

# TAF/TAP TSI Sector Handbook Change Log

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<b>Version:</b>	<b>3.3.0.0_3.3</b>
<b>Date:</b>	<b>2023-04-26</b>

## Purpose

**Change Log: Brief overview of the changes from the version 2.1.3\_1.2 to 3.3.0.0\_3.3**  
**Important note: the change log is split to XSD related adaptations and Sector Handbook text changes.**

**The XSD related adaptations contain the list of messages that are affected by the particular schema version increment. The messages are listed if their structure was affected. The business rules for usage of the elements in the structure is not explained here. Some elements or codes in the code lists may affect just one business case used by one message, in spite of the usage of the particular element or code in other messages.**

## List of changes in Message Schema

### Version 2.1.3 from the 22/12/2015

CRs approved by ERA and JSG:

- SMO 38 sector message: passenger train composition -- association of vehicle list added to global association
- SMO 49 sector message: other technical restrictions for passenger rolling stock simplified
- SMO 35 / ERA 396 Wagon data cardinality changed to /0 to many/from /1 to many/ -- related to TrainCompositionMessage
- SMO 43 / ERA 397 BookedLocationDateTime added to PlannedJourneySection/Timing/TimingAtLocation: **Optional** element added – to be used only in Operations, not in Planning. Affects Path Request, Path Coordination and Path Details, but should only be used by Path Details in Operations.
- SMO 44 / ERA 398 BookedLocationDateTime added to AffectedSection/Start-EndOfSection: **Optional** element added – to be used only in Operations, not in Planning. Affects Path Canceled, Path Not Available, Path Details Refused,

Path Confirmed, Path Section Notification. Will be used by Path Not Available, Path Cancelled and Path Section Notification if needed during Operations.

- Bug Fix: CR 45 / ERA 395 Approved correction of LocationFileDatasetMessage
  - usage of corrected ValidityType without restriction

### **Messages (structure!) affected by 2.1.3:**

Passenger Train Composition Process Message (Sector)

Train Composition Message

Path Request Message

Path Details Message

Path Coordination Message (Sector)

Path Canceled Message

Path Details Refused Message

Path Confirmed Message

Path Not Available Message

Receipt Confirmation

Path Section Notification Message

Location File Dataset Message

### **Version 2.1.4 from the 27/06/2016**

CRs approved by ERA and JSG:

- SMO 16 ERA 357 Public Time Support – TimeQualifierCode (PathRequest/PathDetails) -- TimerQualifierCode moved to code list schema
- SMO 34 ERA 392 "DangerousGoodsIndication in TrainCompositionMessage - TrainRunningData
- SMO 50 ERA 409 (Hand) Brake (Braked) weight values "0" in TrainCompositionMessage -- HandBrakedBrakeWeight type changed from Numeric3--3 to xs:integer with restriction 000 to 999
- SMO 51 ERA 411 Replace Train Control System Code in TrainCompositionMessage with xs:token and annotation. Code list remains in the code list schema to be updated accordingly.

### **Messages (Structure!) affected by 2.1.4:**

Train Composition Message

Path Request Message

Path Details Message

Path Coordination Message (sector)

Version 2.1.5 from the 15/12/2016

CRs approved by ERA and JSG:

- SMO 53 ERA 419 Loco Numbers in Train Composition Message (TCM): the new optional element LocoNumber is added to the LocIdent used in TCM (affected only TCM. New global element LocoNumber added)
- SMO 55 ERA 417 Creation of the code list for the element TractionType: The TractionType is converted to a code list and moved to taf\_cat\_codelists\_sector.xsd. The new codes are:
  - First digit:
    - “0” = not specified
    - “1” = external electric power supply for traction (catenary and pantograph, third rail or other such as maglev)
    - “2” = on-board traction power supply for traction without external electrical or other power supply available
    - “3” = hybrid traction (both on-board or electric traction available)
  - Second digit (definitions in chapter 2.2.2 of the LOC&PAS TSI 1302/2014):
    - “0” = not specified
    - “1” = locomotive or power unit
    - “2” = trainset or multiple unit or railcar
    - “3” = shunter
    - “4” = on track machine or infrastructure inspection vehicle
    - (affected only TCM)
- SMO 57 (Sector CR, nor ERA ID) PathSectionNotification -- added ScheduledDateTimeAtTransferPoint on message level (affected only PathSectionNotificationMessage)
- SMO 59 ERA 418 TrainCompositionMessage: Mistake in HazardIdentificationNumber element resolved: the regular expression with the constraint on the format is removed. (affected only TCM)

