternative path to Path ControlFlow from Provide alternative path to Path processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Link processing started to Provide alternative path

Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

### RU

ActivityPartition owned by 'PA- Activity', in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### **ELEMENTS OWNED BY RU**

**E**vent1 : Event

■ Offer accepted : State

### Event1

Event owned by 'RU', in package 'Handbook-Replanning'

Event1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### Offer accepted

State owned by 'RU', in package 'Handbook-Replanning'

Offer accepted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Check alternative path offer: Activity, Public

To: Offer accepted : State, Public

### RU

Event owned by 'PA- Activity', in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

### 4.11 PATH MODIFICATION

UseCase in package 'Handbook-Replanning'

4.11 PATH MODIFICATION Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

### ELEMENTS OWNED BY 4.11 PATH MODIFICATION

■ PM-Activity : Activity

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from 4.11 PATH MODIFICATION to Replanning

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**▶ Dependency** Source → Destination

From: Object : Object, Public

To: 4.11 PATH MODIFICATION : UseCase, Public

### PM-Activity

Activity owned by '4.11 PATH MODIFICATION', in package 'Handbook-Replanning'

PM-Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

## ELEMENTS OWNED BY PM-Activity □ c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o : Activity □ c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o : Activity □ ActivityFinal : ActivityFinal □ REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity □ PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity

ELEMENTS OWNED BY PM-Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ c01-SendMessage-RU-IM -TR_m-CR_m-PR_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m- PA_m-OTN_o-RelID_o : Activity
■ c02-SendMessage-IM-RU -TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c03-SendMessage- RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
■ c03-SendMessage-RU-IM -TR_m-CR_m- PR_m-PA_m-OTN_o-RelID_o : Activity
End of Path Request - NO PATH BOOKED : ActivityFinal

### 4.11 PathModification Activity diagram

Activity diagram in package 'Handbook-Replanning'

4.11 PathModification Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

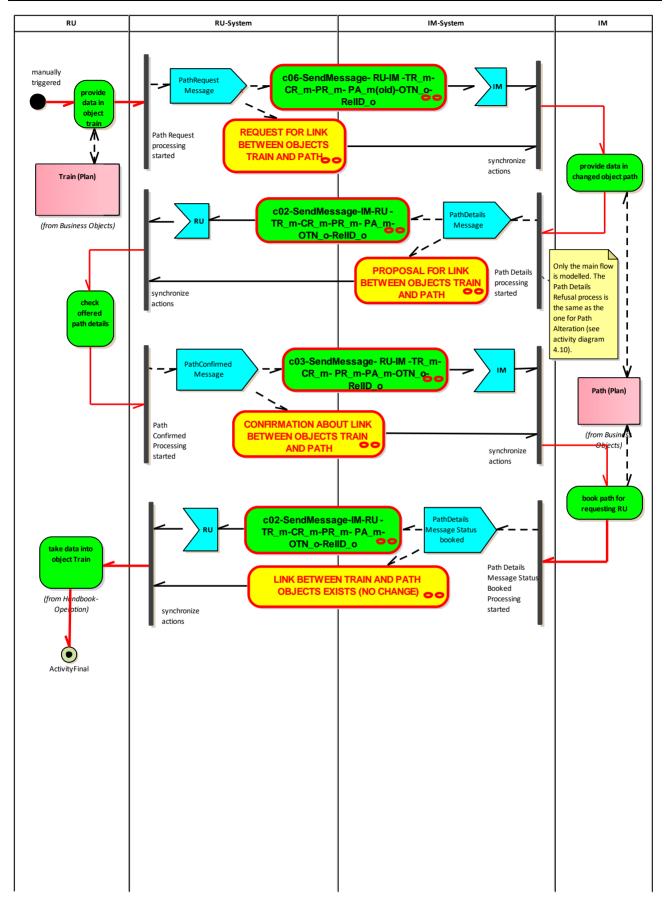


Figure 65: 4.11 PathModification Activity

### take data into object Train

Activity owned by 'Train (OP)', in package 'Handbook-Operation'

take data into object Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
⁴™ Information Flow from take data into object Train to Path (OP)
← ControlFlow from take data into object Train to Acknowledged
4- ControlFlow from take data into object Train to ActivityFinal
⁴™ Information Flow from take data into object Train to Train (OP)
← ControlFlow from take data into object Train to Acknowledged
⁴™ Information Flow from take data into object Train to Train (OP)
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from synchronize actions to take data into object Train

### Control Flow from synchronize actions to take data into object fram

- ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
- ControlFlow from synchronize actions to take data into object Train
- ControlFlow from Check the Train-Path Link to take data into object Train Guard: LINK is OK

### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Path (Plan): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination From: Train (Plan) : Object, Public To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 02.09.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to c02-SendMessage-IM-RU-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID o

### c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 28.06.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Land ControlFlow from c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message to c06-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o

### **ActivityFinal**

ActivityFinal owned by 'PM-Activity', in package 'Handbook-Replanning'

### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 08.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Replanning'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 08.06.2013. Last modified 08.06.2013

Figure 66: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 08.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Replanning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 08.06.2013. Last modified 08.06.2013

### Figure 67: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

### **CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 08.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathConfirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 08.06.2013. Last modified 08.06.2013

Figure 68: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 08.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Replanning'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 08.06.2013. Last modified 08.06.2013

Figure 69: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### ${\tt c01-SendMessage-RU-IM-TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o}$

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.06.2013

### c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Replanning'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

Figure 70: c01-SendMessage-RU-IM -TR m-CR m-PR m-OTN o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 09.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message Status booked to c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN o-RelID o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

Figure 71: c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.06.2013

### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Replanning'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

 $Figure~72:~c02-SendMessage-IM-RU~-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o$ 

### c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathConfirmed Message to c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

Figure 73: c03-SendMessage-RU-IM-TR m-CR m-PR m-PA m-OTN o-RelID o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

Figure 74: c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'PM-Activity', in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 31.05.2013. Last modified 08.06.2013

### c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Replanning'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 08.06.2013. Last modified 08.06.2013

Figure 75: c03-SendMessage-RU-IM-TR m-CR m-PR m-PA m-OTN o-RelID o

### **End of Path Request - NO PATH BOOKED**

ActivityFinal owned by 'PM-Activity', in package 'Handbook-Replanning'

### 4.12 TRAIN MODIFICATION

UseCase in package 'Handbook-Replanning'

4.12 TRAIN MODIFICATION Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

### **ELEMENTS OWNED BY 4.12 TRAIN MODIFICATION**

■ TM-Activity : Activity

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from 4.12 TRAIN MODIFICATION to Replanning

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination From: Object : Object, Public

To: 4.12 TRAIN MODIFICATION: UseCase, Public

### TM-Activity

Activity owned by '4.12 TRAIN MODIFICATION', in package 'Handbook-Replanning'

TM-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

### **ELEMENTS OWNED BY TM-Activity**

Train (Plan): Object

### 4.12 TrainModification Activity diagram

Activity diagram in package 'Handbook-Replanning'

4.12 TrainModification Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 26.10.2014

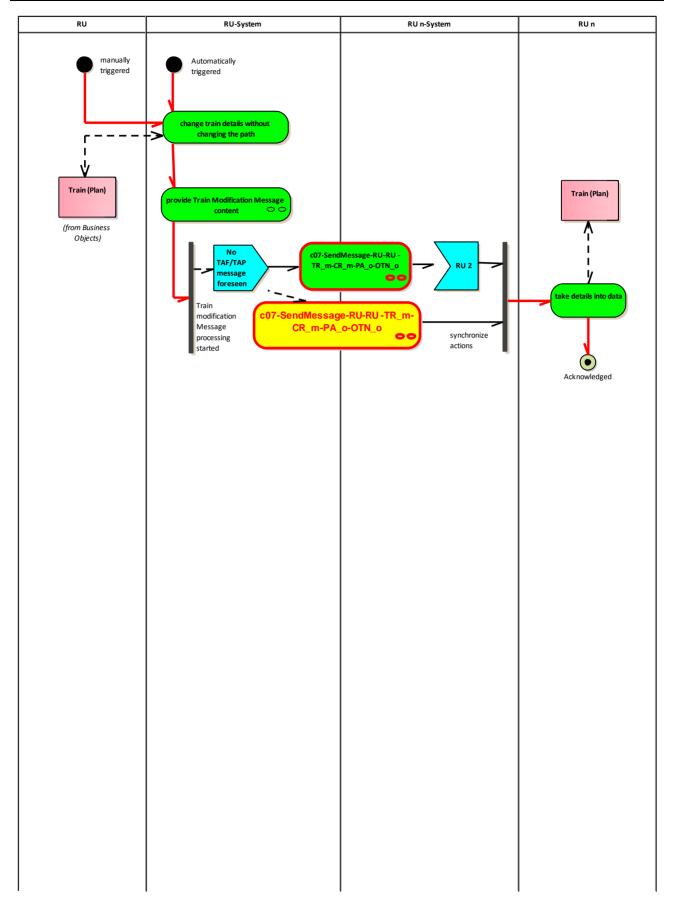


Figure 76: 4.12 TrainModification Activity

### Acknowledged

ActivityFinal owned by 'IM', in package 'Handbook-Operation'

## INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from take details into data to Acknowledged
- ControlFlow from take data into object Train to Acknowledged
- ControlFlow from take info into object train to Acknowledged
- ControlFlow from take data into object Train to Acknowledged
- ControlFlow from take data into object Train to Acknowledged
- → Object Flow from ObjectNode6 to Acknowledged

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (Plan): Object, Public
To: Train: Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Target: Public (Object) TrainInformation

SOCIATIONS	
Cardinality: [1]	Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan)	Target: Public (Object) PathRequest
Cardinality: [1]	Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) Path (Plan)
Cardinality: [1]	Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) CaseReference
Cardinality: [*]	Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)	Target: Public (Object) Dossier
Cardinality: [*]	Cardinality: [1]

# Train (Plan)

Object owned by 'TM-Activity', in package 'Handbook-Replanning'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 10.06.2013

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
JourneyLocations : PlannedJourneyLocation Private	[ Is static True. Containment is Not Specified. ]
ReferenceLocation: LocationIdent Private	[ Is static True. Containment is Not Specified. ]
TrainID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]

#### **ATTRIBUTES**

#### **Path Cancelation**

UseCase in package 'Handbook-Replanning'

Path Cancelation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Path Cancelation to Replanning

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from Path Cancelation from IM to Path Cancelation

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: Path Cancelation : UseCase, Public

# Path Cancelation from IM

UseCase in package 'Handbook-Replanning'

Path Cancelation from IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Path Cancelation from IM to Path Cancelation

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: Path Cancelation from IM: UseCase, Public

# Replanning

UseCase in package 'Handbook-Replanning'

Replanning Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

INCOMING STRUCTURAL RELATIONSHIPS	
→ Generalization from 4.12 TRAIN MODIFICATION to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from Path Cancelation to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from 4.11 PATH MODIFICATION to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from 4.10 PATH ALTERATION to Replanning	[ Direction is 'Source -> Destination'. ]
→ Generalization from 4.9 CHANGE OF TRAIN to Replanning	[ Direction is 'Source -> Destination'. ]

# **Object**

Object «business actor» in package 'Handbook-Replanning'

Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# CONNECTORS Dependency Source → Destination From: Object : Object, Public To: Path Cancelation from IM : UseCase, Public Dependency Source → Destination From: Object : Object, Public To: 4.10 PATH ALTERATION : UseCase, Public

# **Object**

Object «business actor» in package 'Handbook-Replanning'

Object

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.12 TRAIN MODIFICATION : UseCase, Public

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.11 PATH MODIFICATION : UseCase, Public

**Dependency** Source -> Destination

From: Object : Object, Public

To: Path Cancelation : UseCase, Public

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.9 CHANGE OF TRAIN: UseCase, Public

# Check alternative path offer

Activity in package 'Handbook-Replanning'

Check alternative path offer Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Check alternative path offer to Path Confirmed processing started Guard: path offer accepted

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to Check alternative path offer

# CONNECTORS

Dependency [path offer accepted] Source -> Destination
 From: Check alternative path offer: Activity, Public
 To: Path Confirmed Message: Trigger, Public

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#### CONNECTORS

**Dependency** [path offer refused] Source -> Destination From: Check alternative path offer: Activity, Public

To: Path Details Refused Message processing started : Synchronization, Public

**Dependency** Source -> Destination

From: Check alternative path offer: Activity, Public

To: Offer accepted : State, Public

#### **Path**

Activity in package 'Handbook-Replanning'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Object Flow from Path (OP) to Path
- Object Flow from Path (Plan) to Path

# SendMessageIM-RU-TR-PA-RelID

Activity in package 'Handbook-Replanning'

SendMessageIM-RU-TR-PA-RelID Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 21.05.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from SendMessageIM-RU-TR-PA-RelID to synchronize actions

# CONNECTORS

**Dependency** Source -> Destination

From: SendMessageIM-RU-TR-PA-RelID: Activity, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

#### IM

Event in package 'Handbook-Replanning'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

# Message Info

Event in package 'Handbook-Replanning'

Message Info Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### RU

Event in package 'Handbook-Replanning'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: SendMessageIM-RU-TR-PA-RelID: Activity, Public

To: RU: Event, Public

#### **EXIT: Path Details Refused**

FlowFinal in package 'Handbook-Replanning'

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: EXIT: Path Details Refused: FlowFinal, Public

# IM

ActivityPartition in package 'Handbook-Replanning'

IM
Version 1.0 Phase 1.0 Proposed
Hantak created on 20.05.2013. Last modified 20.05.2013

ELEMENTS OWNED BY IM
<b>B</b> book path for requesting RU: Activity
provide data in changed object path : Activity
🗄 replan data in new object path : Activity
■ zz : Event
■ zz : Event
Path (Plan): Object
EXIT: Path Details Refused: FlowFinal

# book path for requesting RU

Activity owned by 'IM', in package 'Handbook-Replanning'

book path for requesting RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.06.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from book path for requesting RU to Path (Plan)
- EntrolFlow from book path for requesting RU to Path Details Message Status Booked Processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to book path for requesting RU

# provide data in changed object path

Activity owned by 'IM', in package 'Handbook-Replanning'

> provide data in changed object path Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 08.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- EntrolFlow from provide data in changed object path to Path Details processing started
- ♣ Information Flow from provide data in changed object path to Path (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to provide data in changed object path

#### replan data in new object path

Activity owned by 'IM', in package 'Handbook-Replanning'

replan data in new object path Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 08.06.2013

ZZ

Event owned by 'IM', in package 'Handbook-Replanning'

Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

ZZ

Event owned by 'IM', in package 'Handbook-Replanning'

Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

# Path (Plan)

Object owned by 'IM', in package 'Handbook-Replanning'

Path (Plan) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 11.06.2013

#### **ATTRIBUTES**

Calendar : Calendar Private

[ Is static True. Containment is Not Specified. ]
[ Is static True. Containment is Not Specified. ]
[ Is static True. Containment is Not Specified. ]
[ Is static True. Containment is Not Specified. ]

# EXIT: Path Details Refused

FlowFinal owned by 'IM', in package 'Handbook-Replanning'

# IM-System

ActivityPartition in package 'Handbook-Replanning'

IM-System Version 1.0 Phase 1.0 Proposed Hantak created on 20.05.2013. Last modified 20.05.2013

ELEMENTS OWNED BY IM-System
■ BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ BREAKING OF LINK BETWEEN OBJECTSTRAIN AND PATH : Activity
CONFIRMATION OF LINK: Activity
PROPOSAL FOR LINK : Activity
PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ UpdateLink Message : Trigger
☐ IM: Event

# ELEMENTS OWNED BY IM-System PathDetails Message: Trigger PathDetails Message Status booked: Trigger IM: Event

#### CONNECTORS

**Dependency** Source -> Destination
From: IM-System : ActivityPartition, Public

To: synchronize actions: Synchronization, Public

Dependency Source -> Destination
 From: IM-System : ActivityPartition, Public
 To: IM-System : ActivityPartition, Public

**Dependency** Source -> Destination

From: IM-System : ActivityPartition, Public

To: IM-System : ActivityPartition, Public

# BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'IM-System', in package 'Handbook-Replanning'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 30.05.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to Link processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start link processing to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

#### **CONNECTORS**

**Dependency** Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

#### BREAKING OF LINK BETWEEN OBJECTSTRAIN AND PATH

Activity owned by 'IM-System', in package 'Handbook-Replanning'

BREAKING OF LINK BETWEEN OBJECTSTRAIN AND PATH Version 1.0 Phase 1.0 Proposed Hantak created on 29.05.2013. Last modified 29.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from BREAKING OF LINK BETWEEN OBJECTSTRAIN AND PATH to Link processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start link processing to BREAKING OF LINK BETWEEN OBJECTSTRAIN AND PATH

#### **CONFIRMATION OF LINK**

Activity owned by 'IM-System', in package 'Handbook-Replanning'

CONFIRMATION OF LINK Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 28.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**♦** ControlFlow from CONFIRMATION OF LINK to Allocate path

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to CONFIRMATION OF LINK

#### PROPOSAL FOR LINK

Activity owned by 'IM-System', in package 'Handbook-Replanning'

PROPOSAL FOR LINK Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from PROPOSAL FOR LINK to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to PROPOSAL FOR LINK

#### INCOMING BEHAVIORAL RELATIONSHIPS

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'IM-System', in package 'Handbook-Replanning'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.05.2013. Last modified 29.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH
- ControlFlow from Path processing started to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### **UpdateLink Message**

Trigger owned by 'IM-System', in package 'Handbook-Replanning'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: UpdateLink Message : Trigger, Public

To: c05-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_o : Activity, Public

**Dependency** Source -> Destination

From: Update Link Message processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

#### IM

Event owned by 'IM-System', in package 'Handbook-Replanning'

111/1

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

#### PathDetails Message

Trigger owned by 'IM-System', in package 'Handbook-Replanning'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

# PathDetails Message Status booked

Trigger owned by 'IM-System', in package 'Handbook-Replanning'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 08.06.2013

#### CONNECTORS

Dependency

Source -> Destination

Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked: Trigger, Public

#### IM

Event owned by 'IM-System', in package 'Handbook-Replanning'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

# **CONNECTORS**

Dependency Source -> Destination

From: IM: Event, Public To: IM: Event, Public

Dependency

Source -> Destination

From: IM: Event, Public To: IM: Event, Public

#### RU

ActivityPartition in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed Hantak created on 20.05.2013. Last modified 20.05.2013

Model Report 12 February, 2025
ELEMENTS OWNED BY RU
El check offered path details: Activity
provide data in object train : Activity
Train (Plan): Object
ActivityFinal : ActivityFinal
manually triggered : ActivityInitial
Start : ActivityInitial
check offered path details  Activity owned by 'RU', in package 'Handbook-Replanning'  check offered path details  Version 1.0 Phase 1.0 Proposed  Hantak created on 30.05.2013. Last modified 08.06.2013  OUTGOING BEHAVIORAL RELATIONSHIPS   4 ControlFlow from check offered path details to Path Confirmed Processing started
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from synchronize actions to check offered path details
provide data in object train  Activity owned by 'RU', in package 'Handbook-Replanning'  provide data in object train  Version 1.0 Phase 1.0 Proposed  Hantak created on 30.05.2013. Last modified 08.06.2013
OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from provide data in object train to Path Request processing started
Information Flow from provide data in object train to Train (Plan)

Model Report	12 February, 2025
OUTGOING BEHAVIORAL RELATIONSHIPS	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from manually triggered to provide data in object train	

# Train (Plan)

Object owned by 'RU', in package 'Handbook-Replanning'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 10.06.2013

# **ActivityFinal**

ActivityFinal owned by 'RU', in package 'Handbook-Replanning'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from take data into object Train to ActivityFinal

# manually triggered

ActivityInitial owned by 'RU', in package 'Handbook-Replanning'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♣ ControlFlow from manually triggered to provide data in object train
- ControlFlow from manually triggered to provide Train Modification Message content
- EntrolFlow from manually triggered to change train details without changing the path

#### Start

ActivityInitial owned by 'RU', in package 'Handbook-Replanning'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from Start to Start link processing

# **RU-System**

ActivityPartition in package 'Handbook-Replanning'

RU-System Version 1.0 Phase 1.0 Proposed Hantak created on 20.05.2013. Last modified 20.05.2013

ELEMENTS OWNED BY RU-System
■ c07-SendMessage-RU-RU -TR_m-CR_m-PA_o-OTN_o : Activity
■ c07-SendMessage-RU-RU -TR_m-CR_m-PA_o-OTN_o : Activity
change train details without changing the path : Activity
check Train Path Link: Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
provide Train Modification Message content : Activity
provide Update Link Message content : Activity
■ No TAF/TAP message foreseen : Event
RU : Event
Automatically triggered : ActivityInitial
RU: Event
RU: Event
PathConfirmed Message : Trigger
PathDetailsRefused Message: Trigger

Model Report 12 February, 2025

ELEMENTS OWNED BY RU-System

PathRequest Message: Trigger

■ PathRequest Message Status Deletion : Trigger

# c07-SendMessage-RU-RU-TR m-CR m-PA o-OTN o

Activity owned by 'RU-System', in package 'Handbook-Replanning'

c07-SendMessage-RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from c07-SendMessage-RU-RU-TR m-CR m-PA o-OTN o to RU 2
- ← ControlFlow from c07-SendMessage-RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from No TAF/TAP message foreseen to c07-SendMessage-RU-RU -TR m-CR m-PA o-OTN o

# c07-SendMessage-RU-RU-TR m-CR m-PA o-OTN o

Activity owned by 'RU-System', in package 'Handbook-Replanning'

c07-SendMessage-RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c07-SendMessage-RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from No TAF/TAP message foreseen to c07-SendMessage-RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o

# change train details without changing the path

Activity owned by 'RU-System', in package 'Handbook-Replanning'

change train details without changing the path

Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from change train details without changing the path to provide Train Modification Message content

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Automatically triggered to change train details without changing the path
- ControlFlow from manually triggered to change train details without changing the path
- Information Flow from Train (Plan) to change train details without changing the path

#### check Train Path Link

Activity owned by 'RU-System', in package 'Handbook-Replanning'

check Train Path Link Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 11.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from check Train Path Link to provide Update Link Message content

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from manually triggered to check Train Path Link
- ControlFlow from process error message to check Train Path Link
- ControlFlow from Automatically triggered to check Train Path Link Guard: Train ID known

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Replanning'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 29.05.2013. Last modified 02.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to Allocate path
- ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Path Confirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

# provide Train Modification Message content

Activity owned by 'RU-System', in package 'Handbook-Replanning'

provide Train Modification Message content

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from provide Train Modification Message content to Train modification Message processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ➡ Information Flow from Train (Plan) to provide Train Modification Message content
- ControlFlow from Automatically triggered to provide Train Modification Message content
- ControlFlow from change train details without changing the path to provide Train Modification Message content
- ControlFlow from manually triggered to provide Train Modification Message content

#### provide Train Modification Message content diagram

Activity diagram in package 'Handbook-Replanning'

provide Train Modification Message content

Version 1.0
km created on 10.06.2013. Last modified 10.06.2013

Figure 77: provide Train Modification Message content

# provide Update Link Message content

Activity owned by 'RU-System', in package 'Handbook-Replanning'

provide Update Link Message content Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from provide Update Link Message content to Update Link Message processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check Train Path Link to provide Update Link Message content

# provide Update Link Message content diagram

Activity diagram in package 'Handbook-Replanning'

provide Update Link Message content Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 78: provide Update Link Message content

# No TAF/TAP message foreseen

Event owned by 'RU-System', in package 'Handbook-Replanning'

No TAF/TAP message foreseen Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### CONNECTORS

Dependency

Source -> Destination

From: Train modification Message processing started: Synchronization, Public

To: No TAF/TAP message foreseen : Event, Public

#### RU

Event owned by 'RU-System', in package 'Handbook-Replanning'

Rι

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

# Automatically triggered

ActivityInitial owned by 'RU-System', in package 'Handbook-Replanning'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Automatically triggered to provide Train Modification Message content

← ControlFlow from Automatically triggered to change train details without changing the path

#### RU

Event owned by 'RU-System', in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Replanning'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 19.06.2013

#### **PathConfirmed Message**

Trigger owned by 'RU-System', in package 'Handbook-Replanning'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 08.06.2013

#### CONNECTORS

Dependency

Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: PathConfirmed Message: Trigger, Public

# PathDetailsRefused Message

Trigger owned by 'RU-System', in package 'Handbook-Replanning'

PathDetailsRefused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

# PathRequest Message

Trigger owned by 'RU-System', in package 'Handbook-Replanning'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.06.2013

#### CONNECTORS

Dependency

Source -> Destination

From:

Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

# **PathRequest Message Status Deletion**

Trigger owned by 'RU-System', in package 'Handbook-Replanning'

PathRequest Message Status Deletion
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 08.06.2013

#### RU n

ActivityPartition in package 'Handbook-Replanning'

RU n Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

# ELEMENTS OWNED BY RU n take details into data: Activity RU n-System: ActivityPartition

ELEMENTS OWNED BY RU n

Train (Plan): Object

Acknowledged: ActivityFinal

take details into data

Activity owned by 'RU n', in package 'Handbook-Replanning'

take details into data

Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 11.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from take details into data to Acknowledged
- Information Flow from take details into data to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to take details into data

# RU n-System

ActivityPartition owned by 'RU n', in package 'Handbook-Replanning'

RU n-System Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

# ELEMENTS OWNED BY RU n-System

**B** RU 2 : Event

# RU<sub>2</sub>

Event owned by 'RU n-System', in package 'Handbook-Replanning'

RU 2 Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

# Train (Plan)

Object owned by 'RU n', in package 'Handbook-Replanning'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 19.06.2013

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
JourneyLocations: PlannedJourneyLocation Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]

# Acknowledged

ActivityFinal owned by 'RU n', in package 'Handbook-Replanning'

INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from Allocate path to Acknowledged	
ControlFlow from Allocate path to Acknowledged	

# **Operation**

Package in package 'Business Use Cases'

Operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

# **Handbook-Operation**

Package in package 'Operation'

Handbook-Operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.11.2013

# Handbook-Operation diagram

Use Case diagram in package 'Handbook-Operation'

Handbook-Operation
Version 1.0
seid.maglajlic created on 18.03.2013. Last modified 02.04.2013

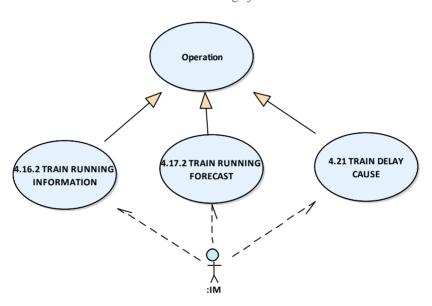




Figure 79: Handbook-Operation

# 4.13 TRAIN COMPOSITION

UseCase in package 'Handbook-Operation'

4.13 TRAIN COMPOSITION Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY 4.13 TRAIN COMPOSITION	
TC-Activity : Activity	

# TC-Activity

Activity owned by '4.13 TRAIN COMPOSITION', in package 'Handbook-Operation'

TC-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY TC-Activity
c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK TO BE CHECKED : Activity

# 4.13 TrainComposition Activity diagram

Activity diagram in package 'Handbook-Operation'

4.13 TrainComposition Activity

Version 1.0

Hantak created on 02.04.2013. Last modified 28.11.2013

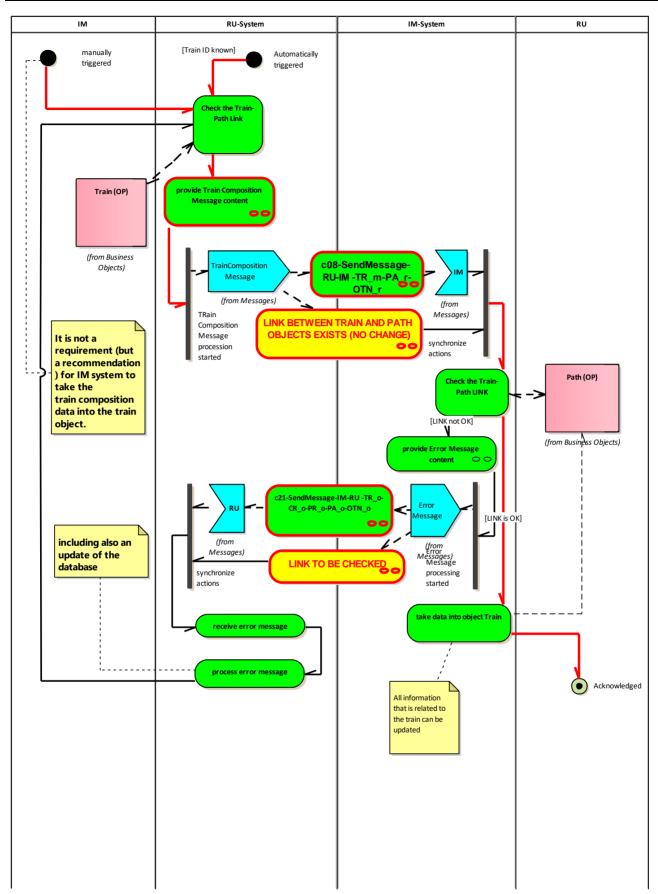


Figure 80: 4.13 TrainComposition Activity

#### Note

Note in package 'Handbook-Operation'

It is not a requirement (but a recommendation) for IM system to take the train composition data into the train object.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 22.11.2013
Extends

#### Note

Note in package 'Handbook-Operation'

including also an update of the database

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

#### IM

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message : Trigger, Public To: RU : Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

#### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Prom: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### **TrainComposition Message**

Trigger in package 'Messages'

TrainComposition Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

# CONNECTORS

**Dependency** Source -> Destination

From: TRain Composition Message procession started: Synchronization, Public

To: TrainComposition Message : Trigger, Public

#### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

**Dependency** Source -> Destination From: Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### ATTRIBUTES

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

# OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**



Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

#### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'TC-Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'TC-Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

➡ Information Flow from TrainComposition Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### LINK TO BE CHECKED

Activity owned by 'TC-Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

**←** ControlFlow from LINK TO BE CHECKED to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

#### 4.14 TRAIN READY

UseCase in package 'Handbook-Operation'

4.14 TRAIN READY Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY 4.14 TRAIN READY**

TR-Activity: Activity

# **TR-Activity**

Activity owned by '4.14 TRAIN READY', in package 'Handbook-Operation'

TR-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

ELEMENTS OWNED BY TR-Activity
■ c08-SendMessage-RU-IM -TR_m-PA_r-OTN_r : Activity
c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK TO BE CHECKED : Activity

# 4.14 TrainReady Activity diagram

Activity diagram in package 'Handbook-Operation'

4.14 TrainReady Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 28.11.2013

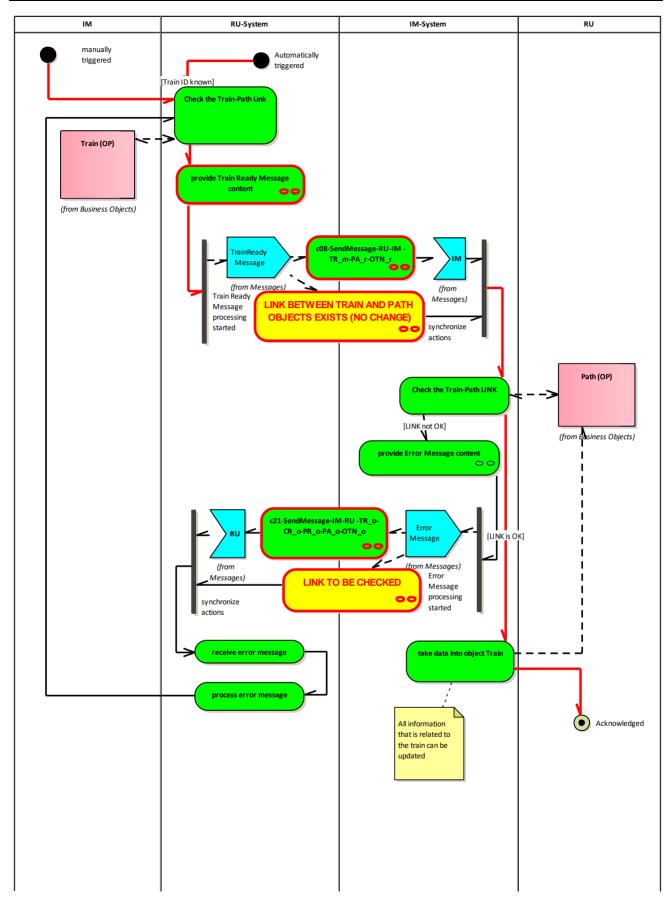


Figure 81: 4.14 TrainReady Activity

#### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

# **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**▶ Dependency** PathID Source → Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **TrainReady Message**

Trigger in package 'Messages'

TrainReady Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

Dependency Source -> Destination
 From: TrainReady Message : Trigger, Public
 To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Train Ready Message processing started: Synchronization, Public

To: TrainReady Message : Trigger, Public

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

# **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**▶ Dependency** Source → Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

# **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Target: Public (Object) PlannedJourenyLocation

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# ASSOCIATIONS Cardinality: [1] Cardinality: [\*]

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

# c08-SendMessage-RU-IM -TR\_m-PA\_r-OTN\_r

Activity owned by 'TR-Activity', in package 'Handbook-Operation'

c08-SendMessage-RU-IM -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c08-SendMessage-RU-IM -TR m-PA r-OTN r to IM

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c08-SendMessage-RU-IM -TR\_m-PA\_r-OTN\_r to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainReady Message to c08-SendMessage-RU-IM-TR m-PA r-OTN r

# c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'TR-Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'TR-Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainReady Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# LINK TO BE CHECKED

Activity owned by 'TR-Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED

Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### STRUCTURAL PART OF LINK TO BE CHECKED

ObjectNode15 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK TO BE CHECKED to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# ObjectNode15

ActionPin owned by 'LINK TO BE CHECKED', in package 'Handbook-Operation'

#### 4.15 TRAIN POSITION

UseCase in package 'Handbook-Operation'

4.15 TRAIN POSITION Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY 4.15 TRAIN POSITION**

■ TP-Activity : Activity

# **TP-Activity**

Activity owned by '4.15 TRAIN POSITION', in package 'Handbook-Operation'

TP-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 07.04.2013

# **ELEMENTS OWNED BY TP-Activity**

■ c09-SendMessage-IM-RU -TR m-PA r-OTN r : Activity

# 4.15 TrainPosition Activity diagram

Activity diagram in package 'Handbook-Operation'

4.15 TrainPosition Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 28.11.2013

RU	IM-System	RU-System	IM
MESSAGE TYPE			
UNUSED -			
COMMUNICATED	BY		
ERA			
	I .		

Figure 82: 4.15 TrainPosition Activity

#### Note

Note in package 'Handbook-Operation'

#### MESSAGE TYPE UNUSED - COMMUNICATED BY ERA

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 22.11.2013
Extends

# c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'TP-Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### 4.16.2 TRAIN RUNNING INFORMATION

UseCase in package 'Handbook-Operation'

4.16.2 TRAIN RUNNING INFORMATION

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 07.04.2013

#### **ELEMENTS OWNED BY 4.16.2 TRAIN RUNNING INFORMATION**

■ TRI-Activity : Activity

# **OUTGOING STRUCTURAL RELATIONSHIPS**

← Generalization from 4.16.2 TRAIN RUNNING INFORMATION to Operation

[ Direction is 'Source -> Destination'. ]

# **CONNECTORS**

Prom: Object : Object, Public

To: 4.16.2 TRAIN RUNNING INFORMATION : UseCase, Public

# TRI-Activity

Activity owned by '4.16.2 TRAIN RUNNING INFORMATION', in package 'Handbook-Operation'

TRI-Activity Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

ELEMENTS OWNED BY TRI-Activity	
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
■ LINK TO BE CHECKED : Activity	
Automatically triggered : ActivityInitial	

# 4.16.2 Train Running Information Activity diagram

Activity diagram in package 'Handbook-Operation'

4.16.2 Train Running Information Activity

Version 1.0
seid.maglajlic created on 18.03.2013. Last modified 27.07.2015

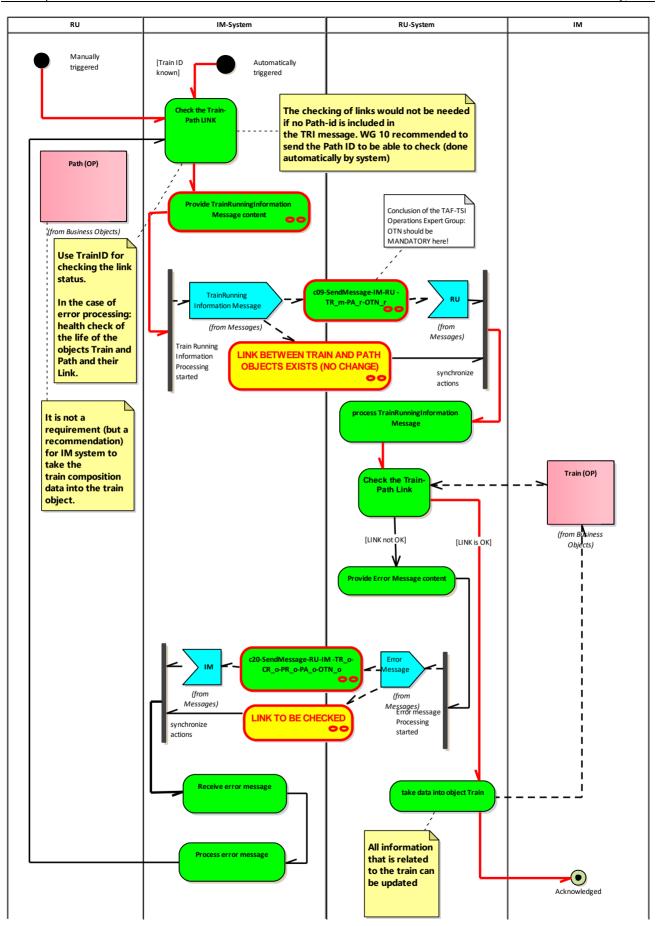


Figure 83: 4.16.2 Train Running Information Activity

Note

Note in package 'Handbook-Operation'

The checking of links would not be needed if no Path-id is included in the TRI message. WG 10 recommended to send the Path ID to be able to check (done automatically by system)

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

# CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

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# CONNECTORS

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

#### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### **CONNECTORS**

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Running Information Message processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

#### Note

Note in package 'Business Objects'

It is not a requirement (but a recommendation) for IM system to take the train composition data into the train object.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Path (OP): Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP) : Object, Public

To: Path : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

# **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

# c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'TRI-Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from TrainRunning Information Message to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'TRI-Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 04.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'TRI-Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 04.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from TrainRunning Information Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# **LINK TO BE CHECKED**

Activity owned by 'TRI-Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK TO BE CHECKED to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# Automatically triggered

ActivityInitial owned by 'TRI-Activity', in package 'Handbook-Operation'

# 4.17.2 TRAIN RUNNING FORECAST

UseCase in package 'Handbook-Operation'

4.17.2 TRAIN RUNNING FORECAST Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

#### **ELEMENTS OWNED BY 4.17.2 TRAIN RUNNING FORECAST**

Activity: Activity

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Generalization from 4.17.2 TRAIN RUNNING FORECAST to Operation

[ Direction is 'Source -> Destination'. ]

# **CONNECTORS**

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.17.2 TRAIN RUNNING FORECAST: UseCase, Public

# **Activity**

Activity owned by '4.17.2 TRAIN RUNNING FORECAST', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

# ELEMENTS OWNED BY Activity C20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o : Activity LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity LINK TO BE CHECKED : Activity

ELEMENTS OWNED BY Activity

RU: Event

Path (OP): Object

Train (OP): Object

ErrorMessage: Trigger

TrainRunningInformationMessage: Trigger

# 4.17.2 Train Running Forecast Activity diagram

Activity diagram in package 'Handbook-Operation'

Model Report

4.17.2 Train Running Forecast Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 28.11.2013

12 February, 2025

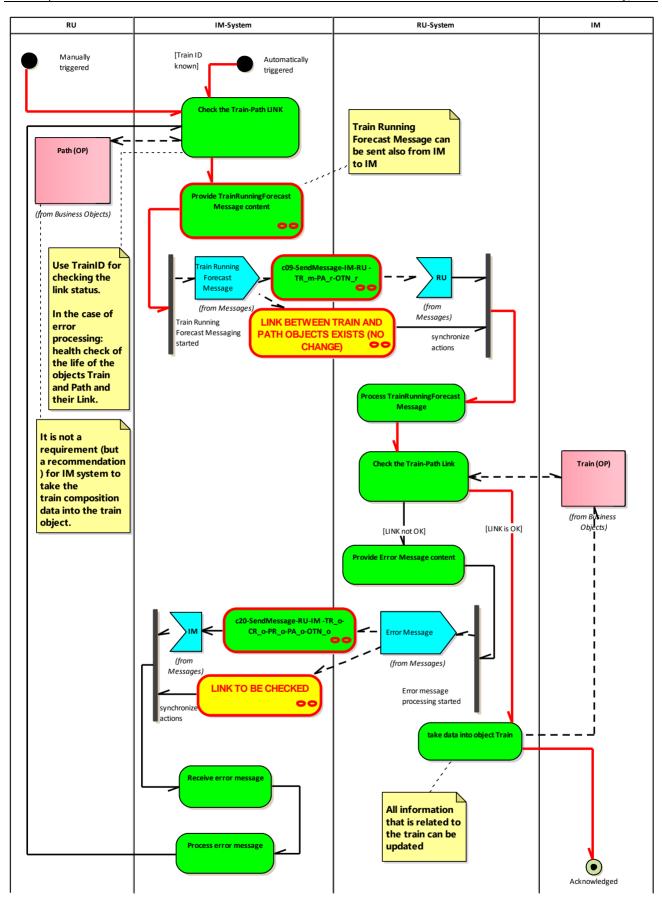


Figure 84: 4.17.2 Train Running Forecast Activity

Note

Note in package 'Handbook-Operation'

Train Running Forecast Message can be sent also from IM to IM

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Model Report \_\_\_\_\_\_ 12 February, 2025

# CONNECTORS

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

# **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

Dependency PathID Source -> Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message : Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

#### Note

Note in package 'Business Objects'

It is not a requirement (but a recommendation) for IM system to take the train composition data into the train object.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013
Extends

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

# c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

# LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Train Running Forecast Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK TO BE CHECKED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# **Process TrainRunningForecast Message**

Activity owned by 'Activity', in package 'Handbook-Operation'

Process TrainRunningForecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 27.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from Process TrainRunningForecast Message to Check the Train-Path Link
- Object Flow from Process TrainRunningForecast Message to Train (OP)
- ← ControlFlow from Process TrainRunningForecast Message to Check the Train-Path LINK

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU to Process TrainRunningForecast Message

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Train Running Forecast Message to Process TrainRunningForecast Message

ControlFlow from synchronize actions to Process TrainRunningForecast Message

#### RU

Event owned by 'Activity', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# Path (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ATTRIBUTES	
PathID: CompositIdentifierOperationalType Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

# Train (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# ATTRIBUTES

Startdate : Date Private

[ Is static True. Containment is Not Specified. ]

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]
TrainID : CompositIdentifierOperationalType Private	[ Is static True. Containment is Not Specified. ]

# **ErrorMessage**

Trigger owned by 'Activity', in package 'Handbook-Operation'

ErrorMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

# TrainRunningInformationMessage

Trigger owned by 'Activity', in package 'Handbook-Operation'

TrainRunningInformationMessage
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

# 4.18.2 TRAIN DELAY PERFORMANCE

UseCase in package 'Handbook-Operation'

4.18.2 TRAIN DELAY PERFORMANCE

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 21.05.2013

ELEMENTS OWNED BY 4.18.2 TRAIN DELAY PERFORMANCE	
Activity: Activity	

# Activity

Activity owned by '4.18.2 TRAIN DELAY PERFORMANCE', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
LINK NOT CONFIRMED : Activity
Process error message : Activity
Produce error message : Activity
RU updates the data: Activity
■ IM : Event
RU: Event
Path (OP): Object
Train (OP): Object
Acknowledged: ActivityFinal
Manually triggered : ActivityInitial
ErrorMessage: Trigger
TrainRunningInformationMessage: Trigger

# 4.18.2 Train Delay Performance Activity diagram

Activity diagram in package 'Handbook-Operation'

4.18.2 Train Delay Performance Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 22.11.2013

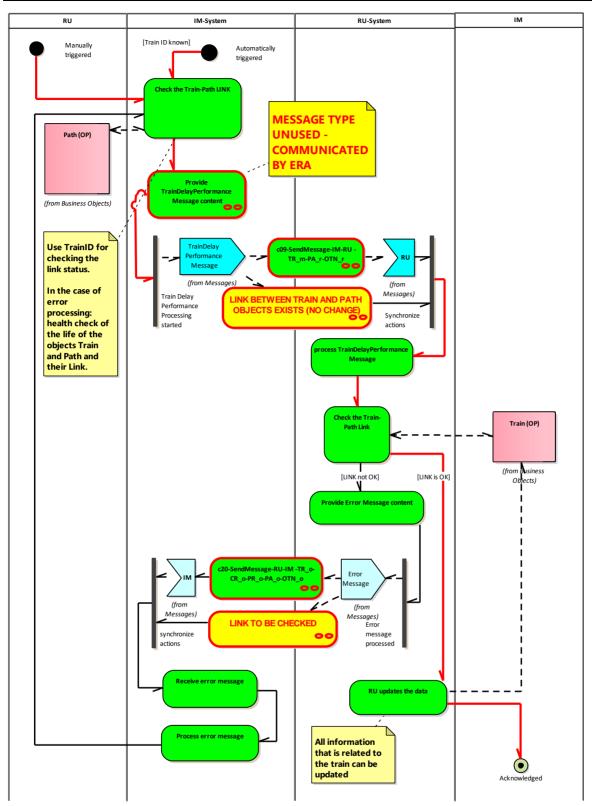


Figure 85: 4.18.2 Train Delay Performance Activity

# Note

Note in package 'Handbook-Operation'

# MESSAGE TYPE UNUSED - COMMUNICATED BY ERA

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 22.11.2013. Last modified 22.11.2013

Extends

#### IM

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

# CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

# **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message: Activity, Public

**Dependency** PathID Source -> Destination

From: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **TrainDelay Performance Message**

Trigger in package 'Messages'

TrainDelay Performance Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

Dependency

Source -> Destination

Train Delay Performance Processing started: Synchronization, Public From:

TrainDelay Performance Message: Trigger, Public To:

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Dependency

Source -> Destination

Path (OP): Object, Public

Train Running Forecast Message: Trigger, Public

Dependency Source -> Destination Path (OP): Object, Public

Path: Object, Public To:

Dependency Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### ATTRIBUTES

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM
- ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

### **LINK NOT CONFIRMED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK NOT CONFIRMED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

### Process error message

Activity owned by 'Activity', in package 'Handbook-Operation'

Process error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### Produce error message

Activity owned by 'Activity', in package 'Handbook-Operation'

Produce error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

**♦••** Information Flow from Produce error message to Error Message

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path Link to Produce error message Guard: LINK not OK

### RU updates the data

Activity owned by 'Activity', in package 'Handbook-Operation'

RU updates the data Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

### STRUCTURAL PART OF RU updates the data

ObjectNode13: ActionPin

Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from RU updates the data to Acknowledged Information Flow from RU updates the data to Train (OP) INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from Train (OP) to RU updates the data ControlFlow from Check the Train-Path Link to RU updates the data Guard: LINK is OK Information Flow from Train (OP) to RU updates the data ObjectNode13 ActionPin owned by 'RU updates the data', in package 'Handbook-Operation' **OUTGOING BEHAVIORAL RELATIONSHIPS** ◆ Object Flow from ObjectNode13 to Acknowledged IM Event owned by 'Activity', in package 'Handbook-Operation' Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013 RU Event owned by 'Activity', in package 'Handbook-Operation' RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

Path (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
StartDate : Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

### Train (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ATTRIBUTES	
Startdate : Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]

### Acknowledged

ActivityFinal owned by 'Activity', in package 'Handbook-Operation'

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU updates the data to Acknowledged

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from ObjectNode13 to Acknowledged

### Manually triggered

ActivityInitial owned by 'Activity', in package 'Handbook-Operation'

### **ErrorMessage**

Trigger owned by 'Activity', in package 'Handbook-Operation'

ErrorMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

### TrainRunningInformationMessage

Trigger owned by 'Activity', in package 'Handbook-Operation'

TrainRunningInformationMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

### 4.19.2 TRAIN FORECAST AT REPORTING LOCATION

UseCase in package 'Handbook-Operation'

4.19.2 TRAIN FORECAST AT REPORTING LOCATION

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 21.05.2013

### **ELEMENTS OWNED BY 4.19.2 TRAIN FORECAST AT REPORTING LOCATION**

Activity: Activity

### **Activity**

Activity owned by '4.19.2 TRAIN FORECAST AT REPORTING LOCATION', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

### **ELEMENTS OWNED BY Activity**

■ c09-SendMessage-IM-RU -TR m-PA r-OTN r : Activity

Model Report

ELEMENTS OWNED BY Activity

LINK TO BE CHECKED : Activity

### 4.19.2 Train Forecast at Reporting Location Activity diagram

Activity diagram in package 'Handbook-Operation'

Path (OP): Object

4.19.2 Train Forecast at Reporting Location Activity

Version 1.0

Hantak created on 02.04.2013. Last modified 28.11.2013

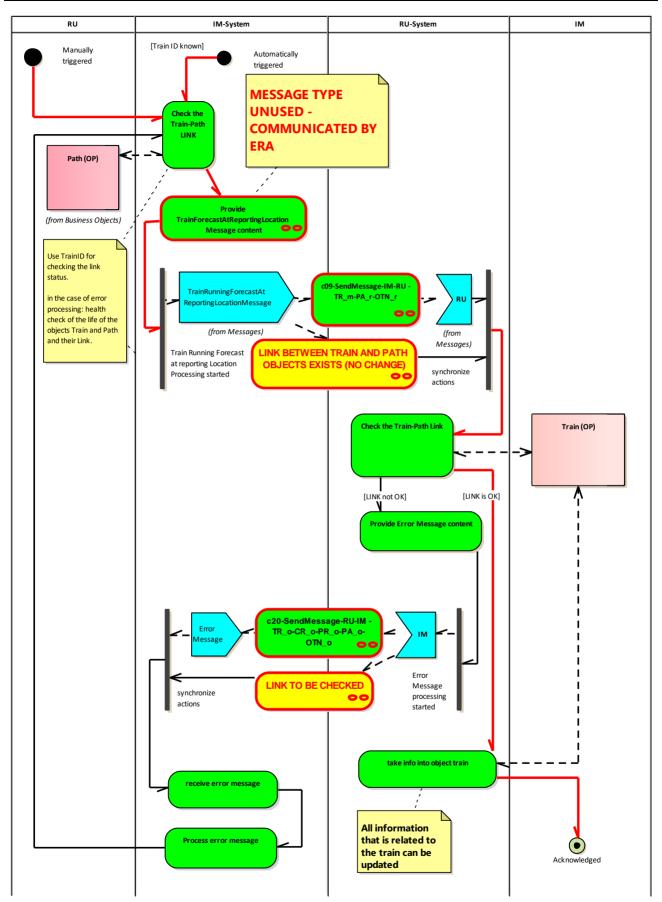


Figure 86: 4.19.2 Train Forecast at Reporting Location Activity

### Note

Note in package 'Handbook-Operation'

### MESSAGE TYPE UNUSED - COMMUNICATED BY ERA

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.11.2013. Last modified 22.11.2013
Extends

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

### TrainRunningForecastAt ReportingLocationMessage

Trigger in package 'Messages'

TrainRunningForecastAt ReportingLocationMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

### **CONNECTORS**

**Dependency** Source -> Destination

From: Train Running Forecast at reporting Location Processing started: Synchronization, Public

To: TrainRunningForecastAt ReportingLocationMessage : Trigger, Public

**Dependency** Source -> Destination
From: IM-System : ActivityPartition, Public

To: TrainRunningForecastAt ReportingLocationMessage : Trigger, Public

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public To: Path : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### ATTRIBUTES

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

### **ASSOCIATIONS**

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK TO BE CHECKED to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from IM to LINK TO BE CHECKED

### Path (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

# ATTRIBUTES PathID: CompositIdentifierOperationalType Private [Is static True. Containment is Not Specified.] StartDate: Date Private [Is static True. Containment is Not Specified.] technParameters: Complex Private [Is static True. Containment is Not Specified.]