## **Messages (Structure!) affected by 2.1.5**

Path Section Notification (Sector)

Train Composition

## Version 2.1.6 from the 08/02/2017

CRs approved by ERA and JSG:

- CR60 ERA 423 CR is mainly renaming and adding the annotation -- affects only RSRD.
  - Elements affected:
    - ....MaxDesignSpeed -- added, replaced MaxSpeedEmpty and
  - MaxSpeedLoaded
    - ....NormalLoadingGauge
    - ....LoadTable
    - ....ParkingBrakeForce
  - Elements deleted (completely removed from the schema!):
    - ....MaxSpeedEmpty
    - ....MaxSpeedLoaded
    - ....MaxParkingBrakeGradient
  
- CR61 ERA 424 Change of the type of the element MaxAxleWeight -- affects:
  - .....RollingStockDatasetMessage
  - .....TrainCompositionMessage
  - .....PathRequestMessage
  - .....PathDetailsMessage
  
- CR62 ERA 425 Renaming and annotation improvement -- affects TrainComposition & RSRD
  - Elements affected:
    - ....LengthOverBuffers (replaced WagonLenth -- IMPORTANT for those who already have mapping on TCM)
    - ....ExceptionalGaugingInd (Train Level)
  - Element removed from the message (but remains in the schema) (IMPORTANT for those who already have mapping on TCM!):
    - ....WagonLength
  
- CR63 (Sector Message PassengerTrainComposition):
  - Redefinition of the type of EuropeanVehicleNumber -- changed from integer to string with restriction and regular expression.
  
- CR66 ERA 426 Wrong number in the code list (repeated value) -- affects TrainComposition (the change is applied on the code list)
  - Affected code list: TractionMode. Code 44 repeated twice, code 54 must be added instead.
  
- CR67 ERA 427 Wrong pattern applied -- affects ErrorMessage
  - Error code number format was wrong -- there will be no restrictions on format on the error code any more.
  
- LengthOverBuffers annotation on DesignDataset level (RSRD message) removed -- this is not needed, since the global annotation (documentation) of the element LengthOverBuffers applies.

## **Messages (Structure!) affected by 2.1.6:**

Rolling Stock Dataset Message

Train Composition Message

Passenger Train Composition Process Message (Sector)

Path Request Message

Path Details Message

Path Coordination Message (Sector)

Error Message

## **Version 2.1.7 from the 18/05/2017**

- CR 70 ERA 433: Error Message Element Multiplicity: all significant elements of the message are packed into one complex element Error which has the 1--n multiplicity. Affected message: ErrorMessage
- CR 71 ERA 434: TypeOfInformationCode 23 added. The code is used for PathNotAvailable message. Indicates that the alternative offer will be prepared by IM. Affected messages: all messages for Path Request process, because they all use the TypeOfInformationCode list. This particular code should be used only for PathNotAvailable and ReceiptConfirmation.
- CR 76 ERA 435: Element name and type changed: MinVerticleRadiusYardHump / Integer 1--9999 became MinVerticalRadiusYardHump / Integer 1--999, measured in meters. Affected message: RSRD.