Model Report 12 February, 2025

ATTRIBUTES

ATTRIBUTES	
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

### 4.20 TRAIN RUNNING INTERRUPTED

UseCase in package 'Handbook-Operation'

4.20 TRAIN RUNNING INTERRUPTED

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 21.05.2013

ELEMENTS OWNED BY 4.20 TRAIN RUNNING INTERRUPTED
Activity : Activity

### Activity

Activity owned by '4.20 TRAIN RUNNING INTERRUPTED', in package 'Handbook-Operation'

Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity	
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity	
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
LINK TO BE CHECKED: Activity	

### 4.20 Train Running Interrupted Activity diagram

Activity diagram in package 'Handbook-Operation'

4.20 Train Running Interrupted Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

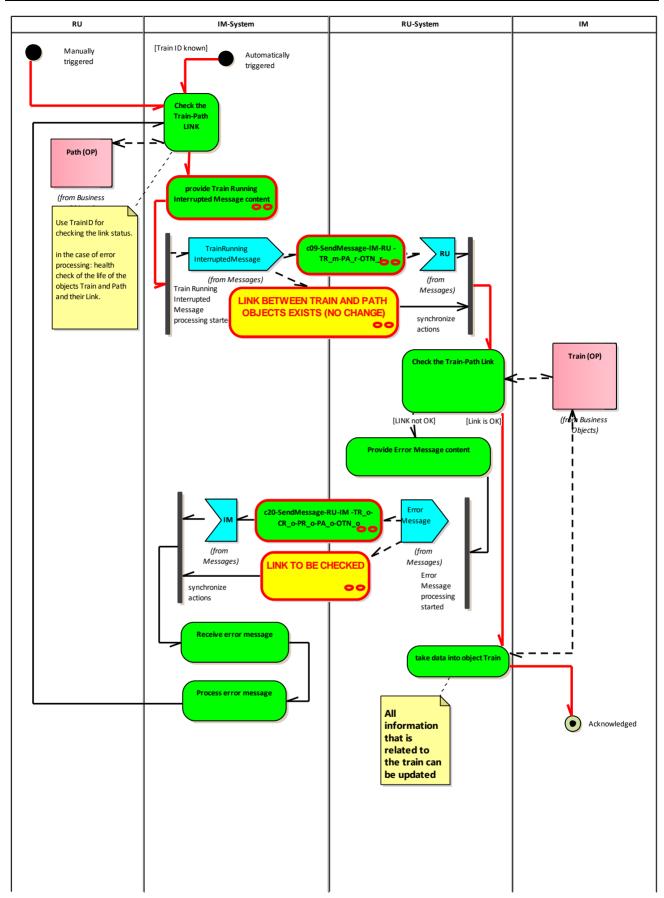


Figure 87: 4.20 Train Running Interrupted Activity

### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### **CONNECTORS**

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**▶ Dependency** PathID Source → Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### TrainRunning InterruptedMessage

Trigger in package 'Messages'

TrainRunning InterruptedMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning InterruptedMessage: Trigger, Public

To: Interrupted : State, Public

**Dependency** Source -> Destination

From: Train Running Interrupted Message processing started: Synchronization, Public

To: TrainRunning InterruptedMessage: Trigger, Public

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Target: Public (Object) PlannedJourenyLocation

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# ASSOCIATIONS Cardinality: [1] Cardinality: [\*]

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainRunning InterruptedMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK TO BE CHECKED to synchronize actions

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from Error Message to LINK TO BE CHECKED

### 4.21 TRAIN DELAY CAUSE

UseCase in package 'Handbook-Operation'

4.21 TRAIN DELAY CAUSE Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 21.05.2013

### **ELEMENTS OWNED BY 4.21 TRAIN DELAY CAUSE**

**■** TDC-Activity : Activity

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from 4.21 TRAIN DELAY CAUSE to Operation

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.21 TRAIN DELAY CAUSE: UseCase, Public

### **TDC-Activity**

Activity owned by '4.21 TRAIN DELAY CAUSE', in package 'Handbook-Operation'

TDC-Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

## ELEMENTS OWNED BY TDC-Activity

- c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r : Activity
- $\blacksquare$  c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r : Activity
- c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o: Activity

|--|

**■** LINK TO BE CHECKED : Activity

### 4.21 Train Delay Cause Activity diagram

Activity diagram in package 'Handbook-Operation'

4.21 Train Delay Cause Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 28.11.2013

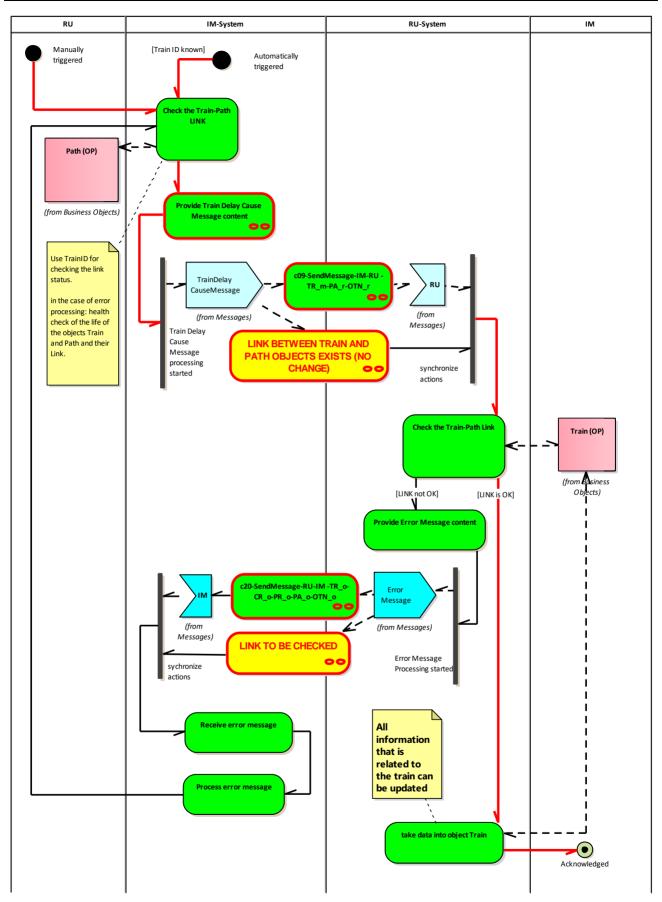


Figure 88: 4.21 Train Delay Cause Activity

### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### **CONNECTORS**

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

Prom: Error Message: Trigger, Public
To: Refused by IM: State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### TrainDelay CauseMessage

Trigger in package 'Messages'

TrainDelay CauseMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Delay Cause Message processing started: Synchronization, Public

To: TrainDelay CauseMessage: Trigger, Public

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Dependency Source -> Destination

From: Train (OP): Object, Public Train: Object, Public To:

### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**



Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'TDC-Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU-TR m-PA r-OTN r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'TDC-Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'TDC-Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

### **LINK TO BE CHECKED**

Activity owned by 'TDC-Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

◆ ControlFlow from LINK TO BE CHECKED to sychronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

### 4.22 TRAIN PARKING

UseCase in package 'Handbook-Operation'

4.22 TRAIN PARKING Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

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ELEMENTS OWNED BY 4.22 TRAIN PARKING	
Activity : Activity	

### Activity

Activity owned by '4.22 TRAIN PARKING', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity	
■ c08-SendMessage-RU-IM -TR_m-PA_r-OTN_r : Activity	
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity	
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity	
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
LINK TO BE CHECKED : Activity	

### 4.22 Train Parking Activity diagram

Activity diagram in package 'Handbook-Operation'

4.22 Train Parking Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

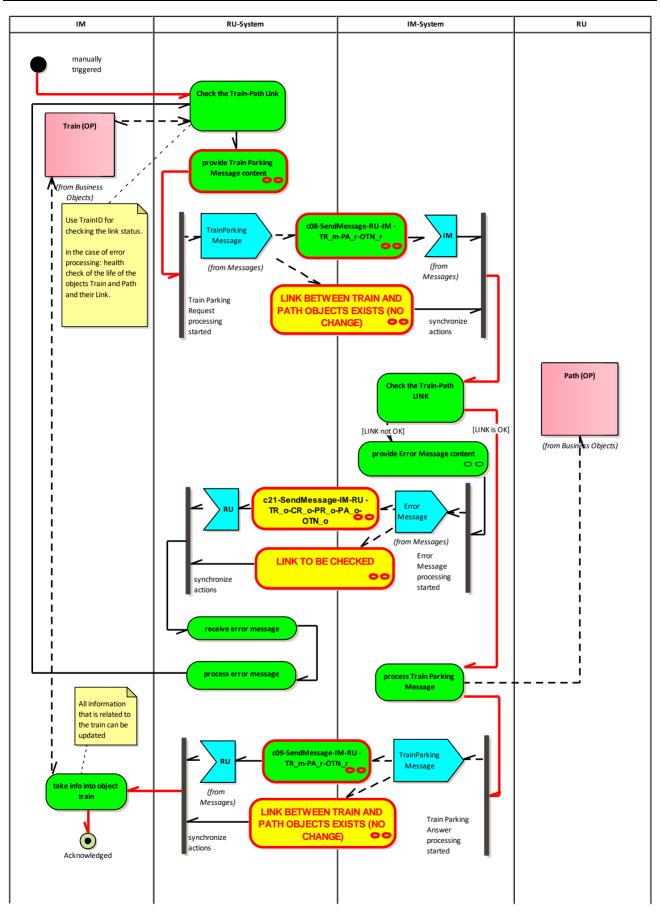


Figure 89: 4.22 Train Parking Activity

### Note

Note in package 'Handbook-Operation'

All information that is related to the train can be updated

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 17.06.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU : Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### CONNECTORS

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

### **TrainParking Message**

Trigger in package 'Messages'

TrainParking Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

### CONNECTORS

Dependency

Source -> Destination

From: Train Parking Request processing started: Synchronization, Public

TrainParking Message: Trigger, Public To:

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Dependency

Source -> Destination

Path (OP): Object, Public

Train Running Forecast Message: Trigger, Public To:

Dependency

Source -> Destination

Path (OP): Object, Public From:

Path: Object, Public

Dependency

Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public

Path (OP): Object, Public To:

### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Target: Public (Object) PlannedJourenyLocation

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# ASSOCIATIONS Cardinality: [1] Cardinality: [\*]

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### c08-SendMessage-RU-IM -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c08-SendMessage-RU-IM -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c08-SendMessage-RU-IM -TR m-PA r-OTN r to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainParking Message to c08-SendMessage-RU-IM -TR m-PA r-OTN r

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c09-SendMessage-IM-RU -TR m-PA r-OTN r to IM

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainParking Message to c09-SendMessage-IM-RU-TR m-PA r-OTN r

### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainParking Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainParking Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK TO BE CHECKED to synchronize actions

4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Version 1.0 Phase 1.0 Proposed  Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity  Version 1.0 Phase 1.0 Proposed	OUTGOING BEHAVIORAL RELATIONSHIPS
## Information Flow from Error Message to LINK TO BE CHECKED  ### 1.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN    Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013    ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN   Activity Activity    Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'   Activity Owned by '4.23 TRAIN REROUTED	
### ### ### ### ### ### ### ### ### ##	INCOMING BEHAVIORAL RELATIONSHIPS
4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN Version 1.0 Phase 1.0 Proposes Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity  Activity  Activity  Activity  LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	□ Information Flow from Error Message to LINK TO BE CHECKED
4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity  Activity  Activity  Activity  Wersion 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation' Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o: Activity  C09-SendMessage-IM-RU-TR_m-CR_n-PR_o-PA_o-OTN_o: Activity  LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	
4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity  Activity  Activity  Activity  Activity  Wersion 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation' Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o: Activity  C09-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_o-OTN_o: Activity  LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN
Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity  Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  c02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  c09-SendMessage-IM-RU-TR_m-CR_n-PR_o-PA_o-OTN_o : Activity  LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	UseCase in package 'Handbook-Operation'
Hantak created on 02.04.2013. Last modified 21.05.2013  ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN  Activity  Activity  Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity  Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o: Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r: Activity  C20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o: Activity	
Activity  Activity  Activity  Activity  Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity  Version 1.0 Phase 1.0 Proposed  Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  C09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  C20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
Activity  Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity  Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  C20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	ELEMENTS OWNED BY 4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN
Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  c20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	■ Activity : Activity
Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  c20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation'  Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  c20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o : Activity	
Activity  Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  c02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o: Activity  c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r: Activity  c20-SendMessage-RU-IM-TR_o-CR_o-PR_o-PA_o-OTN_o: Activity	Activity
Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013  ELEMENTS OWNED BY Activity  ☐ c02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity  ☐ c09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity  ☐ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity  ☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	Activity owned by '4.23 TRAIN REROUTED-WITHOUT NEW PATH-SAME OTN', in package 'Handbook-Operation
<ul> <li>C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity</li> <li>C09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity</li> <li>C20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity</li> <li>LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity</li> </ul>	Version 1.0 Phase 1.0 Propo
<ul> <li>C02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity</li> <li>C09-SendMessage-IM-RU-TR_m-PA_r-OTN_r : Activity</li> <li>C20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity</li> <li>LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity</li> </ul>	ELEMENTS OWNED BY Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity  ■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity  ■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity  ■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	■ c02-SendMessage-IM-RU-TR_m-CR_m-PR_m-PA_m-OTN_o : Activity
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity  ■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity	
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	■ c20-SendMessage-RIJ-IM -TR o-CR o-PR o-PA o-OTN o : Activity
	20 Schalinessage Re hit TR_0 CR_0 TR_0 TR_0 . Neuvity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity	
	LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE): Activity
LINK TO BE CHECKED : Activity	LINK TO BE CHECKED : Activity
	4.23 Train rerouted-without new path-same OTN Activity diagram

Model Report

12 February, 2025

Activity diagram in package 'Handbook-Operation'

4.23 Train rerouted-without new path-same OTN Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

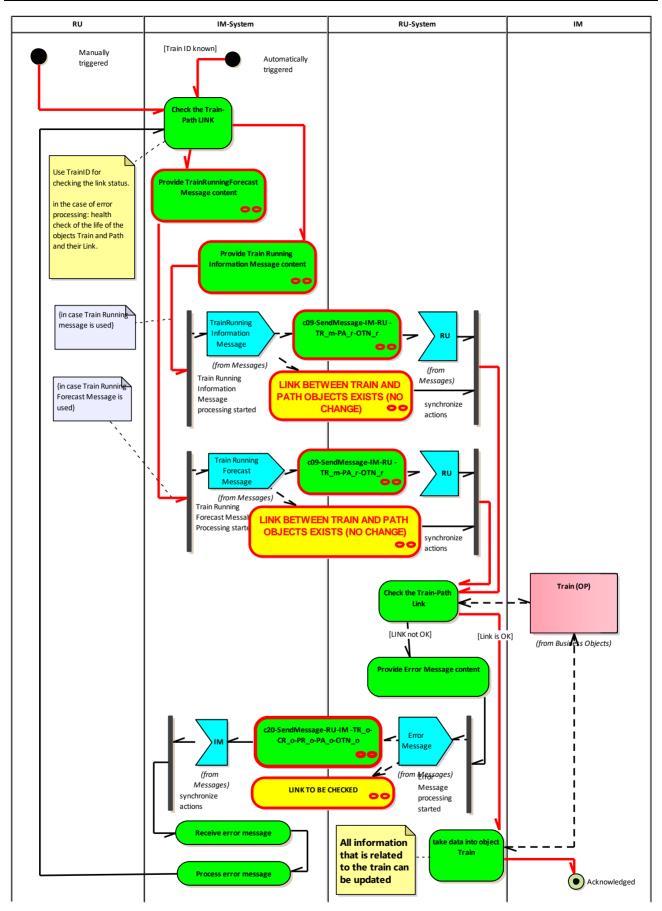


Figure 90: 4.23 Train rerouted-without new path-same OTN Activity

## **Constraint**

Constraint in package 'Handbook-Operation'

in case Train Running message is used

Constraint
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.06.2013. Last modified 18.06.2013
Extends

#### Constraint

Constraint in package 'Handbook-Operation'

in case Train Running Forecast Message is used

Constraint
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.06.2013. Last modified 18.06.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

## CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**▶ Dependency** PathRequestID Source → Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

## CONNECTORS

**▶ Dependency** Train ID: Mandatory Source → Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

## **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message: Trigger, Public

To: Receive error message: Activity, Public

Prom: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed: Synchronization, Public

To: Error Message : Trigger, Public

Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

## **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

## CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started : Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Processing started : Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

## **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

## CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Running Information Message processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

## Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Version 1.0 Phase 1.0 Proposed

Train (OP)

seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Dependency Source -> Destination Train (OP): Object, Public Train: Object, Public To:

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

## c02-SendMessage-IM-RU-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o Version 1.0 Phase 1.0 Proposed Hantak created on 20.05.2013. Last modified 20.05.2013

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU-TR m-PA r-OTN r Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Train Running Forecast Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 18.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

4 ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainRunning Information Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### LINK TO BE CHECKED

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

## 4.24 TRAIN REROUTED-WITHOUT NEW PATH-CHANGED OTN

UseCase in package 'Handbook-Operation'

4.24 TRAIN REROUTED-WITHOUT NEW PATH-CHANGED OTN

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 02.09.2013

	ELEMENTS OWNED BY	4.24 TRAIN RER	OUTED-WITHOUT	NEW PATH	-CHANGED OTN
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Activity: Activity

## Activity

Activity owned by '4.24 TRAIN REROUTED-WITHOUT NEW PATH-CHANGED OTN', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity
C10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
C10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity

## 4.24 Train rerouted-without new path-changed OTN Activity diagram

Activity diagram in package 'Handbook-Operation'

4.24 Train rerouted-without new path-changed OTN Activity

Version 1.0 Hantak created on 02.04.2013. Last modified 18.11.2013

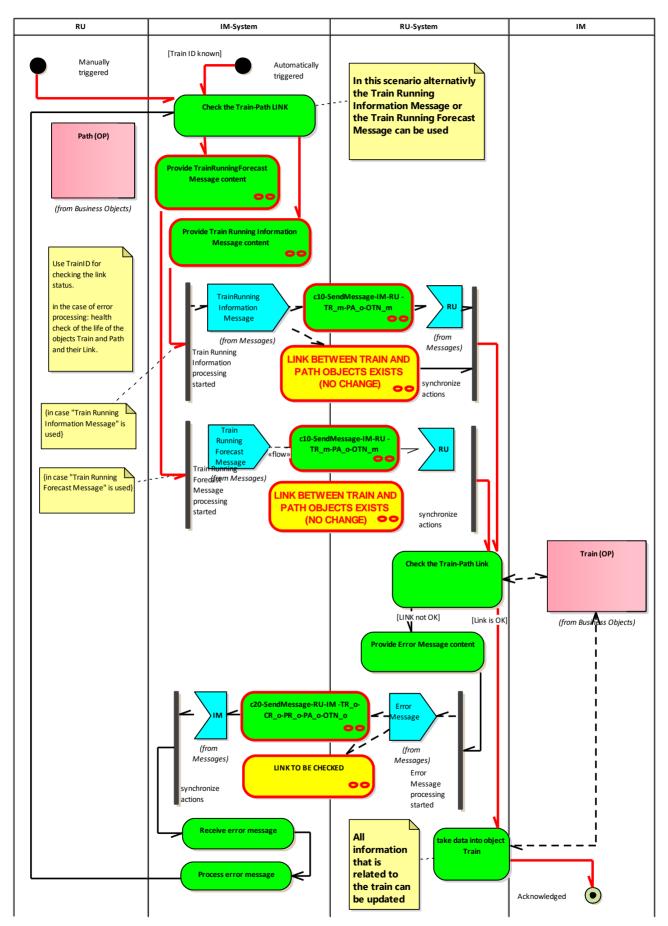


Figure 91: 4.24 Train rerouted-without new path-changed OTN Activity

#### Constraint

Constraint in package 'Handbook-Operation'

in case "Train Running Forecast Message" is used

Constraint
Version 1.0 Phase 1.0 Proposed
Hantak created on 19.06.2013. Last modified 19.06.2013
Extends

#### **Constraint**

Constraint in package 'Handbook-Operation'

in case "Train Running Information Message" is used

Constraint
Version 1.0 Phase 1.0 Proposed
Hantak created on 19.06.2013. Last modified 19.06.2013
Extends

#### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

# RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

## **CONNECTORS**

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

## CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

## **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed: Synchronization, Public

To: Error Message : Trigger, Public

Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

## **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

## CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

## **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

## CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Running Information Message processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

## Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Version 1.0 Phase 1.0 Proposed

Path (OP)

seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path: Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

## **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

## ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

## Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

## **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

## c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from c10-SendMessage-IM-RU -TR m-PA o-OTN m to RU
- ← ControlFlow from c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Train Running Information processing started to c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m
- Information Flow from TrainRunning Information Message to c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

## c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m to RU
- ← ControlFlow from c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

- information Flow from Train Running Forecast Message to c10-SendMessage-IM-RU-TR m-PA o-OTN m
- ControlFlow from Train Running Information processing started to c10-SendMessage-IM-RU-TR m-PA o-OTN m

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

## INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

## STRUCTURAL PART OF LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

ObjectNode14 : ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainRunning Information Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## ObjectNode14

ActionPin owned by 'LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)', in package 'Handbook-Operation'

# 4.25 Train early/delayed-without new path-same OTN

UseCase in package 'Handbook-Operation'

4.25 Train early/delayed-without new path-same OTN

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 02.04.2013

# ELEMENTS OWNED BY 4.25 Train early/delayed-without new path-same OTN

Activity: Activity

#### **Activity**

Activity owned by '4.25 Train early/delayed-without new path-same OTN', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

# ELEMENTS OWNED BY Activity

- c09-SendMessage-IM-RU -TR m-PA r-OTN r : Activity
- c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r : Activity
- c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r : Activity

ELEMENTS OWNED BY Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
Path (OP): Object
Acknowledged: ActivityFinal
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
Check the Train-Path LINK with TRAIN ID : Activity
takes data into object Train: Activity
Receive error message : Activity

# 4.25 Train early/delayed-without new path-same OTN Activity diagram

Activity diagram in package 'Handbook-Operation'

4.25 Train early/delayed-without new path-same OTN Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

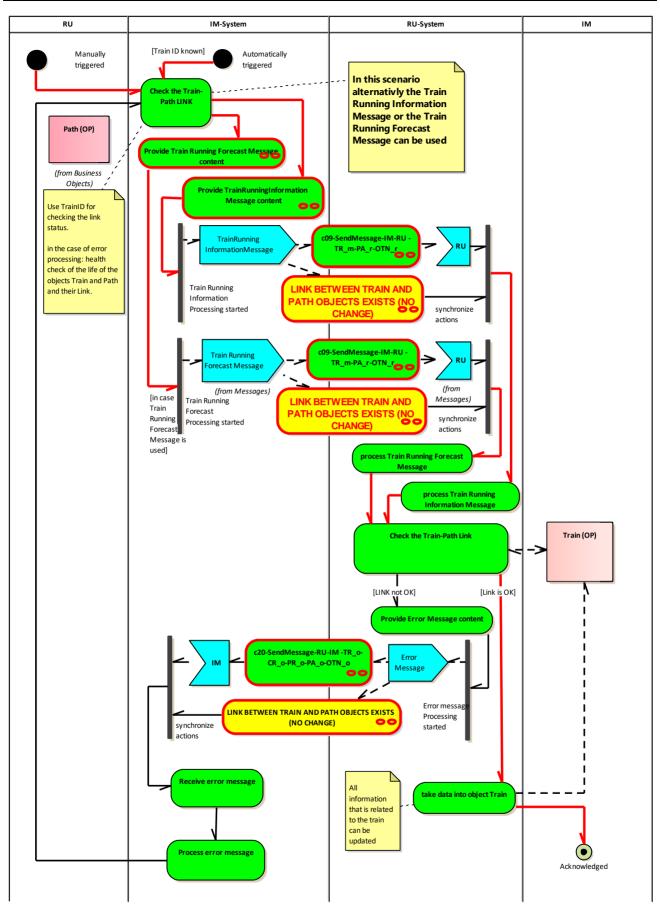


Figure 92: 4.25 Train early/delayed-without new path-same OTN Activity

# Note

Note in package 'Handbook-Operation'

In this scenario alternativly the Train Running Information Message or the Train Running Forecast Message can be used

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 19.06.2013
Extends

#### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

# **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

# OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

## CONNECTORS

Path (OP): Object, Public

To: Train Running Forecast Message : Trigger, Public

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#### CONNECTORS

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

## **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# ${\tt c09-SendMessage-IM-RU-TR\_m-PA\_r-OTN\_r}$

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage-IM-RU-TR m-PA r-OTN r to RU

#### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage-IM-RU -TR m-PA r-OTN r to RU

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Train Running Forecast Message to c09-SendMessage-IM-RU -TR m-PA r-OTN r

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 10.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainRunning InformationMessage to c09-SendMessage-IM-RU -TR m-PA r-OTN r

# c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r diagram

Activity diagram in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 93: c09-SendMessage-IM-RU-TR\_m-PA\_r-OTN\_r

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainRunning InformationMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 94: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 10.06.2013

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

## Figure 95: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 16.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Train Running Forecast Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

# Path (OP)

Object owned by 'Activity', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ATTRIBUTES	
PathID: CompIdentOPType Private	[ Is static True. Containment is Not Specified. ]
StartDate : Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

## **Acknowledged**

ActivityFinal owned by 'Activity', in package 'Handbook-Operation'

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 27.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o diagram

Activity diagram in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 96: c20-SendMessage-RU-IM-TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

## Check the Train-Path LINK with TRAIN ID

Activity owned by 'Activity', in package 'Handbook-Operation'

Check the Train-Path LINK with TRAIN ID Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 27.05.2013

#### takes data into object Train

Activity owned by 'Activity', in package 'Handbook-Operation'

takes data into object Train

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 27.05.2013

ELEMENTS OWNED BY takes data into object Train
Process error message : Activity

## Process error message

Activity owned by 'takes data into object Train', in package 'Handbook-Operation'

Process error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

## Receive error message

Activity owned by 'Activity', in package 'Handbook-Operation'

Receive error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 27.05.2013

# 4.26 Train early/delayed-without new path-changed OTN

UseCase in package 'Handbook-Operation'

4.26 Train early/delayed-without new path-changed OTN Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY 4.26 Train early/delayed-without new path-changed OTN	
Activity : Activity	

## **Activity**

Activity owned by '4.26 Train early/delayed-without new path-changed OTN', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity
Activity2: Activity
■ c09-SendMessage- IM-RU -TR_m-PA_r-OTN_r : Activity

ELEMENTS OWNED BY Activity
■ c09-SendMessage- IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage- IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage- IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
■ c10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK TO BE CHECKED : Activity
Acknowledged : ActivityFinal
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
TrainRunning InformationMessage: Trigger
IM: ActivityPartition

ELEMENTS OWNED BY Activity
IM-System : ActivityPartition
RU : ActivityPartition
RU-System : ActivityPartition

# 4.26 Train early/delayed-without new path-changed OTN Activity diagram

Activity diagram in package 'Handbook-Operation'

4.26 Train early/delayed-without new path-changed OTN Activity

Version 1.0

Hantak created on 02.04.2013. Last modified 18.11.2013

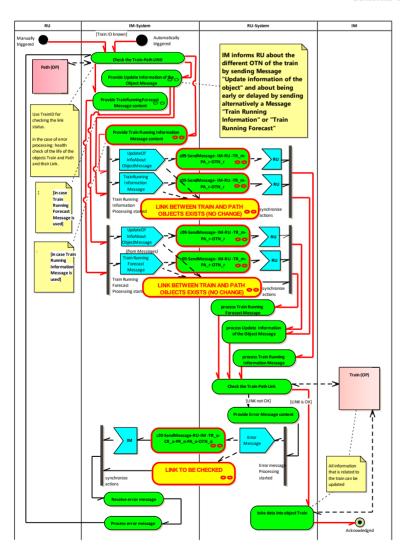




Figure 97: 4.26 Train early/delayed-without new path-changed OTN Activity

## Note

Note in package 'Handbook-Operation'

:

Note Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013 Extends

#### Note

Note in package 'Handbook-Operation'

:

Note Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013 Extends

#### Note

Note in package 'Handbook-Operation'

IM informs RU about the different OTN of the train by sending Message "Update information of the object" and about being early or delayed by sending alternatively a Message "Train Running Information" or "Train Running Forecast"

Note Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013 Extends

## **UpdateOf InfoAbout ObjectMessage**

Trigger in package 'Messages'

UpdateOf InfoAbout ObjectMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 17.06.2013

## CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: UpdateOf InfoAbout ObjectMessage : Trigger, Public

# Activity2

Activity owned by 'Activity', in package 'Handbook-Operation'

Activity2 Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

## c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 18.09.2013. Last modified 18.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ Information Flow from c09-SendMessage- IM-RU -TR m-PA r-OTN r to RU

## INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateOf InfoAbout ObjectMessage to c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

## c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 18.09.2013. Last modified 18.09.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage- IM-RU -TR m-PA r-OTN r to RU

# INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from TrainRunning Information Message to c09-SendMessage-IM-RU-TR\_m-PA\_r-OTN\_r

## c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 18.09.2013. Last modified 18.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage- IM-RU -TR m-PA r-OTN r to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from UpdateOf InfoAbout ObjectMessage to c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

#### INCOMING BEHAVIORAL RELATIONSHIPS

## c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 18.09.2013. Last modified 18.09.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Train Running Forecast Message to c09-SendMessage- IM-RU -TR m-PA r-OTN r

#### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 10.06.2013

# c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r diagram

Activity diagram in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 98: c09-SendMessage-IM-RU -TR m-PA r-OTN r

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

## c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r diagram

Activity diagram in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 99: c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

# c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'Activity', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 17.06.2013

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 100: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 17.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

- information Flow from UpdateOf InfoAbout ObjectMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)
- information Flow from Train Running Forecast Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

#### Figure 101: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.06.2013. Last modified 10.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

- □→ Information Flow from TrainRunning Information Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)
- Information Flow from UpdateOf InfoAbout ObjectMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 102: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK TO BE CHECKED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

## **Acknowledged**

ActivityFinal owned by 'Activity', in package 'Handbook-Operation'

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o to IM

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

## c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o diagram

Activity diagram in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 103: c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

## TrainRunning InformationMessage

Trigger owned by 'Activity', in package 'Handbook-Operation'

TrainRunning InformationMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

IM

ActivityPartition owned by 'Activity', in package 'Handbook-Operation'

Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 20.05.2013

## **IM-System**

ActivityPartition owned by 'Activity', in package 'Handbook-Operation'

IM-System
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 20.05.2013

#### RU

ActivityPartition owned by 'Activity', in package 'Handbook-Operation'

RU Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 05.06.2013

#### **RU-System**

ActivityPartition owned by 'Activity', in package 'Handbook-Operation'

RU-System
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 20.05.2013

## 4.27 Train Shifting to an existing path-changed OTN

UseCase in package 'Handbook-Operation'

4.27 Train Shifting to an existing path-changed OTN

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 02.04.2013

## ELEMENTS OWNED BY 4.27 Train Shifting to an existing path-changed OTN

■ Activity : Activity

## **Activity**

Activity owned by '4.27 Train Shifting to an existing path-changed OTN', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity
■ BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
C11-SendMessage-RU-IM -TR_m-CR_o-PA_m-OTN_m : Activity
C12-SendMessage-IM-RU -TR_m-CR_o-PA_m-OTN_m : Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
■ LINK TO BE CHECKED : Activity

# 4.27 Train Shifting to an existing path-changed OTN Activity diagram

Activity diagram in package 'Handbook-Operation'

4.27 Train Shifting to an existing path-changed OTN Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

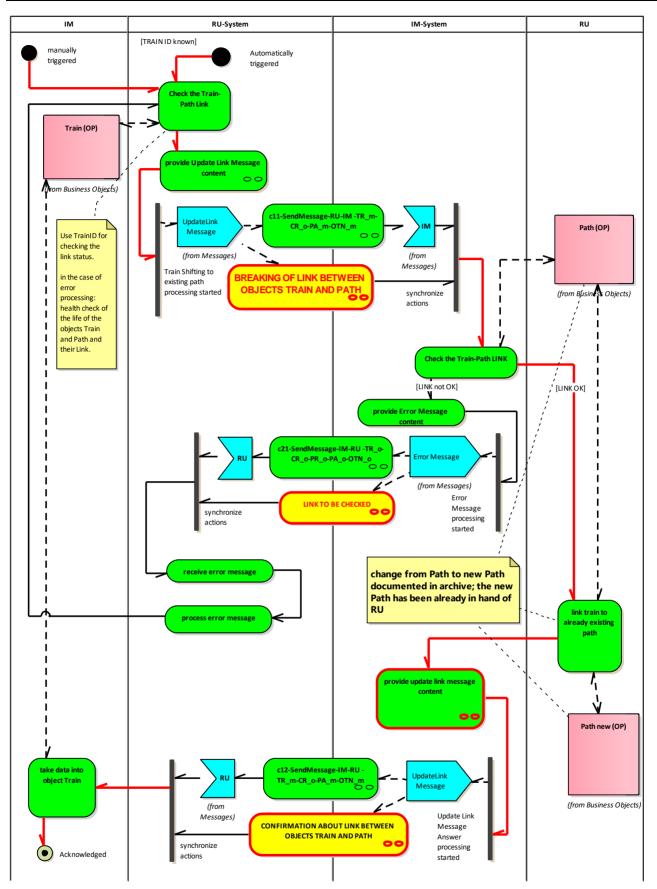


Figure 104: 4.27 Train Shifting to an existing path-changed OTN Activity

## Note

Note in package 'Handbook-Operation'

change from Path to new Path documented in archive; the new Path has been already in hand of RU

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 18.06.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

RU
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

## **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

## **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

Prom: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR m-PA m-OTN m : Activity, Public

Prom: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

## Path new (OP)

Object in package 'Business Objects'

Path new (OP) Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP)

Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

## CONNECTORS

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

## Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Dependency Source -> Destination Train (OP): Object, Public From:

To: Train: Object, Public

## **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

#### **BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'Activity', in package 'Handbook-Operation'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

📫 Information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

# c11-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c11-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c11-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_m to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c11-SendMessage-RU-IM -TR m-CR o-PA m-OTN m

## c12-SendMessage-IM-RU -TR\_m-CR\_o-PA\_m-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c12-SendMessage-IM-RU -TR\_m-CR\_o-PA\_m-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 21.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from c12-SendMessage-IM-RU-TR m-CR o-PA m-OTN m to RU
- ← ControlFlow from c12-SendMessage-IM-RU -TR m-CR o-PA m-OTN m to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c12-SendMessage-IM-RU -TR m-CR o-PA m-OTN m

## c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o to synchronize actions
- ← ControlFlow from c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

■ Information Flow from Error Message to c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

#### **CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'Activity', in package 'Handbook-Operation'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 17.06.2013. Last modified 17.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions
- ← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

- ← ControlFlow from LINK TO BE CHECKED to synchronize actions
- ← ControlFlow from LINK TO BE CHECKED to synchronize actions

Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** INCOMING BEHAVIORAL RELATIONSHIPS ■ Information Flow from Error Message to LINK TO BE CHECKED 4.28 Train Shifting to a new path-changed OTN UseCase in package 'Handbook-Operation' 4.28 Train Shifting to a new path-changed OTN Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013 ELEMENTS OWNED BY 4.28 Train Shifting to a new path-changed OTN Activity: Activity Activity Activity owned by '4.28 Train Shifting to a new path-changed OTN', in package 'Handbook-Operation' Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013 **ELEMENTS OWNED BY Activity** BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH: Activity ■ c01-SendMessage-RU-IM -TR m-CR m-PR m-OTN o-RelID o : Activity ■ c02-SendMessage-IM-RU-TR m-CR m-PR m-PA m-OTN o-RelID o: Activity ■ c02-SendMessage-IM-RU -TR m-CR m-PR m-PA m-OTN o : Activity 3 c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o : Activity

■ c13-SendMessage-RU-IM -TR m-CR o-PA m-OTN o-RelID o : Activity

**□** c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o : Activity

ELEMENTS OWNED BY Activity
c14-SendMessage-IM-RU -TR_m-CR_o-PR_m-PA_m-OTN_m-RelID_o : Activity
c15-SendMessage-RU-IM -TR_m-CR_o-PR_m-PA_m-OTN_m-RelID_o : Activity
c16-SendMessage-RU-IM -TR_m-PA_m-OTN_m : Activity
c17-SendMessage-IM-RU -TR_m-PA_m-OTN_m : Activity
c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH: Activity
■ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
LINK TO BE CHECKED : Activity
■ REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
■ PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity

# 4.28 Train Shifting to a new path-changed OTN Activity diagram

Activity diagram in package 'Handbook-Operation'

4.28 Train Shifting to a new path-changed OTN Activity
Version 1.0
Hantak created on 02.04.2013. Last modified 18.11.2013

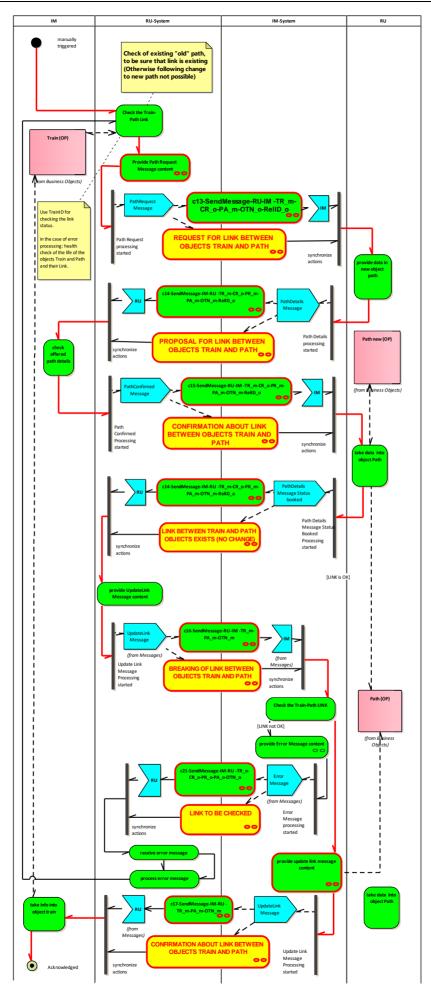


Figure 105: 4.28 Train Shifting to a new path-changed OTN Activity

#### Note

Note in package 'Handbook-Operation'

Check of existing "old" path, to be sure that link is existing (Otherwise following change to new path not possible)

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 19.06.2013. Last modified 19.06.2013

Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**▶ Dependency** Train ID: Mandatory Source → Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

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## CONNECTORS

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

## **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

Dependency PathID Source -> Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

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#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

## **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

## CONNECTORS

**Dependency** Source -> Destination
From: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR m-PA m-OTN m : Activity, Public

**Dependency** Source -> Destination
From: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

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## CONNECTORS

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

## Path new (OP)

Object in package 'Business Objects'

Path new (OP) Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

## Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP) : Object, Public

To: Path : Object, Public

**Dependency** Source -> Destination

 $From: \qquad Operational Train Number\ (OTN): Artifact,\ Public$ 

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

## Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Dependency Source -> Destination Train (OP): Object, Public

To: Train: Object, Public

## ATTRIBUTES



TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**



Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

#### **BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'Activity', in package 'Handbook-Operation'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

## c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 21.05.2013. Last modified 10.06.2013

## c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Operation'

c01-SendMessage-RU-IM -TR\_m-CR\_m-PR\_m-OTN\_o-RelID\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 106: c01-SendMessage-RU-IM -TR m-CR m-PR m-OTN o-RelID o

## c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-ReIID\_o

Version 1.0 Phase 1.0 Proposed

Hantak created on 31.05.2013. Last modified 10.06.2013

#### c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Operation'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

 $Figure~107:~c02-SendMessage-IM-RU~-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o$ 

## c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 10.06.2013

## c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Operation'

c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 108: c02-SendMessage-IM-RU -TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o

## c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-ReIID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 31.05.2013. Last modified 10.06.2013

## c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Handbook-Operation'

c03-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

 $Figure~109:~c03-SendMessage-RU-IM~-TR\_m-CR\_m-PR\_m-PA\_m-OTN\_o-RelID\_o$ 

## c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 17.11.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c13-SendMessage-RU-IM -TR m-CR o-PA m-OTN o-RelID o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathRequest Message to c13-SendMessage-RU-IM -TR m-CR o-PA m-OTN o-RelID o

## c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 28.06.2013. Last modified 28.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c14-SendMessage-IM-RU -TR m-CR o-PR m-PA m-OTN m-RelID o to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN m-RelID o

## c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 17.11.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c14-SendMessage-IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message to c14-SendMessage-IM-RU-TR m-CR o-PR m-PA m-OTN m-RelID o

#### c15-SendMessage-RU-IM -TR m-CR o-PR m-PA m-OTN m-RelID o

Activity owned by 'Activity', in package 'Handbook-Operation'

c15-SendMessage-RU-IM -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-ReIID\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c15-SendMessage-RU-IM -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathConfirmed Message to c15-SendMessage-RU-IM -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID o

## c16-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c16-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_m

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c16-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_m to IM

## **CONNECTORS**

Prom: UpdateLink Message : Trigger, Public

 ${\tt To:} \qquad {\tt c16-SendMessage-RU-IM-TR\_m-PA\_m-OTN\_m: Activity, Public}$ 

### c17-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_m

Activity owned by 'Activity', in package 'Handbook-Operation'

c17-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from c17-SendMessage-IM-RU -TR\_m-PA\_m-OTN\_m to RU

## INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from UpdateLink Message to c17-SendMessage-IM-RU-TR m-PA m-OTN m

## c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA o-OTN o

## CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'Activity', in package 'Handbook-Operation'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'Activity', in package 'Handbook-Operation'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.06.2013. Last modified 10.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

◆ ControlFlow from CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathConfirmed Message to CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

## CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Operation'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0
km created on 10.06.2013. Last modified 10.06.2013

Figure 110: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from PathDetails Message Status booked to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

## LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 111: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK TO BE CHECKED to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

## REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'Activity', in package 'Handbook-Operation'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathRequest Message to REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

## REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Operation'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 112: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'Activity', in package 'Handbook-Operation'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 30.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

## INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathDetails Message to PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

## PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Handbook-Operation'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 113: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

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# 4.29 Train Cancellation-Path remains in hand of RU

UseCase in package 'Handbook-Operation'

4.29 Train Cancellation-Path remains in hand of RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY 4.29 Train Cancellation-Path remains in hand of RU
Activity : Activity

## Activity

Activity owned by '4.29 Train Cancellation-Path remains in hand of RU', in package 'Handbook-Operation'

Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 02.04.2013

ELEMENTS OWNED BY Activity
c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
■ LINK TO BE CHECKED : Activity

# 4.29 Train Cancellation-Path remains in hand of RU Activity diagram

Activity diagram in package 'Handbook-Operation'

4.29 Train Cancellation-Path remains in hand of RU Activity

Version 1.0

Hantak created on 02.04.2013. Last modified 18.11.2013

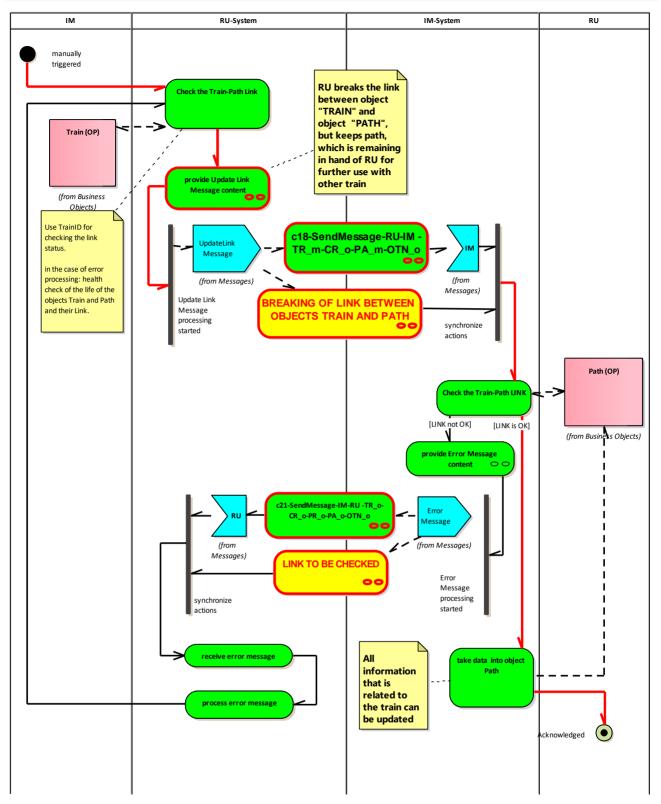


Figure 114: 4.29 Train Cancellation-Path remains in hand of RU Activity

## Note

Note in package 'Handbook-Operation'

RU breaks the link between object "TRAIN" and object "PATH", but keeps path, which is remaining in hand of RU for further use with other train

Note Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

Extends

#### IM

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

## CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions : Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

## **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source → Destination From: Error Message : Trigger, Public

To: Receive error message: Activity, Public

**Dependency** PathID Source -> Destination

From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination
From: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR m-PA m-OTN m : Activity, Public

**Dependency** Source -> Destination From: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

#### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

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#### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

Path (OP): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### ATTRIBUTES

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**



Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

#### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

# c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

# **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from LINK TO BE CHECKED to synchronize actions

OUTGOING BEHAVIORAL RELATIONSHIPS	
INCOMING BEHAVIORAL RELATIONSHIPS	
Information Flow from Error Message to LINK TO BE CHEC	KED
4.30 Train Cancellation-Path also cancelled by RU	
UseCase in package 'Handbook-Operation'	
	4.30 Train Cancellation-Path also cancelled by RU
I	Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013
ELEMENTS OWNED BY 4.30 Train Cancellation-Path also canc	elled by RU
Activity : Activity	
<b>Activity</b> Activity owned by '4.30 Train Cancellation-Path also cancelled t	ny RII' in nackage 'Handbook-Operation'
Activity owned by 4.30 Train Cancellation-1 ain also cancelled to	
I	Activity Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.04.2013
ELEMENTS OWNED BY Activity	
■ BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PA	ATH : Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : A	Activity
LINK TO BE CHECKED : Activity	
L.	
4.20 Train Cancellation Dath also cancelled by DLL & sticks	, diagram
<b>4.30 Train Cancellation-Path also cancelled by RU Activity</b> Activity diagram in package 'Handbook-Operation'	, ulagrain
and an puchage Humaoon Operation	

12 February, 2025

Model Report

4.30 Train Cancellation-Path also cancelled by RU Activity

Hantak created on 02.04.2013. Last modified 18.11.2013

Version 1.0

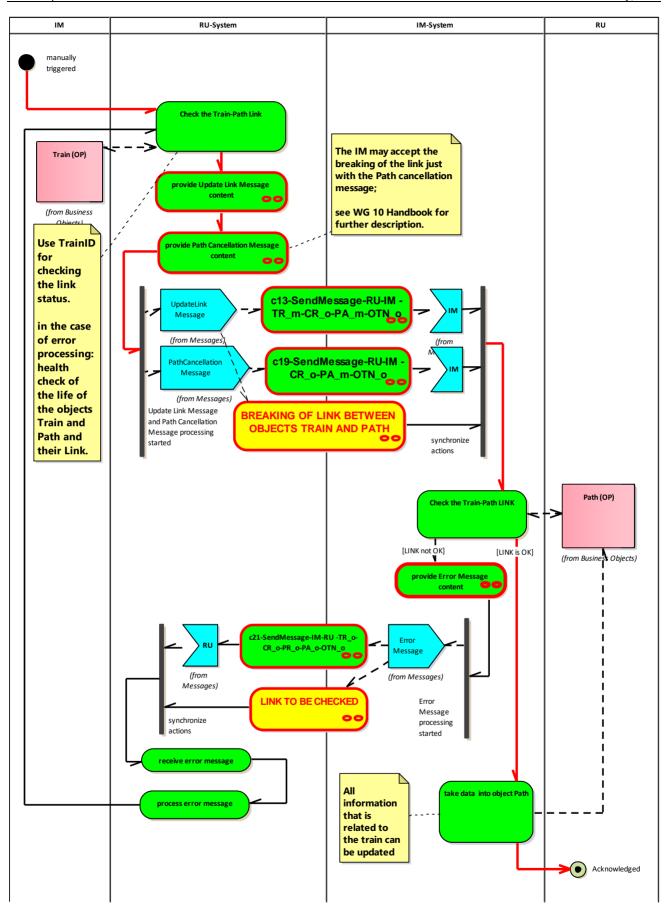


Figure 115: 4.30 Train Cancellation-Path also cancelled by RU Activity

Note

Note in package 'Handbook-Operation'

The IM may accept the breaking of the link just with the Path cancellation message;

see WG 10 Handbook for further description.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 19.06.2013. Last modified 19.06.2013
Extends

IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

RU

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**▶ Dependency** PathRequestID Source → Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

Dependency TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

#### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message : Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

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#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

## **PathCancellation Message**

Trigger in package 'Messages'

PathCancellation Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathCancellation Message: Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started : Synchronization, Public

To: PathCancellation Message : Trigger, Public

#### **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

Prom: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_m : Activity, Public

Prom: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Update Link Message processing started : Synchronization, Public

To: UpdateLink Message : Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

#### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

# **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message : Trigger, Public

Path (OP) : Object, Public

To: Path : Object, Public

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#### CONNECTORS

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

#### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

# ATTRIBUTES

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Target: Public (Object) TrainInformation

# ASSOCIATIONS Cardinality: [1] Cardinality: [1]

#### **BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH**

Activity owned by 'Activity', in package 'Handbook-Operation'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

📫 Information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

#### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'Activity', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o to RU

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

#### **LINK TO BE CHECKED**

Activity owned by 'Activity', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

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#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK TO BE CHECKED to synchronize actions

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# **Operation**

UseCase in package 'Handbook-Operation'

Operation
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from 4.17.2 TRAIN RUNNING FORECAST to Operation

[ Direction is 'Source -> Destination'. ]

→ Generalization from 4.21 TRAIN DELAY CAUSE to Operation

[ Direction is 'Source -> Destination'. ]

→ Generalization from 4.16.2 TRAIN RUNNING INFORMATION to Operation

[ Direction is 'Source -> Destination'. ]

# **Object**

Object «business actor» in package 'Handbook-Operation'

Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

# **CONNECTORS**

Prom: Object : Object, Public

To: 4.21 TRAIN DELAY CAUSE : UseCase, Public

**Dependency** Source -> Destination From: Object : Object, Public

To: 4.16.2 TRAIN RUNNING INFORMATION: UseCase, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Object : Object, Public

To: 4.17.2 TRAIN RUNNING FORECAST : UseCase, Public

# **Object**

Object «business actor» in package 'Handbook-Operation'

Object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.03.2013

#### provide Path Request Message content

Activity in package 'Handbook-Operation'

provide Path Request Message content Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 19.06.2013

# provide Update Link Message

Activity in package 'Handbook-Operation'

provide Update Link Message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from provide Update Link Message to Update Link Message processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from provide data in new object path to provide Update Link Message

# LINK TO BE CHECKED

UMLDiagram in package 'Handbook-Operation'

LINK TO BE CHECKED

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 18.06.2013

Extends

RU

ActivityPartition in package 'Handbook-Operation'

RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 11.08.2014

ELEMENTS OWNED BY RU
link train to already existing path: Activity
Path (OP): Object
■ book path for requesting RU : Activity
provide data in new object path: Activity
☐ take data into object Path: Activity
■ take data into object Path: Activity
Manually triggered : ActivityInitial
Acknowledged: ActivityFinal

# CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

# link train to already existing path

Activity owned by 'RU', in package 'Handbook-Operation'

link train to already existing path Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 18.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 ControlFlow from link train to already existing path to provide update link message content
- Information Flow from link train to already existing path to Path new (OP)

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from link train to already existing path to Path (OP)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to link train to already existing path Guard: LINK OK

# Path (OP)

Object owned by 'RU', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 10.06.2013

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
StartDate : Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

# book path for requesting RU

Activity owned by 'RU', in package 'Handbook-Operation'

book path for requesting RU Version 1.0 Phase 1.0 Proposed Hantak created on 02.06.2013. Last modified 02.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from book path for requesting RU to update object Path
- Information Flow from book path for requesting RU to Path (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to book path for requesting RU
- ControlFlow from provide data in new object path to book path for requesting RU Guard: Pre-acceptance indicated

# provide data in new object path

Activity owned by 'RU', in package 'Handbook-Operation'

provide data in new object path Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from provide data in new object path to provide Update Link Message
- ♣ Information Flow from provide data in new object path to Path (OP)
- rootrolFlow from provide data in new object path to Path Details processing started
- ControlFlow from provide data in new object path to Acknowledged

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to provide data in new object path Guard: LINK is OK
- ControlFlow from synchronize actions to provide data in new object path

#### take data into object Path

Activity owned by 'RU', in package 'Handbook-Operation'

take data into object Path Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from take data into object Path to Path (OP)

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from take data into object Path to Path Details Message Status Booked Processing started
- 🖛 Information Flow from take data into object Path to Path new (OP)
- ControlFlow from take data into object Path to Acknowledged

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to take data into object Path
- ControlFlow from Check the Train-Path LINK to take data into object Path Guard: LINK is OK

## take data into object Path

Activity owned by 'RU', in package 'Handbook-Operation'

take data into object Path Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

# Manually triggered

ActivityInitial owned by 'RU', in package 'Handbook-Operation'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Manually triggered to Check the Train-Path LINK

# Acknowledged

ActivityFinal owned by 'RU', in package 'Handbook-Operation'

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from take data into object Train to Acknowledged
- ControlFlow from provide data in new object path to Acknowledged
- ControlFlow from take data into object Path to Acknowledged

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from take data into object Train to Acknowledged

# IM-System

ActivityPartition in package 'Handbook-Operation'

IM-System Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 20.05.2013

ELEMENTS OWNED BY IM-System
■ c18-SendMessage-RU-IM -TR_m-CR_o-PA_m-OTN_o : Activity
■ c19-SendMessage-RU-IM -CR_o-PA_m-OTN_o : Activity
☐ LINK TO BE CHECKED : Activity
provide Train Running Interrupted Message content : Activity
provide update link message content : Activity
Path (OP): Object
provide Error Message content : Activity
provide Error Message content : Activity
LINK TO BE CHECKED : Activity
Check the Train-Path LINK: Activity
Provide Train Running Information Message content : Activity
Provide TrainRunningInformation Message content : Activity
Provide TrainRunningForecast Message content : Activity

ELEMENTS OWNED BY IM-System
Provide Train Running Forecast Message content : Activity
Provide Train Delay Cause Message content : Activity
Provide TrainDelayPerformance Message content : Activity
☐ Provide TrainForecastAtReportingLocation Message content : Activity
Provide Update Information of the Object Message : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
☐ LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) : Activity
☐ c08-SendMessage- RU-IM -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
■ c21-SendMessage-IM-RU -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
process Train Parking Message : Activity
Receive error message : Activity
Process error message : Activity

ELEMENTS OWNED BY IM-System
ake data into object Train: Activity
UpdateLink Message: Trigger
IM: Event
Automatically triggered : ActivityInitial
TrainParking Message: Trigger
UpdateOf InfoAbout ObjectMessage: Trigger
Error Message: Trigger
PathDetails Message: Trigger
PathDetails Message Status booked : Trigger
UpdateLinkMessage: Trigger
Train Running Forecast Message: Trigger
TrainRunning Information Message: Trigger
TrainRunning InformationMessage: Trigger

#### **ELEMENTS OWNED BY IM-System**

UpdateLink Message: Trigger

#### **CONNECTORS**

Prom: IM-System : ActivityPartition, Public

To: TrainRunningForecastAt ReportingLocationMessage: Trigger, Public

# c18-SendMessage-RU-IM -TR m-CR o-PA m-OTN o

Activity owned by 'IM-System', in package 'Handbook-Operation'

c18-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 17.11.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from c18-SendMessage-RU-IM -TR m-CR o-PA m-OTN o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to c18-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o

#### c19-SendMessage-RU-IM -CR o-PA m-OTN o

Activity owned by 'IM-System', in package 'Handbook-Operation'

c19-SendMessage-RU-IM -CR\_o-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 28.06.2013. Last modified 17.11.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c19-SendMessage-RU-IM -CR o-PA m-OTN o to IM

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from PathCancellation Message to c19-SendMessage-RU-IM -CR\_o-PA\_m-OTN\_o

#### LINK TO BE CHECKED

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# provide Train Running Interrupted Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide Train Running Interrupted Message content

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from provide Train Running Interrupted Message content to Train Running Interrupted Message processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from Check the Train-Path LINK to provide Train Running Interrupted Message content

#### provide Train Running Interrupted Message content diagram

Activity diagram in package 'Handbook-Operation'

provide Train Running Interrupted Message content
Version 1.0
km created on 18.06.2013. Last modified 18.06.2013

Figure 116: provide Train Running Interrupted Message content

# provide update link message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide update link message content

Version 1.0 Phase 1.0 Proposed

Hantak created on 19.06.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 Information Flow from provide update link message content to Path (OP)
- ControlFlow from provide update link message content to Update Link Message Processing started
- ControlFlow from provide update link message content to Update Link Message Answer processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to provide update link message content Guard: LINK is OK
- ControlFlow from link train to already existing path to provide update link message content

## provide update link message content diagram

Activity diagram in package 'Handbook-Operation'

provide update link message content
Version 1.0
km created on 19.06.2013. Last modified 19.06.2013

Figure 117: provide update link message content

# Path (OP)

Object owned by 'IM-System', in package 'Handbook-Operation'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 10.06.2013

# **ATTRIBUTES**

PathID : CompIdentOPType Private

[ Is static True. Containment is Not Specified. ]

StartDate : Date Private

[ Is static True. Containment is Not Specified. ]

# provide Error Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide Error Message content Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

[ Is static True. Containment is Not Specified. ]

OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from provide Error Message content to Error Message processing started	
ControlFlow from provide Error Message content to Error Message processing started	
ControlFlow from provide Error Message content to Error Message processing started	
ControlFlow from provide Error Message content to Error Message processing started	
◆ ControlFlow from provide Error Message content to Error Message processing started	
◆ ControlFlow from provide Error Message content to Error Message processing started	
	_

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK

# provide Error Message content diagram

Activity diagram in package 'Handbook-Operation'

provide Error Message content
Version 1.0
km created on 19.06.2013. Last modified 19.06.2013

Figure 118: provide Error Message content

# provide Error Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

provide Error Message content Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

# ControlFlow from provide Error Message content to Error Message processing started ControlFlow from provide Error Message content to Error Message processing started ControlFlow from provide Error Message content to Error Message processing started ControlFlow from provide Error Message content to Error Message processing started ControlFlow from provide Error Message content to Error Message processing started ControlFlow from provide Error Message content to Error Message processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK

#### LINK TO BE CHECKED

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK TO BE CHECKED Version 1.0 Phase 1.0 Proposed Hantak created on 18.06.2013. Last modified 18.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from LINK TO BE CHECKED to synchronize actions

# INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to LINK TO BE CHECKED

# Check the Train-Path LINK

Activity owned by 'IM-System', in package 'Handbook-Operation'

Check the Train-Path LINK Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 16.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
← ControlFlow from Check the Train-Path LINK to provide data in new object path Guard: LINK is OK
← ControlFlow from Check the Train-Path LINK to provide Error Message content Guard: LINK not OK
ControlFlow from Check the Train-Path LINK to update object Path Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to provide update link message content Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to take data into object Train  Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to process Train Parking Message Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to Provide Train Running Forecast Message content
ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content
ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message
← ControlFlow from Check the Train-Path LINK to provide Error Message content

# **OUTGOING BEHAVIORAL RELATIONSHIPS** Guard: LINK not OK + ControlFlow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content ♦ Object Flow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content Deject Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) ♣ Information Flow from Check the Train-Path LINK to Train (OP) ControlFlow from Check the Train-Path LINK to Provide TrainDelayPerformance Message content r ControlFlow from Check the Train-Path LINK to Provide TrainRunningInformation Message content - ControlFlow from Check the Train-Path LINK to take data into object Path Guard: LINK is OK Information Flow from Check the Train-Path LINK to Path (OP) Information Flow from Check the Train-Path LINK to Path (OP) ControlFlow from Check the Train-Path LINK to link train to already existing path Guard: LINK OK ← ControlFlow from Check the Train-Path LINK to Provide Train Delay Cause Message content ControlFlow from Check the Train-Path LINK to Provide Train Running Information Message content + ControlFlow from Check the Train-Path LINK to provide Train Running Interrupted Message content Information Flow from Check the Train-Path LINK to Path (OP)

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

In ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message

# INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from process TrainRunningInformation Message to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK Information Flow from Path (OP) to Check the Train-Path LINK ControlFlow from Process error message to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK Information Flow from Path (OP) to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from synchronize actions to Check the Train-Path LINK ControlFlow from Manually triggered to Check the Train-Path LINK

Model Report

INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to Check the Train-Path LINK

ControlFlow from Automatically triggered to Check the Train-Path LINK Guard: Train ID known

ControlFlow from Process TrainRunningForecast Message to Check the Train-Path LINK

# **Provide Train Running Information Message content**

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide Train Running Information Message content Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from Provide Train Running Information Message content to Train Running Information processing started
- ControlFlow from Provide Train Running Information Message content to Train Running Information Message processing started
- ControlFlow from Provide Train Running Information Message content to Train Running Information Processing started Guard: in case Train Running Information Message is used

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to Provide Train Running Information Message content

# Provide TrainRunningInformation Message content diagram

Activity diagram in package 'Handbook-Operation'

Provide TrainRunningInformation Message content
Version 1.0
Hantak created on 10.06.2013. Last modified 18.09.2013

Figure 119: Provide TrainRunningInformation Message content

# Provide TrainRunningInformation Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide TrainRunningInformation Message content
Version 1.0 Phase 1.0 Proposed
Hantak created on 27.05.2013. Last modified 10.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 💠 Object Flow from Provide TrainRunningInformation Message content to Train Running Information Processing started
- 🖛 ControlFlow from Provide TrainRunningInformation Message content to Train Running Information Processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to Provide TrainRunningInformation Message content

#### Provide TrainRunningInformation Message content diagram

Activity diagram in package 'Handbook-Operation'

Provide TrainRunningInformation Message content
Version 1.0
km created on 10.06.2013. Last modified 10.06.2013

Figure 120: Provide TrainRunningInformation Message content

# Provide TrainRunningForecast Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide TrainRunningForecast Message content Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

🖛 Object Flow from Provide TrainRunningForecast Message content to Train Running Forecast Messaging started

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from Provide TrainRunningForecast Message content to Train Running Forecast Messahe Processing started
- 🖛 ControlFlow from Provide TrainRunningForecast Message content to Train Running Forecast Message processing started
- ControlFlow from Provide TrainRunningForecast Message content to Train Running Forecast Processing started Guard: in case Train Running Forecast Message is used

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content
- Object Flow from Path (OP) to Provide TrainRunningForecast Message content
- ControlFlow from Check the Train-Path Link to Provide TrainRunningForecast Message content
- ControlFlow from Check the Train-Path LINK to Provide TrainRunningForecast Message content

# Provide TrainRunningForecast Message content diagram

Activity diagram in package 'Handbook-Operation'

Provide TrainRunningForecast Message content
Version 1.0
km created on 27.05.2013. Last modified 27.05.2013

Figure 121: Provide TrainRunningForecast Message content

## **Provide Train Running Forecast Message content**

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide Train Running Forecast Message content Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Provide Train Running Forecast Message content to Train Running Forecast Processing started

Model Report \_\_\_\_\_\_ 12 February, 2025

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Guard: in case Train Running Forecast Message is used

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to Provide Train Running Forecast Message content

# **Provide Train Running Forecast Message content diagram**

Activity diagram in package 'Handbook-Operation'

Provide Train Running Forecast Message content
Version 1.0
km created on 17.06.2013. Last modified 17.06.2013

Figure 122: Provide Train Running Forecast Message content

# Provide Train Delay Cause Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide Train Delay Cause Message content Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Provide Train Delay Cause Message content to Train Delay Cause Message processing started

# INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to Provide Train Delay Cause Message content

# **Provide Train Delay Cause Message content diagram**

Activity diagram in package 'Handbook-Operation'

Provide Train Delay Cause Message content Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 123: Provide Train Delay Cause Message content

# Provide TrainDelayPerformance Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide TrainDelayPerformance Message content Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 Information Flow from Provide TrainDelayPerformance Message content to TrainDelay Performance Message
- 💠 ControlFlow from Provide TrainDelayPerformance Message content to Train Delay Performance Processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Object Flow from Path (OP) to Provide TrainDelayPerformance Message content
- \*\* ControlFlow from Check the Train-Path LINK to Provide TrainDelayPerformance Message content
- Object Flow from Path (OP) to Provide TrainDelayPerformance Message content

#### Provide TrainDelayPerformance Message content diagram

Activity diagram in package 'Handbook-Operation'

Provide TrainDelayPerformance Message content Version 1.0 km created on 27.05.2013. Last modified 27.05.2013

Figure 124: Provide TrainDelayPerformance Message content

# Provide TrainForecastAtReportingLocation Message content

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide TrainForecastAtReportingLocation Message content Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from Provide TrainForecastAtReportingLocation Message content to TrainRunningForecastAt ReportingLocationMessage
- ControlFlow from Provide TrainForecastAtReportingLocation Message content to Train Running Forecast at reporting Location Processing started

#### INCOMING BEHAVIORAL RELATIONSHIPS

- \*\* ControlFlow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content
- Object Flow from Path (OP) to Provide TrainForecastAtReportingLocation Message content
- Deject Flow from Check the Train-Path LINK to Provide TrainForecastAtReportingLocation Message content

#### Provide TrainForecastAtReportingLocation Message content diagram

Activity diagram in package 'Handbook-Operation'

Provide TrainForecastAtReportingLocation Message content Version 1.0 km created on 27.05.2013. Last modified 27.05.2013

Figure 125: Provide TrainForecastAtReportingLocation Message content

#### Provide Update Information of the Object Message

Activity owned by 'IM-System', in package 'Handbook-Operation'

Provide Update Information of the Object Message Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from Provide Update Information of the Object Message to Train Running Information Processing started
- 🖛 ControlFlow from Provide Update Information of the Object Message to Train Running Forecast Processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message
- ControlFlow from Check the Train-Path LINK to Provide Update Information of the Object Message

### Activity4 diagram

Activity diagram in package 'Handbook-Operation'

Activity4 Version 1.0 km created on 10.06.2013. Last modified 10.06.2013

Figure 126: Activity4

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 10.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

km created on 10.06.2013. Last modified 10.06.2013

Figure 127: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainRunningForecastAt ReportingLocationMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from TrainDelay CauseMessage to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Activity owned by 'IM-System', in package 'Handbook-Operation'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) to Synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from TrainDelay Performance Message to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)
- Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### c08-SendMessage- RU-IM -TR\_m-PA\_r-OTN\_r

Activity owned by 'IM-System', in package 'Handbook-Operation'

c08-SendMessage- RU-IM -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 08.09.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

◆ ControlFlow from c08-SendMessage- RU-IM -TR m-PA r-OTN r to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

- information Flow from TrainComposition Message to c08-SendMessage- RU-IM -TR m-PA r-OTN r
- Information Flow from TrainComposition Message to c08-SendMessage- RU-IM -TR\_m-PA\_r-OTN\_r

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'IM-System', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Error Message to c09-SendMessage-IM-RU-TR m-PA r-OTN r

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'IM-System', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from TrainNotSuitable Message to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'IM-System', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 11.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM
- ControlFlow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from Error Message to c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o
- information Flow from Error Message to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

### c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'IM-System', in package 'Handbook-Operation'

c21-SendMessage-IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 27.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c21-SendMessage-IM-RU -TR o-CR o-PR o-PA o-OTN o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c21-SendMessage-IM-RU-TR o-CR o-PR o-PA o-OTN o

### process Train Parking Message

Activity owned by 'IM-System', in package 'Handbook-Operation'

process Train Parking Message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Information Flow from process Train Parking Message to Path (OP)
- ControlFlow from process Train Parking Message to Train Parking Answer processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path LINK to process Train Parking Message Guard: LINK is OK

### Receive error message

Activity owned by 'IM-System', in package 'Handbook-Operation'

Receive error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 27.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Receive error message to Process error message

# INCOMING BEHAVIORAL RELATIONSHIPS \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message \*\*\*\* ControlFlow from synchronize actions to Receive error message

### CONNECTORS

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

### Process error message

Activity owned by 'IM-System', in package 'Handbook-Operation'

ControlFlow from sychronize actions to Receive error message

Process error message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 20.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

4 ControlFlow from Process error message to Check the Train-Path LINK

ControlFlow from Process error message to Check the Train-Path LINK

Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** ◆ ControlFlow from Process error message to Check the Train-Path LINK ← ControlFlow from Process error message to Check the Train-Path LINK INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Receive error message to Process error message ControlFlow from receive error message to Process error message ControlFlow from IM to Process error message take data into object Train Activity owned by 'IM-System', in package 'Handbook-Operation' take data into object Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013 STRUCTURAL PART OF take data into object Train SobjectNode6: ActionPin **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from take data into object Train to Acknowledged 🖛 Information Flow from take data into object Train to Train (OP) ♣ Information Flow from take data into object Train to Path (OP) ControlFlow from take data into object Train to Acknowledged INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from Train (OP) to take data into object Train

ControlFlow from Check the Train-Path LINK to take data into object Train

Guard: LINK is OK

### INCOMING BEHAVIORAL RELATIONSHIPS

- Object Flow from Train (OP) to take data into object Train
- Information Flow from Train (OP) to take data into object Train
- ControlFlow from Check the Train-Path Link to take data into object Train Guard: LINK is OK

### ObjectNode6

ActionPin owned by 'take data into object Train', in package 'Handbook-Operation'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from ObjectNode6 to Acknowledged

### **UpdateLink Message**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 19.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

### IM

Event owned by 'IM-System', in package 'Handbook-Operation'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### IM

Event owned by 'IM-System', in package 'Handbook-Operation'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### IM

Event owned by 'IM-System', in package 'Handbook-Operation'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### IM

Event owned by 'IM-System', in package 'Handbook-Operation'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### IM

Event owned by 'IM-System', in package 'Handbook-Operation'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

### Automatically triggered

ActivityInitial owned by 'IM-System', in package 'Handbook-Operation'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Automatically triggered to Check the Train-Path Link Guard: TRAIN ID known
- ControlFlow from Automatically triggered to Check the Train-Path LINK Guard: Train ID known

### **TrainParking Message**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

TrainParking Message Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 17.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Train Parking Answer processing started: Synchronization, Public

To: TrainParking Message : Trigger, Public

### UpdateOf InfoAbout ObjectMessage

Trigger owned by 'IM-System', in package 'Handbook-Operation'

UpdateOf InfoAbout ObjectMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 17.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: UpdateOf InfoAbout ObjectMessage : Trigger, Public

### **Error Message**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 18.06.2013

### **CONNECTORS**

Prom: Error Message : Trigger, Public

To: synchronize actions : Synchronization, Public

### PathDetails Message

Trigger owned by 'IM-System', in package 'Handbook-Operation'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

### CONNECTORS

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

### PathDetails Message Status booked

Trigger owned by 'IM-System', in package 'Handbook-Operation'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 10.06.2013

### CONNECTORS

Dependency

Source -> Destination

Path Details Message Status Booked Processing started: Synchronization, Public

To:

PathDetails Message Status booked: Trigger, Public

### **UpdateLinkMessage**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

UpdateLinkMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

### Train Running Forecast Message

Trigger owned by 'IM-System', in package 'Handbook-Operation'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

### CONNECTORS

Dependency

Source -> Destination

From:

Train Running Forecast Processing started: Synchronization, Public

To:

Train Running Forecast Message: Trigger, Public

### **TrainRunning Information Message**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

TrainRunning Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

### CONNECTORS

Dependency

Source -> Destination

Train Running Information Processing started: Synchronization, Public

To:

TrainRunning Information Message: Trigger, Public

### TrainRunning InformationMessage

Trigger owned by 'IM-System', in package 'Handbook-Operation'

TrainRunning InformationMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

### CONNECTORS

Dependency

Source -> Destination

Train Running Information Processing started: Synchronization, Public

To: TrainRunning InformationMessage: Trigger, Public

### **UpdateLink Message**

Trigger owned by 'IM-System', in package 'Handbook-Operation'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 10.06.2013

### CONNECTORS

Dependency

Source -> Destination

From:

Update Link Message Answer processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

### IM

ActivityPartition in package 'Handbook-Operation'

IM Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 11.08.2014

ELEMENTS OWNED BY IM
check offered path details: Activity
provide data in object train: Activity
Train (OP): Object
Train (OP): Object

Model Report	12 February, 2025
ELEMENTS OWNED BY IM	
Train (OP): Object	
Acknowledged : ActivityFinal	
manually triggered : ActivityInitial	
Train (OP): Object	
■ RU : Event	
atake info into object train: Activity	
check offered path details  Activity owned by 'IM', in package 'Handbook-Operation'  OUTGOING BEHAVIORAL RELATIONSHIPS	check offered path details  Version 1.0 Phase 1.0 Proposed  Hantak created on 30.05.2013. Last modified 11.06.2013
◆ ControlFlow from check offered path details to Path Confirmed Processing started	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from synchronize actions to check offered path details	
provide data in object train  Activity owned by 'IM', in package 'Handbook-Operation'	provide data in object train Version 1.0 Phase 1.0 Proposed Hantak created on 30.05.2013. Last modified 19.06.2013
ELEMENTS OWNED BY provide data in object train	
provide PathRequest Message : Activity	

### provide PathRequest Message

Activity owned by 'provide data in object train', in package 'Handbook-Operation'

provide PathRequest Message Version 1.0 Phase 1.0 Proposed Hantak created on 16.06.2013. Last modified 16.06.2013

### Train (OP)

Object owned by 'IM', in package 'Handbook-Operation'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 11.06.2013

ATTRIBUTES	
Startdate: Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]
TrainID : CompositIdentifierOperationalType Private	[ Is static True. Containment is Not Specified. ]

### Train (OP)

Object owned by 'IM', in package 'Handbook-Operation'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 10.06.2013

ATTRIBUTES	
Startdate: Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

### 

### Train (OP)

Object owned by 'IM', in package 'Handbook-Operation'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 10.06.2013

ATTRIBUTES	
Startdate: Date Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]

### Acknowledged

ActivityFinal owned by 'IM', in package 'Handbook-Operation'

INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from take details into data to Acknowledged
ControlFlow from take data into object Train to Acknowledged
ControlFlow from take info into object train to Acknowledged
ControlFlow from take data into object Train to Acknowledged
ControlFlow from take data into object Train to Acknowledged



### Train (OP)

Object owned by 'IM', in package 'Handbook-Operation'

← ControlFlow from manually triggered to Check the Train-Path Link

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 16.06.2013

ELEMENTS OWNED BY Train (OP)	
■ take data into object Train: Activity	

TTRIBUTES	
Startdate: Date Private	[ Is static True. Containment is Not Specified. ]
◆ technParameters : Complex Private	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]
TrainID : CompositIdentifierOperationalType Private	[ Is static True. Containment is Not Specified. ]

### take data into object Train

Activity owned by 'Train (OP)', in package 'Handbook-Operation'

take data into object Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS** 4 Information Flow from take data into object Train to Path (OP) ♣ ControlFlow from take data into object Train to Acknowledged ControlFlow from take data into object Train to ActivityFinal ♣ Information Flow from take data into object Train to Train (OP) ControlFlow from take data into object Train to Acknowledged 🖛 Information Flow from take data into object Train to Train (OP)

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to take data into object Train
- ControlFlow from Check the Train-Path LINK to take data into object Train Guard: LINK is OK
- ControlFlow from synchronize actions to take data into object Train
- ControlFlow from Check the Train-Path Link to take data into object Train Guard: LINK is OK

### RU

Event owned by 'IM', in package 'Handbook-Operation'

Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.02.2013. Last modified 27.05.2013

### take info into object train

Activity owned by 'IM', in package 'Handbook-Operation'

take info into object train Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 18.06.2013 OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from take info into object train to Train (OP)

Information Flow from take info into object train to Train (OP)

INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to take info into object train

ControlFlow from Check the Train-Path Link to take info into object train

ControlFlow from Synchronize actions to take info into object train

ControlFlow from Synchronize actions to take info into object train

ControlFlow from Synchronize actions to take info into object train

### **RU-System**

ActivityPartition in package 'Handbook-Operation'

RU-System Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 20.05.2013

ELEMENTS OWNED BY RU-System
provide Train Composition Message content : Activity
■ BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity
Provide Path Request Message content : Activity
provide Path Cancellation Message content : Activity
■ RU : Event
provide Train Ready Message content : Activity
provide Update Link Message content : Activity

ELEMENTS OWNED BY RU-System
provide Train Parking Message content : Activity
provide UpdateLink Message content : Activity
process Train Running Forecast Message : Activity
process Train Running Forecast Message : Activity
process Train Running Information Message : Activity
process Train Running Information Message : Activity
process TrainRunningInformation Message : Activity
process TrainDelayPerformance Message : Activity
process Update Information of the Object Message : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c09-SendMessage-IM-RU -TR_m-PA_r-OTN_r : Activity
■ c10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
☐ c10-SendMessage-IM-RU -TR_m-PA_o-OTN_m : Activity
c13-SendMessage-RU-IM -TR_m-CR_o-PA_m-OTN_o : Activity
■ c13-SendMessage-RU-IM -TR_m-CR_o-PA_m-OTN_o : Activity
■ c13-SendMessage-RU-IM -TR_m-CR_o-PA_m-OTN_o : Activity

ELEMENTS OWNED BY RU-System
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
■ c20-SendMessage-RU-IM -TR_o-CR_o-PR_o-PA_o-OTN_o : Activity
🗄 take data into object Train : Activity
Check the Train-Path Link: Activity
Provide Error Message content : Activity
process error message : Activity
receive error message : Activity
RU: Event
RU: Event
RU: Event
RU: Event
IM: Event
RU: Event
RU: Event
■ RU : Event
RU: Event
■ RU : Event

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ELEMENTS OWNED BY RU-System	
RU: Event	
■ RU : Event	
Automatically triggered : ActivityInitial	
Error Message : Trigger	
Error Message : Trigger	
PathConfirmed Message : Trigger	
PathRequest Message : Trigger	
provide Train Composition Message content	
Activity owned by 'RU-System', in package 'Handbook-Operation'	

provide Train Composition Message content Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from provide Train Composition Message content to TRain Composition Message procession started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path Link to provide Train Composition Message content

### provide Train Composition Message content diagram

Activity diagram in package 'Handbook-Operation'

provide Train Composition Message content
Version 1.0
km created on 19.06.2013. Last modified 19.06.2013

Figure 128: provide Train Composition Message content

### BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Activity owned by 'RU-System', in package 'Handbook-Operation'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0 Phase 1.0 Proposed

Hantak created on 18.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH to synchronize actions

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

### **Provide Path Request Message content**

Activity owned by 'RU-System', in package 'Handbook-Operation'

Provide Path Request Message content
Version 1.0 Phase 1.0 Proposed
Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Provide Path Request Message content to Path Request processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path Link to Provide Path Request Message content

### **Provide Path Request Message content diagram**

Activity diagram in package 'Handbook-Operation'

Provide Path Request Message content Version 1.0 km created on 19.06.2013. Last modified 19.06.2013

Figure 129: Provide Path Request Message content

### provide Path Cancellation Message content

Activity owned by 'RU-System', in package 'Handbook-Operation'

provide Path Cancellation Message content Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from provide Path Cancellation Message content to Update Link Message and Path Cancellation Message processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from provide Update Link Message content to provide Path Cancellation Message content

### provide Path Cancellation Message content diagram

Activity diagram in package 'Handbook-Operation'

provide Path Cancellation Message content

Version 1.0
km created on 19.06.2013. Last modified 19.06.2013

Figure 130: provide Path Cancellation Message content

### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 19.06.2013

### provide Train Ready Message content

Activity owned by 'RU-System', in package 'Handbook-Operation'

provide Train Ready Message content Version 1.0 Phase 1.0 Proposed Hantak created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from provide Train Ready Message content to Train Ready Message processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path Link to provide Train Ready Message content

### provide Train Ready Message content diagram

Activity diagram in package 'Handbook-Operation'

provide Train Ready Message content
Version 1.0
km created on 19.06.2013. Last modified 19.06.2013

Figure 131: provide Train Ready Message content

### provide Update Link Message content

Activity owned by 'RU-System', in package 'Handbook-Operation'

provide Update Link Message content
Version 1.0 Phase 1.0 Proposed
Hantak created on 18.06.2013. Last modified 19.06.2013

### STRUCTURAL PART OF provide Update Link Message content

ObjectNode17 : ActionPin

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from provide Update Link Message content to provide Path Cancellation Message content

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- EntrolFlow from provide Update Link Message content to Update Link Message processing started
- 🖛 ControlFlow from provide Update Link Message content to Train Shifting to existing path processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Check the Train-Path Link to provide Update Link Message content
- ControlFlow from Check the Train-Path Link to provide Update Link Message content

### ObjectNode17

ActionPin owned by 'provide Update Link Message content', in package 'Handbook-Operation'

### provide Update Link Message diagram

Activity diagram in package 'Handbook-Operation'

provide Update Link Message Version 1.0 km created on 18.06.2013. Last modified 18.06.2013

Figure 132: provide Update Link Message

### provide Train Parking Message content

Activity owned by 'RU-System', in package 'Handbook-Operation'

provide Train Parking Message content Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

I ControlFlow from provide Train Parking Message content to Train Parking Request processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Check the Train-Path Link to provide Train Parking Message content

### INCOMING BEHAVIORAL RELATIONSHIPS

### provide Train Parking Message diagram

Activity diagram in package 'Handbook-Operation'

provide Train Parking Message Version 1.0 km created on 17.06.2013. Last modified 17.06.2013

Figure 133: provide Train Parking Message

### provide UpdateLink Message content

Activity owned by 'RU-System', in package 'Handbook-Operation'

provide UpdateLink Message content Version 1.0 Phase 1.0 Proposed Hantak created on 16.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from provide UpdateLink Message content to Update Link Message Processing started

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to provide UpdateLink Message content

### process Train Running Forecast Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process Train Running Forecast Message Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

roin Forecast Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to process Train Running Forecast Message

### process Train Running Forecast Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process Train Running Forecast Message Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

EntrolFlow from process Train Running Forecast Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to process Train Running Forecast Message

### process Train Running Information Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process Train Running Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from process Train Running Information Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to process Train Running Information Message

### process Train Running Information Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process Train Running Information Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

EntrolFlow from process Train Running Information Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to process Train Running Information Message

### process TrainRunningInformation Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process TrainRunningInformation Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from process TrainRunningInformation Message to Check the Train-Path LINK
- ControlFlow from process TrainRunningInformation Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to process TrainRunningInformation Message

### process TrainDelayPerformance Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process TrainDelayPerformance Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 18.06.2013

### STRUCTURAL PART OF process TrainDelayPerformance Message

ObjectNode11 : ActionPin

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from process TrainDelayPerformance Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Synchronize actions to process TrainDelayPerformance Message
- Information Flow from TrainDelay Performance Message to process TrainDelayPerformance Message

### ObjectNode11

ActionPin owned by 'process TrainDelayPerformance Message', in package 'Handbook-Operation'

### process Update Information of the Object Message

Activity owned by 'RU-System', in package 'Handbook-Operation'

process Update Information of the Object Message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from process Update Information of the Object Message to Check the Train-Path Link

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to process Update Information of the Object Message
- ControlFlow from synchronize actions to process Update Information of the Object Message

### c09-SendMessage-IM-RU-TR m-PA r-OTN r

Activity owned by 'RU-System', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 02.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♣ Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU
- Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU
- Information Flow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from TrainDelay CauseMessage to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r
- information Flow from TrainRunning Information Message to c09-SendMessage-IM-RU-TR m-PA r-OTN r

### INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from Train Running Forecast Message to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r
- Information Flow from TrainRunningForecastAt ReportingLocationMessage to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r
- Information Flow from TrainRunning InterruptedMessage to c09-SendMessage-IM-RU-TR m-PA r-OTN r
- information Flow from TrainDelay Performance Message to c09-SendMessage-IM-RU -TR m-PA r-OTN r

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'RU-System', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU
- ControlFlow from c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Train Running Forecast Messahe Processing started to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN r
- information Flow from Train Running Forecast Message to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

### c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

Activity owned by 'RU-System', in package 'Handbook-Operation'

c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from c09-SendMessage-IM-RU-TR m-PA r-OTN r to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train Running Information Message processing started to c09-SendMessage-IM-RU -TR\_m-PA\_r-OTN\_r

information Flow from TrainRunning Information Message to c09-SendMessage-IM-RU -TR m-PA r-OTN r

### c10-SendMessage-IM-RU-TR m-PA o-OTN m

Activity owned by 'RU-System', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m

Activity owned by 'RU-System', in package 'Handbook-Operation'

c10-SendMessage-IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 10.06.2013

### c13-SendMessage-RU-IM -TR m-CR o-PA m-OTN o

Activity owned by 'RU-System', in package 'Handbook-Operation'

c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o
Version 1.0 Phase 1.0 Proposed
Hantak created on 21.05.2013. Last modified 19.06.2013

### c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o

Activity owned by 'RU-System', in package 'Handbook-Operation'

c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 29.05.2013

### c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o diagram

Activity diagram in package 'Handbook-Operation'

c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o Version 1.0 km created on 27.05.2013. Last modified 27.05.2013 Figure 134: c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o