## **Messages (Structure!) affected by 2.1.7:**

Error Message

Rolling Stock Dataset Message

Path Request Message

Path Details Message

Path Coordination Message (Sector)

Path Canceled Message

Path Details Refused Message

Path Confirmed Message

Path Not Available Message

Receipt Confirmation

Path Section Notification Message

### **Sector Handbook Changes**

- For the internal version 2.1.3\_1.2: The disclaimer about TrainID (the sentence about “TrainID is not mandatory...” is deleted) was removed from Application Guide and Sector Handbook, according to the decisions of TEGs and SMO/JSG.
- Path alteration process (chapter 12.8.5). After the review of the sector in June 2017, all references to the “Temporary Capacity Restrictions (TCR)”, the term which is used in the Timetable Redesign (TTR) project, are removed. The references will be added once when the TCR processes are defined in the TTR implementation and linked precisely to TAF/TAP processes.
- Path not available message (chapter 12.11.6)
- Error Message structure explanation (chapters 12.11.8, 12.14.15)
- Explanation for adding the “Operational” elements to Path Details and Path Section Notification message (12.11.9, 12.14.8, 12.14.12)
- Adding of the new codes to the code list for Type Of Information (12.14.17)
- Adding the explanation for the new type of element for Restrictions of the Rolling Stock (TAP Train Preparation, chapter 13.2)
- Added new annexes:
  - Annex 6.1: Explanation of XSD diagram notation.
  - Annex 6.2: Export of the XSD “complete” schema to MS Word
  - Annex 6.3: Export of the XSD “codelist” schema to MS Word
  - Annex 8.7.1: TrainID test cases: general list with all the details and introductory explanations
  - Annex 8.7.2: Test cases for Joint Sector Group Pilot Programme for Short Term Path Request and TrainID

## Version 2.1.8 from the 21/09/2017

CRs approved by ERA and JSG:

- Error Correction (Affected: PathRequest, PathDetails, PathCoordination, ObjectInfo messages): The TimingQualifierCode list of attributes was accidentally moved to time in the version 2.1.4. It actually belongs to Timing (it was an attribute list of the Timing element in all versions before 2.1.4). To correct the error, we moved the list of attributes TimerQualifierCode back to Timing element.
- CR 82: Update of RU-WagonKeeper communication (GCU Working Party result): new version of WagonPerformanceMessage is provided in the SECTOR schema.

### **Messages (Structure!) affected by 2.1.8:**

Path Request message

Path Details message

Path Coordination message

ObjectInfo message

WagonPerformance message

## Version 2.2.1 from the 14/06/2018

CRs approved by ERA and JSG:

- CR 87 / ERA 444: Information on connecting services and their direction should be provided by defining two new type codes "Connecting service to other train" and "Connecting service from other train" (definition according to type codes 0044/0045). Affected element: TrainActivity, description - no functional change.
- CR 88 / ERA 445: DerailmentDetectionDevice element added. New type (enumerated code list) created. CHANGE ON THE CODE LIST: DerailmentDetectionDeviceEnumeration added
- CR 89 / ERA 446: Extension of the NormalLoadingGauge code list.
- CR79 / ERA 443: Add an optional element RequestedCalendar in the PathInformation. This calendar will indicate the dates of the request to which that path is answering. Its value is a subset of the PlannedCalendar which was sent in the PathRequest message. In case the element is not present, the RequestedCalendar is assumed to be strictly identical to the PlannedCalendar

provided in the TrainInformation (no offset). Affected messages: Path Request, Path Details, Path Coordination (sector message). New global element RequestedCalendar is created. It is now the optional element of the PathInformation.