### c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o

Activity owned by 'RU-System', in package 'Handbook-Operation'

c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 21.05.2013. Last modified 17.11.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from UpdateLink Message to c13-SendMessage-RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'RU-System', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 29.05.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to Error Message

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from IM to c20-SendMessage-RU-IM -TR o-CR o-PR o-PA o-OTN o

### c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

Activity owned by 'RU-System', in package 'Handbook-Operation'

c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Phase 1.0 Proposed Hantak created on 27.05.2013. Last modified 29.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from c20-SendMessage-RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o to IM

### INCOMING BEHAVIORAL RELATIONSHIPS

information Flow from Error Message to c20-SendMessage-RU-IM-TR o-CR o-PR o-PA o-OTN o

### take data into object Train

Activity owned by 'RU-System', in package 'Handbook-Operation'

take data into object Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 📭 Information Flow from take data into object Train to Train (OP)
- ♣ Information Flow from take data into object Train to Train (OP)
- ControlFlow from take data into object Train to Acknowledged

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from synchronize actions to take data into object Train
- ControlFlow from Check the Train-Path Link to take data into object Train Guard: Link is OK

### Check the Train-Path Link

Activity owned by 'RU-System', in package 'Handbook-Operation'

Check the Train-Path Link Version 1.0 Phase 1.0 Proposed Hantak created on 11.06.2013. Last modified 18.06.2013

### STRUCTURAL PART OF Check the Train-Path Link

ObjectNode16: ActionPin

## **OUTGOING BEHAVIORAL RELATIONSHIPS** Information Flow from Check the Train-Path Link to Train (OP) Information Flow from Check the Train-Path Link to Train (OP) 🖛 ControlFlow from Check the Train-Path Link to provide Update Link Message content ControlFlow from Check the Train-Path Link to provide Update Link Message content 🖛 ControlFlow from Check the Train-Path Link to take data into object Train Guard: LINK is OK ControlFlow from Check the Train-Path Link to Provide TrainRunningForecast Message content ControlFlow from Check the Train-Path Link to provide Train Composition Message content ControlFlow from Check the Train-Path Link to RU updates the data Guard: LINK is OK - ControlFlow from Check the Train-Path Link to provide Train Parking Message content Information Flow from Check the Train-Path Link to Path (OP) ControlFlow from Check the Train-Path Link to Provide Path Request Message content rain-Path Link to take data into object Train Guard: LINK is OK ← ControlFlow from Check the Train-Path Link to take info into object train Guard: LINK is OK EntrolFlow from Check the Train-Path Link to provide Train Ready Message content ControlFlow from Check the Train-Path Link to Provide Error Message content Guard: LINK not OK ← ControlFlow from Check the Train-Path Link to Produce error message

# **OUTGOING BEHAVIORAL RELATIONSHIPS** Guard: LINK not OK Information Flow from Check the Train-Path Link to Train (OP) ControlFlow from Check the Train-Path Link to take data into object Train Guard: Link is OK INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from synchronize actions to Check the Train-Path Link ControlFlow from process Update Information of the Object Message to Check the Train-Path Link ControlFlow from Automatically triggered to Check the Train-Path Link Guard: TRAIN ID known ControlFlow from Process TrainRunningForecast Message to Check the Train-Path Link ControlFlow from synchronize actions to Check the Train-Path Link ControlFlow from synchronize actions to Check the Train-Path Link ControlFlow from process Train Running Information Message to Check the Train-Path Link Information Flow from Train (OP) to Check the Train-Path Link ControlFlow from process Train Running Information Message to Check the Train-Path Link ControlFlow from Automatically triggered to Check the Train-Path Link Guard: Train ID known ControlFlow from synchronize actions to Check the Train-Path Link ControlFlow from process Train Running Forecast Message to Check the Train-Path Link

ControlFlow from synchronize actions to Check the Train-Path Link

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# INCOMING BEHAVIORAL RELATIONSHIPS \*\*\*\* ControlFlow from synchronize actions to Check the Train-Path Link \*\*\*\* ControlFlow from process TrainDelayPerformance Message to Check the Train-Path Link \*\*\*\* ControlFlow from process TrainRunningInformation Message to Check the Train-Path Link \*\*\*\* ControlFlow from synchronize actions to Check the Train-Path Link \*\*\*\* ControlFlow from process Train Running Forecast Message to Check the Train-Path Link \*\*\*\* ControlFlow from manually triggered to Check the Train-Path Link \*\*\*\* ControlFlow from process error message to Check the Train-Path Link

### ObjectNode16

ActionPin owned by 'Check the Train-Path Link', in package 'Handbook-Operation'

### **Provide Error Message content**

Activity owned by 'RU-System', in package 'Handbook-Operation'

Provide Error Message content Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.03.2013. Last modified 19.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from	Provide Error Message content to Error Message processing started
← ControlFlow from	Provide Error Message content to Error message Processing started
← ControlFlow from	Provide Error Message content to Error Message processing started
← ControlFlow from	Provide Error Message content to Error message processing started
<b>←</b> ControlFlow from	Provide Error Message content to Error Message processing started

Model Report 12 February, 2025 **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from Provide Error Message content to Error message processed ControlFlow from Provide Error Message content to Error message Processing started ← ControlFlow from Provide Error Message content to Error message Processing started ← ControlFlow from Provide Error Message content to Error Message processing started ← ControlFlow from Provide Error Message content to Error Message Processing started INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Check the Train-Path Link to Provide Error Message content Guard: LINK not OK process error message Activity owned by 'RU-System', in package 'Handbook-Operation' process error message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from process error message to check Train-Path Link ControlFlow from process error message to check Train Path Link ControlFlow from process error message to Check the Train-Path Link INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from receive error message to process error message
- ControlFlow from receive error message to process error message

# receive error message

Activity owned by 'RU-System', in package 'Handbook-Operation'

receive error message Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 18.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from receive error message to process error message
← ControlFlow from receive error message to process error message
ControlFlow from receive error message to Process error message
INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message
ControlFlow from synchronize actions to receive error message

Model Report \_\_\_\_\_\_ 12 February, 2025

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from synchronize actions to receive error message

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 19.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 19.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 17.06.2013

# IM

Event owned by 'RU-System', in package 'Handbook-Operation'

IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.06.2013

#### CONNECTORS

Dependency

Source -> Destination

From: Error Message processing started: Synchronization, Public

To: IM : Event, Public

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 11.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 17.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 17.06.2013

#### RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

# RU

Event owned by 'RU-System', in package 'Handbook-Operation'

RU

Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

# Automatically triggered

ActivityInitial owned by 'RU-System', in package 'Handbook-Operation'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Automatically triggered to Check the Train-Path Link Guard: Train ID known

# **Error Message**

Trigger owned by 'RU-System', in package 'Handbook-Operation'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **Error Message**

Trigger owned by 'RU-System', in package 'Handbook-Operation'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### **PathConfirmed Message**

Trigger owned by 'RU-System', in package 'Handbook-Operation'

PathConfirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: PathConfirmed Message : Trigger, Public

# PathRequest Message

Trigger owned by 'RU-System', in package 'Handbook-Operation'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message : Trigger, Public

# **Business Objects**

Package in package 'Business Process Model'

Business Objects Version 1.0 Phase 1.0 Proposed created on 24.06.2013. Last modified 24.06.2013

# **Business Object Model diagram**

Object diagram in package 'Business Objects'

Business Object Model

Version 2.0
seid.maglajlic created on 08.11.2012. Last modified 11.03.2015

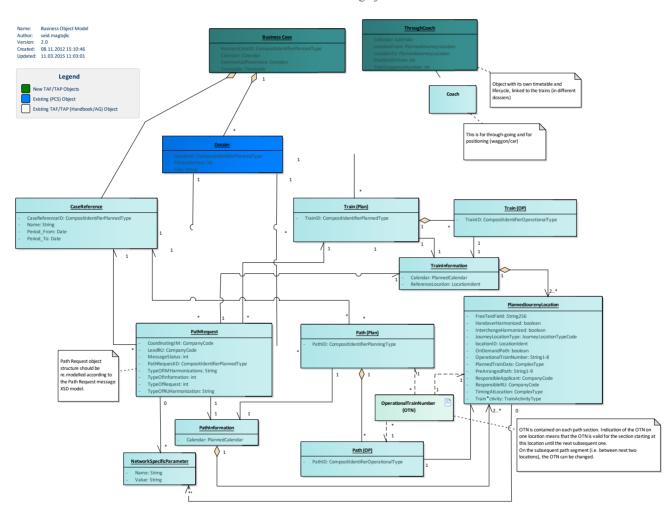


Figure 135: Business Object Model

# Legend

Text in package 'Main Objects and LINKs'

Legend
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.02.2013. Last modified 18.02.2013
Extends

#### Note

Note in package 'Business Objects'

Path Request object structure should be re.modelled according to the Path Request message XSD model.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.11.2013. Last modified 13.11.2013
Extends

#### Note

Note in package 'Business Objects'

OTN is contained on each path section. Indication of the OTN on one location means that the OTN is valid for the section starting at this location until the next subsequent one.

On the subsequent path segment (i.e. between next two locations), the OTN can be changed.

Note
Version 1.0 Phase 1.0 Proposed
seidmaglajlic created on 18.02.2015. Last modified 18.02.2015
Extends

#### Note

Note in package 'Business Objects'

Object with its own timetable and lifecycle, linked to the trains (in different dossiers)

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 18.02.2013
Extends

#### Note

Note in package 'Business Objects'

This is for through-going and for positioning (waggon/car)

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.02.2013
Extends

#### **Text**

Text in package 'Business Objects'

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012
Extends

# **Business Overview-Objects diagram**

Object diagram in package 'Business Objects'

Business Overview-Objects
Version 1.0
seid.maglajlic created on 28.06.2013. Last modified 06.03.2015

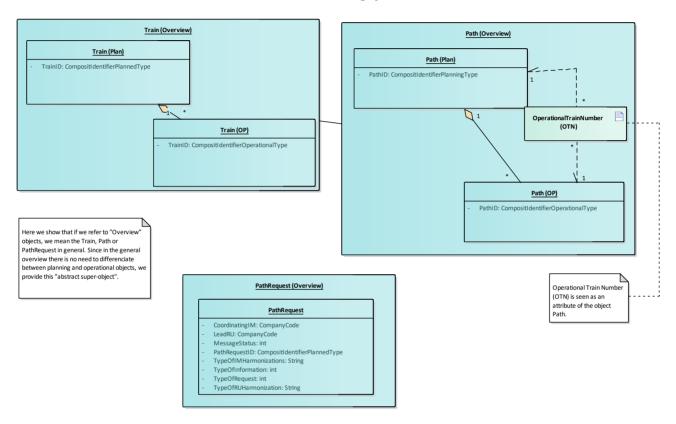


Figure 136: Business Overview-Objects

### Note

Note in package 'Business Objects'

Here we show that if we refer to "Overview" objects, we mean the Train, Path or PathRequest in general. Since in the general overview there is no need to differenciate between planning and operational objects, we provide this "abstract super-object".

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013 Extends

## Note

Note in package 'Business Objects'

Operational Train Number (OTN) is seen as an attribute of the object Path.

Note

Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 06.03.2015. Last modified 06.03.2015

# Lifecycles

Package in package 'Business Objects'

Lifecycles Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 09.04.2013. Last modified 09.04.2013

# **BusinessCase diagram**

StateMachine diagram in package 'Lifecycles'

BusinessCase Version 1.0 Hantak created on 07.02.2013. Last modified 28.06.2013

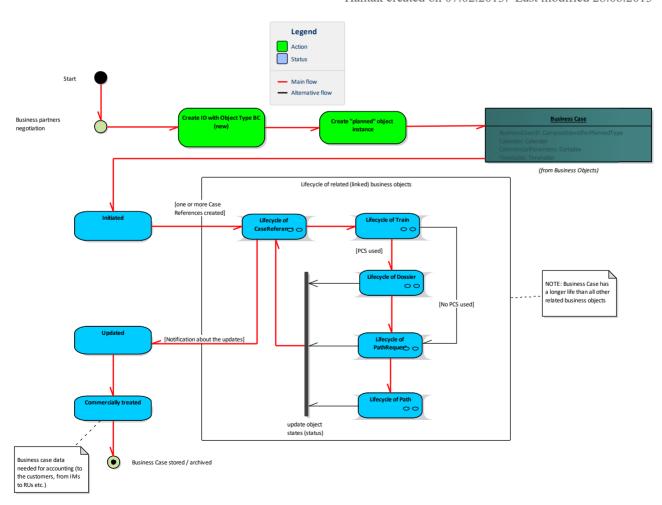


Figure 137: BusinessCase

### **Business Case**

Object in package 'Business Objects'

Business Case Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

[ Direction is 'Source -> Destination'. ]
[ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
BusinessCaseID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
CommercialParamters : Complex Private	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

# Lifecycle of related (linked) business objects

Boundary in package 'Lifecycles'

Lifecycle of related (linked) business objects

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

Extends

#### Note

Note in package 'Lifecycles'

NOTE: Business Case has a longer life than all other related business objects

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Business case data needed for accounting (to the customers, from IMs to RUs etc.)

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

Extends

# **Business Case stored / archived**

Final State in package 'Lifecycles'

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Commercially treated to Business Case stored / archived

# update object states (status)

Synchronization in package 'Lifecycles'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from update object states (status) to Lifecycle of CaseReference

# INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Lifecycle of Path to update object states (status)
- Transition from Lifecycle of Dossier to update object states (status)
- Transition from Lifecycle of PathRequest to update object states (status)

# CaseReference diagram

StateMachine diagram in package 'Lifecycles'

CaseReference
Version 1.0
seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

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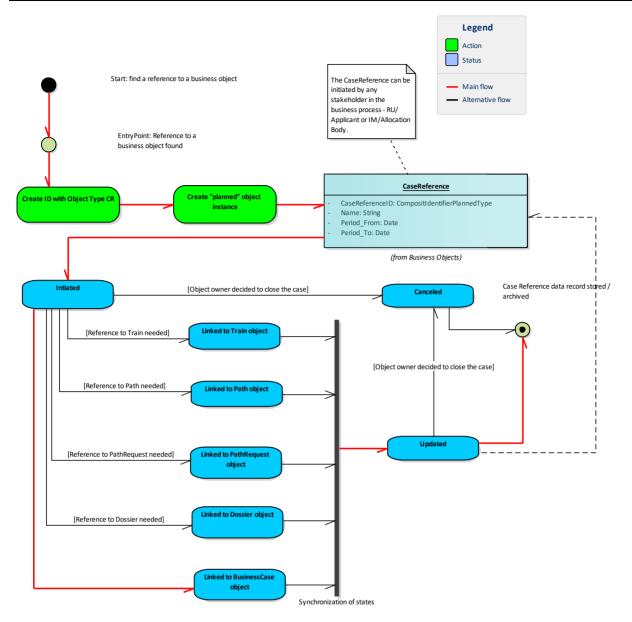


Figure 138: CaseReference

#### CaseReference

Object in package 'Business Objects'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013

# OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from CaseReference to Business Case [ Direction is 'Source -> Destination'. ]



ATTRIBUTES	
CaseReferenceID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
Name: String Private	[ Is static True. Containment is Not Specified. ]
Period_From : Date Private	[ Is static True. Containment is Not Specified. ]
Period_To: Date Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]

# Note

Note in package 'Lifecycles'

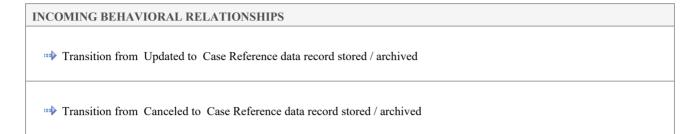
The CaseReference can be initiated by any stakeholder in the business process - RU/ Applicant or IM/Allocation Body.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

# Case Reference data record stored / archived

Final State in package 'Lifecycles'

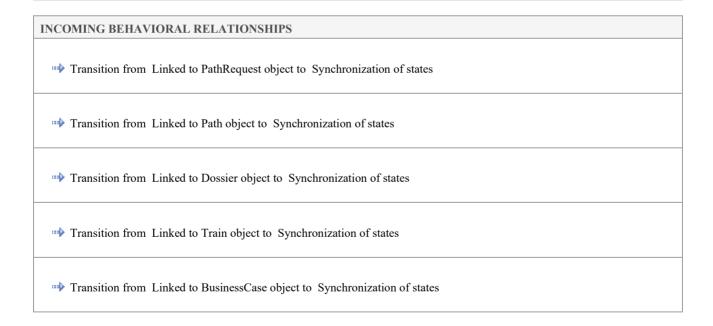


# Synchronization of states

Synchronization in package 'Lifecycles'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Synchronization of states to Updated



# **Dossier diagram**

StateMachine diagram in package 'Lifecycles'

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Dossier
Version 1.0
Hantak created on 07.02.2013. Last modified 28.06.2013

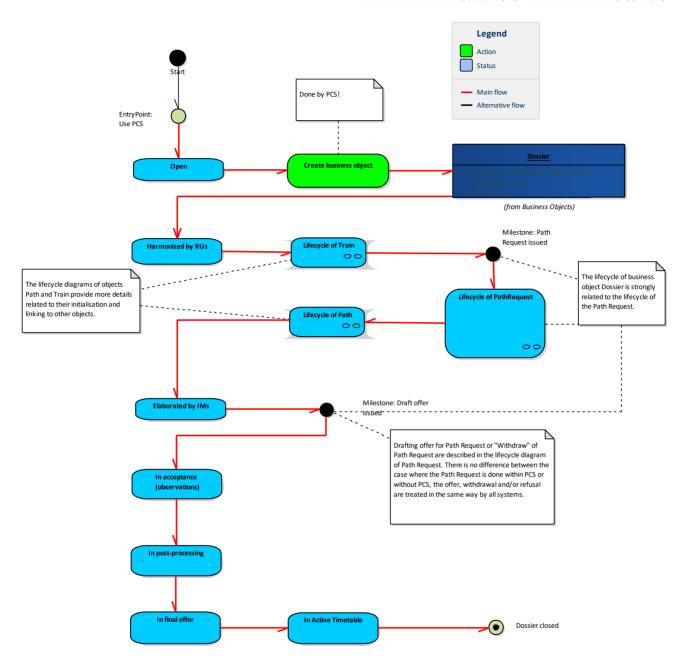


Figure 139: Dossier

#### **Dossier**

Object in package 'Business Objects'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

# OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from Dossier to Business Case [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
DossierID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
▼ TimetableYear : int Private	[ Is static True. Containment is Not Specified. ]
▼ Title : String Private	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

# Note

Note in package 'Lifecycles'

The lifecycle of business object Dossier is strongly related to the lifecycle of the Path Request.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

# **Note**

Note in package 'Lifecycles'

Drafting offer for Path Request or "Withdraw" of Path Request are described in the lifecycle diagram of Path Request. There is no difference between the case where the Path Request is done within PCS or without PCS, the offer, withdrawal and/or refusal are treated in the same way by all systems.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013
Extends

#### Note

Note in package 'Lifecycles'

The lifecycle diagrams of objects Path and Train provide more details related to their initialisation and linking to other objects.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013
Extends

#### Note

Note in package 'Lifecycles'

Done by PCS!

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013
Extends

#### **Dossier closed**

Final State in package 'Lifecycles'

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In Active Timetable to Dossier closed

#### Milestone: Draft offer issued

Junction in package 'Lifecycles'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Milestone: Draft offer issued to In acceptance (observations)

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated by IMs to Milestone: Draft offer issued

#### INCOMING BEHAVIORAL RELATIONSHIPS

# Milestone: Path Request issued

Junction in package 'Lifecycles'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Milestone: Path Request issued to Lifecycle of PathRequest

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of Train to Milestone: Path Request issued

# Lifecycles diagram

Analysis diagram in package 'Lifecycles'

Lifecycles Version 1.0 seid.maglajlic created on 14.06.2013. Last modified 18.06.2013

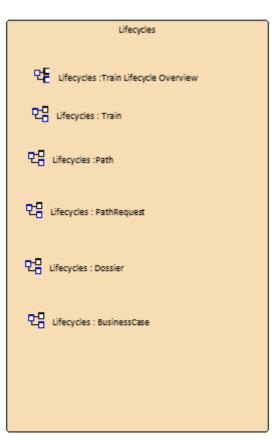


Figure 140: Lifecycles

# Lifecycles

Boundary in package 'Lifecycles'

Lifecycles
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

Lifecycles: BusinessCase

Text in package 'Lifecycles'

Lifecycles: BusinessCase

Lifecycles: BusinessCase
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

Lifecycles: Dossier

Text in package 'Lifecycles'

Lifecycles: Dossier

Lifecycles: Dossier
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

**Lifecycles: PathRequest** 

Text in package 'Lifecycles'

Lifecycles: PathRequest

Lifecycles: PathRequest
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

**Lifecycles: Train** 

Text in package 'Lifecycles'

Lifecycles: Train

Lifecycles: Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

# Lifecycles:Path

Text in package 'Lifecycles'

Lifecycles:Path

Lifecycles :Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

# **Lifecycles :Train Lifecycle Overview**

Text in package 'Lifecycles'

Lifecycles: Train Lifecycle Overview

Lifecycles :Train Lifecycle Overview
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013
Extends

# Path diagram

StateMachine diagram in package 'Lifecycles'

Path Version 1.0 seid.maglajlic created on 07.02.2013. Last modified 08.11.2017

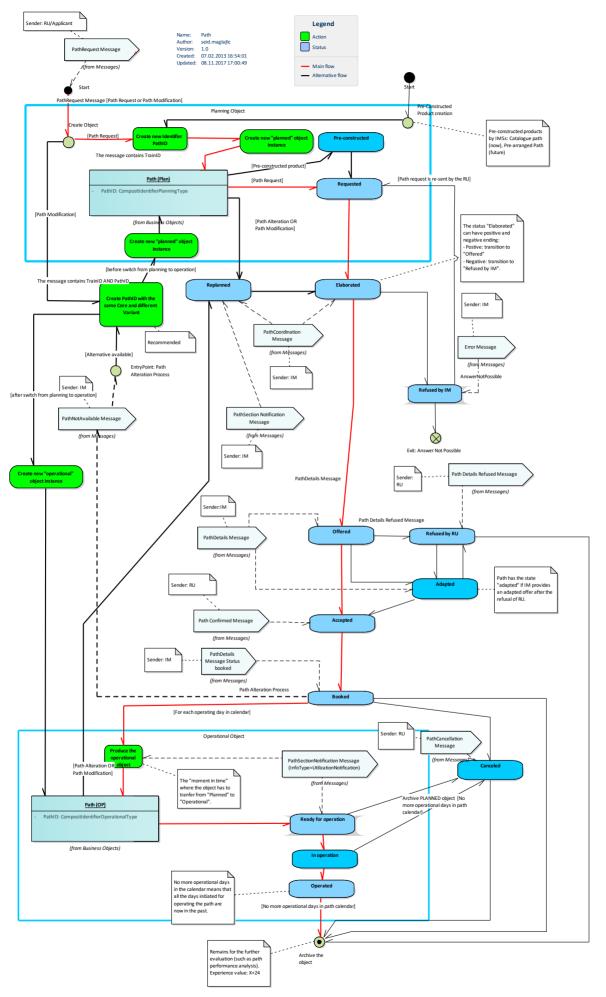


Figure 141: Path

# **PathCoordination Message**

Trigger in package 'Messages'

PathCoordination Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: In harmonization : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Create object : EntryPoint, Public

**Dependency** Source -> Destination

From: PathCoordination Message : Trigger, Public

To: Replanned : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message : Trigger, Public

To: Elaborated : State, Public

#### **PathSection Notification Message**

Trigger in package 'Messages'

PathSection Notification Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013 Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

**Dependency** Source -> Destination

From: PathSection Notification Message: Trigger, Public

To: Replanned : State, Public

# **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message : Activity, Public

**Dependency** PathID Source -> Destination From: Error Message: Trigger, Public

To: RU : Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

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#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **PathCancellation Message**

Trigger in package 'Messages'

PathCancellation Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathCancellation Message: Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: PathCancellation Message: Trigger, Public

#### **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public

To: Accepted : State, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

Pependency [path offer accepted] Source -> Destination
From: Check alternative path offer : Activity, Public
To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message: Trigger, Public

# **PathDetails Message**

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

# CONNECTORS

Pependency Source -> Destination
From: PathDetails Message : Trigger, Public
To: Finally offered : State, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message : Trigger, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** TrainID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Offered : State, Public

**Dependency** PathID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Drafted : State, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Source -> Destination
 From: PathDetails Message : Trigger, Public
 To: Path for the Train offered : State, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

# **PathDetails Message Status booked**

Trigger in package 'Messages'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public

To: Booked : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

**Dependency** Source -> Destination From: Accepted: State, Public

To: PathDetails Message Status booked : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked : Trigger, Public

## **Path Details Refused Message**

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started : Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started : Synchronization, Public

To: Path Details Refused Message: Trigger, Public

#### PathNotAvailable Message

Trigger in package 'Messages'

PathNotAvailable Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: EntryPoint: Path Alteration Process: EntryPoint, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message : Trigger, Public
To: Link processing started : Synchronization, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

**Dependency** Path Alteration Process Source -> Destination

From: Booked: State, Public

To: PathNotAvailable Message : Trigger, Public

**Dependency** Source -> Destination

From: Start link processing : Synchronization, Public To: PathNotAvailable Message : Trigger, Public

# **PathRequest Message**

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

# CONNECTORS

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: Issued (requested) : State, Public

#### CONNECTORS

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: In planning by IM : State, Public

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: In planning by IM : State, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**▶ Dependency** PathRequest ID: Mandatory Source → Destination

From: PathRequest Message : Trigger, Public

To: IM : Event, Public

**Dependency** Source -> Destination From: PathRequest Message : Trigger, Public

To: Start : Initial State, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o : Activity, Public

**Dependency** Source -> Destination
From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message : Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message: Trigger, Public

# PathSectionNotification Message (InfoType=UtilizationNotification)

Trigger in package 'Messages'

PathSectionNotification Message (InfoType=UtilizationNotification)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 18.02.2015

Model Report \_\_\_\_\_\_ 12 February, 2025

#### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Produce the operational object : Action, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Ready for operation: State, Public

**Dependency** Source -> Destination

From: Utilisation Notification Processing started: Synchronization, Public

To: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

# Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

Path : Object, Public

Path: Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Dependency Source -> Destination From: Path (Plan): Object, Public

To:

Path: Object, Public



Dependency Source -> Destination

From:

synchronize actions: Synchronization, Public

To:

Path (Plan): Object, Public



Dependency

Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public

To:

Path (Plan): Object, Public

#### **ATTRIBUTES**



PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

ASSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan) Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]

#### Note

Note in package 'Lifecycles'

Path has the state "adapted" if IM provides an adapted offer after the refusal of RU.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 17.09.2013. Last modified 17.09.2013
Extends

# Note

Note in package 'Lifecycles'

No more operational days in the calendar means that all the days initiated for operating the path are now in the past.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 17.09.2013. Last modified 17.09.2013 Extends

#### Note

Note in package 'Lifecycles'

The status "Elaborated" can have positive and negative ending:

- Postive: transition to "Offered"
- Negative: transition to "Refused by IM".

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.11.2013. Last modified 13.11.2013
Extends

# **Operational Object**

Boundary in package 'Lifecycles'

Operational Object Version 1.0 Phase 1.0 Proposed sfr created on 18.02.2013. Last modified 18.02.2013 Extends

# **Planning Object**

Boundary in package 'Lifecycles'

Planning Object Version 1.0 Phase 1.0 Proposed sfr created on 18.02.2013. Last modified 18.02.2013 Extends

#### Note

Note in package 'Lifecycles'

Sender: IM

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Recommended

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013 Extends

## **Note**

Note in package 'Lifecycles'

Sender: RU/Applicant

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

Extends

#### Note

Note in package 'Lifecycles'

Sender: RU

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

#### Note

Note in package 'Lifecycles'

Sender:IM

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

Extends

#### Note

Note in package 'Lifecycles'

Sender: IM

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Pre-constructed products by IMSs: Catalogue path (now), Pre-arranged Path (future)

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.06.2013. Last modified 18.06.2013
Extends

# **Note**

Note in package 'Lifecycles'

The "moment in time" where the object has to tranfer from "Planned" to "Operational".

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

Extends

#### Note

Note in package 'Lifecycles'

Sender: IM

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

Extends

#### **Note**

Note in package 'Lifecycles'

Sender: IM

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013 Extends

#### Note

Note in package 'Lifecycles'

Sender: IM

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Sender: RU

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013 Extends

# **Note**

Note in package 'Lifecycles'

Remains for the further evaluation (such as path performance analysis). Experience value: X+24

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

Extends

#### Note

Note in package 'Lifecycles'

Sender: RU

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

Extends

#### **Text**

Text in package 'Lifecycles'

Text
Version 1.0 Phase 1.0 Proposed
sfr created on 18.02.2013. Last modified 18.02.2013
Extends

# Archive the object

Final State in package 'Lifecycles'

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Canceled to Archive the object

Name: Archive PLANNED object

- Transition from Booked to Archive the object Guard: No more operational days in path calendar
- Transition from Refused by RU to Archive the object
- Transition from Operated to Archive the object Guard: No more operational days in path calendar

# PathRequest diagram

StateMachine diagram in package 'Lifecycles'

PathRequest Version 1.0 seid.maglajlic created on 07.02.2013. Last modified 05.07.2022

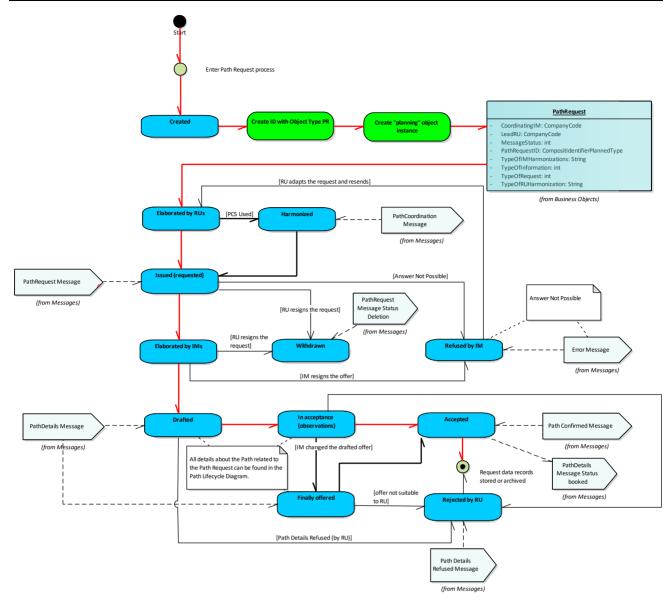


Figure 142: PathRequest

# **PathCoordination Message**

Trigger in package 'Messages'

PathCoordination Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

# Dependency Source -> Destination From: PathCoordination Message : Trigger, Public To: In harmonization : State, Public Dependency Source -> Destination From: PathCoordination Message : Trigger, Public To: Create object : EntryPoint, Public

# CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Replanned: State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message : Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Elaborated : State, Public

# **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

# CONNECTORS

Prom: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message: Trigger, Public

To: Receive error message : Activity, Public

Prom: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Messagge processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

# **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

# CONNECTORS

Dependency [path offer accepted] Source -> Destination
From: Check alternative path offer : Activity, Public
To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message : Trigger, Public

# **PathDetails Message**

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

# CONNECTORS

Pependency Source -> Destination
From: PathDetails Message : Trigger, Public
To: Finally offered : State, Public

**▶ Dependency** PathRequestID Source → Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

# CONNECTORS

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Offered: State, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

PathDetails Message : Trigger, Public

To: Drafted : State, Public

**Dependency** Source -> Destination

From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

Path for the Train offered: State, Public

Postpart Source -> Destination

Path Details Message: Trigger, Public

To: Path for the Train offered: State, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination

From: Path processing started: Synchronization, Public

To: PathDetails Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

# **PathDetails Message Status booked**

Trigger in package 'Messages'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Booked : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

**Dependency** Source -> Destination

From: Accepted : State, Public

To: PathDetails Message Status booked : Trigger, Public

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked: Trigger, Public

# **Path Details Refused Message**

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

# **PathRequest Message**

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

# CONNECTORS

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: Issued (requested) : State, Public

✓ Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

# CONNECTORS

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM: Event, Public

**Dependency** Source -> Destination From: PathRequest Message : Trigger, Public

To: Start : Initial State, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o : Activity, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message: Trigger, Public

# **PathRequest Message Status Deletion**

Trigger in package 'Messages'

PathRequest Message Status Deletion Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: PathRequest Message Status Deletion: Trigger, Public

To: Withdrawn : State, Public

**Dependency** Source -> Destination

From: Path Request Message Status Deletion Processing started: Synchronization, Public

To: PathRequest Message Status Deletion : Trigger, Public

# **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]
PathRequestID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
TypeOfInformation: int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]
TypeOfRUHarmonization : String Private	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) TrainInformation
Cardinality: [1]	Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) CaseReference
Cardinality: [*]	Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) NetworkSpecificParameter
Cardinality: [0]	Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest	Target: Public (Object) PathInformation
Cardinality: [1]	Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier	Target: Public (Object) PathRequest
Cardinality: [1]	Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan)	Target: Public (Object) PathRequest
Cardinality: [1]	Cardinality: [*]

# Note

Note in package 'Lifecycles'

All details about the Path related to the Path Request can be found in the Path Lifecycle Diagram.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Answer Not Possible

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013 Extends

# Request data records stored or archived

Final State in package 'Lifecycles'

# INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Rejected by RU to Request data records stored or archived
- Transition from Accepted to Request data records stored or archived

# **Train diagram**

StateMachine diagram in package 'Lifecycles'

Train
Version 1.0
seid.maglajlic created on 07.02.2013. Last modified 17.09.2013



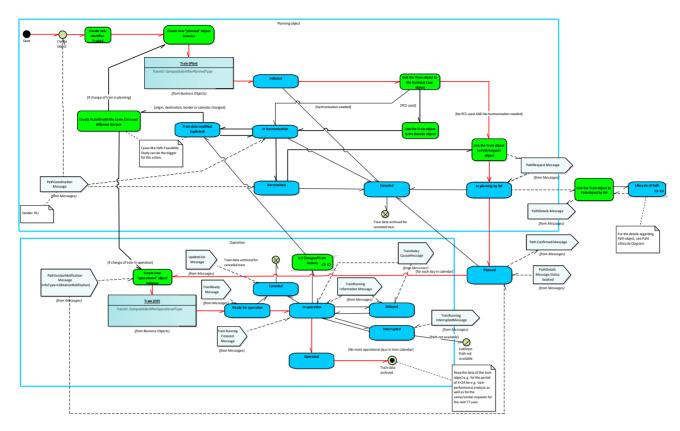


Figure 143: Train

# **PathCoordination Message**

Trigger in package 'Messages'

PathCoordination Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

# CONNECTORS Dependency Source -> Destination From: PathCoordination Message: Trigger, Public To: In harmonization: State, Public Dependency Source -> Destination PathCoordination Message: Trigger, Public From: To: Create object : EntryPoint, Public Dependency Source -> Destination From: PathCoordination Message: Trigger, Public Replanned: State, Public To:

# CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Elaborated : State, Public

# **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

**Dependency** [path offer accepted] Source -> Destination

From: Check alternative path offer : Activity, Public
To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

# CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message: Trigger, Public

# **PathDetails Message**

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

# CONNECTORS

Pependency Source -> Destination
From: PathDetails Message : Trigger, Public
To: Finally offered : State, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Offered : State, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

# CONNECTORS

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Drafted : State, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID : Activity, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Source -> Destination
 From: PathDetails Message : Trigger, Public
 To: Path for the Train offered : State, Public

**Dependency** TrainID Source -> Destination From: PathDetails Message : Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination

From: Path processing started : Synchronization, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

# CONNECTORS

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

# **PathDetails Message Status booked**

Trigger in package 'Messages'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Booked : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

**Dependency** Source -> Destination From: Accepted: State, Public

To: PathDetails Message Status booked : Trigger, Public

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked : Trigger, Public

# **PathRequest Message**

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

# CONNECTORS

PathRequest Message: Trigger, Public
To: Issued (requested): State, Public

PathRequest Message: Trigger, Public
To: In planning by IM: State, Public

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message : Trigger, Public

To: IM : Event, Public

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

**Dependency** Source -> Destination From: PathRequest Message : Trigger, Public

To: Start : Initial State, Public

**Dependency** Source -> Destination
From: PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o : Activity, Public

**Dependency** Source -> Destination
From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH: Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message : Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message : Trigger, Public

# **TrainDelay CauseMessage**

Trigger in package 'Messages'

TrainDelay CauseMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Delay Cause Message processing started: Synchronization, Public

To: TrainDelay CauseMessage : Trigger, Public

# **TrainReady Message**

Trigger in package 'Messages'

TrainReady Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

# CONNECTORS

Pependency Source -> Destination
From: TrainReady Message : Trigger, Public
To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Train Ready Message processing started : Synchronization, Public

To: TrainReady Message : Trigger, Public

# **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: ActivityPartition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

# **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

# CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Information Message processing started : Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

# TrainRunning InterruptedMessage

Trigger in package 'Messages'

TrainRunning InterruptedMessage
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 21.05.2013

# CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning InterruptedMessage: Trigger, Public

To: Interrupted : State, Public

**Dependency** Source -> Destination

From: Train Running Interrupted Message processing started: Synchronization, Public

To: TrainRunning InterruptedMessage: Trigger, Public

# **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### **CONNECTORS**

Dependency Source -> Destination
From: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_m : Activity, Public

#### CONNECTORS

Prom: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

# PathSectionNotification Message (InfoType=UtilizationNotification)

Trigger in package 'Messages'

PathSectionNotification Message (InfoType=UtilizationNotification)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 18.02.2015

# CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Produce the operational object : Action, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Utilisation Notification Processing started: Synchronization, Public

To: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

# **OUTGOING STRUCTURAL RELATIONSHIPS**

← Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# CONNECTORS

Prom: Train (OP) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

Target: Public (Object) TrainInformation

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1] Cardinality: [1]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan) Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

# INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

# **CONNECTORS**

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

# Operation

Boundary in package 'Lifecycles'

Operation
Version 1.0 Phase 1.0 Proposed
sfr created on 18.02.2013. Last modified 12.06.2013
Extends

# **Planning object**

Boundary in package 'Lifecycles'

Planning object Version 1.0 Phase 1.0 Proposed sfr created on 18.02.2013. Last modified 12.06.2013 Extends

#### Note

Note in package 'Lifecycles'

Keep the data of the train object e.g. for the period of X+24 for e.g. train performance analysis as well as for the same/similar requests for the next TT year

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013
Extends

# Note

Note in package 'Lifecycles'

Cases like Path Feasibility Study can be the trigger for this action.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013
Extends

# **Note**

Note in package 'Lifecycles'

Sender: RU

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 12.06.2013. Last modified 12.06.2013
Extends

# Note

Note in package 'Lifecycles'

For the details regarding Path object, see Paht Lifecycle Diagram.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

Extends

# **Text**

Text in package 'Lifecycles'

Text
Version 1.0 Phase 1.0 Proposed
sfr created on 18.02.2013. Last modified 18.02.2013
Extends

# Train data archived

Final State in package 'Lifecycles'

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Operated to Train data archived Guard: No more operational days in train calendar

# **Train Lifecycle Overview diagram**

StateMachine diagram in package 'Lifecycles'

Train Lifecycle Overview
Version 1.0
seid.maglajlic created on 12.06.2013. Last modified 08.09.2014

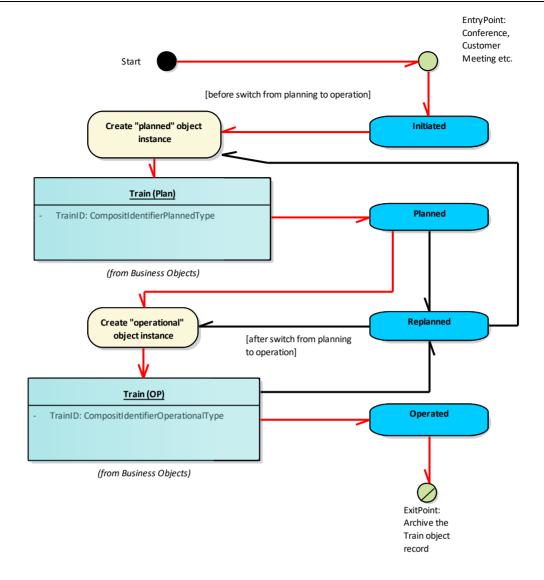


Figure 144: Train Lifecycle Overview

# Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013



# CONNECTORS Dependency Source -> Destination From: Train (OP): Object, Public To: Train: Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan) Version 1.0 Phase 1.0 Proposed Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Dependency Source -> Destination Train (Plan): Object, Public Train: Object, Public To:

# **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

Association (direction: Destination -> Source)

Source: Public (Object) Train (Plan)

Target: Public (Object) PathRequest

Cardinality: [1] Cardinality: [\*]

# **ASSOCIATIONS** Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Dossier Cardinality: [\*] Cardinality: [1]

# 4.9 ChangeofTrain Activity

State in package 'Lifecycles'

4.9 ChangeofTrain Activity Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from 4.9 ChangeofTrain Activity to Train data modified (updated)

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In operation to 4.9 ChangeofTrain Activity

# **Accepted**

State in package 'Lifecycles'

Accepted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Accepted to Request data records stored or archived

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In acceptance (observations) to Accepted

Transition from Finally offered to Accepted

# CONNECTORS

**Dependency** Source -> Destination

From: Accepted : State, Public

To: PathDetails Message Status booked : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

# **Adapted**

State in package 'Lifecycles'

Adapted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Adapted to Refused by RU

ransition from Adapted to Accepted

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Refused by RU to Adapted

Transition from Offered to Adapted

# CONNECTORS

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

#### **Canceled**

State in package 'Lifecycles'

Canceled Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

ransition from Canceled to Train data archived for canceled train



# **Canceled**

State in package 'Lifecycles'

Canceled Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

- ransition from Canceled to Train data archived for canceled train
- ransition from Canceled to Archive the object

# INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from In operation to Canceled
- Transition from Ready for operation to Canceled

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Booked to Canceled
- Transition from Ready for operation to Canceled
- Transition from In operation to Canceled

# CONNECTORS

**Dependency** Source -> Destination From: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: PathCancellation Message: Trigger, Public

To: Canceled : State, Public

#### **Canceled**

State in package 'Lifecycles'

Canceled Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Canceled to Case Reference data record stored / archived

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Canceled
Guard: Object owner decided to close the case

Transition from Updated to Canceled
Guard: Object owner decided to close the case

# **Commercially treated**

State in package 'Lifecycles'

Commercially treated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Commercially treated to Business Case stored / archived

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Updated to Commercially treated

#### Created

State in package 'Lifecycles'

Created Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Created to Create ID with Object Type PR

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Enter Path Request process to Created

# **Delayed**

State in package 'Lifecycles'

Delayed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Delayed to In operation

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In operation to Delayed

#### **CONNECTORS**

**Dependency** Source -> Destination

From: TrainRunning Information Message : Trigger, Public

To: Delayed : State, Public

## CONNECTORS

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: Delayed : State, Public

## **Draft offer adapted**

State in package 'Lifecycles'

Draft offer adapted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **Drafted**

State in package 'Lifecycles'

Drafted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Drafted to Rejected by RU Guard: Path Details Refused (by RU)
- ransition from Drafted to In acceptance (observations)

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated by IMs to Drafted

### CONNECTORS

PathDetails Message: Trigger, Public

To: Drafted : State, Public

## **Elaborated by IMs**

State in package 'Lifecycles'

Elaborated by IMs Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ransition from Elaborated by IMs to Milestone: Draft offer issued

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of Path to Elaborated by IMs

## **Elaborated by IMs**

State in package 'Lifecycles'

Elaborated by IMs Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 13.11.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Elaborated by IMs to Withdrawn Guard: RU resigns the request
- rransition from Elaborated by IMs to Drafted
- Transition from Elaborated by IMs to Refused by IM Guard: IM resigns the offer

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Issued (requested) to Elaborated by IMs

## **Elaborated by RUs**

State in package 'Lifecycles'

Elaborated by RUs Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 13.11.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Elaborated by RUs to Harmonized Guard: PCS Used
- ransition from Elaborated by RUs to Issued (requested)

## INCOMING BEHAVIORAL RELATIONSHIPS

- Object Flow from PathRequest to Elaborated by RUs
- Transition from Refused by IM to Elaborated by RUs Guard: RU adapts the request and resends

## **Finally offered**

State in package 'Lifecycles'

Finally offered Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- rransition from Finally offered to Accepted
- Transition from Finally offered to Rejected by RU Guard: offer not suitable to RU

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In acceptance (observations) to Finally offered Guard: IM changed the drafted offer

## **CONNECTORS**

Pependency Source -> Destination
From: PathDetails Message : Trigger, Public
To: Finally offered : State, Public

## Harmonized

State in package 'Lifecycles'

Harmonized Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

**◆** Transition from Harmonized to Issued (requested)

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated by RUs to Harmonized

Guard: PCS Used

### CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

# Harmonized by RUs

State in package 'Lifecycles'

Harmonized by RUs Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Harmonized by RUs to Lifecycle of Train

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Dossier to Harmonized by RUs

# In acceptance (observations)

State in package 'Lifecycles'

In acceptance (observations)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from In acceptance (observations) to Finally offered Guard: IM changed the drafted offer
- Transition from In acceptance (observations) to Accepted
- rransition from In acceptance (observations) to Rejected by RU

## INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Drafted to In acceptance (observations)

# In acceptance (observations)

State in package 'Lifecycles'

In acceptance (observations)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from In acceptance (observations) to In post-processing

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Milestone: Draft offer issued to In acceptance (observations)

## In Active Timetable

State in package 'Lifecycles'

In Active Timetable
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from In Active Timetable to Dossier closed

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In final offer to In Active Timetable

### In final offer

State in package 'Lifecycles'

In final offer Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from In final offer to In Active Timetable

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In post-processing to In final offer

# In operation

State in package 'Lifecycles'

In operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ransition from In operation to Operated
- + Transition from In operation to 4.9 ChangeofTrain Activity
- rransition from In operation to Canceled
- rransition from In operation to Delayed
- rransition from In operation to Interrupted

## INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Interrupted to In operation
- Transition from Ready for operation to In operation
- Transition from Delayed to In operation

# CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: In operation : State, Public

### CONNECTORS

**Dependency** Se

Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

## In operation

State in package 'Lifecycles'

In operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ransition from In operation to Operated
- ransition from In operation to Canceled

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Ready for operation to In operation

## In post-processing

State in package 'Lifecycles'

In post-processing Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from In post-processing to In final offer

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In acceptance (observations) to In post-processing

### **Initiated**

State in package 'Lifecycles'

Initiated Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Initiated to Create "planned" object instance

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from EntryPoint: Conference, Customer Meeting etc. to Initiated

### Initiated

State in package 'Lifecycles'

Initiated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Initiated to Lifecycle of CaseReference
Guard: one or more Case References created

## INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Business Case to Initiated

## Interrupted

State in package 'Lifecycles'

Interrupted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Interrupted to ExitPoint: Path not available Guard: Path not available
- ransition from Interrupted to In operation

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In operation to Interrupted

## CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning InterruptedMessage: Trigger, Public

To: Interrupted : State, Public

### Intiated

State in package 'Lifecycles'

Intiated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ransition from Intiated to Linked to BusinessCase object
- Transition from Intiated to Linked to PathRequest object Guard: Reference to PathRequest needed
- Transition from Intiated to Linked to Path object Guard: Reference to Path needed
- Transition from Intiated to Canceled
  Guard: Object owner decided to close the case
- Transition from Intiated to Linked to Train object
  Guard: Reference to Train needed
- Transition from Intiated to Linked to Dossier object Guard: Reference to Dossier needed

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from CaseReference to Intiated

# **Issued (requested)**

State in package 'Lifecycles'

Issued (requested)
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Issued (requested) to Refused by IM Guard: Answer Not Possible

Transition from Issued (requested) to Withdrawn Guard: RU resigns the request

ransition from Issued (requested) to Elaborated by IMs

### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Harmonized to Issued (requested)
- Transition from Elaborated by RUs to Issued (requested)

#### CONNECTORS

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: Issued (requested) : State, Public

## Lifecycle of CaseReference

State in package 'Lifecycles'

Lifecycle of CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Lifecycle of CaseReference to Updated Guard: Notification about the updates
- rransition from Lifecycle of CaseReference to Lifecycle of Train

## INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Initiated to Lifecycle of CaseReference
  Guard: one or more Case References created
- Transition from update object states (status) to Lifecycle of CaseReference

# **Lifecycle of Dossier**

State in package 'Lifecycles'

Lifecycle of Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ransition from Lifecycle of Dossier to Lifecycle of PathRequest
- rransition from Lifecycle of Dossier to update object states (status)

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of Train to Lifecycle of Dossier Guard: PCS used

# Lifecycle of Path

State in package 'Lifecycles'

Lifecycle of Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Lifecycle of Path to update object states (status)

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of PathRequest to Lifecycle of Path

# Lifecycle of Path

State in package 'Lifecycles'

Lifecycle of Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 Information Flow from Lifecycle of Path to Link the Train object to Path object by IM

Model Report 12 February	, 2025
OUTGOING BEHAVIORAL RELATIONSHIPS	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from Link the Train object to Path object by IM to Lifecycle of Path	
Lifecycle of Path	
State in package 'Lifecycles'	
Lifecycle of Version 1.0 Phase 1.0 Prop seid.maglajlic created on 19.06.2013. Last modified 28.06.	osed
OUTGOING BEHAVIORAL RELATIONSHIPS	
◆ Transition from Lifecycle of Path to Elaborated by IMs	
INCOMING BEHAVIORAL RELATIONSHIPS	
Transition from Lifecycle of PathRequest to Lifecycle of Path	
Lifecycle of PathRequest	
State in package 'Lifecycles'	
Lifecycle of PathRe Version 1.0 Phase 1.0 Prop seid.maglajlic created on 19.06.2013. Last modified 28.06.	osed
OUTGOING BEHAVIORAL RELATIONSHIPS	
◆ Transition from Lifecycle of PathRequest to Lifecycle of Path	
◆ Transition from Lifecycle of PathRequest to update object states (status)	
INCOMING BEHAVIORAL RELATIONSHIPS	

Transition from Lifecycle of Train to Lifecycle of PathRequest Guard: No PCS used

Transition from Lifecycle of Dossier to Lifecycle of PathRequest

# Lifecycle of PathRequest

State in package 'Lifecycles'

Lifecycle of PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Lifecycle of PathRequest to Lifecycle of Path

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Milestone: Path Request issued to Lifecycle of PathRequest

# **Lifecycle of Train**

State in package 'Lifecycles'

Lifecycle of Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Lifecycle of Train to Lifecycle of Dossier Guard: PCS used
- Transition from Lifecycle of Train to Lifecycle of PathRequest Guard: No PCS used

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of CaseReference to Lifecycle of Train

## **Lifecycle of Train**

State in package 'Lifecycles'

Lifecycle of Train Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Lifecycle of Train to Milestone: Path Request issued

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Harmonized by RUs to Lifecycle of Train

## Linked to BusinessCase object

State in package 'Lifecycles'

Linked to BusinessCase object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Linked to BusinessCase object to Synchronization of states

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Linked to BusinessCase object

## **Linked to Dossier object**

State in package 'Lifecycles'

Linked to Dossier object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Linked to Dossier object to Synchronization of states

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Linked to Dossier object Guard: Reference to Dossier needed

## **Linked to Path object**

State in package 'Lifecycles'

Linked to Path object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

### OUTGOING BEHAVIORAL RELATIONSHIPS

ransition from Linked to Path object to Synchronization of states

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Linked to Path object
Guard: Reference to Path needed

# Linked to PathRequest object

State in package 'Lifecycles'

Linked to PathRequest object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Linked to PathRequest object to Synchronization of states

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Linked to PathRequest object Guard: Reference to PathRequest needed

## **Linked to Train object**

State in package 'Lifecycles'

Linked to Train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

🖛 Transition from Linked to Train object to Synchronization of states

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Intiated to Linked to Train object Guard: Reference to Train needed

## Open

State in package 'Lifecycles'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

$\cap$	HTCOING	<b>REHAVIORAL</b>	REL	ATIONSHIP
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ControlFlow from Open to Create business object

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from EntryPoint: Use PCS to Open

## **Operated**

State in package 'Lifecycles'

Operated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Operated to ExitPoint: Archive the Train object record

## INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (OP) to Operated

## **Planned**

State in package 'Lifecycles'

Planned Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

- ← ControlFlow from Planned to Create "operational" object instance
- rransition from Planned to Replanned

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Planned

### Pre-constructed

State in package 'Lifecycles'

Pre-constructed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.06.2013. Last modified 18.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Pre-constructed to Requested

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Pre-constructed Guard: Pre-constructed product

## **Ready for operation**

State in package 'Lifecycles'

Ready for operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ransition from Ready for operation to Canceled
- ransition from Ready for operation to In operation

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (OP) to Ready for operation

# CONNECTORS

Dependency Source -> Destination
 From: TrainReady Message : Trigger, Public
 To: Ready for operation : State, Public

# Refused by IM

State in package 'Lifecycles'

Refused by IM

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Refused by IM to Elaborated by RUs Guard: RU adapts the request and resends

### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Issued (requested) to Refused by IM Guard: Answer Not Possible
- Transition from Elaborated by IMs to Refused by IM Guard: IM resigns the offer

## CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

## Rejected by RU

State in package 'Lifecycles'

Rejected by RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Rejected by RU to Request data records stored or archived

## INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Drafted to Rejected by RU Guard: Path Details Refused (by RU)
- Transition from In acceptance (observations) to Rejected by RU
- Transition from Finally offered to Rejected by RU Guard: offer not suitable to RU

### CONNECTORS

**Dependency** Source

Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

## Replanned

State in package 'Lifecycles'

Replanned Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Replanned to Create "planned" object instance Guard: before switch from planning to operation

ControlFlow from Replanned to Create "operational" object instance Guard: after switch from planning to operation

### INCOMING BEHAVIORAL RELATIONSHIPS

- Object Flow from Train (OP) to Replanned
- Transition from Planned to Replanned

### State1

State in package 'Lifecycles'

State1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **Updated**

State in package 'Lifecycles'

Updated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Updated to Commercially treated

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of CaseReference to Updated Guard: Notification about the updates

## **Updated**

State in package 'Lifecycles'

Updated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

- ransition from Updated to Case Reference data record stored / archived
- Transition from Updated to Canceled
  Guard: Object owner decided to close the case

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Synchronization of states to Updated

### **CONNECTORS**

**Dependency** Source -> Destination From: Updated : State, Public

To: CaseReference : Object, Public

## Withdrawn

State in package 'Lifecycles'

Withdrawn Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Issued (requested) to Withdrawn Guard: RU resigns the request

Transition from Elaborated by IMs to Withdrawn

Guard: RU resigns the request

## CONNECTORS

**Dependency** Source -> Destination

From: PathRequest Message Status Deletion: Trigger, Public

To: Withdrawn : State, Public

## **Accepted**

State in package 'Lifecycles'

Accepted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Accepted to Booked

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Offered to Accepted

Transition from Adapted to Accepted

### **CONNECTORS**

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

## **Booked**

State in package 'Lifecycles'

Booked Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ransition from Booked to Canceled

Name: Archive PLANNED object

Transition from Booked to Archive the object
Guard: No more operational days in path calendar

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Booked to Produce the operational object

Guard: For each operating day in calendar

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Accepted to Booked

### CONNECTORS

**Dependency** Path Alteration Process Source -> Destination

From: Booked : State, Public

To: PathNotAvailable Message : Trigger, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Booked : State, Public

**Dependency** Source -> Destination

From: ReceiptConfirmation Message: Trigger, Public

To: Booked : State, Public

## **Initiated**

State in package 'Lifecycles'

Initiated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 12.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Initiated to Link the Train object to the Business Case object

rransition from Initiated to Canceled

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Initiated

## **Elaborated**

State in package 'Lifecycles'

Elaborated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Elaborated to EntryPoint: Path Alteration Process
Guard: Path Alteration

4 Transition from Elaborated to Offered

Triggers:

PathDetails Message Signal

rransition from Elaborated to Refused by IM

## INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Replanned to Elaborated
- Transition from Requested to Elaborated

## CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Elaborated : State, Public

## Harmonized

State in package 'Lifecycles'

Harmonized Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Harmonized to Link the Train object to Path Request object
- 4 Transition from Harmonized to Canceled

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In harmonization to Harmonized

### INCOMING BEHAVIORAL RELATIONSHIPS

## CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

## In harmonization

State in package 'Lifecycles'

In harmonization
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 12.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- rransition from In harmonization to Harmonized
- Transition from In harmonization to Canceled
- rransition from In harmonization to Train data modified (updated)

## INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Link the Train object to the Business Case object to In harmonization Guard: harmonization needed
- Transition from Train data modified (updated) to In harmonization
- ControlFlow from Link the Train object to the Dossier object to In harmonization

## CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: In harmonization : State, Public

## Offered

State in package 'Lifecycles'

Offered

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Offered to Accepted

rransition from Offered to Refused by RU

Triggers:

Path Details Refused Message Signal

ransition from Offered to Adapted

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from EntryPoint: Path Alteration Process to Offered

Transition from Elaborated to Offered

Triggers:

PathDetails Message Signal

### CONNECTORS

**Dependency** Source -> Destination
From: PathDetails Message: Trigger, Public

To: Offered : State, Public

# **Operated**

State in package 'Lifecycles'

Operated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

Transition from Operated to Archive the object Guard: No more operational days in path calendar

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In operation to Operated

## Path for the Train accepted

State in package 'Lifecycles'

Path for the Train accepted Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Path for the Train accepted to Train data adapted to the offered Path

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Path for the Train offered to Path for the Train accepted

### CONNECTORS

Dependency

Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

### Path for the Train offered

State in package 'Lifecycles'

Path for the Train offered Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Path for the Train offered to Path for the Train accepted

### CONNECTORS

Path Details Message: Trigger, Public
To: Path for the Train offered: State, Public

## In planning by IM

State in package 'Lifecycles'

In planning by IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 18.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- rransition from In planning by IM to Canceled
- rransition from In planning by IM to Planned

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Link the Train object to Path Request object to In planning by IM

### **CONNECTORS**

**Dependency** Source -> Destination From: In planning by IM: State, Public

To: Link the Train object to Path object by IM : Action, Public

PathRequest Message: Trigger, Public
To: In planning by IM: State, Public

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: In planning by IM : State, Public

## **Ready for operation**

State in package 'Lifecycles'

Ready for operation Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- Transition from Ready for operation to Canceled
- ransition from Ready for operation to In operation

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (OP) to Ready for operation

### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Ready for operation : State, Public

## Refused by IM

State in package 'Lifecycles'

Refused by IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Refused by IM to Requested Guard: Path request is re-sent by the RU

rransition from Refused by IM to Exit: Answer Not Possible

#### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated to Refused by IM

## CONNECTORS

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public To: Refused by IM : State, Public

# Refused by RU

State in package 'Lifecycles'

Refused by RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Refused by RU to Adapted

ransition from Refused by RU to Archive the object

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Adapted to Refused by RU

Transition from Offered to Refused by RU

Triggers:

Path Details Refused Message Signal

## CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

## Replanned

State in package 'Lifecycles'

Replanned Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Replanned to Elaborated

## INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Replanned Guard: Path Alteration OR Path Modification

Object Flow from Path (OP) to Replanned Guard: Path Alteration OR Path Modification

### CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Replanned : State, Public

**Dependency** Source -> Destination

From: PathSection Notification Message: Trigger, Public

To: Replanned : State, Public

## Requested

State in package 'Lifecycles'

Requested Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 18.02.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Requested to Elaborated

#### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Refused by IM to Requested Guard: Path request is re-sent by the RU
- Object Flow from Path (Plan) to Requested Guard: Path Request
- Transition from Pre-constructed to Requested

# Train data adapted to the offered Path

State in package 'Lifecycles'

Train data adapted to the offered Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Path for the Train accepted to Train data adapted to the offered Path

### CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

# Train data modified (updated)

State in package 'Lifecycles'

Train data modified (updated)
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Train data modified (updated) to Create TrainID with the same Core and different Variant Guard: origin, destination, border or calendar changed
- rransition from Train data modified (updated) to In harmonization

### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from 4.9 ChangeofTrain Activity to Train data modified (updated)
- Transition from In harmonization to Train data modified (updated)

# **Operated**

State in package 'Lifecycles'

Operated Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Operated to Train data archived Guard: No more operational days in train calendar

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In operation to Operated

## **Planned**

State in package 'Lifecycles'

Planned Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- rransition from Planned to Canceled
- ControlFlow from Planned to Create new "operational" object instance Guard: for each day in calendar

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In planning by IM to Planned

## CONNECTORS

**Dependency** Source -> Destination

From: Planned : State, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Planned : State, Public

## **Updated**

State in package 'Lifecycles'

Updated
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

## Create "operational" object instance

Activity in package 'Lifecycles'

Create "operational" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Object Flow from Create "operational" object instance to Train (OP)

## INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Planned to Create "operational" object instance
- ControlFlow from Replanned to Create "operational" object instance Guard: after switch from planning to operation

## Create "planned" object instance

Activity in package 'Lifecycles'

Create "planned" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from Create "planned" object instance to CaseReference

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create ID with Object Type CR to Create "planned" object instance

# Create "planned" object instance

Activity in package 'Lifecycles'

Create "planned" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Object Flow from Create "planned" object instance to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Initiated to Create "planned" object instance
- ControlFlow from Replanned to Create "planned" object instance Guard: before switch from planning to operation

# Create "planned" object instance

Activity in package 'Lifecycles'

Create "planned" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ Object Flow from Create "planned" object instance to Business Case

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create ID with Object Type BC (new) to Create "planned" object instance

## Create "planning" object instance

Activity in package 'Lifecycles'

Create "planning" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from Create "planning" object instance to PathRequest

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create ID with Object Type PR to Create "planning" object instance

## Create business object

Activity in package 'Lifecycles'

Create business object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from Create business object to Dossier

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Open to Create business object

## Create ID with Object Type BC (new)

Activity in package 'Lifecycles'

Create ID with Object Type BC (new)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Create ID with Object Type BC (new) to Create "planned" object instance

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Business partners negotiation to Create ID with Object Type BC (new)

## **Create ID with Object Type CR**

Activity in package 'Lifecycles'

Create ID with Object Type CR Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ ControlFlow from Create ID with Object Type CR to Create "planned" object instance

## INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from EntryPoint: Reference to a business object found to Create ID with Object Type CR

## **Create ID with Object Type CR**

Activity in package 'Lifecycles'

Create ID with Object Type CR Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **Create ID with Object Type PR**

Activity in package 'Lifecycles'

Create ID with Object Type PR Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Create ID with Object Type PR to Create "planning" object instance

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Created to Create ID with Object Type PR

## Create new "operational" object instance

Activity in package 'Lifecycles'

Create new "operational" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

• Object Flow from Create new "operational" object instance to Path (OP)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create PathID with the same Core and different Variant to Create new "operational" object instance Guard: after switch from planning to operation

# Create new "planned" object instance

Activity in package 'Lifecycles'

Create new "planned" object instance
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ Object Flow from Create new "planned" object instance to Path (Plan)

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create new Identifier PathID to Create new "planned" object instance

# Create new "planned" object instance

Activity in package 'Lifecycles'

Create new "planned" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Object Flow from Create new "planned" object instance to Path (Plan)

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create PathID with the same Core and different Variant to Create new "planned" object instance Guard: before switch from planning to operation

### Create new "planned" object instance

Activity in package 'Lifecycles'

Create new "planned" object instance Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from Create new "planned" object instance to Train (Plan)

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Create new identifier TrainId to Create new "planned" object instance
- ControlFlow from Create TrainID with the same Core and different Variant to Create new "planned" object instance Guard: if change of train in planning

### **Link to Dossier object**

Activity in package 'Lifecycles'

Link to Dossier object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### Link to Path object

Activity in package 'Lifecycles'

Link to Path object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### Link to Path Request object

Activity in package 'Lifecycles'

Link to Path Request object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### Link to Train object

Activity in package 'Lifecycles'

Link to Train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.06.2013. Last modified 19.06.2013

### IM

Event in package 'Lifecycles'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 09.04.2013. Last modified 09.04.2013

### RU

Event in package 'Lifecycles'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

### RU

Event in package 'Lifecycles'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 09.04.2013. Last modified 09.04.2013

### **CONNECTORS**

Prom: Error Message: Trigger, Public

To: RU: Event, Public

### RU

Event in package 'Lifecycles'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 09.04.2013. Last modified 09.04.2013

### CONNECTORS

PathDetails Message: Trigger, Public

To: RU: Event, Public

Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

### **Business partners negotiation**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Business partners negotiation to Create ID with Object Type BC (new)

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to Business partners negotiation

### **Enter Path Request process**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 Transition from Enter Path Request process to Created

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to Enter Path Request process

### **EntryPoint: Conference, Customer Meeting etc.**

EntryPoint in package 'Lifecycles'

### OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from EntryPoint: Conference, Customer Meeting etc. to Initiated

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to EntryPoint: Conference, Customer Meeting etc.

### **EntryPoint: Reference to a business object found**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from EntryPoint: Reference to a business object found to Create ID with Object Type CR

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start: find a reference to a business object to EntryPoint: Reference to a business object found

### **EntryPoint: Use PCS**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from EntryPoint: Use PCS to Open

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to EntryPoint: Use PCS

### **ExitPoint: Archive the Train object record**

ExitPoint in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Operated to ExitPoint: Archive the Train object record

### **Pre-Constructed Product creation**

EntryPoint in package 'Lifecycles'

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from Pre-Constructed Product creation to Create new Identifier PathID

### INCOMING BEHAVIORAL RELATIONSHIPS

Model Report \_\_\_\_\_\_ 12 February, 2025

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to Pre-Constructed Product creation

### Train data archived for canceled train

ExitPoint in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Canceled to Train data archived for canceled train

### Train data archived for canceled train

ExitPoint in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Canceled to Train data archived for canceled train

### **Create Object**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: The message contains TrainID AND PathID

ControlFlow from Create Object to Create PathID with the same Core and different Variant Guard: Path Modification

Name: The message contains TrainID

ControlFlow from Create Object to Create new Identifier PathID Guard: Path Request

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to Create Object
Guard: Path Request or Path Modification

Triggers:

PathRequest Message Signal

### **Create object**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Create object to Create new identifier TrainId

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Start to Create object

### CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Create object : EntryPoint, Public

### **EntryPoint: Path Alteration Process**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from EntryPoint: Path Alteration Process to Create PathID with the same Core and different Variant Guard: Alternative available

### **CONNECTORS**

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: EntryPoint: Path Alteration Process : EntryPoint, Public

### **EntryPoint: Path Alteration Process**

EntryPoint in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from EntryPoint: Path Alteration Process to Offered

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated to EntryPoint: Path Alteration Process Guard: Path Alteration

### **Exit: Answer Not Possible**

ExitPoint in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Refused by IM to Exit: Answer Not Possible

### **ExitPoint: Path not available**

ExitPoint in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Interrupted to ExitPoint: Path not available Guard: Path not available

### **ExitPoint: Answer Not Possible**

ExitPoint in package 'Lifecycles'

### Archive the record

ActivityFinal in package 'Lifecycles'

### **Business Case stored / archived**

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Commercially treated to Business Case stored / archived

### Case Reference data record stored / archived

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Updated to Case Reference data record stored / archived
- Transition from Canceled to Case Reference data record stored / archived

### INCOMING BEHAVIORAL RELATIONSHIPS

### **Dossier closed**

ActivityFinal in package 'Lifecycles'

### **Dossier closed**

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from In Active Timetable to Dossier closed

### Legend

Text in package 'Lifecycles'

Legend
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 12.06.2013. Last modified 12.06.2013
Extends

### Milestone: Draft offer issued

Junction in package 'Lifecycles'

### OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Milestone: Draft offer issued to In acceptance (observations)

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Elaborated by IMs to Milestone: Draft offer issued

### Milestone: Path Request issued

Junction in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Milestone: Path Request issued to Lifecycle of PathRequest

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Lifecycle of Train to Milestone: Path Request issued

### Request data records stored or archived

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

- Transition from Rejected by RU to Request data records stored or archived
- Transition from Accepted to Request data records stored or archived

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Transition from Start to EntryPoint: Use PCS

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Start to Enter Path Request process

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Start to Pre-Constructed Product creation

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ransition from Start to Business partners negotiation

### Start

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Start to EntryPoint: Conference, Customer Meeting etc.

### Start: find a reference to a business object

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Start: find a reference to a business object to EntryPoint: Reference to a business object found

### **Archive operational object**

Final State in package 'Lifecycles'

### **Archive the object**

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Canceled to Archive the object

Name: Archive PLANNED object

- Transition from Booked to Archive the object Guard: No more operational days in path calendar
- Transition from Refused by RU to Archive the object
- Transition from Operated to Archive the object Guard: No more operational days in path calendar

### Create PathID with the same Core and different Variant

Action in package 'Lifecycles'

Create PathID with the same Core and different Variant Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Create PathID with the same Core and different Variant to Create new "operational" object instance Guard: after switch from planning to operation
- ControlFlow from Create PathID with the same Core and different Variant to Create new "planned" object instance Guard: before switch from planning to operation

### INCOMING BEHAVIORAL RELATIONSHIPS

Name: The message contains TrainID AND PathID

- ControlFlow from Create Object to Create PathID with the same Core and different Variant Guard: Path Modification
- ControlFlow from EntryPoint: Path Alteration Process to Create PathID with the same Core and different Variant Guard: Alternative available

### Create TrainID with the same Core and different Variant

Action in package 'Lifecycles'

Create TrainID with the same Core and different Variant
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from Create TrainID with the same Core and different Variant to Create new "operational" object instance Guard: if change of train in operation
- ControlFlow from Create TrainID with the same Core and different Variant to Create new "planned" object instance Guard: if change of train in planning

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train data modified (updated) to Create TrainID with the same Core and different Variant Guard: origin, destination, border or calendar changed

### **Create new Identifier PathID**

Action in package 'Lifecycles'

Create new Identifier PathID Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Create new Identifier PathID to Create new "planned" object instance

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Pre-Constructed Product creation to Create new Identifier PathID

Name: The message contains TrainID

ControlFlow from Create Object to Create new Identifier PathID

Guard: Path Request

### Create new identifier TrainId

Action in package 'Lifecycles'

Create new identifier TrainId Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ ControlFlow from Create new identifier TrainId to Create new "planned" object instance

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Create object to Create new identifier TrainId

### Link the Train object to Path Request object

Action in package 'Lifecycles'

Link the Train object to Path Request object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Link the Train object to Path Request object to In planning by IM

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Harmonized to Link the Train object to Path Request object

ControlFlow from Link the Train object to the Business Case object to Link the Train object to Path Request object Guard: No PCS used AND No harmonization needed

### CONNECTORS

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message : Trigger, Public

### Link the Train object to Path object by IM

Action in package 'Lifecycles'

Link the Train object to Path object by IM

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 11.02.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Link the Train object to Path object by IM to Lifecycle of Path

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from Lifecycle of Path to Link the Train object to Path object by IM

### CONNECTORS

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message: Trigger, Public

Prom: In planning by IM: State, Public

To: Link the Train object to Path object by IM: Action, Public

### Link the Train object to the Business Case object

Action in package 'Lifecycles'

Link the Train object to the Business Case object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### STRUCTURAL PART OF Link the Train object to the Business Case object

ActionPin1 : ActionPin

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Link the Train object to the Business Case object to In harmonization Guard: harmonization needed
- ControlFlow from Link the Train object to the Business Case object to Link the Train object to the Dossier object Guard: PCS used
- ControlFlow from Link the Train object to the Business Case object to Link the Train object to Path Request object Guard: No PCS used AND No harmonization needed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Initiated to Link the Train object to the Business Case object

### ActionPin1

ActionPin owned by 'Link the Train object to the Business Case object', in package 'Lifecycles'

### Link the Train object to the Dossier object

Action in package 'Lifecycles'

Link the Train object to the Dossier object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 11.02.2013. Last modified 11.02.2013

### STRUCTURAL PART OF Link the Train object to the Dossier object

s ActionPin2 : ActionPin

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Link the Train object to the Dossier object to In harmonization

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Link the Train object to the Business Case object to Link the Train object to the Dossier object Guard: PCS used

### ActionPin2

ActionPin owned by 'Link the Train object to the Dossier object', in package 'Lifecycles'

### Create new "operational" object instance

Action in package 'Lifecycles'

Create new "operational" object instance
Version 1.0 Phase 1.0 Proposed
sfr created on 18.02.2013. Last modified 18.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from Create new "operational" object instance to Train (OP)

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Create TrainID with the same Core and different Variant to Create new "operational" object instance Guard: if change of train in operation
- ControlFlow from Planned to Create new "operational" object instance Guard: for each day in calendar
- Information Flow from PathSectionNotification Message (InfoType=UtilizationNotification) to Create new "operational" object instance

### Produce the operational object

Action in package 'Lifecycles'

Produce the operational object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

• Object Flow from Produce the operational object to Path (OP)

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Booked to Produce the operational object

Guard: For each operating day in calendar

### **CONNECTORS**

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Produce the operational object : Action, Public

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

rransition from Start to Create object

### **Start**

Initial State in package 'Lifecycles'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Transition from Start to Create Object
Guard: Path Request or Path Modification

Triggers:

PathRequest Message Signal

### **CONNECTORS**

PathRequest Message : Trigger, Public

To: Start : Initial State, Public

### Train data archived

Final State in package 'Lifecycles'

### INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Operated to Train data archived Guard: No more operational days in train calendar

### **Business Case**

Object in package 'Business Objects'

Business Case Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

INCOMING STRUCTURAL RELATIONSHIPS	
→ Aggregation from CaseReference to Business Case	[ Direction is 'Source -> Destination'. ]
→ Aggregation from Dossier to Business Case	[ Direction is 'Source -> Destination'. ]
ATTRIBUTES	
BusinessCaseID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
CommercialParamters : Complex Private	[ Is static True. Containment is Not Specified. ]
Timetable : Timetable Private	[ Is static True. Containment is Not Specified. ]

### CaseReference

Object in package 'Business Objects'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.09.2013

### OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from CaseReference to Business Case [ Direction is 'Source -> Destination'. ]

### CONNECTORS

**Dependency** Source -> Destination

From: Updated : State, Public

To: CaseReference : Object, Public

## ATTRIBUTES CaseReferenceID : CompositIdentifierPlannedType Private [ Is static True. Containment is Not Specified. ] Name : String Private [ Is static True. Containment is Not Specified. ] Period\_From : Date Private [ Is static True. Containment is Not Specified. ]

[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference	Target: Public (Object) Dossier
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Source -> Destination)	
Source: Public (Object) Path (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]

### CaseReference (Overview)

Object in package 'Business Objects'

CaseReference (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ATTRIBUTES	
CaseReferenceID: Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) CaseReference
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) PathRequest (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Train (Overview)

### Coach

Object in package 'Business Objects'

Coach
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

ASSOCIATIONS	
Association (direction: Unspecified)	
Association (direction, Olispecified)	
Source: Public (Object) ThroughCoach	Target: Public (Object) Coach

### **Dossier**

Object in package 'Business Objects'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

### OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Dossier to Business Case

[ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
DossierID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
▼ TimetableYear : int Private	[ Is static True. Containment is Not Specified. ]
▼ Title : String Private	[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS Association (direction: Unspecified) Source: Public (Object) Dossier Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Dossier Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) CaseReference Target: Public (Object) Dossier Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Dossier Cardinality: [\*] Cardinality: [1]

### **JourneyLocation**

Object in package 'Business Objects'

JourneyLocation Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 18.02.2015

### *NetworkSpecificParameter*

Object in package 'Business Objects'

NetworkSpecificParameter Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 18.02.2015

ATTRIBUTES	
Name : String Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PlannedJourenyLocation Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]

### **Path**

Object in package 'Business Objects'

Path
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### CONNECTORS

Path (Plan) : Object, Public

To: Path : Object, Public

### CONNECTORS

Path : Object, Public

Path: Object, Public

### **ATTRIBUTES**

JourneyLocations: PlannedJourneyLocation Protected

[ Is static True. Containment is Not Specified. ]

PathParameters : PlannedTrainParameters Protected

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Path (Overview) Target: Public (Object) Path

### Path (Overview)

Object in package 'Business Objects'

Path (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### **ELEMENTS OWNED BY Path (Overview)**

■ OperationalTrainNumber (OTN) : Artifact

Path (OP): Object

Path (Plan): Object

### ATTRIBUTES

Calendar : Private

[ Is static True. Containment is Not Specified. ]

OTN 1: Private

[ Is static True. Containment is Not Specified. ]

ATTRIBUTES	
◆ OTN 2 : Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
Path Parameters: Private	[ Is static True. Containment is Not Specified. ]
PathID: Private	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Private	[ Is static True. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) Path (Overview)	Target: Public (Object) Path
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) Train (Overview)	Target: Public (Object) Path (Overview)

### OperationalTrainNumber (OTN)

Artifact owned by 'Path (Overview)', in package 'Business Objects'

OTN is contained on each path section. Indication of the OTN on one location means that the OTN is valid for the section starting at this location until the next subsequent one.

On the subsequent path segment (i.e. between next two locations), the OTN can be changed.

OperationalTrainNumber (OTN) Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 06.03.2015 Model Report \_\_\_\_\_\_ 12 February, 2025

### CONNECTORS

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: PlannedJourenyLocation : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

### Path (OP)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (OP) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

**Dependency** Source -> Destination From: Path (OP) : Object, Public

To: Train Running Forecast Message: Trigger, Public

Path (OP): Object, Public

To: Path : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (OP): Object, Public

### ATTRIBUTES

PathID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (OP)

Cardinality: [1]

Target: Public (Object) PlannedJourenyLocation

Cardinality: [\*]

### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

### CONNECTORS

Dependency

Source -> Destination Path (Plan): Object, Public

From: Path: Object, Public



Source -> Destination

synchronize actions: Synchronization, Public

Path (Plan): Object, Public To:



Dependency Source -> Destination

OperationalTrainNumber (OTN): Artifact, Public From:

Path (Plan): Object, Public

### **ATTRIBUTES**



PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

Target: Public (Object) PathInformation

### ASSOCIATIONS



Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Cardinality: [1]

Cardinality: [1]

Association (direction: Source -> Destination)

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# ASSOCIATIONS Source: Public (Object) Path (Plan) Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Dossier Cardinality: [1] Association (direction: Unspecified) Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Dossier Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Cardinality: [\*] Cardinality: [\*]

### Path new (OP)

Object in package 'Business Objects'

Path new (OP) Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013

### Path Z (Plan)

Object in package 'Business Objects'

Path Z (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 10.06.2013

### **PathInformation**

Object in package 'Business Objects'

PathInformation Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 18.02.2015

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from PlannedJourenyLocation to PathInformation

[ Direction is 'Destination -> Source'. ]

### **ATTRIBUTES**

Calendar : PlannedCalendar Private

[ Is static True. Containment is Not Specified. ]

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### ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Object) Path (Plan) Target: Public (Object) PathInformation Cardinality: [1] Cardinality: [1] Association (direction: Source -> Destination) Source: Public (Object) PathRequest Target: Public (Object) PathInformation Cardinality: [1] Cardinality: [1]

### PathRequest (Overview)

Object in package 'Business Objects'

**ELEMENTS OWNED BY PathRequest (Overview)** 

Association (direction: Unspecified)

Association (direction: Unspecified)

PathRequest (Overview) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

PathRequest : Object	
ATTRIBUTES	
✓ Calendar: Private	[ Is static True. Containment is Not Specified. ]
Parameters: Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Private	[ Is static True. Containment is Not Specified. ]
ASSOCIATIONS	

ASSOCIATIONS	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Train (Overview)
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) Path (Overview)
Association (direction: Unspecified)	
Source: Public (Object) CaseReference (Overview)	Target: Public (Object) PathRequest (Overview)

### **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
MessageStatus : int Private	[ Is static True. Containment is Not Specified. ]
PathRequestID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
TypeOfInformation : int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRUHarmonization : String Private	

ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]

### **PlannedJourenyLocation**

Object in package 'Business Objects'

PlannedJourenyLocation Version 1.0 Phase 1.0 Proposed seidmaglajlic created on 18.02.2015. Last modified 18.02.2015

### OUTGOING STRUCTURAL RELATIONSHIPS ← Aggregation from PlannedJourenyLocation to PathInformation [ Direction is 'Destination -> Source'. ] ← Aggregation from PlannedJourenyLocation to TrainInformation [ Direction is 'Destination -> Source'. ]

### CONNECTORS

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN) : Artifact, Public To: PlannedJourenyLocation : Object, Public

ATTRIBUTES	
FreeTextField: String256 Private	[ Is static True. Containment is Not Specified. ]
HandoverHarmonized : boolean Private	[ Is static True. Containment is Not Specified. ]
InterchangeHarmonized : boolean Private	[ Is static True. Containment is Not Specified. ]
JourneyLocationType : JourneyLocationTypeCode Private	[ Is static True. Containment is Not Specified. ]
locationID : LocationIdent Private	[ Is static True. Containment is Not Specified. ]
OnDemandPath: boolean Private	[ Is static True. Containment is Not Specified. ]
OperationalTrainNumber : String1-8 Private	[ Is static True. Containment is Not Specified. ]
PlannedTrainData : ComplexType Private	[ Is static True. Containment is Not Specified. ]
PreArrangedPath : String1-9 Private	[ Is static True. Containment is Not Specified. ]

ATTRIBUTES	
ResponsibleApplicant : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
▼ TimingAtLocation : ComplexType Private	[ Is static True. Containment is Not Specified. ]
TrainActivity: TrainActivityType Private	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PlannedJourenyLocation Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) Path (OP) Cardinality: [1]	Target: Public (Object) PlannedJourenyLocation Cardinality: [*]

### ThroughCoach

Object in package 'Business Objects'

ThroughCoach Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.02.2013

tic True. Containment is Not Specified. ]
tic True. Containment is Not Specified. ]
tic True. Containment is Not Specified. ]

### 

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) ThroughCoach Target: Public (Object) Coach

### **Train**

Object in package 'Business Objects'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### CONNECTORS

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

JourneyLocations: PlannedJourneyLocation Protected

[ Is static True. Containment is Not Specified. ]

TrainParameters: PlannedTrainParameters Protected

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Unspecified)

Source: Public (Object) Train (Overview) Target: Public (Object) Train

### **Train**

Object in package 'Business Objects'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

### Train (Overview)

Object in package 'Business Objects'

Train (Overview)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 14.06.2013. Last modified 14.06.2013

ELEMENTS OWNED BY Train (Overview)	
Train (OP): Object	
Train (Plan): Object	
ATTRIBUTES	
	[ Is static True. Containment is Not Specified. ]
▼ Timetable : Private	[ Is static True. Containment is Not Specified. ]
Train Parameters: Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) Train (Overview)	Target: Public (Object) Train
Association (direction: Unspecified)	
Source: Public (Object) Train (Overview)	Target: Public (Object) Path (Overview)

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## ASSOCIATIONS Association (direction: Unspecified) Source: Public (Object) PathRequest (Overview) Target: Public (Object) Train (Overview) Association (direction: Unspecified) Source: Public (Object) CaseReference (Overview) Target: Public (Object) Train (Overview)

### Train (OP)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (OP)

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 18.09.2013

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (OP) : Object, Public
To: Train : Object, Public

### ATTRIBUTES

TrainID : CompositIdentifierOperationalType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

### **CONNECTORS**

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

### ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Target: Public (Object) TrainInformation Cardinality: [1] Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Dossier Cardinality: [\*] Cardinality: [1]

### **TrainInformation**

Object in package 'Business Objects'

TrainInformation
Version 1.0 Phase 1.0 Proposed
seidmaglajlic created on 18.02.2015. Last modified 18.02.2015

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from PlannedJourenyLocation to TrainInformation

[ Direction is 'Destination -> Source'. ]

### ATTRIBUTES

Calendar : PlannedCalendar Private

[ Is static True. Containment is Not Specified. ]

ReferenceLocation : LocationIdent Private

[ Is static True. Containment is Not Specified. ]

### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) PathRequest

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Train (OP)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

### Train Y (Plan)

Object in package 'Business Objects'

Train Y (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 10.06.2013

#### **Messages**

Package in package 'Business Process Model'

Messages Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### Messages diagram

Analysis diagram in package 'Messages'

Messages
Version 1.0
seid.maglajlic created on 14.06.2013. Last modified 14.06.2013



(from Business Process Model)

Figure 145: Messages

#### Messages

Package in package 'Business Process Model'

Messages

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### IM

Event in package 'Messages'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### RU

Event in package 'Messages'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 15.03.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: RU: Event, Public

To: synchronize actions: Synchronization, Public

**Dependency** PathRequestID Source -> Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination

From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

#### **PathCoordination Message**

Trigger in package 'Messages'

PathCoordination Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: In harmonization : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Create object : EntryPoint, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Replanned : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Harmonized : State, Public

**Dependency** Source -> Destination

From: PathCoordination Message: Trigger, Public

To: Elaborated : State, Public

#### **PathSection Notification Message**

Trigger in package 'Messages'

PathSection Notification Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 12.06.2013. Last modified 12.06.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: PathSection Notification Message: Trigger, Public

To: Replanned : State, Public

#### **Error Message**

Trigger in package 'Messages'

Error Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

Pependency Source -> Destination
From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination From: Error Message : Trigger, Public

To: Receive error message: Activity, Public

Prom: Error Message: Trigger, Public

To: RU: Event, Public

**Dependency** AnswerNotPossible Source -> Destination

From: Error Message : Trigger, Public
To: Refused by IM : State, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Error Messagge processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message Processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processed : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started : Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

**Dependency** Source -> Destination

From: Error Message processing started: Synchronization, Public

To: Error Message : Trigger, Public

#### **PathCancellation Message**

Trigger in package 'Messages'

PathCancellation Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathCancellation Message: Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started : Synchronization, Public

To: PathCancellation Message: Trigger, Public

#### **Path Confirmed Message**

Trigger in package 'Messages'

Path Confirmed Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message: Trigger, Public

To: Accepted : State, Public

**Dependency** Source -> Destination

From: Path Confirmed Message : Trigger, Public To: Path for the Train accepted : State, Public

Pependency [path offer accepted] Source -> Destination From: Check alternative path offer : Activity, Public To: Path Confirmed Message : Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Confirmed Processing started: Synchronization, Public

To: Path Confirmed Message: Trigger, Public

**Dependency** Source -> Destination

From: Planned: State, Public

To: Path Confirmed Message: Trigger, Public

#### PathDetails Message

Trigger in package 'Messages'

c02 diagram contains the identifier processing of this message

PathDetails Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 05.06.2013

#### CONNECTORS

Pependency Source -> Destination
From: PathDetails Message : Trigger, Public
To: Finally offered : State, Public

**▶ Dependency** PathRequestID Source → Destination

From: PathDetails Message: Trigger, Public

To: RU: Event, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination
From: PathDetails Message : Trigger, Public

To: Offered : State, Public

**Dependency** PathID Source -> Destination From: PathDetails Message: Trigger, Public

To: RU: Event, Public

#### CONNECTORS

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Adapted : State, Public

**Dependency** Source -> Destination

From: PathDetails Message: Trigger, Public

To: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination From: PathDetails Message : Trigger, Public

To: Drafted : State, Public

**Dependency** Source -> Destination

From: PathDetails Message : Trigger, Public

To: SendMessageIM-RU-TR-PA-RelID: Activity, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

Dependency Source -> Destination
 From: PathDetails Message : Trigger, Public
 To: Path for the Train offered : State, Public

PathDetails Message: Trigger, Public

To: RU: Event, Public

**Dependency** Source -> Destination

From: Path processing started: Synchronization, Public

To: PathDetails Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path object by IM: Action, Public

To: PathDetails Message : Trigger, Public

**Dependency** Source -> Destination

From: Provide alternative path : Activity, Public To: PathDetails Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details processing started: Synchronization, Public

To: PathDetails Message : Trigger, Public

#### PathDetails Message Status booked

Trigger in package 'Messages'

PathDetails Message Status booked Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked: Trigger, Public

To: Booked : State, Public

**Dependency** Source -> Destination

From: PathDetails Message Status booked : Trigger, Public To: Train data adapted to the offered Path : State, Public

**Dependency** Source -> Destination From: Accepted: State, Public

To: PathDetails Message Status booked : Trigger, Public

**Dependency** Source -> Destination

From: Path Details Message Status Booked Processing started: Synchronization, Public

To: PathDetails Message Status booked: Trigger, Public

#### **Path Details Refused Message**

Trigger in package 'Messages'

Path Details Refused Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 10.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Refused by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message: Trigger, Public

To: Rejected by RU: State, Public

**Dependency** Source -> Destination

From: Path Details Refused Message processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

**Dependency** Source -> Destination

From: Path Details refused Processing started: Synchronization, Public

To: Path Details Refused Message: Trigger, Public

#### PathNotAvailable Message

Trigger in package 'Messages'

PathNotAvailable Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: EntryPoint: Path Alteration Process: EntryPoint, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination

From: PathNotAvailable Message : Trigger, Public
To: Link processing started : Synchronization, Public

#### CONNECTORS

**Dependency** Train ID: Mandatory Source -> Destination

From: PathNotAvailable Message: Trigger, Public

To: RU: Event, Public

**Dependency** Path ID: Mandatory Source -> Destination From: PathNotAvailable Message : Trigger, Public

To: RU: Event, Public

**Dependency** Path Alteration Process Source -> Destination

From: Booked : State, Public

To: PathNotAvailable Message: Trigger, Public

**Dependency** Source -> Destination

From: Start link processing : Synchronization, Public To: PathNotAvailable Message : Trigger, Public

#### PathRequest Message

Trigger in package 'Messages'

PathRequest Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 21.05.2013

#### CONNECTORS

Dependency Source -> Destination
 From: PathRequest Message : Trigger, Public
 To: Issued (requested) : State, Public

Pependency Source -> Destination
From: PathRequest Message : Trigger, Public
To: In planning by IM : State, Public

 ▶ Dependency
 Source -> Destination

 From:
 PathRequest Message : Trigger, Public

 To:
 In planning by IM : State, Public

**Dependency** Train ID: Mandatory Source -> Destination

From: PathRequest Message: Trigger, Public

To: IM : Event, Public

#### CONNECTORS

**Dependency** PathRequest ID: Mandatory Source -> Destination

From: PathRequest Message : Trigger, Public

To: IM: Event, Public

**Dependency** Source -> Destination
From: PathRequest Message : Trigger, Public

To: Start : Initial State, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: c01-SendMessage-RU-IM -TR m-CR m- PR m-OTN o-RelID o : Activity, Public

**Dependency** Source -> Destination

From: PathRequest Message : Trigger, Public

To: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH : Activity, Public

**Dependency** Source -> Destination

From: Path Request processing started: Synchronization, Public

To: PathRequest Message: Trigger, Public

**Dependency** Source -> Destination

From: Link the Train object to Path Request object : Action, Public

To: PathRequest Message : Trigger, Public

#### **PathRequest Message Status Deletion**

Trigger in package 'Messages'

PathRequest Message Status Deletion Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: PathRequest Message Status Deletion: Trigger, Public

To: Withdrawn : State, Public

**Dependency** Source -> Destination

From: Path Request Message Status Deletion Processing started: Synchronization, Public

To: PathRequest Message Status Deletion : Trigger, Public

#### ReceiptConfirmation Message

Trigger in package 'Messages'

ReceiptConfirmation Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: ReceiptConfirmation Message: Trigger, Public

To: Booked : State, Public

#### TrainAccepted Message

Trigger in package 'Messages'

TrainAccepted Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### TrainAtStart Message

Trigger in package 'Messages'

TrainAtStart Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### **TrainComposition Message**

Trigger in package 'Messages'

TrainComposition Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: TRain Composition Message procession started : Synchronization, Public

To: TrainComposition Message: Trigger, Public

#### TrainDelay CauseMessage

Trigger in package 'Messages'

TrainDelay CauseMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainDelay CauseMessage: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Delay Cause Message processing started : Synchronization, Public

To: TrainDelay CauseMessage: Trigger, Public

#### **TrainDelay Performance Message**

Trigger in package 'Messages'

TrainDelay Performance Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 02.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Delay Performance Processing started: Synchronization, Public

To: TrainDelay Performance Message: Trigger, Public

#### TrainNotSuitable Message

Trigger in package 'Messages'

TrainNotSuitable Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### **TrainParking Message**

Trigger in package 'Messages'

TrainParking Message
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 21.05.2013

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#### CONNECTORS

**Dependency** Source -> Destination

From: Train Parking Request processing started: Synchronization, Public

To: TrainParking Message : Trigger, Public

#### **TrainPosition Message**

Trigger in package 'Messages'

TrainPosition Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### **TrainReady Message**

Trigger in package 'Messages'

TrainReady Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: TrainReady Message : Trigger, Public

To: Ready for operation : State, Public

**Dependency** Source -> Destination

From: Train Ready Message processing started : Synchronization, Public

To: TrainReady Message : Trigger, Public

#### **Train Running Forecast Message**

Trigger in package 'Messages'

Train Running Forecast Message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 04.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: In operation : State, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast Message: Trigger, Public

To: RU: Activity Partition, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messaging started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination From: Path (OP): Object, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Running Forecast Messahe Processing started: Synchronization, Public

To: Train Running Forecast Message: Trigger, Public

#### **TrainRunning Information Message**

Trigger in package 'Messages'

TrainRunning Information Message
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 15.03.2013. Last modified 17.06.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: In operation : State, Public

**Dependency** Source -> Destination

From: TrainRunning Information Message: Trigger, Public

To: Delayed : State, Public

**Dependency** Source -> Destination

From: Train Running Information Message processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Information Processing started: Synchronization, Public

To: TrainRunning Information Message : Trigger, Public

**Dependency** Source -> Destination

From: Train Running Information processing started: Synchronization, Public

To: TrainRunning Information Message: Trigger, Public

#### TrainRunning InterruptedMessage

Trigger in package 'Messages'

TrainRunning InterruptedMessage
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 21.05.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: TrainRunning InterruptedMessage: Trigger, Public

To: Interrupted : State, Public

**Dependency** Source -> Destination

From: Train Running Interrupted Message processing started: Synchronization, Public

To: TrainRunning InterruptedMessage: Trigger, Public

#### TrainRunningForecastAt ReportingLocationMessage

Trigger in package 'Messages'

TrainRunningForecastAt ReportingLocationMessage
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: Train Running Forecast at reporting Location Processing started : Synchronization, Public

 $To: \qquad TrainRunningForecastAt\ ReportingLocationMessage: Trigger,\ Public$ 

**Dependency** Source -> Destination

From: IM-System : ActivityPartition, Public

To: TrainRunningForecastAt ReportingLocationMessage : Trigger, Public

#### **UpdateLink Message**

Trigger in package 'Messages'

UpdateLink Message Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 21.05.2013

#### CONNECTORS

**Dependency** Source -> Destination

From: UpdateLink Message : Trigger, Public

To: c16-SendMessage-RU-IM -TR m-PA m-OTN m : Activity, Public

Prom: UpdateLink Message : Trigger, Public

To: Canceled : State, Public

**Dependency** Source -> Destination

From: Update Link Message processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message and Path Cancellation Message processing started: Synchronization, Public

To: UpdateLink Message : Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message Processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Train Shifting to existing path processing started: Synchronization, Public

To: UpdateLink Message: Trigger, Public

**Dependency** Source -> Destination

From: Update Link Message processing started : Synchronization, Public

To: UpdateLink Message: Trigger, Public

#### PathSectionNotification Message (InfoType=UtilizationNotification)

Trigger in package 'Messages'

PathSectionNotification Message (InfoType=UtilizationNotification)

Version 1.0 Phase 1.0 Proposed

Hantak created on 02.04.2013. Last modified 18.02.2015

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#### CONNECTORS

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Planned : State, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Produce the operational object : Action, Public

**Dependency** Source -> Destination

From: PathSectionNotification Message (InfoType=UtilizationNotification): Trigger, Public

To: Ready for operation: State, Public

**Dependency** Source -> Destination

From: Utilisation Notification Processing started: Synchronization, Public

To: PathSectionNotification Message (InfoType=UtilizationNotification) : Trigger, Public

#### UpdateOf InfoAbout ObjectMessage

Trigger in package 'Messages'

UpdateOf InfoAbout ObjectMessage Version 1.0 Phase 1.0 Proposed Hantak created on 02.04.2013. Last modified 17.06.2013

#### **CONNECTORS**

**Dependency** Source -> Destination

From: Train Running Forecast Processing started: Synchronization, Public

To: UpdateOf InfoAbout ObjectMessage : Trigger, Public

#### **Common**

Package in package 'Business Process Model'

Common Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 15.03.2013

#### **HOW TO GET PATH(S) diagram**

Activity diagram in package 'Common'

HOW TO GET PATH(S) Version 1.0 Hantak created on 05.09.2013. Last modified 08.09.2013

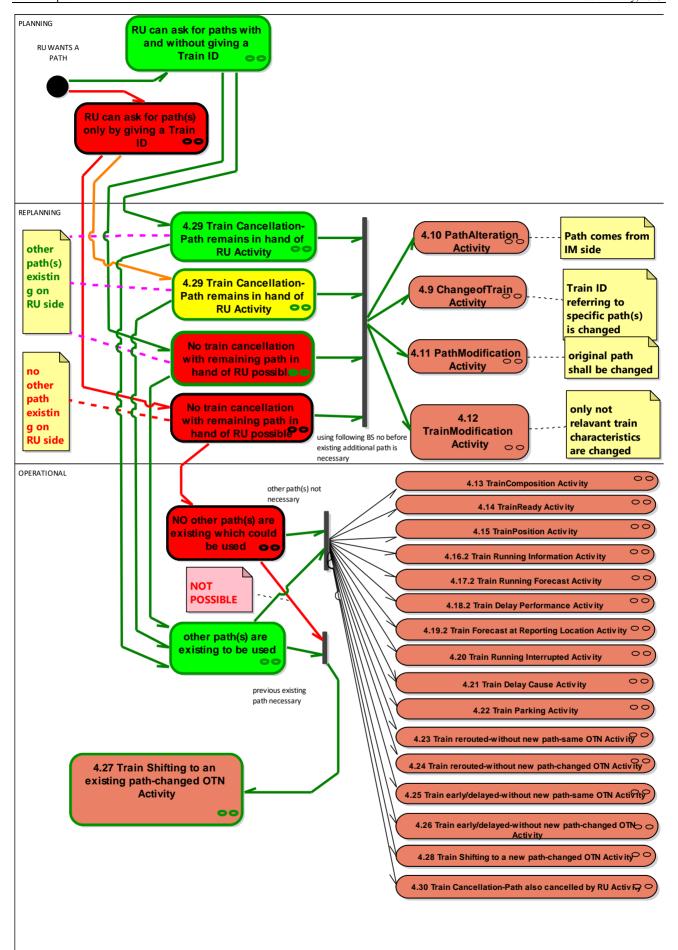


Figure 146: HOW TO GET PATH(S)

#### Note

Note in package 'Common'

Path comes from IM side

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013
Extends

#### Note

Note in package 'Common'

Train ID referring to specific path(s) is changed

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013
Extends

#### Note

Note in package 'Common'

original path shall be changed

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013
Extends

#### Note

Note in package 'Common'

only not relavant train characteristics are changed

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013
Extends

#### Note

Note in package 'Common'

other path(s) existing on RU side

Note Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 06.09.2013 Extends

#### Note

Note in package 'Common'

no other path existing on RU side

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 06.09.2013
Extends

#### Note

Note in package 'Common'

NOT POSSIBLE

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 06.09.2013
Extends

#### **RU WANTS A PATH**

ActivityInitial in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from RU WANTS A PATH to RU can ask for path(s) only by giving a Train ID
- rontrolFlow from RU WANTS A PATH to RU can ask for paths with and without giving a Train ID

#### other path(s) not necessary

Synchronization in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from other path(s) not necessary to 4.16.2 Train Running Information Activity
- ControlFlow from other path(s) not necessary to 4.17.2 Train Running Forecast Activity
- 4.28 Train Shifting to a new path-changed OTN Activity
- ControlFlow from other path(s) not necessary to 4.24 Train rerouted-without new path-changed OTN Activity

### **OUTGOING BEHAVIORAL RELATIONSHIPS** ControlFlow from other path(s) not necessary to 4.14 TrainReady Activity ControlFlow from other path(s) not necessary to 4.21 Train Delay Cause Activity ControlFlow from other path(s) not necessary to 4.18.2 Train Delay Performance Activity I ControlFlow from other path(s) not necessary to 4.30 Train Cancellation-Path also cancelled by RU Activity will ControlFlow from other path(s) not necessary to 4.25 Train early/delayed-without new path-same OTN Activity ControlFlow from other path(s) not necessary to 4.26 Train early/delayed-without new path-changed OTN Activity ControlFlow from other path(s) not necessary to 4.23 Train rerouted-without new path-same OTN Activity ControlFlow from other path(s) not necessary to 4.22 Train Parking Activity ControlFlow from other path(s) not necessary to 4.20 Train Running Interrupted Activity ControlFlow from other path(s) not necessary to 4.19.2 Train Forecast at Reporting Location Activity ControlFlow from other path(s) not necessary to 4.14 TrainReady Activity ControlFlow from other path(s) not necessary to 4.15 TrainPosition Activity ControlFlow from other path(s) not necessary to 4.13 TrainComposition Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from NO other path(s) are existing which could be used to other path(s) not necessary
- ControlFlow from other path(s) are existing to be used to other path(s) not necessary

#### previous existing path necessary

Synchronization in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from previous existing path necessary to 4.27 Train Shifting to an existing path-changed OTN Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from other path(s) are existing to be used to previous existing path necessary
- ControlFlow from NO other path(s) are existing which could be used to previous existing path necessary

#### using following BS no before existing additional path is necessary

Synchronization in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4- ControlFlow from using following BS no before existing additional path is necessary to 4.12 TrainModification Activity
- 4 ControlFlow from using following BS no before existing additional path is necessary to 4.9 ChangeofTrain Activity
- ControlFlow from using following BS no before existing additional path is necessary to 4.11 PathModification Activity
- 4.10 PathAlteration Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from No train cancellation with remaining path in hand of RU possible to using following BS no before existing additional path is necessary
- ControlFlow from No train cancellation with remaining path in hand of RU possible to using following BS no before existing additional path is necessary
- ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to using following BS no before existing additional path is necessary
- ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to using following BS no before existing additional path is necessary

#### LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE) diagram

Activity diagram in package 'Common'

LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

Version 1.0

seid.maglajlic created on 30.05.2013. Last modified 28.11.2013

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Figure 147: LINK BETWEEN TRAIN AND PATH OBJECTS EXISTS (NO CHANGE)

#### Note

Note in package 'Common'

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013 Extends

#### LINK HAS BEEN REFUSED diagram

Activity diagram in package 'Common'

LINK HAS BEEN REFUSED

Version 1.0
seid.maglajlic created on 31.05.2013. Last modified 28.06.2013

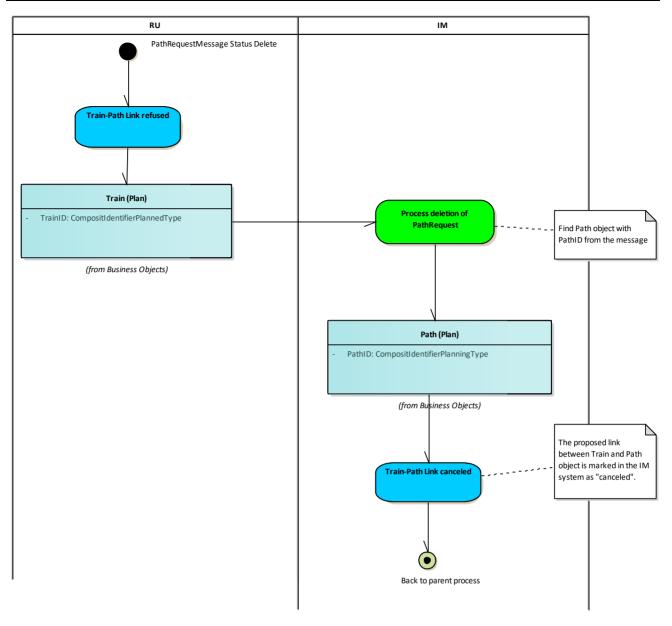


Figure 148: LINK HAS BEEN REFUSED

#### Note

Note in package 'Common'

The proposed link between Train and Path object is marked in the IM system as "canceled".

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 27.06.2013

Extends

#### Note

Note in package 'Common'

Find Path object with PathID from the message

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

#### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Pependency Source -> Destination
From: Path (Plan): Object, Public
To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan) : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

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## ASSOCIATIONS Source: Public (Object) Dossier Cardinality: [1] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*]

#### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) PathRequest Cardinality: [1] Association (direction: Unspecified)

ASSOCIATIONS		
Source: Public (Object) Train (Plan)  Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]	
Association (direction: Unspecified)		
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]	
Association (direction: Unspecified)		
Source: Public (Object) Train (Plan)  Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]	

#### LINK NOT CONFIRMED diagram

Activity diagram in package 'Common'

LINK NOT CONFIRMED Version 1.0 seid.maglajlic created on 31.05.2013. Last modified 27.06.2013

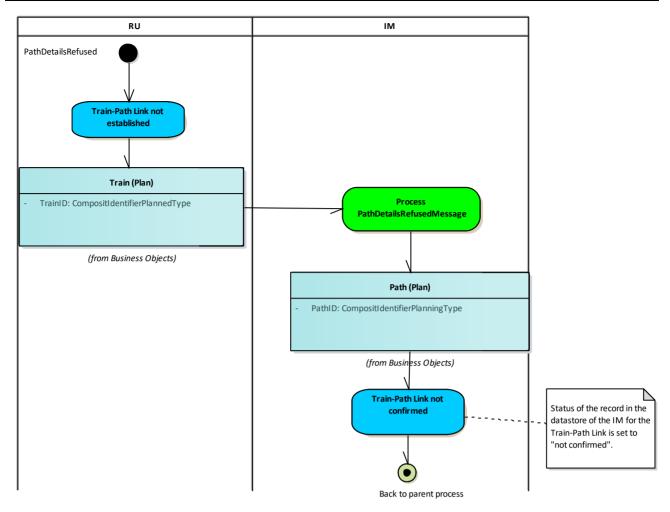


Figure 149: LINK NOT CONFIRMED

#### Note

Note in package 'Common'

Status of the record in the datastore of the IM for the Train-Path Link is set to "not confirmed".

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

Extends

#### **PathDetailsRefused**

ActivityInitial in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from PathDetailsRefused to Train-Path Link not established

#### Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

From: Path (Plan): Object, Public
To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

#### ATTRIBUTES

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

Association (direction: Unspecified)

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#### **ASSOCIATIONS**

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

#### Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Pependency Source -> Destination
From: Train (Plan): Object, Public
To: Train: Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Target: Public (Object) TrainInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Destination -> Source)

Source: Public (Object) Train (Plan)

Target: Public (Object) PathRequest

Cardinality: [1] Cardinality: [\*]

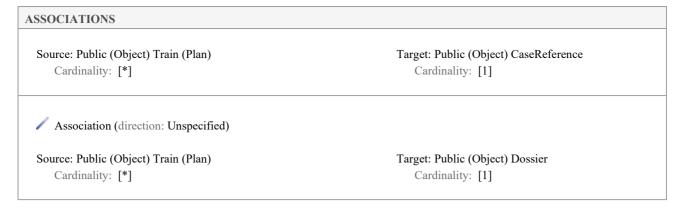
Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

Association (direction: Unspecified)



#### LINK TO BE CHECKED diagram

Activity diagram in package 'Common'

LINK TO BE CHECKED Version 1.0 Hantak created on 17.06.2013. Last modified 10.09.2013

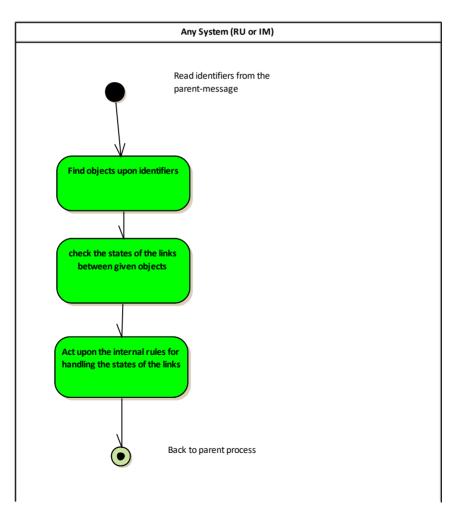


Figure 150: LINK TO BE CHECKED

#### REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Common'

REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0
seid.maglajlic created on 29.05.2013. Last modified 27.06.2013

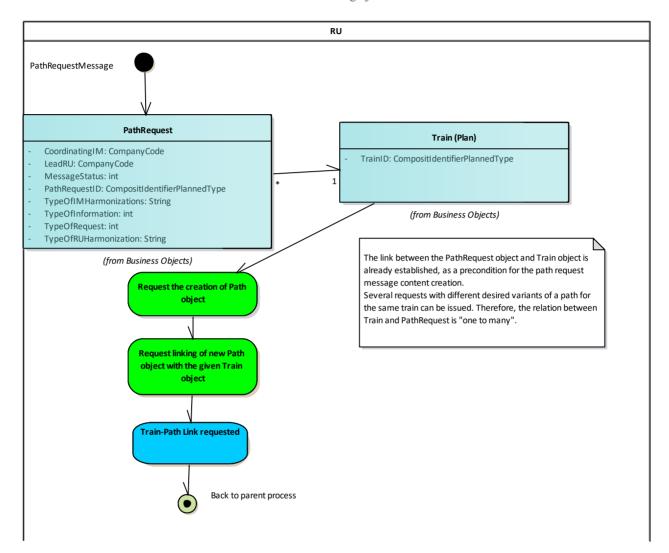


Figure 151: REQUEST FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### Note

Note in package 'Common'

The link between the PathRequest object and Train object is already established, as a precondition for the path request message content creation.

Several requests with different desired variants of a path for the same train can be issued. Therefore, the relation between Train and PathRequest is "one to many".

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 28.06.2013 Extends

#### **PathRequest**

Object owned by 'PathRequest (Overview)', in package 'Business Objects'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

ATTRIBUTES	
CoordinatingIM : CompanyCode Private	[ Is static True. Containment is Not Specified. ]
	[ Is static True. Containment is Not Specified. ]
MessageStatus: int Private	[ Is static True. Containment is Not Specified. ]
PathRequestID : CompositIdentifierPlannedType Private	[ Is static True. Containment is Not Specified. ]
TypeOfIMHarmonizations : String Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfInformation : int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRequest : int Private	[ Is static True. Containment is Not Specified. ]
▼ TypeOfRUHarmonization : String Private	[ Is static True. Containment is Not Specified. ]

SSOCIATIONS			
Association (direction: Source -> Destination)			
Source: Public (Object) PathRequest	Target: Public (Object) TrainInformation		
Cardinality: [1]	Cardinality: [1]		
Association (direction: Source -> Destination)			
Source: Public (Object) PathRequest	Target: Public (Object) CaseReference		

SSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [0]	Target: Public (Object) NetworkSpecificParameter Cardinality: [*]
Association (direction: Source -> Destination)	
Source: Public (Object) PathRequest Cardinality: [1]	Target: Public (Object) PathInformation Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Dossier Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) PathRequest (Overview)	Target: Public (Object) PathRequest
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)
Version 1.0 Phase 1.0 Proposed
Hantak created on 10.06.2013. Last modified 28.06.2013

# INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from Train (OP) to Train (Plan) [ Direction is 'Source -> Destination'. ]

# CONNECTORS Dependency Source -> Destination From: Train (Plan): Object, Public To: Train: Object, Public

ATTRIBUTES	

# 

ASSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) TrainInformation Cardinality: [1]
Association (direction: Destination -> Source)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) PathRequest Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

# PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Common'

PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH Version 1.0 seid.maglajlic created on 29.05.2013. Last modified 27.06.2013

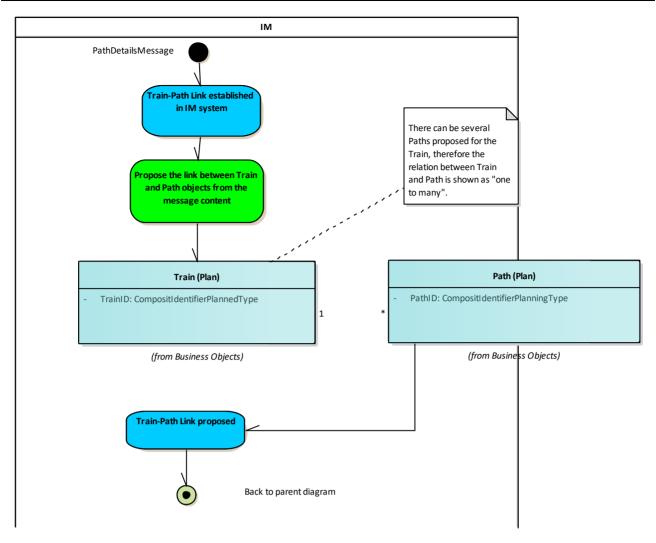


Figure 152: PROPOSAL FOR LINK BETWEEN OBJECTS TRAIN AND PATH

#### Note

Note in package 'Common'

There can be several Paths proposed for the Train, therefore the relation between Train and Path is shown as "one to many".

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 27.06.2013 Extends

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Path (Plan): Object, Public
To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### **ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

# ASSOCIATIONS Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Target: Public (Object) TrainInformation Cardinality: [1] Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*] Association (direction: Unspecified) Source: Public (Object) Train (Plan) Target: Public (Object) CaseReference Cardinality: [\*] Cardinality: [1] Association (direction: Unspecified)

ASSOCIATIONS

Source: Public (Object) Train (Plan)
Cardinality: [\*]

Target: Public (Object) Dossier
Cardinality: [1]

## CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Common'

CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0

seid.maglajlic created on 29.05.2013. Last modified 06.09.2013

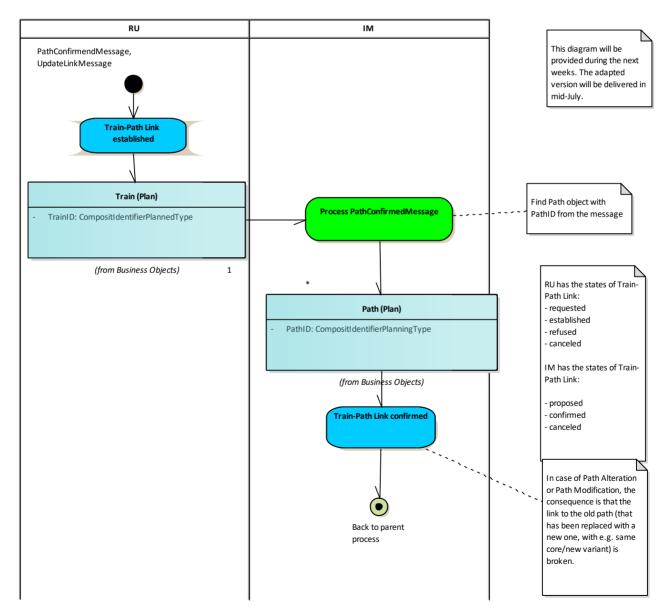


Figure 153: CONFIRMATION ABOUT LINK BETWEEN OBJECTS TRAIN AND PATH

#### Note

Note in package 'Common'

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013

Extends

#### Note

Note in package 'Common'

Find Path object with PathID from the message

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013 Extends

#### Note

Note in package 'Common'

RU has the states of Train-Path Link:

- requested
- established
- refused
- canceled

IM has the states of Train-Path Link:

- proposed
- confirmed
- canceled

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

Extends

#### Note

Note in package 'Common'

In case of Path Alteration or Path Modification, the consequence is that the link to the old path (that has been replaced with a new one, with e.g. same core/new variant) is broken.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 06.09.2013. Last modified 06.09.2013
Extends

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Path : Object, Public

Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan): Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

#### **ATTRIBUTES**

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

Association (direction: Unspecified)

Source: Public (Object) Dossier Target: Public (Object) Path (Plan)

Cardinality: [1] Cardinality: [\*]

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Train (Plan) Target: Public (Object) Path (Plan)

Cardinality: [1]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

Cardinality: [\*]

#### INCOMING STRUCTURAL RELATIONSHIPS

Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

## ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) TrainInformation

Cardinality: [1]

Association (direction: Destination -> Source)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) PathRequest

Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)

Cardinality: [1]

Target: Public (Object) Path (Plan)

Cardinality: [\*]

ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)
Cardinality: [\*]

Association (direction: Unspecified)

Source: Public (Object) Train (Plan)
Cardinality: [\*]

Target: Public (Object) Dossier
Cardinality: [\*]

Cardinality: [\*]

# BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Common'

BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

Version 1.0
seid.maglajlic created on 29.05.2013. Last modified 22.11.2013

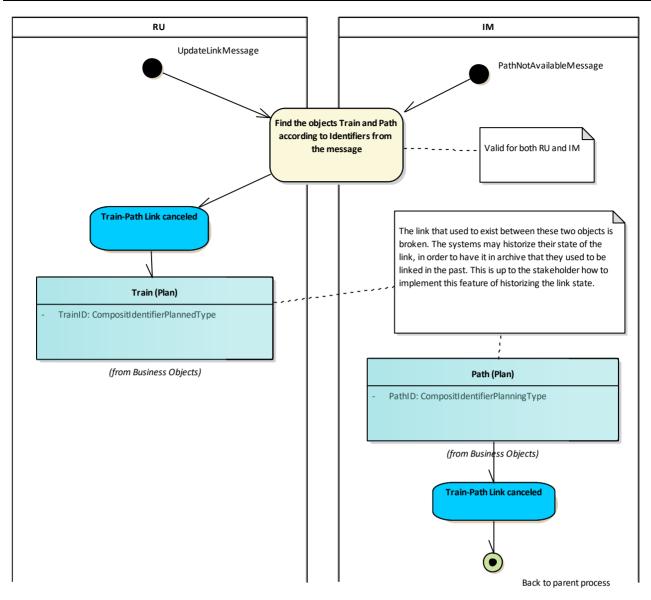


Figure 154: BREAKING OF LINK BETWEEN OBJECTS TRAIN AND PATH

#### Note

Note in package 'Common'

Valid for both RU and IM

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013
Extends

#### Note

Note in package 'Common'

The link that used to exist between these two objects is broken. The systems may historize their state of the link, in order to have it in archive that they used to be linked in the past. This is up to the stakeholder how to implement this feature of historizing the link state.

Note

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

# Path (Plan)

Object owned by 'Path (Overview)', in package 'Business Objects'

Path (Plan)
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Path (OP) to Path (Plan)

[ Direction is 'Source -> Destination'. ]

#### **CONNECTORS**

Path (Plan): Object, Public

To: Path: Object, Public

**Dependency** Source -> Destination

From: synchronize actions: Synchronization, Public

To: Path (Plan) : Object, Public

**Dependency** Source -> Destination

From: OperationalTrainNumber (OTN): Artifact, Public

To: Path (Plan): Object, Public

## ATTRIBUTES

PathID : CompositIdentifierPlanningType Private

[ Is static True. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) PathInformation

Cardinality: [1] Cardinality: [1]

Association (direction: Source -> Destination)

Source: Public (Object) Path (Plan)

Target: Public (Object) CaseReference

Cardinality: [\*] Cardinality: [1]

# Association (direction: Unspecified) Source: Public (Object) Dossier Cardinality: [1] Association (direction: Unspecified) Association (direction: Unspecified) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) Path (Plan) Cardinality: [1] Cardinality: [\*]

# Train (Plan)

Object owned by 'Train (Overview)', in package 'Business Objects'

Train (Plan)

Version 1.0 Phase 1.0 Proposed

Hantak created on 10.06.2013. Last modified 28.06.2013

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Train (OP) to Train (Plan)

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Pependency Source -> Destination
From: Train (Plan) : Object, Public
To: Train : Object, Public

#### **ATTRIBUTES**

TrainID : CompositIdentifierPlannedType Private

[ Is static True. Containment is Not Specified. ]

# Association (direction: Source -> Destination) Source: Public (Object) Train (Plan) Cardinality: [1] Association (direction: Destination -> Source) Source: Public (Object) Train (Plan) Cardinality: [1] Target: Public (Object) PathRequest Cardinality: [1] Cardinality: [1]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [1]	Target: Public (Object) Path (Plan) Cardinality: [*]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) CaseReference Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Object) Train (Plan) Cardinality: [*]	Target: Public (Object) Dossier Cardinality: [1]

# CREATION OF LINK BETWEEN OBJECTS TRAIN AND PATH diagram

Activity diagram in package 'Common'

CREATION OF LINK BETWEEN OBJECTS TRAIN AND PATH
Version 1.0
seid.maglajlic created on 29.05.2013. Last modified 24.06.2013

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Figure 155: CREATION OF LINK BETWEEN OBJECTS TRAIN AND PATH

#### Note

Note in package 'Common'

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

# LIFECYCLE AND MESSAGES diagram

Activity diagram in package 'Common'

LIFECYCLE AND MESSAGES Version 1.0

Hantak created on 05.05.2013. Last modified 24.06.2013

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Figure 156: LIFECYCLE AND MESSAGES

#### Note

Note in package 'Common'

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Note Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 24.06.2013. Last modified 24.06.2013 Extends

# **TRAIN ID diagram**

Activity diagram in package 'Common'

TRAIN ID
Version 1.0
Hantak created on 01.05.2013. Last modified 24.06.2013

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Figure 157: TRAIN ID

#### **Note**

Note in package 'Common'

This diagram will be provided during the next weeks. The adapted version will be delivered in mid-July.

Note
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 24.06.2013. Last modified 24.06.2013
Extends

c01-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Common'

c01-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-OTN\_o-RelID\_o Version 1.0 Hantak created on 26.04.2013. Last modified 28.11.2013

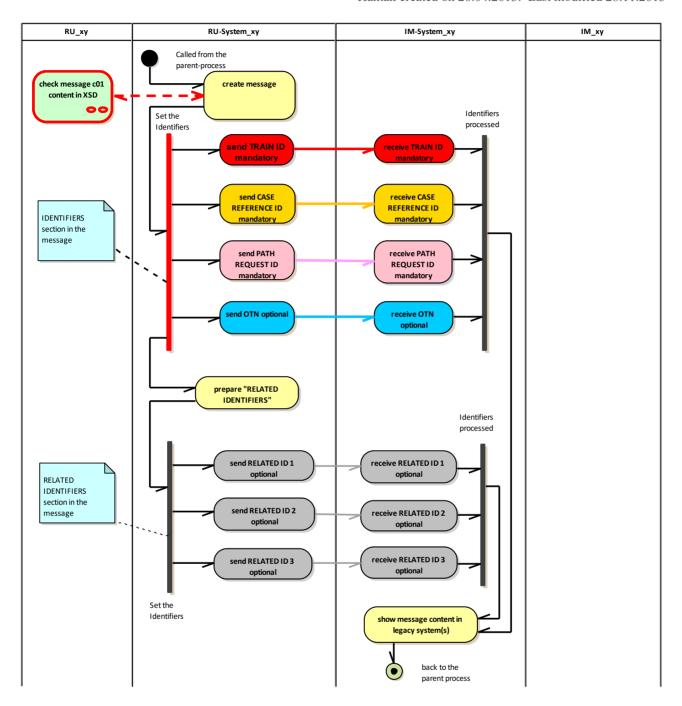


Figure 158: c01-SendMessage-RU-IM-TR m-CR m-PR m-OTN o-RelID o

# Set the Identifiers

Synchronization in package 'Common'

# OUTGOING BEHAVIORAL RELATIONSHIPS 4 ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory

Model Report

OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory

ControlFlow from Set the Identifiers to send OTN optional

ControlFlow from Set the Identifiers to send TRAIN ID mandatory

ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory

**←** ControlFlow from Set the Identifiers to prepare "RELATED IDENTIFIERS"

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from create message to Set the Identifiers

ControlFlow from create message to Set the Identifiers

# c02-SendMessage- IM-RU -TR\_m-CR\_m- PR\_m- PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Common'

c02-SendMessage- IM-RU -TR\_m-CR\_m- PR\_m- PA\_m-OTN\_o-RelID\_o Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

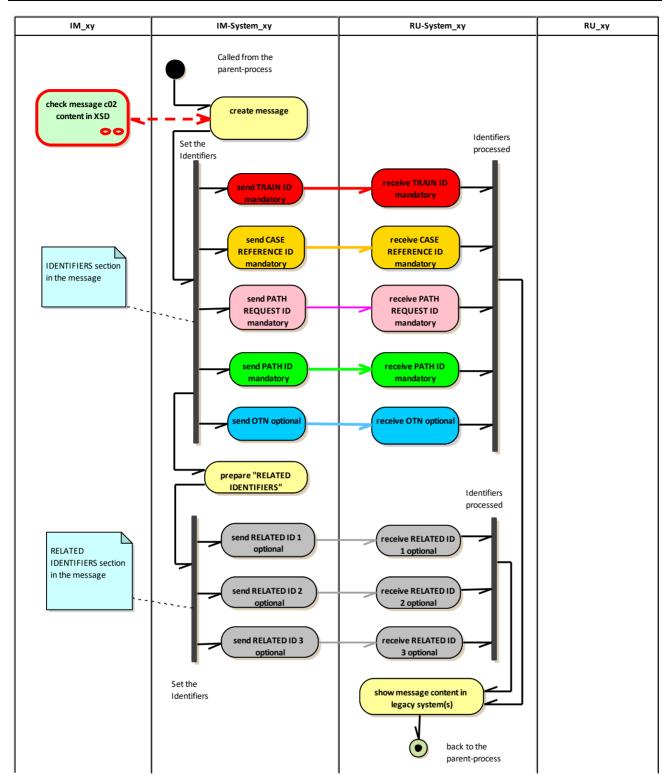


Figure 159: c02-SendMessage- IM-RU -TR m-CR m- PR m- PA m-OTN o-RelID o

# c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Common'

c03-SendMessage- RU-IM -TR\_m-CR\_m- PR\_m-PA\_m-OTN\_o-RelID\_o Version 1.0

Hantak created on 26.04.2013. Last modified 08.09.2013

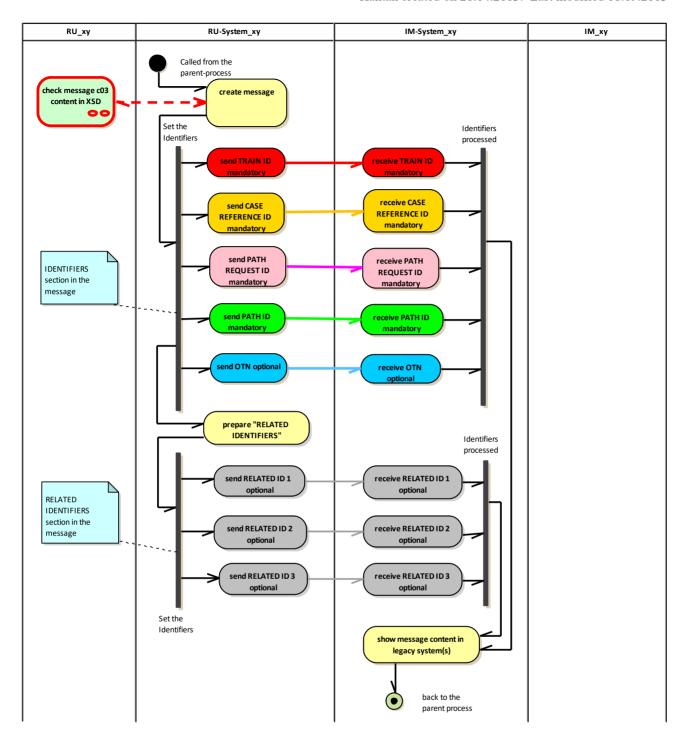


Figure 160: c03-SendMessage- RU-IM -TR m-CR m- PR m-PA m-OTN o-RelID o

# c04-SendMessage- RU-IM -TR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Common'

c04-SendMessage- RU-IM -TR\_m-PA\_m-OTN\_o Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

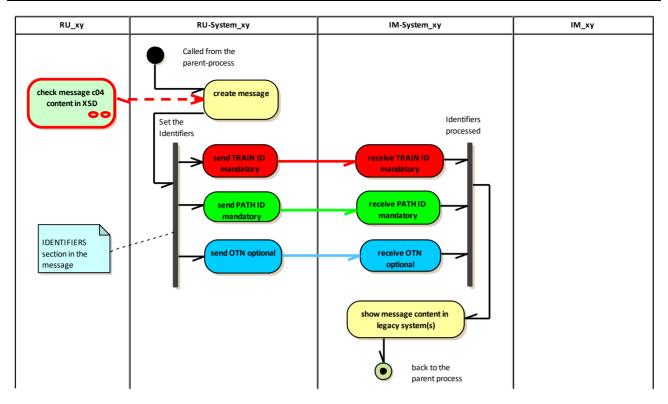


Figure 161: c04-SendMessage-RU-IM -TR\_m-PA\_m-OTN\_o

# c05-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_o diagram

Activity diagram in package 'Common'

c05-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_o Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

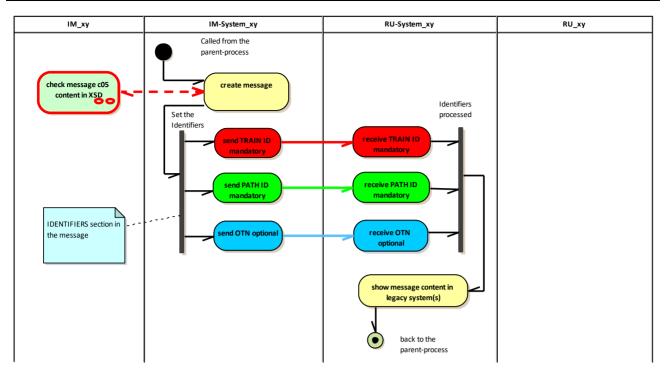


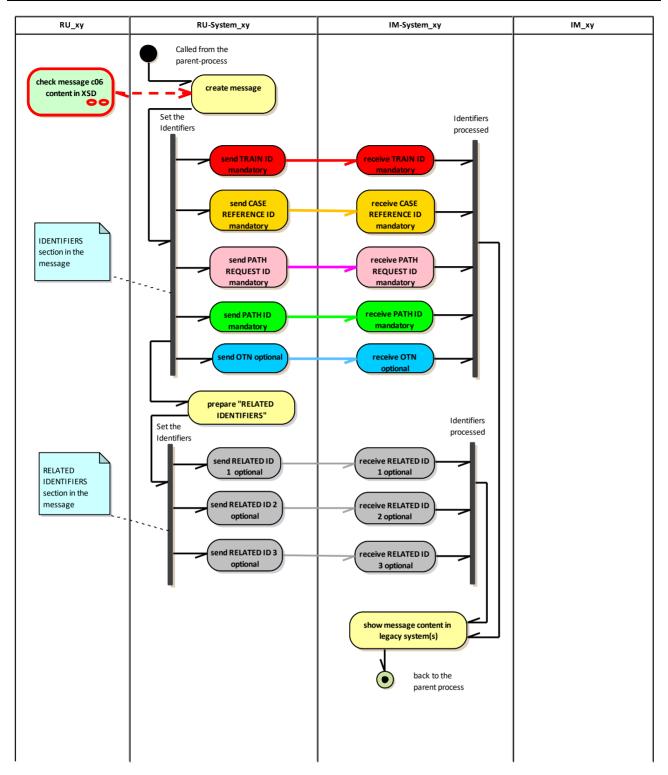
Figure 162: c05-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_o

# c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o diagram

Activity diagram in package 'Common'

c06-SendMessage- RU-IM -TR\_m-CR\_m-PR\_m- PA\_m(old)-OTN\_o-RelID\_o Version 1.0

Hantak created on 26.04.2013. Last modified 08.09.2013



 $Figure~163:~c06-SendMessage-~RU-IM~-TR\_m-CR\_m-PR\_m-~PA\_m(old)-OTN\_o-RelID\_o~-RelID$ 

# c07-SendMessage- RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o diagram

Activity diagram in package 'Common'

c07-SendMessage- RU-RU -TR\_m-CR\_m-PA\_o-OTN\_o Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

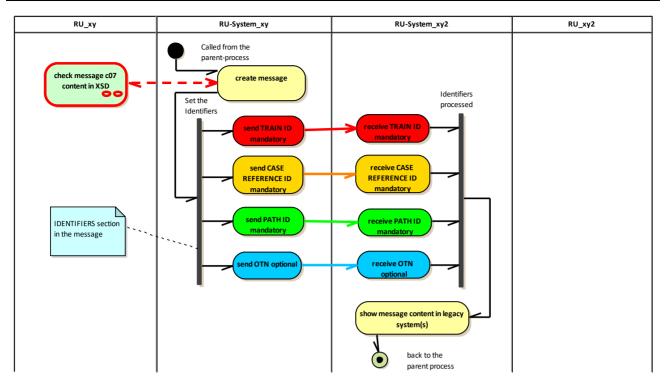


Figure 164: c07-SendMessage-RU-RU-TR\_m-CR\_m-PA\_o-OTN\_o

# c08-SendMessage- RU-IM -TR\_m-PA\_r-OTN\_r diagram

Activity diagram in package 'Common'

c08-SendMessage- RU-IM -TR\_m-PA\_r-OTN\_r Version 1.0 seid.maglajlic created on 19.04.2013. Last modified 08.09.2013

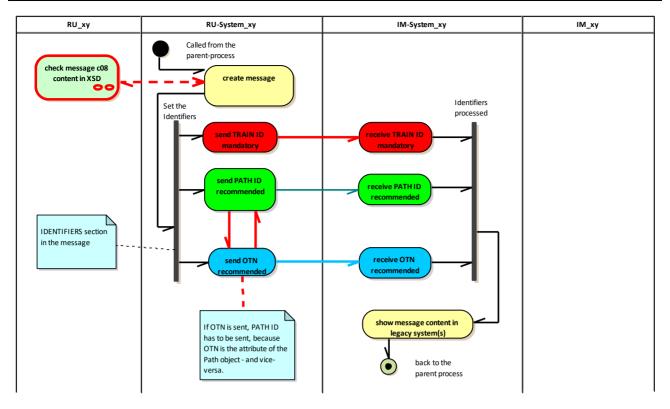


Figure 165: c08-SendMessage-RU-IM-TR\_m-PA\_r-OTN\_r

#### Note

Note in package 'Common'

If OTN is sent, PATH ID has to be sent, because OTN is the attribute of the Path object - and vice-versa.

Note
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

Extends

# c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r diagram

Activity diagram in package 'Common'

c09-SendMessage- IM-RU -TR\_m-PA\_r-OTN\_r Version 1.0 Hantak created on 26.04.2013. Last modified 28.11.2013

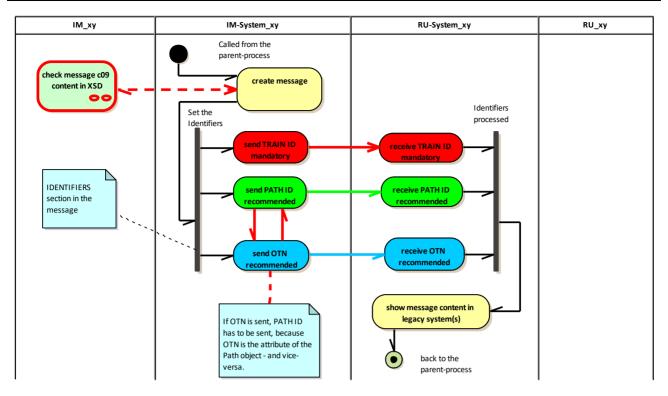


Figure 166: c09-SendMessage-IM-RU-TR\_m-PA\_r-OTN\_r

#### Note

Note in package 'Common'

If OTN is sent, PATH ID has to be sent, because OTN is the attribute of the Path object - and vice-versa.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.05.2013. Last modified 21.05.2013
Extends

## c10-SendMessage- IM-RU -TR\_m-PA\_o-OTN\_m diagram

Activity diagram in package 'Common'

c10-SendMessage- IM-RU -TR\_m-PA\_o-OTN\_m Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

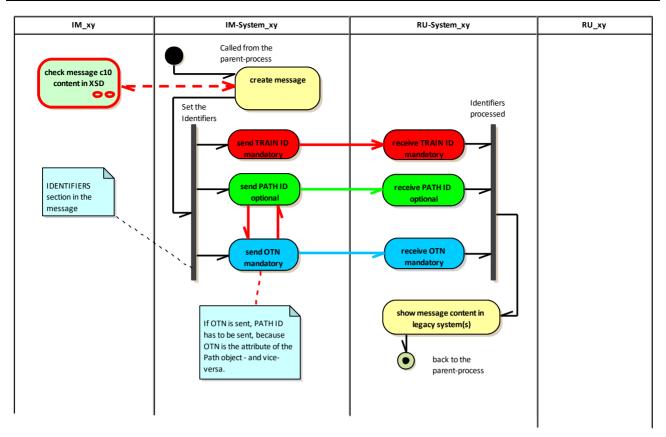


Figure 167: c10-SendMessage-IM-RU-TR\_m-PA\_o-OTN\_m

#### Note

Note in package 'Common'

If OTN is sent, PATH ID has to be sent, because OTN is the attribute of the Path object - and vice-versa.

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.05.2013. Last modified 06.05.2013
Extends

# c11-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_m diagram

Activity diagram in package 'Common'

c11-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_m Version 1.0 Hantak created on 26.04.2013. Last modified 08.09.2013

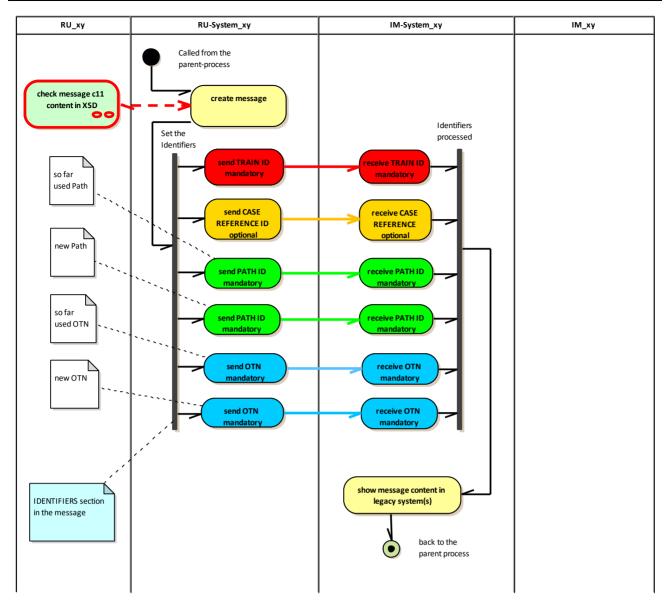


Figure 168: c11-SendMessage- RU-IM -TR m-CR o-PA m-OTN m

# c12-SendMessage- IM-RU -TR\_m-CR\_o-PA\_m-OTN\_m diagram

Activity diagram in package 'Common'

c12-SendMessage- IM-RU -TR\_m-CR\_o-PA\_m-OTN\_m Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

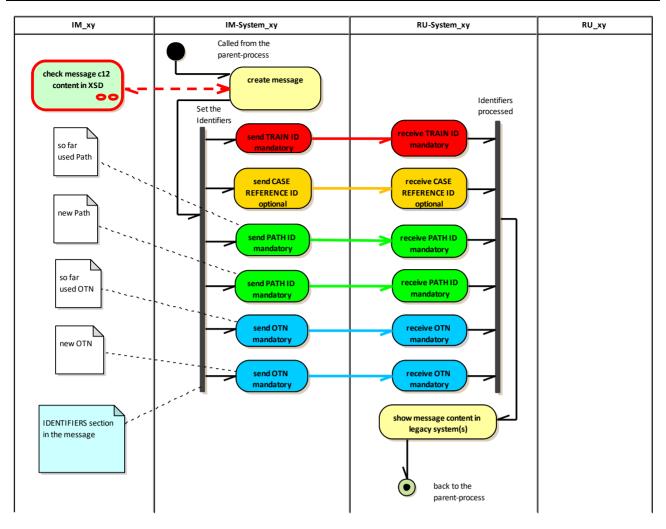


Figure 169: c12-SendMessage- IM-RU -TR\_m-CR\_o-PA\_m-OTN\_m

#### Note

Note in package 'Common'

so far used Path

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 17.06.2013
Extends

#### **Note**

Note in package 'Common'

new Path

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 17.06.2013
Extends

#### Note

Note in package 'Common'

so far used OTN

Note
Version 1.0 Phase 1.0 Proposed
Hantak created on 17.06.2013. Last modified 17.06.2013
Extends

#### Note

Note in package 'Common'

new OTN

Note Version 1.0 Phase 1.0 Proposed Hantak created on 17.06.2013. Last modified 17.06.2013 Extends

# c13-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o-RelID\_o diagram

Activity diagram in package 'Common'

c13-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o-RelID\_o Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

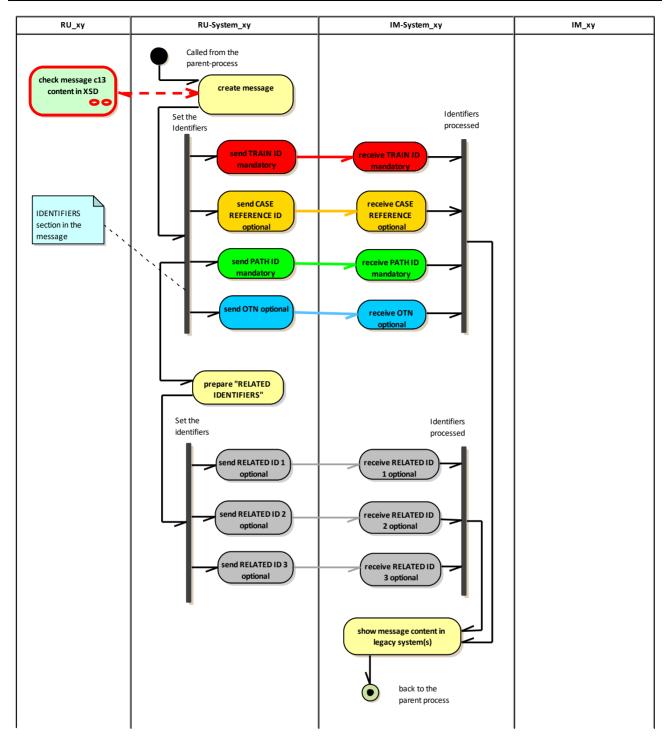
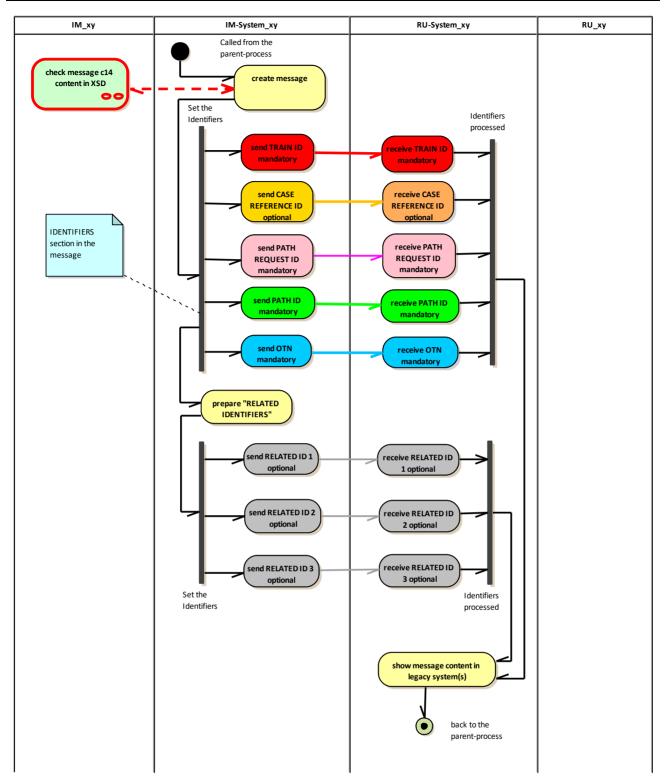


Figure 170: c13-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o-RelID\_o

# c14-SendMessage- IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o diagram

Activity diagram in package 'Common'

c14-SendMessage- IM-RU -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013



 $Figure~171:~c14-SendMessage-~IM-RU~-TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o$ 

## c15-SendMessage- RU-IM -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o diagram

Activity diagram in package 'Common'

Hantak created on 02.05.2013. Last modified 08.09.2013

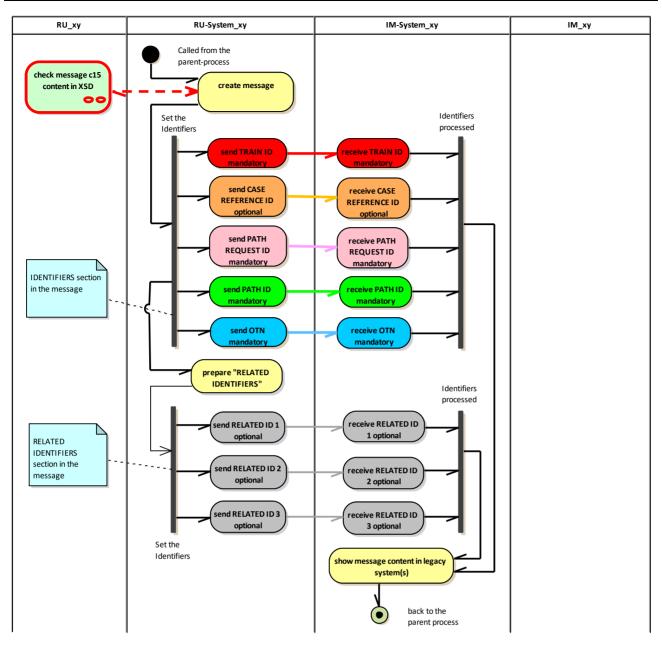


Figure 172: c15-SendMessage- RU-IM -TR\_m-CR\_o-PR\_m-PA\_m-OTN\_m-RelID\_o

# c16-SendMessage- RU-IM -TR\_m-PA\_m-OTN\_m diagram

Activity diagram in package 'Common'

c16-SendMessage- RU-IM -TR\_m-PA\_m-OTN\_m Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

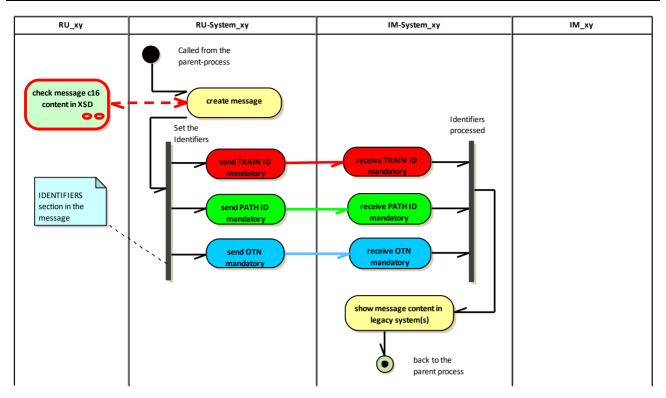


Figure 173: c16-SendMessage- RU-IM -TR\_m-PA\_m-OTN\_m

# c17-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_m diagram

Activity diagram in package 'Common'

c17-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_m Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

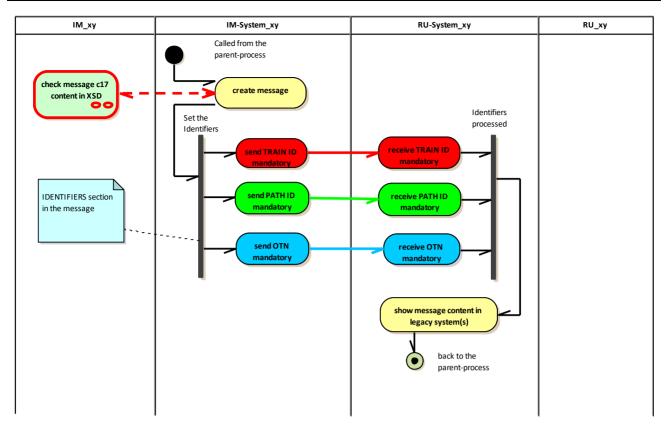


Figure 174: c17-SendMessage- IM-RU -TR\_m-PA\_m-OTN\_m

# c18-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o diagram

Activity diagram in package 'Common'

c18-SendMessage- RU-IM -TR\_m-CR\_o-PA\_m-OTN\_o Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

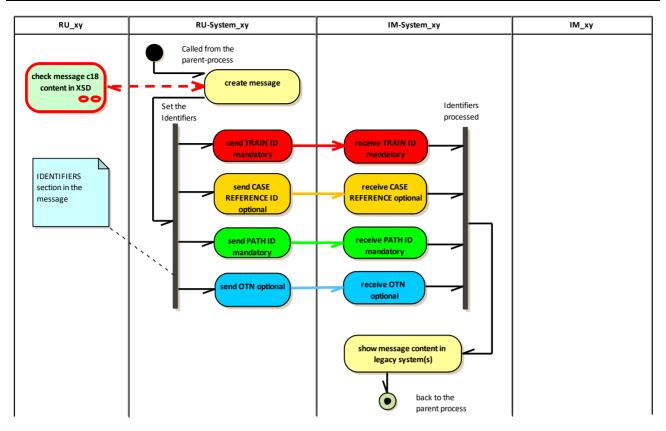


Figure 175: c18-SendMessage- RU-IM -TR m-CR o-PA m-OTN o

# c19-SendMessage- RU-IM -CR\_o-PA\_m-OTN\_o diagram

Activity diagram in package 'Common'

c19-SendMessage- RU-IM -CR\_o-PA\_m-OTN\_o Version 1.0 Hantak created on 02.05.2013. Last modified 08.09.2013

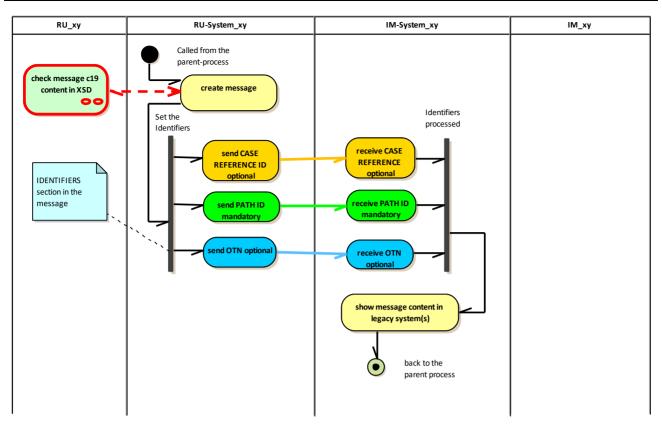


Figure 176: c19-SendMessage- RU-IM -CR\_o-PA\_m-OTN\_o

# c20-SendMessage- RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o diagram

Activity diagram in package 'Common'

c20-SendMessage- RU-IM -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o Version 1.0 Hantak created on 20.05.2013. Last modified 08.09.2013

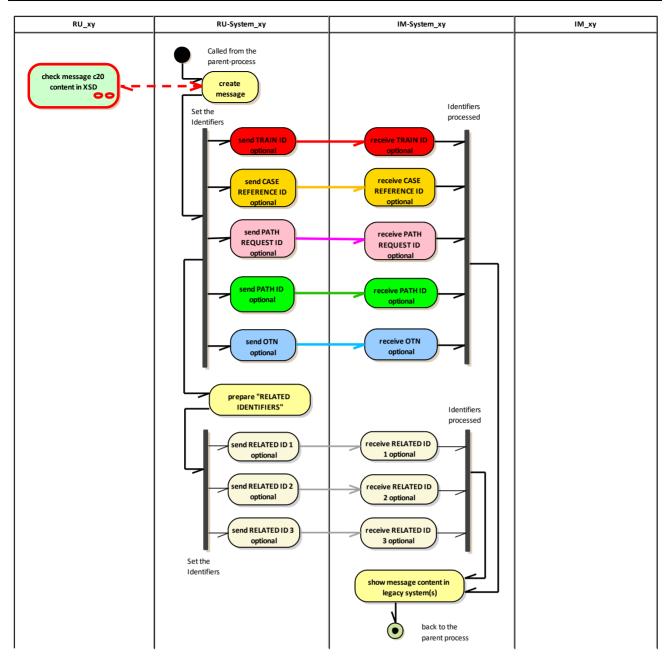


Figure 177: c20-SendMessage-RU-IM-TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

# c21-SendMessage- IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o diagram

Activity diagram in package 'Common'

c21-SendMessage- IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o
Version 1.0
Hantak created on 21.05.2013. Last modified 08.09.2013

Model Report \_\_\_\_\_\_ 12 February, 2025

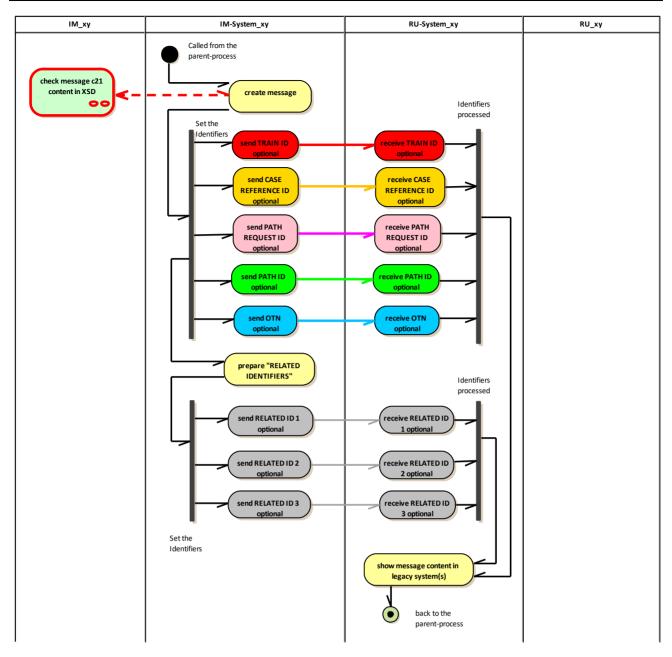


Figure 178: c21-SendMessage- IM-RU -TR\_o-CR\_o-PR\_o-PA\_o-OTN\_o

# 4.10 PathAlteration Activity

Activity in package 'Common'

4.10 PathAlteration Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

- \*\* ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.10 PathAlteration Activity
- ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.10 PathAlteration Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from using following BS no before existing additional path is necessary to 4.10 PathAlteration Activity

# 4.11 PathModification Activity

Activity in package 'Common'

4.11 PathModification Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.11 PathModification Activity
- ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.11 PathModification Activity
- ControlFlow from using following BS no before existing additional path is necessary to 4.11 PathModification Activity

## CONNECTORS

**Dependency** Source -> Destination

From: Train cancellation with remaining path in hand of RU possible: Activity, Public

To: 4.11 PathModification Activity : Activity, Public

# 4.12 TrainModification Activity

Activity in package 'Common'

4.12 TrainModification Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.12 TrainModification Activity
- \*\* ControlFlow from using following BS no before existing additional path is necessary to 4.12 TrainModification Activity
- ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.12 TrainModification Activity

# 4.13 TrainComposition Activity

Activity in package 'Common'

4.13 TrainComposition Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.13 TrainComposition Activity

# 4.14 TrainReady Activity

Activity in package 'Common'

4.14 TrainReady Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 06.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.14 TrainReady Activity

# 4.14 TrainReady Activity

Activity in package 'Common'

4.14 TrainReady Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 08.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.14 TrainReady Activity

# 4.15 TrainPosition Activity

Activity in package 'Common'

4.15 TrainPosition Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.15 TrainPosition Activity

# 4.16.2 Train Running Information Activity

Activity in package 'Common'

4.16.2 Train Running Information Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.16.2 Train Running Information Activity

# 4.17.2 Train Running Forecast Activity

Activity in package 'Common'

4.17.2 Train Running Forecast Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.17.2 Train Running Forecast Activity

# 4.18.2 Train Delay Performance Activity

Activity in package 'Common'

4.18.2 Train Delay Performance Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.18.2 Train Delay Performance Activity

# 4.19.2 Train Forecast at Reporting Location Activity

Activity in package 'Common'

4.19.2 Train Forecast at Reporting Location Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.19.2 Train Forecast at Reporting Location Activity

# 4.20 Train Running Interrupted Activity

Activity in package 'Common'

4.20 Train Running Interrupted Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.20 Train Running Interrupted Activity

# 4.21 Train Delay Cause Activity

Activity in package 'Common'

4.21 Train Delay Cause Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.21 Train Delay Cause Activity

# 4.22 Train Parking Activity

Activity in package 'Common'

4.22 Train Parking Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.22 Train Parking Activity

# 4.23 Train rerouted-without new path-same OTN Activity

Activity in package 'Common'

4.23 Train rerouted-without new path-same OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from other path(s) not necessary to 4.23 Train rerouted-without new path-same OTN Activity

# 4.24 Train rerouted-without new path-changed OTN Activity

Activity in package 'Common'

4.24 Train rerouted-without new path-changed OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from other path(s) not necessary to 4.24 Train rerouted-without new path-changed OTN Activity

# 4.25 Train early/delayed-without new path-same OTN Activity

Activity in package 'Common'

4.25 Train early/delayed-without new path-same OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.25 Train early/delayed-without new path-same OTN Activity

# 4.26 Train early/delayed-without new path-changed OTN Activity

Activity in package 'Common'

4.26 Train early/delayed-without new path-changed OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.26 Train early/delayed-without new path-changed OTN Activity

# 4.27 Train Shifting to an existing path-changed OTN Activity

Activity in package 'Common'

4.27 Train Shifting to an existing path-changed OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from previous existing path necessary to 4.27 Train Shifting to an existing path-changed OTN Activity

# 4.28 Train Shifting to a new path-changed OTN Activity

Activity in package 'Common'

4.28 Train Shifting to a new path-changed OTN Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from other path(s) not necessary to 4.28 Train Shifting to a new path-changed OTN Activity

# 4.29 Train Cancellation-Path remains in hand of RU Activity

Activity in package 'Common'

4.29 Train Cancellation-Path remains in hand of RU Activity

Version 1.0 Phase 1.0 Proposed

Hantak created on 08.09.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to using following BS no before existing additional path is necessary
- 4 ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to other path(s) are existing to be used

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU can ask for paths with and without giving a Train ID to 4.29 Train Cancellation-Path remains in hand of RU Activity

# 4.29 Train Cancellation-Path remains in hand of RU Activity

Activity in package 'Common'

4.29 Train Cancellation-Path remains in hand of RU Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 08.09.2013. Last modified 08.09.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to other path(s) are existing to be used
- will ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to using following BS no before existing additional path is necessary

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU can ask for path(s) only by giving a Train ID to 4.29 Train Cancellation-Path remains in hand of RU Activity

# 4.30 Train Cancellation-Path also cancelled by RU Activity

Activity in package 'Common'

4.30 Train Cancellation-Path also cancelled by RU Activity
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.09.2013. Last modified 08.09.2013

## INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from other path(s) not necessary to 4.30 Train Cancellation-Path also cancelled by RU Activity

# 4.9 ChangeofTrain Activity

Activity in package 'Common'

4.9 ChangeofTrain Activity Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

# INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.9 ChangeofTrain Activity
- \*\* ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.9 ChangeofTrain Activity
- ControlFlow from using following BS no before existing additional path is necessary to 4.9 ChangeofTrain Activity

# Activity1

Activity in package 'Common'

Activity1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

# NO other path(s) are existing which could be used

Activity in package 'Common'

NO other path(s) are existing which could be used Version 1.0 Phase 1.0 Proposed

Hantak created on 06.09.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from NO other path(s) are existing which could be used to other path(s) not necessary
- ControlFlow from NO other path(s) are existing which could be used to previous existing path necessary

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from No train cancellation with remaining path in hand of RU possible to NO other path(s) are existing which could be used

# NO other path(s) are existing which could be used diagram

Activity diagram in package 'Common'

NO other path(s) are existing which could be used

Version 1.0
km created on 06.09.2013. Last modified 06.09.2013

Figure 179: NO other path(s) are existing which could be used

# No train cancellation with remaining path in hand of RU possible

Activity in package 'Common'

No train cancellation with remaining path in hand of RU possible

Version 1.0 Phase 1.0 Proposed

Hantak created on 05.09.2013. Last modified 08.09.2013

# STRUCTURAL PART OF No train cancellation with remaining path in hand of RU possible

ObjectNode6 : ActionPin

SobjectNode8: ActionPin

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.12 TrainModification Activity

#### OUTGOING BEHAVIORAL RELATIONSHIPS

- remaining path in hand of RU possible to 4.11 PathModification Activity
- 🖛 ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.9 ChangeofTrain Activity
- 4. ControlFlow from No train cancellation with remaining path in hand of RU possible to 4.10 PathAlteration Activity
- ControlFlow from No train cancellation with remaining path in hand of RU possible to using following BS no before existing additional path is necessary
- + ControlFlow from No train cancellation with remaining path in hand of RU possible to other path(s) are existing to be used

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from RU can ask for paths with and without giving a Train ID to No train cancellation with remaining path in hand of RU possible
- ControlFlow from RU can ask for paths with and without giving a Train ID to No train cancellation with remaining path in hand of RU possible

## ObjectNode6

ActionPin owned by 'No train cancellation with remaining path in hand of RU possible', in package 'Common'

# ObjectNode8

ActionPin owned by 'No train cancellation with remaining path in hand of RU possible', in package 'Common'

## no train cancellation with remaining path in hand of RU possible diagram

Activity diagram in package 'Common'

no train cancellation with remaining path in hand of RU possible

Version 1.0

Hantak created on 05.09.2013. Last modified 06.09.2013

# No train cancellation with remaining path in hand of RU possible

Activity in package 'Common'

No train cancellation with remaining path in hand of RU possible Version 1.0 Phase 1.0 Proposed Hantak created on 05.09.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from No train cancellation with remaining path in hand of RU possible to using following BS no before existing additional path is necessary
- \(\psi\) ControlFlow from No train cancellation with remaining path in hand of RU possible to NO other path(s) are existing which could be used

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU can ask for path(s) only by giving a Train ID to No train cancellation with remaining path in hand of RU possible

## No train cancellation with remaining path in hand of RU possible diagram

Activity diagram in package 'Common'

No train cancellation with remaining path in hand of RU possible

Version 1.0

km created on 06.09.2013. Last modified 06.09.2013

Figure 181: No train cancellation with remaining path in hand of RU possible

# other path(s) are existing to be used

Activity in package 'Common'

other path(s) are existing to be used Version 1.0 Phase 1.0 Proposed Hantak created on 06.09.2013. Last modified 08.09.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from other path(s) are existing to be used to previous existing path necessary
- ControlFlow from other path(s) are existing to be used to other path(s) not necessary

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to other path(s) are existing to be used
- ControlFlow from No train cancellation with remaining path in hand of RU possible to other path(s) are existing to be used
- ControlFlow from 4.29 Train Cancellation-Path remains in hand of RU Activity to other path(s) are existing to be used

# other path(s) are existing to be used diagram

Activity diagram in package 'Common'

other path(s) are existing to be used

Version 1.0
km created on 06.09.2013. Last modified 06.09.2013

Figure 182: other path(s) are existing to be used

# Request the creation of Path object

Activity in package 'Common'

Request the creation of Path object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Request the creation of Path object to Request linking of new Path object with the given Train object

### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Request the creation of Path object

# RU can ask for path(s) only by giving a Train ID

Activity in package 'Common'

RU can ask for path(s) only by giving a Train ID Version 1.0 Phase 1.0 Proposed Hantak created on 05.09.2013. Last modified 08.09.2013

STRUCTURAL PART OF RU can ask f	or path(s) only by giving a Train ID
S ObjectNode4 : ActionPin	
ObjectNode5 : ActionPin	
ObjectNode7 : ActionPin	

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from RU can ask for path(s) only by giving a Train ID to 4.29 Train Cancellation-Path remains in hand of RU Activity
- ControlFlow from RU can ask for path(s) only by giving a Train ID to No train cancellation with remaining path in hand of RU possible

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU WANTS A PATH to RU can ask for path(s) only by giving a Train ID

# ObjectNode4

ActionPin owned by 'RU can ask for path(s) only by giving a Train ID', in package 'Common'

# ObjectNode5

ActionPin owned by 'RU can ask for path(s) only by giving a Train ID', in package 'Common'

## ObjectNode7

ActionPin owned by 'RU can ask for path(s) only by giving a Train ID', in package 'Common'

# RU can ask for path(s) only by giving a Train ID diagram

Activity diagram in package 'Common'

RU can ask for path(s) only by giving a Train ID

Version 1.0

Hantak created on 05.09.2013. Last modified 06.09.2013

Figure 183: RU can ask for path(s) only by giving a Train ID

# RU can ask for paths with and without giving a Train ID

Activity in package 'Common'

RU can ask for paths with and without giving a Train ID Version 1.0 Phase 1.0 Proposed Hantak created on 05.09.2013. Last modified 08.09.2013

### STRUCTURAL PART OF RU can ask for paths with and without giving a Train ID

ObjectNode9: ActionPin

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from RU can ask for paths with and without giving a Train ID to Train cancellation with remaining path in hand of RU possible
- + ControlFlow from RU can ask for paths with and without giving a Train ID to No train cancellation with remaining path in hand of RU possible
- 4 ControlFlow from RU can ask for paths with and without giving a Train ID to No train cancellation with remaining path in hand of RU possible
- 4. ControlFlow from RU can ask for paths with and without giving a Train ID to 4.29 Train Cancellation-Path remains in hand of RU Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU WANTS A PATH to RU can ask for paths with and without giving a Train ID

# ObjectNode9

ActionPin owned by 'RU can ask for paths with and without giving a Train ID', in package 'Common'

# RU can ask for paths without giving a Train ID diagram

Activity diagram in package 'Common'

RU can ask for paths without giving a Train ID Version 1.0 Hantak created on 05.09.2013. Last modified 06.09.2013

Figure 184: RU can ask for paths without giving a Train ID

# RU can ask for paths with and without giving a Train ID

Activity in package 'Common'

RU can ask for paths with and without giving a Train ID Version 1.0 Phase 1.0 Proposed Hantak created on 05.09.2013. Last modified 06.09.2013

# RU can ask for paths with and without giving a Train ID diagram

Activity diagram in package 'Common'

RU can ask for paths with and without giving a Train ID Version 1.0 km created on 06.09.2013. Last modified 06.09.2013

Figure 185: RU can ask for paths with and without giving a Train ID  $\,$ 

# RU decision, not interested

Activity in package 'Common'

RU decision, not interested Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 24.05.2013

**OUTGOING BEHAVIORAL RELATIONSHIPS** 

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from RU decision, not interested to End Guard: NO

#### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from Custumer wants transport by train, informs RU to RU decision, not interested Guard: NO

# Train cancellation with remaining path in hand of RU possible

Activity in package 'Common'

Train cancellation with remaining path in hand of RU possible

Version 1.0 Phase 1.0 Proposed

Hantak created on 05.09.2013. Last modified 08.09.2013

# STRUCTURAL PART OF Train cancellation with remaining path in hand of RU possible

Solution ObjectNode10 : ActionPin

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

- + ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.10 PathAlteration Activity
- ← ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.9 ChangeofTrain Activity
- 4 ControlFlow from Train cancellation with remaining path in hand of RU possible to 4.12 TrainModification Activity
- rontrolFlow from Train cancellation with remaining path in hand of RU possible to 4.11 PathModification Activity

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU can ask for paths with and without giving a Train ID to Train cancellation with remaining path in hand of RU possible

#### CONNECTORS

**Dependency** Source -> Destination

From: Train cancellation with remaining path in hand of RU possible: Activity, Public

To: 4.11 PathModification Activity : Activity, Public

## ObjectNode10

ActionPin owned by 'Train cancellation with remaining path in hand of RU possible', in package 'Common'

# **Activity3 diagram**

Activity diagram in package 'Common'

Activity3 Version 1.0 km created on 05.09.2013. Last modified 05.09.2013

Figure 186: Activity3

# Train cancellation with remaining path in hand of RU possible

Activity in package 'Common'

Train cancellation with remaining path in hand of RU possible

Version 1.0 Phase 1.0 Proposed

Hantak created on 05.09.2013. Last modified 08.09.2013

# Train cancellation with remaining path in hand of RU possible diagram

Activity diagram in package 'Common'

Train cancellation with remaining path in hand of RU possible

Version 1.0

km created on 06.09.2013. Last modified 06.09.2013

Figure 187: Train cancellation with remaining path in hand of RU possible

# Any System (RU or IM)

ActivityPartition in package 'Common'

Any System (RU or IM) Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY Any System (RU or IM)
Act upon the internal rules for handling the states of the links : Activity
check the states of the links between given objects: Activity
Find objects upon identifiers: Activity
Back to parent process : ActivityFinal
Read identifiers from the parent-message : ActivityInitial

# Act upon the internal rules for handling the states of the links

Activity owned by 'Any System (RU or IM)', in package 'Common'

Act upon the internal rules for handling the states of the links

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Act upon the internal rules for handling the states of the links to Back to parent process

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from check the states of the links between given objects to Act upon the internal rules for handling the states of the links

# check the states of the links between given objects

Activity owned by 'Any System (RU or IM)', in package 'Common'

check the states of the links between given objects

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from check the states of the links between given objects to Act upon the internal rules for handling the states of the links

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Find objects upon identifiers to check the states of the links between given objects

#### INCOMING BEHAVIORAL RELATIONSHIPS

# Find objects upon identifiers

Activity owned by 'Any System (RU or IM)', in package 'Common'

Find objects upon identifiers Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

EntrolFlow from Find objects upon identifiers to check the states of the links between given objects

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Read identifiers from the parent-message to Find objects upon identifiers

# **Back to parent process**

ActivityFinal owned by 'Any System (RU or IM)', in package 'Common'

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Act upon the internal rules for handling the states of the links to Back to parent process

# Read identifiers from the parent-message

ActivityInitial owned by 'Any System (RU or IM)', in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Read identifiers from the parent-message to Find objects upon identifiers

## **Business**

ActivityPartition in package 'Common'

Business
Version 1.0 Phase 1.0 Proposed
Hantak created on 23.05.2013. Last modified 23.05.2013

Model Report

ELEMENTS OWNED BY Business

Custumer wants transport by train, informs RU : Activity

RU interested, decides to do transport : Activity

RU looks for partners, starts HArmonisation process : Activity

RU runs train on its own : Activity

DecisionNode : DecisionNode

# Custumer wants transport by train, informs RU

Activity owned by 'Business', in package 'Common'

■ End : ActivityFinal

■ Start : ActivityInitial

Custumer wants transport by train, informs RU Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from Custumer wants transport by train, informs RU to RU decision, not interested Guard: NO
- ControlFlow from Custumer wants transport by train, informs RU to RU interested, decides to do transport Guard: YES

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Start to Custumer wants transport by train, informs RU

# RU interested, decides to do transport

Activity owned by 'Business', in package 'Common'

RU interested, decides to do transport Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 🖛 ControlFlow from RU interested, decides to do transport to RU looks for partners, starts HArmonisation process
- 🖛 ControlFlow from RU interested, decides to do transport to RU looks for partners, starts HArmonisation process

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Custumer wants transport by train, informs RU to RU interested, decides to do transport Guard: YES

# **RU looks for partners, starts HArmonisation process**

Activity owned by 'Business', in package 'Common'

RU looks for partners, starts HArmonisation process

Version 1.0 Phase 1.0 Proposed

Hantak created on 23.05.2013. Last modified 23.05.2013

#### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from RU interested, decides to do transport to RU looks for partners, starts HArmonisation process
- ControlFlow from RU interested, decides to do transport to RU looks for partners, starts HArmonisation process

#### RU runs train on its own

Activity owned by 'Business', in package 'Common'

RU runs train on its own Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

## **DecisionNode**

DecisionNode owned by 'Business', in package 'Common'

### **End**

ActivityFinal owned by 'Business', in package 'Common'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from RU decision, not interested to End

Model Report 12 February, 2025
INCOMING BEHAVIORAL RELATIONSHIPS
Guard: NO
Choub
Start ActivityInitial owned by 'Business', in package 'Common'
OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from Start to Custumer wants transport by train, informs RU
IM ActivityPartition in package 'Common'
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
ELEMENTS OWNED BY IM
Propose the link between Train and Path objects from the message content: Activity
Train-Path Link established in IM system : State
Train-Path Link proposed : State
Back to parent diagram : Final State
PathDetailsMessage : ActivityInitial
Propose the link between Train and Path objects from the message content
Activity owned by 'IM', in package 'Common'
Propose the link between Train and Path objects from the message content Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013
OUTGOING BEHAVIORAL RELATIONSHIPS
Object Flow from Propose the link between Train and Path objects from the message content to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link established in IM system to Propose the link between Train and Path objects from the message content

# Train-Path Link established in IM system

State owned by 'IM', in package 'Common'

Train-Path Link established in IM system
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Train-Path Link established in IM system to Propose the link between Train and Path objects from the message content

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from PathDetailsMessage to Train-Path Link established in IM system

# **Train-Path Link proposed**

State owned by 'IM', in package 'Common'

Train-Path Link proposed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

rransition from Train-Path Link proposed to Back to parent diagram

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Train-Path Link proposed

## **Back to parent diagram**

Final State owned by 'IM', in package 'Common'

## INCOMING BEHAVIORAL RELATIONSHIPS

Transition from Train-Path Link proposed to Back to parent diagram

# **PathDetailsMessage**

ActivityInitial owned by 'IM', in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from PathDetailsMessage to Train-Path Link established in IM system

## IM

ActivityPartition in package 'Common'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

ELEMENTS OWNED BY IM
Process PathDetailsRefusedMessage : Activity
Train-Path Link not confirmed: State
Back to parent process : ActivityFinal

# Process PathDetailsRefusedMessage

Activity owned by 'IM', in package 'Common'

Process PathDetailsRefusedMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from Process PathDetailsRefusedMessage to Path (Plan)

# INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Train (Plan) to Process PathDetailsRefusedMessage

## **Train-Path Link not confirmed**

State owned by 'IM', in package 'Common'

Train-Path Link not confirmed

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

OUTGOING	<b>REHAVIORAL</b>	RELATIONSHIPS
OUT CTOUNCE	BEHAVIUKAL	KELATIONSHIPS

🖛 ControlFlow from Train-Path Link not confirmed to Back to parent process

#### INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Train-Path Link not confirmed

# **Back to parent process**

ActivityFinal owned by 'IM', in package 'Common'

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link not confirmed to Back to parent process

## IM

ActivityPartition in package 'Common'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

ELEMENTS OWNED BY IM
Process deletion of PathRequest : Activity
Train-Path Link canceled : State
Back to parent process: Final State

# **Process deletion of PathRequest**

Activity owned by 'IM', in package 'Common'

Process deletion of PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

25
ed ed 13
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13

Model Report 12 February, 2025 ELEMENTS OWNED BY IM Train-Path Link confirmed: State ■ Back to parent process : ActivityFinal Find Path with PathID from the message Activity owned by 'IM', in package 'Common' Find Path with PathID from the message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013 **Process PathConfirmedMessage** Activity owned by 'IM', in package 'Common' Process PathConfirmedMessage Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** Object Flow from Process PathConfirmedMessage to Path (Plan) INCOMING BEHAVIORAL RELATIONSHIPS Object Flow from Train (Plan) to Process PathConfirmedMessage Train-Path Link confirmed State owned by 'IM', in package 'Common' Train-Path Link confirmed Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link confirmed to Back to parent process

## INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Train-Path Link confirmed

Model Report \_\_\_\_\_\_ 12 February, 2025

# **Back to parent process**

ActivityFinal owned by 'IM', in package 'Common'

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link confirmed to Back to parent process

## IM

ActivityPartition in package 'Common'

IM
Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY IM
Train-Path Link canceled: State
Back to parent process : ActivityFinal
■ PathNotAvailableMessage : ActivityInitial

# **Train-Path Link canceled**

State owned by 'IM', in package 'Common'

Train-Path Link canceled Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link canceled to Back to parent process

## INCOMING BEHAVIORAL RELATIONSHIPS

Object Flow from Path (Plan) to Train-Path Link canceled

# **Back to parent process**

ActivityFinal owned by 'IM', in package 'Common'

Model Report 12 Febr	ruary, 2025
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from Train-Path Link canceled to Back to parent process	
PathNotAvailableMessage	
ActivityInitial owned by 'IM', in package 'Common'	
OUTGOING BEHAVIORAL RELATIONSHIPS	
ControlFlow from PathNotAvailableMessage to Find the objects Train and Path according to Identifiers from the me	essage
Path Dotails Potused	
PathDetailsRefused	
ActivityInitial in package 'Common'	
OUTGOING BEHAVIORAL RELATIONSHIPS	
◆ ControlFlow from PathDetailsRefused to Train-Path Link not established	
RU	
ActivityPartition in package 'Common'	
Version 1.0 Phase 1.0 seid.maglajlic created on 27.06.2013. Last modified 27	RU Proposed 7.06.2013
ELEMENTS OWNED BY RU	
Request linking of new Path object with the given Train object : Activity	
Train-Path Link requested : State	
Back to parent process : ActivityFinal	
PathRequestMessage : ActivityInitial	

Activity owned by 'RU', in package 'Common'

Request linking of new Path object with the given Train object Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from Request linking of new Path object with the given Train object to Train-Path Link requested

#### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from Request the creation of Path object to Request linking of new Path object with the given Train object

## **Train-Path Link requested**

State owned by 'RU', in package 'Common'

Train-Path Link requested Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Train-Path Link requested to Back to parent process

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Request linking of new Path object with the given Train object to Train-Path Link requested

## **Back to parent process**

ActivityFinal owned by 'RU', in package 'Common'

## INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Train-Path Link requested to Back to parent process

## **PathRequestMessage**

ActivityInitial owned by 'RU', in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Object Flow from PathRequestMessage to PathRequest

## RU

ActivityPartition in package 'Common'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### ELEMENTS OWNED BY RU

Train-Path Link not established: State

#### Train-Path Link not established

State owned by 'RU', in package 'Common'

Train-Path Link not established Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### OUTGOING BEHAVIORAL RELATIONSHIPS

♦ Object Flow from Train-Path Link not established to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from PathDetailsRefused to Train-Path Link not established

## RU

ActivityPartition in package 'Common'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

# ELEMENTS OWNED BY RU

Train-Path Link refused: State

■ PathRequestMessage Status Delete : ActivityInitial

# **Train-Path Link refused**

State owned by 'RU', in package 'Common'

Train-Path Link refused Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 27.06.2013. Last modified 27.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Object Flow from Train-Path Link refused to Train (Plan)

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from PathRequestMessage Status Delete to Train-Path Link refused

# PathRequestMessage Status Delete

ActivityInitial owned by 'RU', in package 'Common'

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

🖛 ControlFlow from PathRequestMessage Status Delete to Train-Path Link refused

# RU

ActivityPartition in package 'Common'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

### **ELEMENTS OWNED BY RU**

Train-Path Link established: State

PathConfirmendMessage, UpdateLinkMessage : ActivityInitial

### Train-Path Link established

State owned by 'RU', in package 'Common'

Train-Path Link established
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

• Object Flow from Train-Path Link established to Train (Plan)

Model Report	12 February, 2025
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from PathConfirmendMessage, UpdateLinkMessage to Train-Path Link established	

# PathConfirmendMessage, UpdateLinkMessage

ActivityInitial owned by 'RU', in package 'Common'

# OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from PathConfirmendMessage, UpdateLinkMessage to Train-Path Link established

# RU

ActivityPartition in package 'Common'

RU Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

ELEMENTS OWNED BY RU
Break the link: Action
Break the link: Action
Activity2 : Activity
Find the objects Train and Path according to Identifiers from the message : Activity
Train-Path Link canceled : State
UpdateLinkMessage: ActivityInitial

# **Break the link**

Action owned by 'RU', in package 'Common'

Break the link Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### Break the link

Action owned by 'RU', in package 'Common'

Break the link Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

## Activity2

Activity owned by 'RU', in package 'Common'

Activity2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

# Find the objects Train and Path according to Identifiers from the message

Activity owned by 'RU', in package 'Common'

Find the objects Train and Path according to Identifiers from the message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

#### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from Find the objects Train and Path according to Identifiers from the message to Train-Path Link canceled

## INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from PathNotAvailableMessage to Find the objects Train and Path according to Identifiers from the message
- ControlFlow from UpdateLinkMessage to Find the objects Train and Path according to Identifiers from the message

# **Train-Path Link canceled**

State owned by 'RU', in package 'Common'

Train-Path Link canceled Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 28.06.2013. Last modified 28.06.2013

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Object Flow from Train-Path Link canceled to Train (Plan)

#### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from Find the objects Train and Path according to Identifiers from the message to Train-Path Link canceled

# **UpdateLinkMessage**

ActivityInitial owned by 'RU', in package 'Common'

# **OUTGOING BEHAVIORAL RELATIONSHIPS**

I ControlFlow from UpdateLinkMessage to Find the objects Train and Path according to Identifiers from the message

# RU-System\_xy2

ActivityPartition in package 'Common'

RU-System\_xy2 Version 1.0 Phase 1.0 Proposed Hantak created on 03.05.2013. Last modified 03.05.2013

ELEMENTS OWNED BY RU-System_xy2
show message content in legacy system(s): Activity
■ back to the parent process : ActivityFinal
receive TRAIN ID mandatory : Activity
☐ receive CASE REFERENCE ID mandatory : Activity
receive PATH ID mandatory : Activity
receive OTN optional : Activity

# show message content in legacy system(s)

Activity owned by 'RU-System xy2', in package 'Common'

show message content in legacy system(s)

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 06.05.2013

## **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from show message content in legacy system(s) to back to the parent process

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Identifiers processed to show message content in legacy system(s)

### back to the parent process

ActivityFinal owned by 'RU-System\_xy2', in package 'Common'

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from show message content in legacy system(s) to back to the parent process

### receive TRAIN ID mandatory

Activity owned by 'RU-System xy2', in package 'Common'

receive TRAIN ID mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 03.05.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from receive TRAIN ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### receive CASE REFERENCE ID mandatory

Activity owned by 'RU-System\_xy2', in package 'Common'

receive CASE REFERENCE ID mandatory

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from receive CASE REFERENCE ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory

### receive PATH ID mandatory

Activity owned by 'RU-System xy2', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive PATH ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### receive OTN optional

Activity owned by 'RU-System\_xy2', in package 'Common'

receive OTN optional Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive OTN optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN optional to receive OTN optional

### **RU WANTS A PATH**

ActivityInitial in package 'Common'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from RU WANTS A PATH to RU can ask for path(s) only by giving a Train ID
- ControlFlow from RU WANTS A PATH to RU can ask for paths with and without giving a Train ID

### RU\_xy2

ActivityPartition in package 'Common'

RU\_xy2 Version 1.0 Phase 1.0 Proposed Hantak created on 03.05.2013. Last modified 03.05.2013

### **RU1 (LEAD)**

ActivityPartition in package 'Common'

RU1 (LEAD) Version 1.0 Phase 1.0 Proposed Hantak created on 01.05.2013. Last modified 01.05.2013

ELEMENTS OWNED BY RU1 (LEAD)	
idea for train coming up : ActivityInitial	

### idea for train coming up

ActivityInitial owned by 'RU1 (LEAD)', in package 'Common'

### RU\_xy

ActivityPartition in package 'Common'

RU\_xy
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.04.2013. Last modified 02.05.2013

ELEMENTS OWNED BY RU_xy
check message c01 content in XSD : Activity
check message c03 content in XSD : Activity
check message c04 content in XSD : Activity
check message c06 content in XSD : Activity
check message c07 content in XSD : Activity
check message c08 content in XSD : Activity
check message c11 content in XSD : Activity

ELEMENTS OWNED BY RU_xy
et check message c13 content in XSD : Activity
eleck message c16 content in XSD : Activity
eheck message c18 content in XSD : Activity
eleck message c19 content in XSD : Activity
eleck message c20 content in XSD : Activity

### check message c01 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c01 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ Information Flow from check message c01 content in XSD to create message

### check message c01 content in XSD diagram

Activity diagram in package 'Common'

check message c01 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 188: check message c01 content in XSD

### check message c03 content in XSD

Activity owned by 'RU\_xy', in package 'Common'

check message c03 content in XSD Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c03 content in XSD to create message

### check message c03 content in XSD diagram

Activity diagram in package 'Common'

check message c03 content in XSD

Version 1.0
km created on 04.06.2013. Last modified 04.06.2013

Figure 189: check message c03 content in XSD

### check message c04 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c04 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Information Flow from check message c04 content in XSD to create message

### check message c19 content in XSD diagram

Activity diagram in package 'Common'

check message c19 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 190: check message c19 content in XSD

### check message c06 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c06 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 Information Flow from check message c06 content in XSD to create message

### check message c06 content in XSD diagram

Activity diagram in package 'Common'

check message c06 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 191: check message c06 content in XSD

### check message c07 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c07 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from check message c07 content in XSD to create message

### check message c07 content in XSD diagram

Activity diagram in package 'Common'

check message c07 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 192: check message c07 content in XSD

### check message c08 content in XSD

Activity owned by 'RU\_xy', in package 'Common'

check message c08 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Information Flow from check message c08 content in XSD to create message

### check message c08 content in XSD diagram

Activity diagram in package 'Common'

check message c08 content in XSD

Version 1.0
km created on 04.06.2013. Last modified 04.06.2013

Figure 193: check message c08 content in XSD

### check message c11 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c11 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c11 content in XSD to create message

### check message c11 content in XSD diagram

Activity diagram in package 'Common'

check message c11 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 194: check message c11 content in XSD

### check message c13 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c13 content in XSD

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4" Information Flow from check message c13 content in XSD to create message

### check message c13 content in XSD diagram

Activity diagram in package 'Common'

check message c13 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 195: check message c13 content in XSD

### check message c16 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c16 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

♣ Information Flow from check message c16 content in XSD to create message

### check message c16 content in XSD diagram

Activity diagram in package 'Common'

check message c16 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 196: check message c16 content in XSD

### check message c18 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c18 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

♣ Information Flow from check message c18 content in XSD to create message

### check message c18 content in XSD diagram

Activity diagram in package 'Common'

check message c18 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 197: check message c18 content in XSD

### check message c19 content in XSD

Activity owned by 'RU\_xy', in package 'Common'

check message c19 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 Information Flow from check message c19 content in XSD to create message

### check message c19 content in XSD diagram

Activity diagram in package 'Common'

check message c19 content in XSD

Version 1.0
km created on 04.06.2013. Last modified 04.06.2013

Figure 198: check message c19 content in XSD

### check message c20 content in XSD

Activity owned by 'RU xy', in package 'Common'

check message c20 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c20 content in XSD to create message

### Activity1 diagram

Activity diagram in package 'Common'

Figure 199: Activity1

### RU-System\_xy

ActivityPartition in package 'Common'

RU-System\_xy Version 1.0 Phase 1.0 Proposed Hantak created on 01.05.2013. Last modified 02.05.2013

ELEMENTS OWNED BY RU-System_xy
create message : Activity
show message content in legacy system(s): Activity
send TRAIN ID mandatory : Activity
send TRAIN ID optional : Activity
send CASE REFERENCE ID mandatory : Activity
send CASE REFERENCE ID optional : Activity
send CASE REFERENCE ID recommended : Activity
send PATH REQUEST ID mandatory: Activity
send PATH REQUEST ID optional : Activity
send PATH REQUEST ID recommended : Activity
send PATH ID mandatory : Activity

ELEMENTS OWNED BY RU-System_xy
■ send PATH ID mandatory : Activity
send PATH ID optional : Activity
send PATH ID recommended : Activity
send OTN mandatory : Activity
send OTN mandatory : Activity
send OTN optional : Activity
☐ receive TRAIN ID mandatory : Activity
receive TRAIN ID optional : Activity
☐ receive CASE REFERENCE ID recommended : Activity
☐ receive CASE REFERENCE ID optional : Activity
☐ receive PATH REQUEST ID mandatory : Activity
☐ receive PATH REQUEST ID optional : Activity
receive PATH ID mandatory : Activity
☐ receive PATH ID mandatory : Activity
receive PATH ID optional : Activity
receive PATH ID recommended : Activity
receive OTN mandatory : Activity

ELEMENTS OWNED BY RU-System_xy
☐ receive OTN optional : Activity
receive RELATED ID 1 optional : Activity
receive OTN recommended : Activity
receive RELATED ID 2 optional : Activity
receive RELATED ID 1 optional : Activity
receive RELATED ID 3 optional : Activity
receive RELATED ID 2 optional : Activity
receive RELATED ID 3 optional : Activity
■ back to the parent-process : ActivityFinal
Called from the parent-process : ActivityInitial

### create message

Activity owned by 'RU-System\_xy', in package 'Common'

create message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### 

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### **OUTGOING BEHAVIORAL RELATIONSHIPS ←** ControlFlow from create message to Set the Identifiers **4** ControlFlow from create message to Set the Identifiers ControlFlow from create message to Set the Identifiers **←** ControlFlow from create message to Set the Identifiers ♣ ControlFlow from create message to Set the Identifiers ControlFlow from create message to Set the Identifiers **◆** ControlFlow from create message to Set the Identifiers ♣ ControlFlow from create message to Set the Identifiers ♣ ControlFlow from create message to Set the Identifiers INCOMING BEHAVIORAL RELATIONSHIPS

- Information Flow from check message c06 content in XSD to create message
- Information Flow from check message c19 content in XSD to create message
- Information Flow from check message c20 content in XSD to create message
- Information Flow from check message c16 content in XSD to create message
- Information Flow from check message c03 content in XSD to create message
- Information Flow from check message c08 content in XSD to create message
- Information Flow from check message c01 content in XSD to create message
- ControlFlow from Called from the parent-process to create message

## ControlFlow from Called from the parent-process to create message Information Flow from check message c18 content in XSD to create message Information Flow from check message c11 content in XSD to create message Information Flow from check message c15 content in XSD to create message Information Flow from check message c13 content in XSD to create message Information Flow from check message c04 content in XSD to create message Information Flow from check message c04 content in XSD to create message

### show message content in legacy system(s)

Activity owned by 'RU-System xy', in package 'Common'

show message content in legacy system(s)

Version 1.0 Phase 1.0 Proposed
Hantak created on 05.05.2013. Last modified 26.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 ControlFlow from show message content in legacy system(s) to back to the parent-process
- ControlFlow from show message content in legacy system(s) to back to the parent process

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Identifiers processed to show message content in legacy system(s)
- ControlFlow from Identifiers processed to show message content in legacy system(s)
- ControlFlow from Identifiers processed to show message content in legacy system(s)
- ControlFlow from Identifiers processed to show message content in legacy system(s)

# ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s)

### send TRAIN ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

send TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 29.04.2013. Last modified 03.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send TRAIN ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory ControlFlow from Set the Identifiers to send TRAIN ID mandatory

### send TRAIN ID optional

Activity owned by 'RU-System xy', in package 'Common'

send TRAIN ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send TRAIN ID optional to receive TRAIN ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send TRAIN ID optional

### send CASE REFERENCE ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

send CASE REFERENCE ID mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 29.04.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory
- ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory
- ← ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory

### send CASE REFERENCE ID optional

Activity owned by 'RU-System\_xy', in package 'Common'

send CASE REFERENCE ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional

### send CASE REFERENCE ID recommended

Activity owned by 'RU-System xy', in package 'Common'

send CASE REFERENCE ID recommended

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### send PATH REQUEST ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

send PATH REQUEST ID mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 04.05.2013. Last modified 04.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory
- ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory
- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory
- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory

### send PATH REQUEST ID optional

Activity owned by 'RU-System xy', in package 'Common'

send PATH REQUEST ID optional
Version 1.0 Phase 1.0 Proposed
Hantak created on 25.05.2013. Last modified 25.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send PATH REQUEST ID optional to receive PATH REQUEST ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH REQUEST ID optional

### send PATH REQUEST ID recommended

Activity owned by 'RU-System xy', in package 'Common'

send PATH REQUEST ID recommended

Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### send PATH ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

send PATH ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 04.05.2013. Last modified 04.05.2013

- ← ControlFlow from send PATH ID mandatory to receive PATH ID mandatory
- ← ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory

### send PATH ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

send PATH ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 04.05.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH ID mandatory

### send PATH ID optional

Activity owned by 'RU-System xy', in package 'Common'

send PATH ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 25.05.2013. Last modified 25.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send PATH ID optional to receive PATH ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH ID optional

### send PATH ID recommended

Activity owned by 'RU-System xy', in package 'Common'

send PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from send PATH ID recommended to send OTN recommended
- 4 ControlFlow from send PATH ID recommended to receive PATH ID recommended

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send PATH ID recommended
- ControlFlow from send OTN recommended to send PATH ID recommended

### send OTN mandatory

Activity owned by 'RU-System\_xy', in package 'Common'

send OTN mandatory Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 17.06.2013



ControlFlow from send OTN mandatory to receive OTN mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send OTN mandatory

### send OTN mandatory

Activity owned by 'RU-System xy', in package 'Common'

send OTN mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send OTN mandatory to receive OTN mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send OTN mandatory
- ControlFlow from Set the Identifiers to send OTN mandatory
- ControlFlow from Set the Identifiers to send OTN mandatory

### send OTN optional

Activity owned by 'RU-System xy', in package 'Common'

send OTN optional Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 02.05.2013

- ← ControlFlow from send OTN optional to receive OTN optional
- ← ControlFlow from send OTN optional to receive OTN optional
- ControlFlow from send OTN optional to receive OTN optional

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional
ControlFlow from Set the Identifiers to send OTN optional

### receive TRAIN ID mandatory

Activity owned by 'RU-System\_xy', in package 'Common'

receive TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 29.04.2013. Last modified 03.05.2013

## OUTGOING BEHAVIORAL RELATIONSHIPS 4 ControlFlow from receive TRAIN ID mandatory to Identifiers processed 4 ControlFlow from receive TRAIN ID mandatory to Identifiers processed 4 ControlFlow from receive TRAIN ID mandatory to Identifiers processed 4 ControlFlow from receive TRAIN ID mandatory to Identifiers processed

### OUTGOING BEHAVIORAL RELATIONSHIPS

- ControlFlow from receive TRAIN ID mandatory to Identifiers processed
- ControlFlow from receive TRAIN ID mandatory to Identifiers processed
- ← ControlFlow from receive TRAIN ID mandatory to Identifiers processed
- ControlFlow from receive TRAIN ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory
- ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### receive TRAIN ID optional

Activity owned by 'RU-System xy', in package 'Common'

receive TRAIN ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive TRAIN ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send TRAIN ID optional to receive TRAIN ID optional

### receive CASE REFERENCE ID recommended

Activity owned by 'RU-System\_xy', in package 'Common'

receive CASE REFERENCE ID recommended

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### receive CASE REFERENCE ID optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive CASE REFERENCE ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from receive CASE REFERENCE ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional

### receive PATH REQUEST ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

receive PATH REQUEST ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed
- ← ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed
- ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed
- ← ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

- \*\* ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory
- ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory

### receive PATH REQUEST ID optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive PATH REQUEST ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013



← ControlFlow from receive PATH REQUEST ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH REQUEST ID optional to receive PATH REQUEST ID optional

### receive PATH ID mandatory

Activity owned by 'RU-System\_xy', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 20.05.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
◆ ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from send PATH ID mandatory to receive PATH ID mandatory
- ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### receive PATH ID mandatory

Activity owned by 'RU-System xy', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 19.04.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from receive PATH ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### receive PATH ID optional

Activity owned by 'RU-System xy', in package 'Common'

receive PATH ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive PATH ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID optional to receive PATH ID optional

### receive PATH ID recommended

Activity owned by 'RU-System\_xy', in package 'Common'

receive PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 06.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from receive PATH ID recommended to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID recommended to receive PATH ID recommended

### receive OTN mandatory

Activity owned by 'RU-System\_xy', in package 'Common'

receive OTN mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive OTN mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN mandatory to receive OTN mandatory

### receive OTN optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive OTN optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive OTN optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN optional to receive OTN optional

### receive RELATED ID 1 optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive RELATED ID 1 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

- ControlFlow from receive RELATED ID 1 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 1 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 1 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 1 optional to Identifiers processed



← ControlFlow from receive RELATED ID 1 optional to Identifiers processed

ControlFlow from receive RELATED ID 1 optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send RELATED ID 1 optional to receive RELATED ID 1 optional

### receive OTN recommended

Activity owned by 'RU-System xy', in package 'Common'

receive OTN recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from receive OTN recommended to Identifiers processed
- ← ControlFlow from receive OTN recommended to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN recommended to receive OTN recommended

### receive RELATED ID 2 optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive RELATED ID 2 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send RELATED ID 2 optional to receive RELATED ID 2 optional

### receive RELATED ID 1 optional

Activity owned by 'RU-System xy', in package 'Common'

receive RELATED ID 1 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from receive RELATED ID 1 optional to Identifiers processed
- ◆ ControlFlow from receive RELATED ID 1 optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send RELATED ID 1 optional to receive RELATED ID 1 optional

### receive RELATED ID 3 optional

Activity owned by 'RU-System xy', in package 'Common'

receive RELATED ID 3 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

- ← ControlFlow from receive RELATED ID 3 optional to Identifiers processed
- ControlFlow from receive RELATED ID 3 optional to Identifiers processed

### OUTGOING BEHAVIORAL RELATIONSHIPS

- ← ControlFlow from receive RELATED ID 3 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 3 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 3 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 3 optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send RELATED ID 3 optional to receive RELATED ID 3 optional

### receive RELATED ID 2 optional

Activity owned by 'RU-System xy', in package 'Common'

receive RELATED ID 2 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed
- ← ControlFlow from receive RELATED ID 2 optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send RELATED ID 2 optional to receive RELATED ID 2 optional

### receive RELATED ID 3 optional

Activity owned by 'RU-System\_xy', in package 'Common'

receive RELATED ID 3 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive RELATED ID 3 optional to Identifiers processed

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OUTGOING BEHAVIORAL RELATIONSHIPS	12 1 cordary, 2023
ControlFlow from receive RELATED ID 3 optional to Identifiers processed	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from send RELATED ID 3 optional to receive RELATED ID 3 optional	
back to the parent-process  ActivityFinal owned by 'RU-System xy', in package 'Common'	
INCOMING BEHAVIORAL RELATIONSHIPS	
ControlFlow from show message content in legacy system(s) to back to the parent-process	
OUTGOING BEHAVIORAL RELATIONSHIPS  4 ControlFlow from Called from the parent-process to create message	
ControlFlow from Called from the parent-process to create message	
IM_xy ActivityPartition in package 'Common'	IM_xy
Version 1.0 F Hantak created on 29.04.2013. Last m	Phase 1.0 Proposed nodified 01.05.2013
ELEMENTS OWNED BY IM_xy	
check message c02 content in XSD : Activity	
check message c05 content in XSD : Activity	

eheck message c09 content in XSD : Activity

ELEMENTS OWNED BY IM_xy
check message c10 content in XSD : Activity
check message c12 content in XSD : Activity
check message c14 content in XSD : Activity
check message c15 content in XSD : Activity
check message c17 content in XSD : Activity
eheck message c21 content in XSD : Activity

### check message c02 content in XSD

Activity owned by 'IM\_xy', in package 'Common'

check message c02 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c02 content in XSD to create message

### check message c02 content in XSD diagram

Activity diagram in package 'Common'

check message c02 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 200: check message c02 content in XSD

### check message c05 content in XSD

Activity owned by 'IM xy', in package 'Common'

check message c05 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from check message c05 content in XSD to create message

### check message c05 content in XSD diagram

Activity diagram in package 'Common'

check message c05 content in XSD

Version 1.0
km created on 04.06.2013. Last modified 04.06.2013

Figure 201: check message c05 content in XSD

### check message c09 content in XSD

Activity owned by 'IM\_xy', in package 'Common'

check message c09 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from check message c09 content in XSD to create message

### check message c09 content in XSD diagram

Activity diagram in package 'Common'

check message c09 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 202: check message c09 content in XSD

### check message c10 content in XSD

Activity owned by 'IM xy', in package 'Common'

check message c10 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c10 content in XSD to create message

### check message c10 content in XSD diagram

Activity diagram in package 'Common'

check message c10 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 203: check message c10 content in XSD

### check message c12 content in XSD

Activity owned by 'IM\_xy', in package 'Common'

check message c12 content in XSD

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 04.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

Information Flow from check message c12 content in XSD to create message

### check message c12 content in XSD diagram

Activity diagram in package 'Common'

check message c12 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 204: check message c12 content in XSD

### check message c14 content in XSD

Activity owned by 'IM xy', in package 'Common'

check message c14 content in XSD

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c14 content in XSD to create message

### check message c14 content in XSD diagram

Activity diagram in package 'Common'

check message c14 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 205: check message c14 content in XSD

### check message c15 content in XSD

Activity owned by 'IM xy', in package 'Common'

check message c15 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

Information Flow from check message c15 content in XSD to create message

### check message c15 content in XSD diagram

Activity diagram in package 'Common'

check message c15 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 206: check message c15 content in XSD

### check message c17 content in XSD

Activity owned by 'IM xy', in package 'Common'

check message c17 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 04.06.2013. Last modified 04.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♣ Information Flow from check message c17 content in XSD to create message

### check message c17 content in XSD diagram

Activity diagram in package 'Common'

check message c17 content in XSD Version 1.0 km created on 04.06.2013. Last modified 04.06.2013

Figure 207: check message c17 content in XSD

### check message c21 content in XSD

Activity owned by 'IM\_xy', in package 'Common'

check message c21 content in XSD Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 04.06.2013



ControlFlow from check message c21 content in XSD to create message

### INCOMING BEHAVIORAL RELATIONSHIPS

Information Flow from create message to check message c21 content in XSD

### check message content c21 in XSD diagram

Activity diagram in package 'Common'

check message content c21 in XSD Version 1.0 Hantak created on 26.05.2013. Last modified 27.05.2013

ssage "" with XSD-content	

Figure 208: check message content c21 in XSD

### **IM System**

ActivityPartition in package 'Common'

IM System

Version 1.0 Phase 1.0 Proposed Hantak created on 18.04.2013. Last modified 18.04.2013

ELEMENTS OWNED BY IM System
receive OTN recommended : Activity
receive PATH ID recommended : Activity
☐ receive TRAIN ID mandatory : Activity
Event2 : Event

### receive OTN recommended

Activity owned by 'IM System', in package 'Common'

receive OTN recommended Version 1.0 Phase 1.0 Proposed Hantak created on 18.04.2013. Last modified 19.04.2013

### receive PATH ID recommended

Activity owned by 'IM System', in package 'Common'

receive PATH ID recommended Version 1.0 Phase 1.0 Proposed Hantak created on 18.04.2013. Last modified 18.04.2013

### receive TRAIN ID mandatory

Activity owned by 'IM System', in package 'Common'

receive TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 18.04.2013. Last modified 18.04.2013

### STRUCTURAL PART OF receive TRAIN ID mandatory

ObjectNode3: ActionPin

### ObjectNode3

ActionPin owned by 'receive TRAIN ID mandatory', in package 'Common'

### Event2

Event owned by 'IM System', in package 'Common'

Event2 Version 1.0 Phase 1.0 Proposed Hantak created on 18.04.2013. Last modified 18.04.2013

### IM-System\_c22

ActivityPartition in package 'Common'

IM-System\_c22 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 01.05.2013

ELEMENTS OWNED BY IM-System_c22
Create message : Activity
send TRAIN ID mandatory : Activity
send OTN recommended : Activity
Send PATH ID mandatory: Activity
send PATH ID recommended : Activity
send PATH REQUEST ID recommended : Activity
prepare "related" identifiers : Activity
prepare "related" identifiers : Activity

### **Create message**

Activity owned by 'IM-System\_c22', in package 'Common'

Create message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### send TRAIN ID mandatory

Activity owned by 'IM-System\_c22', in package 'Common'

send TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

4 ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### send OTN recommended

Activity owned by 'IM-System c22', in package 'Common'

send OTN recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from send OTN recommended to receive OTN recommended

### **Send PATH ID mandatory**

Activity owned by 'IM-System c22', in package 'Common'

Send PATH ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from Send PATH ID mandatory to receive PATH ID mandatory

### send PATH ID recommended

Activity owned by 'IM-System c22', in package 'Common'

send PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send PATH ID recommended to receive PATH ID recommended

### send PATH REQUEST ID recommended

Activity owned by 'IM-System\_c22', in package 'Common'

send PATH REQUEST ID recommended

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send PATH REQUEST ID recommended to receive PATH REQUEST ID recommended

### prepare "related" identifiers

Activity owned by 'IM-System c22', in package 'Common'

prepare "related" identifiers Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 01.05.2013

### prepare "related" identifiers

Activity owned by 'IM-System c22', in package 'Common'

prepare "related" identifiers Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### IM-System xy

ActivityPartition in package 'Common'

IM-System\_xy Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 02.05.2013

ELEMENTS OWNED BY IM-System_xy
prepare "RELATED IDENTIFIERS" : Activity
send RELATED ID 1 optional : Activity
prepare "RELATED IDENTIFIERS" : Activity
send RELATED ID 2 optional : Activity
send RELATED ID 3 optional : Activity
create message : Activity

send TRAIN ID mandatory: Activity  send CASE REFERENCE ID mandatory: Activity  send CASE REFERENCE ID optional: Activity  send PATH REQUEST ID mandatory: Activity  send PATH REQUEST ID optional: Activity  send PATH ID mandatory: Activity  send PATH ID mandatory: Activity  send PATH ID mandatory: Activity  send PATH ID optional: Activity  send PATH ID optional: Activity  send OIN mandatory: Activity  send OIN petional: Activity  send OIN optional: Activity  send OIN petional: Activity  send RELATED ID 1 optional: Activity  send RELATED ID 2 optional: Activity	ELEMENTS OWNED BY IM-System_xy
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ELEMENTS OWNED BY IM-System_xy
receive TRAIN ID optional : Activity
send RELATED ID 3 optional : Activity
■ receive CASE REFERENCE ID mandatory : Activity
receive CASE REFERENCE optional : Activity
receive CASE REFERENCE ID mandatory : Activity
■ receive PATH REQUEST ID mandatory : Activity
☐ receive PATH REQUEST ID optional : Activity
receive PATH ID mandatory: Activity
receive PATH ID mandatory : Activity
☐ receive PATH ID recommended : Activity
☐ receive CASE REFERENCE ID optional : Activity
receive OTN optional : Activity
☐ receive OTN mandatory : Activity
☐ receive OTN mandatory : Activity
receive PATH ID optional : Activity
show message content in legacy system(s): Activity
receive OTN optional : Activity

Model Report 12 February, 2025 ELEMENTS OWNED BY IM-System xy ■ back to the parent process : ActivityFinal ■ Called from the parent-process : ActivityInitial prepare "RELATED IDENTIFIERS" Activity owned by 'IM-System xy', in package 'Common' prepare "RELATED IDENTIFIERS" Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013 OUTGOING BEHAVIORAL RELATIONSHIPS ← ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers ← ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Set the Identifiers to prepare "RELATED IDENTIFIERS" ControlFlow from Set the Identifiers to prepare "RELATED IDENTIFIERS" send RELATED ID 1 optional Activity owned by 'IM-System xy', in package 'Common' send RELATED ID 1 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013 **OUTGOING BEHAVIORAL RELATIONSHIPS** ← ControlFlow from send RELATED ID 1 optional to receive RELATED ID 1 optional INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Set the Identifiers to send RELATED ID 1 optional

ControlFlow from Set the Identifiers to send RELATED ID 1 optional

### prepare "RELATED IDENTIFIERS"

Activity owned by 'IM-System\_xy', in package 'Common'

prepare "RELATED IDENTIFIERS"

Version 1.0 Phase 1.0 Proposed
Hantak created on 04.05.2013. Last modified 28.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers
ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers
ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers
ControlFlow from prepare "RELATED IDENTIFIERS" to Set the Identifiers
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INCOMING BEHAVIORAL RELATIONSHIPS
ControlFlow from Set the Identifiers to prepare "RELATED IDENTIFIERS"
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ControlFlow from Set the Identifiers to prepare "RELATED IDENTIFIERS"

### send RELATED ID 2 optional

Activity owned by 'IM-System\_xy', in package 'Common'

send RELATED ID 2 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from send RELATED ID 2 optional to receive RELATED ID 2 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 2 optional
- ControlFlow from Set the Identifiers to send RELATED ID 2 optional

### send RELATED ID 3 optional

Activity owned by 'IM-System xy', in package 'Common'

send RELATED ID 3 optional Version 1.0 Phase 1.0 Proposed Hantak created on 23.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send RELATED ID 3 optional to receive RELATED ID 3 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 3 optional
- ControlFlow from Set the Identifiers to send RELATED ID 3 optional

### create message

Activity owned by 'IM-System xy', in package 'Common'

create message Version 1.0 Phase 1.0 Proposed Hantak created on 29.04.2013. Last modified 03.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from create message to Set the Identifiers

# ControlFlow from create message to Set the Identifiers Information Flow from create message to check message c21 content in XSD ControlFlow from create message to Set the Identifiers ControlFlow from create message to Set the Identifiers

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Called from the parent-process to create message
- Information Flow from check message c12 content in XSD to create message
- Information Flow from check message c17 content in XSD to create message
- Information Flow from check message c10 content in XSD to create message
- Information Flow from check message c14 content in XSD to create message
- ControlFlow from check message c21 content in XSD to create message
- Information Flow from check message c09 content in XSD to create message

- Information Flow from check message c02 content in XSD to create message
- ControlFlow from Called from the parent-process to create message
- Information Flow from check message c05 content in XSD to create message

### send TRAIN ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

send TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 03.05.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory
- ControlFlow from Set the Identifiers to send TRAIN ID mandatory

### send TRAIN ID optional

Activity owned by 'IM-System xy', in package 'Common'

send TRAIN ID optional Version 1.0 Phase 1.0 Proposed

Hantak created on 23.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send TRAIN ID optional to receive TRAIN ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send TRAIN ID optional
- ControlFlow from Identifiers processed to send TRAIN ID optional

### send CASE REFERENCE ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

send CASE REFERENCE ID mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 02.05.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

◆ ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send CASE REFERENCE ID mandatory

### send CASE REFERENCE ID optional

Activity owned by 'IM-System xy', in package 'Common'

send CASE REFERENCE ID optional

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional
- ← ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional

Model Report 12 February, 2025

INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional
- ControlFlow from Set the Identifiers to send CASE REFERENCE ID optional

### send PATH REQUEST ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

send PATH REQUEST ID mandatory
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 19.04.2013. Last modified 04.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory
- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory
- ControlFlow from Set the Identifiers to send PATH REQUEST ID mandatory

### send PATH REQUEST ID optional

Activity owned by 'IM-System xy', in package 'Common'

send PATH REQUEST ID optional
Version 1.0 Phase 1.0 Proposed
Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send PATH REQUEST ID optional to receive PATH REQUEST ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH REQUEST ID optional

### send PATH ID mandatory

Activity owned by 'IM-System\_xy', in package 'Common'

send PATH ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory
- ControlFlow from Set the Identifiers to send PATH ID mandatory

### send PATH ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

send PATH ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send PATH ID mandatory

### send PATH ID optional

Activity owned by 'IM-System xy', in package 'Common'

send PATH ID optional Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 06.05.2013

### ControlFlow from send PATH ID optional to send OTN mandatory ControlFlow from send PATH ID optional to receive PATH ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN mandatory to send PATH ID optional

← ControlFlow from send PATH ID optional to receive PATH ID optional

- ControlFlow from Set the Identifiers to send PATH ID optional
- ControlFlow from Set the Identifiers to send PATH ID optional

### send PATH ID recommended

Activity owned by 'IM-System xy', in package 'Common'

send PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from send PATH ID recommended to receive PATH ID recommended
- ← ControlFlow from send PATH ID recommended to send OTN recommended

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from send OTN recommended to send PATH ID recommended
- ControlFlow from Set the Identifiers to send PATH ID recommended

### send OTN mandatory

Activity owned by 'IM-System xy', in package 'Common'

send OTN mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from send OTN mandatory to receive OTN mandatory
- ← ControlFlow from send OTN mandatory to send PATH ID optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send OTN mandatory
- ControlFlow from send PATH ID optional to send OTN mandatory
- ControlFlow from Set the Identifiers to send OTN mandatory
- ControlFlow from Set the Identifiers to send OTN mandatory
- ControlFlow from Set the Identifiers to send OTN mandatory

### send OTN mandatory

Activity owned by 'IM-System xy', in package 'Common'

send OTN mandatory
Version 1.0 Phase 1.0 Proposed
Hantak created on 06.05.2013. Last modified 17.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN mandatory to receive OTN mandatory

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Set the Identifiers to send OTN mandatory

### send OTN optional

Activity owned by 'IM-System xy', in package 'Common'

send OTN optional Version 1.0 Phase 1.0 Proposed

Hantak created on 02.05.2013. Last modified 02.05.2013



ControlFlow from send OTN optional to receive OTN optional

- ControlFlow from send OTN optional to receive OTN optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send OTN optional
- ControlFlow from Set the Identifiers to send OTN optional
- ControlFlow from Set the Identifiers to send OTN optional

### send OTN recommended

Activity owned by 'IM-System xy', in package 'Common'

send OTN recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- 4 ControlFlow from send OTN recommended to send PATH ID recommended
- 4 ControlFlow from send OTN recommended to receive OTN recommended
- ← ControlFlow from send OTN recommended to send PATH ID recommended

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send OTN recommended
- ControlFlow from Set the Identifiers to send OTN recommended
- ControlFlow from send PATH ID recommended to send OTN recommended
- ControlFlow from send PATH ID recommended to send OTN recommended

### send RELATED ID 1 optional

Activity owned by 'IM-System xy', in package 'Common'

send RELATED ID 1 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from send RELATED ID 1 optional to receive RELATED ID 1 optional

## INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Set the Identifiers to send RELATED ID 1 optional ControlFlow from Set the Identifiers to send RELATED ID 1 optional ControlFlow from Set the Identifiers to send RELATED ID 1 optional ControlFlow from Set the identifiers to send RELATED ID 1 optional ControlFlow from Set the Identifiers to send RELATED ID 1 optional ControlFlow from Set the Identifiers to send RELATED ID 1 optional

### receive TRAIN ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

receive TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 03.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed

# ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed ControlFlow from receive TRAIN ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### send RELATED ID 2 optional

Activity owned by 'IM-System\_xy', in package 'Common'

send RELATED ID 2 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send RELATED ID 2 optional to receive RELATED ID 2 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 2 optional
- ControlFlow from Set the Identifiers to send RELATED ID 2 optional
- ControlFlow from Set the Identifiers to send RELATED ID 2 optional
- ControlFlow from Set the identifiers to send RELATED ID 2 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 2 optional
- ControlFlow from Set the Identifiers to send RELATED ID 2 optional

### receive TRAIN ID optional

Activity owned by 'IM-System xy', in package 'Common'

receive TRAIN ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 26.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive TRAIN ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send TRAIN ID optional to receive TRAIN ID optional

### send RELATED ID 3 optional

Activity owned by 'IM-System xy', in package 'Common'

send RELATED ID 3 optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 28.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from send RELATED ID 3 optional to receive RELATED ID 3 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 3 optional
- ControlFlow from Set the Identifiers to send RELATED ID 3 optional
- ControlFlow from Set the Identifiers to send RELATED ID 3 optional
- ControlFlow from Set the identifiers to send RELATED ID 3 optional

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Set the Identifiers to send RELATED ID 3 optional
- ControlFlow from Set the Identifiers to send RELATED ID 3 optional

### receive CASE REFERENCE ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

receive CASE REFERENCE ID mandatory

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.05.2013. Last modified 04.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ◆ ControlFlow from receive CASE REFERENCE ID mandatory to Identifiers processed
- ← ControlFlow from receive CASE REFERENCE ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory

### receive CASE REFERENCE optional

Activity owned by 'IM-System\_xy', in package 'Common'

receive CASE REFERENCE optional

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 06.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

- 4 ControlFlow from receive CASE REFERENCE optional to Identifiers processed
- ← ControlFlow from receive CASE REFERENCE optional to Identifiers processed
- ← ControlFlow from receive CASE REFERENCE optional to Identifiers processed
- ← ControlFlow from receive CASE REFERENCE optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE optional

### receive CASE REFERENCE ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

receive CASE REFERENCE ID mandatory

Version 1.0 Phase 1.0 Proposed
Hantak created on 02.05.2013. Last modified 23.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♦ ControlFlow from receive CASE REFERENCE ID mandatory to Identifiers processed
- ← ControlFlow from receive CASE REFERENCE ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

- \*\* ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory
- ControlFlow from send CASE REFERENCE ID mandatory to receive CASE REFERENCE ID mandatory

### receive PATH REQUEST ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

receive PATH REQUEST ID mandatory

Version 1.0 Phase 1.0 Proposed

Hantak created on 04.05.2013. Last modified 04.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ♦ ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed
- ← ControlFlow from receive PATH REQUEST ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH REQUEST ID mandatory to receive PATH REQUEST ID mandatory

### receive PATH REQUEST ID optional

Activity owned by 'IM-System xy', in package 'Common'

receive PATH REQUEST ID optional

Version 1.0 Phase 1.0 Proposed

Hantak created on 25.05.2013. Last modified 25.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive PATH REQUEST ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH REQUEST ID optional to receive PATH REQUEST ID optional

### receive PATH ID mandatory

Activity owned by 'IM-System\_xy', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 04.05.2013. Last modified 04.05.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from receive PATH ID mandatory to Identifiers processed
◆ ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed
◆ ControlFlow from receive PATH ID mandatory to Identifiers processed
◆ ControlFlow from receive PATH ID mandatory to Identifiers processed
◆ ControlFlow from receive PATH ID mandatory to Identifiers processed
ControlFlow from receive PATH ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### receive PATH ID mandatory

Activity owned by 'IM-System xy', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 04.05.2013. Last modified 17.06.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive PATH ID mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID mandatory to receive PATH ID mandatory

### receive PATH ID recommended

Activity owned by 'IM-System xy', in package 'Common'

receive PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 06.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive PATH ID recommended to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID recommended to receive PATH ID recommended

### receive CASE REFERENCE ID optional

Activity owned by 'IM-System\_xy', in package 'Common'

receive CASE REFERENCE ID optional

Version 1.0 Phase 1.0 Proposed

Hantak created on 06.05.2013. Last modified 26.05.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

← ControlFlow from receive CASE REFERENCE ID optional to Identifiers processed

### 

### INCOMING BEHAVIORAL RELATIONSHIPS

\*\* ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional

← ControlFlow from receive CASE REFERENCE ID optional to Identifiers processed

ControlFlow from send CASE REFERENCE ID optional to receive CASE REFERENCE ID optional

### receive OTN optional

Activity owned by 'IM-System xy', in package 'Common'

receive OTN optional Version 1.0 Phase 1.0 Proposed Hantak created on 05.05.2013. Last modified 05.05.2013

### 

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN optional to receive OTN optional

### receive OTN mandatory

Activity owned by 'IM-System\_xy', in package 'Common'

receive OTN mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 17.06.2013

OUTGOING BEHAVIORAL RELATIONSHIPS
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
ControlFlow from receive OTN mandatory to Identifiers processed
INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from send OTN mandatory to receive OTN mandatory
- ControlFlow from send OTN mandatory to receive OTN mandatory

### receive OTN mandatory

Activity owned by 'IM-System\_xy', in package 'Common'

receive OTN mandatory Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 17.06.2013

### OUTGOING BEHAVIORAL RELATIONSHIPS

ControlFlow from receive OTN mandatory to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN mandatory to receive OTN mandatory

### receive PATH ID optional

Activity owned by 'IM-System xy', in package 'Common'

receive PATH ID optional Version 1.0 Phase 1.0 Proposed Hantak created on 06.05.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ControlFlow from receive PATH ID optional to Identifiers processed
- ← ControlFlow from receive PATH ID optional to Identifiers processed

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from send PATH ID optional to receive PATH ID optional
- ControlFlow from send PATH ID optional to receive PATH ID optional

### show message content in legacy system(s)

Activity owned by 'IM-System xy', in package 'Common'

show message content in legacy system(s)

Version 1.0 Phase 1.0 Proposed

Hantak created on 05.05.2013. Last modified 05.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← ControlFlow from show message content in legacy system(s) to back to the parent process

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from Identifiers processed to show message content in legacy system(s)
- ControlFlow from Identifiers processed to show message content in legacy system(s)
- ControlFlow from Identifiers processed to show message content in legacy system(s)

### INCOMING BEHAVIORAL RELATIONSHIPS ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s) ControlFlow from Identifiers processed to show message content in legacy system(s)

### receive OTN optional

Activity owned by 'IM-System xy', in package 'Common'

receive OTN optional Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 26.05.2013

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

ControlFlow from receive OTN optional to Identifiers processed

Model Report \_\_\_\_\_\_ 12 February, 2025

### 

INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from receive OTN optional to Identifiers processed

- ControlFlow from send OTN optional to receive OTN optional
- ControlFlow from send OTN optional to receive OTN optional

### back to the parent process

ActivityFinal owned by 'IM-System xy', in package 'Common'

### INCOMING BEHAVIORAL RELATIONSHIPS

- ControlFlow from show message content in legacy system(s) to back to the parent process
- ControlFlow from show message content in legacy system(s) to back to the parent process
- ControlFlow from Identifiers processed to back to the parent process

### Called from the parent-process

ActivityInitial owned by 'IM-System xy', in package 'Common'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

- ← ControlFlow from Called from the parent-process to create message
- ControlFlow from Called from the parent-process to create message

### RU\_path request

ActivityPartition in package 'Common'

Model Report \_\_\_\_\_\_ 12 February, 2025

RU\_path request Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 15.03.2013. Last modified 02.05.2013

ELEMENTS OWNED BY RU_path request
From any path request related process: ActivityInitial

### From any path request related process

ActivityInitial owned by 'RU\_path request', in package 'Common'

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

♦ Information Flow from From any path request related process to PathRequest Message

### RU-System\_c22

ActivityPartition in package 'Common'

RU-System\_c22 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 01.05.2013

ELEMENTS OWNED BY RU-System_c22
☐ receive CASE REFERENCE ID recommended : Activity
receive OTN recommended : Activity
receive PATH ID mandatory : Activity
receive PATH ID recommended : Activity
☐ receive PATH REQUEST ID recommended : Activity
■ receive TRAIN ID mandatory : Activity

### receive CASE REFERENCE ID recommended

Activity owned by 'RU-System\_c22', in package 'Common'

receive CASE REFERENCE ID recommended Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### receive OTN recommended

Activity owned by 'RU-System c22', in package 'Common'

receive OTN recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send OTN recommended to receive OTN recommended

### receive PATH ID mandatory

Activity owned by 'RU-System c22', in package 'Common'

receive PATH ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Send PATH ID mandatory to receive PATH ID mandatory

### receive PATH ID recommended

Activity owned by 'RU-System c22', in package 'Common'

receive PATH ID recommended Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH ID recommended to receive PATH ID recommended

### receive PATH REQUEST ID recommended

Activity owned by 'RU-System\_c22', in package 'Common'

receive PATH REQUEST ID recommended

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send PATH REQUEST ID recommended to receive PATH REQUEST ID recommended

### receive TRAIN ID mandatory

Activity owned by 'RU-System\_c22', in package 'Common'

receive TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from send TRAIN ID mandatory to receive TRAIN ID mandatory

### **RU-System**

ActivityPartition in package 'Common'

RU-System Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 19.04.2013

ELEMENTS OWNED BY RU-System
Create message : Activity
send TRAIN ID mandatory : Activity
Called from the parent-process : ActivityInitial

### Create message

Activity owned by 'RU-System', in package 'Common'

Create message Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 19.04.2013. Last modified 29.04.2013

### INCOMING BEHAVIORAL RELATIONSHIPS

ControlFlow from Called from the parent-process to Create message

### send TRAIN ID mandatory

Activity owned by 'RU-System', in package 'Common'

send TRAIN ID mandatory Version 1.0 Phase 1.0 Proposed

seid.maglajlic created on 19.04.2013. Last modified 29.04.2013

### **Called from the parent-process**

ActivityInitial owned by 'RU-System', in package 'Common'



♣ ControlFlow from Called from the parent-process to Create message

### **Business Context**

Package in package 'Business Process Model'

Business Context Version 1.0 Phase 1.0 Proposed created on 05.01.2006. Last modified 05.01.2006

### **Stakeholders**

Package in package 'Business Context'

Stakeholders Version 1.0 Phase 1.0 Proposed created on 05.01.2006. Last modified 05.01.2006

### Stakeholders diagram

Analysis diagram in package 'Stakeholders'

Stakeholders
Version 1.0
seid.maglajlic created on 11.01.2006. Last modified 02.04.2013

Name: Stakeholders Author: seid.maglajlic Version: 1.0

Created: 11.01.2006 00:00:00 Updated: 02.04.2013 11:59:16

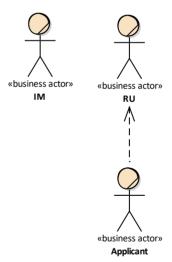


Figure 209: Stakeholders

### **Text**

Text in package 'Stakeholders'

Text
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 08.11.2012. Last modified 08.11.2012
Extends

### **Applicant**

Actor «business actor» in package 'Stakeholders'

Applicant Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.02.2013. Last modified 08.02.2013

### CONNECTORS

Dependency Source -> Destination From: Applicant: Actor, Public To: RU: Actor, Public

### IM

Actor «business actor» in package 'Stakeholders'

IM Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### CONNECTORS

UseCaseLink Source -> Destination

From: IM: Actor, Public

To: PathMgmt: UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor» Target: Public (UseCase) Conference (e.g. FTE,

RNE) «business use case»

Association (direction: Unspecified)

Source: Public (Actor) IM «business actor» Target: Public (UseCase) IM-IM Coordination

«business use case»

### RU

Actor «business actor» in package 'Stakeholders'

Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 08.11.2012. Last modified 08.11.2012

### CONNECTORS

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: Conference (e.g. FTE, RNE): UseCase, Public

UseCaseLink Source -> Destination

From: RU : Actor, Public

To: RU-RU coordination : UseCase, Public

✓ UseCaseLink Source -> Destination

From: RU: Actor, Public

To: PathMgmt : UseCase, Public

**Dependency** Source -> Destination From: Applicant : Actor, Public

To: RU: Actor, Public

### **Topology**

Package in package 'Business Context'

Topology Version 1.0 Phase 1.0 Proposed created on 05.01.2006. Last modified 05.01.2006

### **BusinessCase**

Node in package 'Topology'

BusinessCase Version 1.0 Phase 1.0 Proposed created on 11.01.2006. Last modified 18.02.2013

ELEMENTS OWNED BY BusinessCase
CaseReference : Node
Dossier : Node
Dossier : Node
Dossier : Node
Path : Node
Path : Node
Path : Node
☐ ThroughCoach : Node
Train: Node

### CaseReference

Node owned by 'BusinessCase', in package 'Topology'

CaseReference Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Node) CaseReference	Target: Public (Node) Dossier
Association (direction: Unspecified)  Source: Public (Node) CaseReference	Target: Public (Node) PathRequest
Association (direction: Unspecified)  Source: Public (Node) CaseReference	Target: Public (Node) Train
Association (direction: Unspecified)  Source: Public (Node) CaseReference	Target: Public (Node) ThroughCoach

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### Dossier

Node owned by 'BusinessCase', in package 'Topology'

Dossier Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

ELEMENTS OWNED BY Dossier	
PathRequest : Node	
PathRequest : Node	

ELEMENTS OWNED BY Dossier
PathRequest : Node
☐ Train V1 : Node
Train V2 : Node

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) Dossier

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Node) CaseReference

Target: Public (Node) PathRequest

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **PathRequest**

Node owned by 'Dossier', in package 'Topology'

PathRequest Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Train V1

Node owned by 'Dossier', in package 'Topology'

> Train V1 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 18.02.2013

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) ThroughCoach

Target: Public (Node) Train V1

### Train V2

Node owned by 'Dossier', in package 'Topology'

Train V2 Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

### Path

Node owned by 'BusinessCase', in package 'Topology'

Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### Path

Node owned by 'BusinessCase', in package 'Topology'

Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **Path**

Node owned by 'BusinessCase', in package 'Topology'

Path Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 13.02.2013. Last modified 13.02.2013

### **ThroughCoach**

Node owned by 'BusinessCase', in package 'Topology'

ThroughCoach Version 1.0 Phase 1.0 Proposed seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train V1
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) ThroughCoach

### Train

Node owned by 'BusinessCase', in package 'Topology'

Train
Version 1.0 Phase 1.0 Proposed
seid.maglajlic created on 18.02.2013. Last modified 18.02.2013

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Node) CaseReference	Target: Public (Node) Train
Association (direction: Unspecified)	
Source: Public (Node) ThroughCoach	Target: Public (Node) Train