- CR93 : RouteClass code list error fixed: the empty pattern indication is removed.
- CR 86 (sector-only): make TrainInformation and PathInformation in PathCoordinationMessage optional. During the harmonization phase, the messages between RUs contain usually only the TrainInformation. During the path elaboration phase (after path request, before path offer), the IMs usually exchange only PathInformation. Also, during the planning process, the companies indicate their acceptance of the dossier by sending only the TypeOfInformation, where the details of the whole train and / or path are not relevant. Therefore, both TrainInformation and PathInformation may become optional.
- CR85 (sector-only): In the PassengerTrainCompositionProcessMessage, the Lenth (expressed in mm) used in TrainDataPassenger is replaced by TrainLength (expressed in m)
- CR84 (sector-only): Identification of the RollingStockType and the RollingStockIdentification in the PassengersTrainCompositionProcessMessage was provided in the "choice" structure: one could choose only one or another element but not both. The use cases show that there is a need to have both identification elements at the same time. Therefore, the structure "choice" is changed to the structure "sequence". Both elements are set as optional, but the sequence is mandatory.

### **Messages (Structure!) affected by 2.2.1:**

Path Request message

Path Details message

Path Coordination message

### **Version 2.2.2 from the 21/06/2018**

CRs approved by ERA and JSG:

- Alignment with ERA 2.2.2 (implementing ERA CR 439): Fixing the error found in ConsignmentOrderMessage in RouteCode: the wrong pattern was used `\d*(1-9)\d*0`, and it is replaced by the correct one: `\d*[1-9]\d*0`

### **Version 2.2.3 from the 07/12/2018**

CRs approved by ERA and JSG:

- CR: SMO ID 72, ERA ID 453: BitmapDays of calendar used in Path Request related messages changed to 740. Affected messages: all path-request related messages
- CR: SMO ID 95, ERA 459: Correction of value range of element AirBrakedMass. Affected: RSRD messages
- CR: SMO ID 101, ERA ID 460 Identification of Affected Section. Affected messages: PathSectionNotification, PathCancelation, PathConfirmed, PathDetailsRefused
- CR: SMO ID 91, ERA ID 457 ErrorMessage : to add an optional element in ErrorCauseReference tag. Affected: ErrorMessage
- CR: SMO ID 90, ERA ID 456 ReceiptConfirmationMessage : to add an optional element in RelatedReference tag. Affected: ReceiptConfirmationMessage
- CR: SMO ID 73, ERA ID 454 Unified use of the element “ LocoTypeNumber”. IMPORTANT: Fundamental element structure change. Affected: TrainCompositionMessage, PathRequest, PathDetails, PathCoordination, ObjectInfo
- CR: SMO ID 52: (Sector Only): ObjectInfoMessage adaptation with multiple TrainInformation and PathInformation blocks. Affected: ObjectInfoMessage
- CR: SMO ID 119: (Sector Only): Identification of the Rolling Stock in the PassengersTrainCompositionProcessMessage by both the EVN and RollingStockType + RollingStockIdentification. Affected: PassengerTrainCompositionProcessMessage

**Messages (Structure!) affected by 2.2.3:**

Path Section Notification message

Path Cancelation message

Path Confirmed message

Path Details Refused message

Error message

Receipt Confirmation message

Train Composition message

Path Request message

Path Details message

Path Coordination message

ObjectInfo message

## **Sector Handbook Changes**

- 7.1 Definition of roles is added with the definition of the Lead RU, Responsible Applicant, Responsible RU. In further chapters, especially in planning, the Responsible RU is replaced with Responsible Applicant accordingly either in the core text or in the figures, diagrams.
- High level overview of the processes is moved to chapter 7.2
- As pre-arranged paths have a special process according to 913/2010, the corresponding lines from chapter 8.2.3.2 Path and also from 12.11.2 Message 'Path Details' are removed.
- An example is added to chapter 8.2.4.6 Timetable Year for better understanding of the special use case when the train or path crosses timetable periods due to midnight crossing
- 9.4.1 Roles in Regular Operation is updated
- Based on the definition from the Reference Files WG, in chapter 9.7.3 Location Description, the Definition of a Primary Location and Definition of a Subsidiary Location are updated.
- 9.7.6 Availability of locations in CRD and 9.7.7 General rules for updates of locations in CRD are added
- Chapter 12. is renamed from Short-Term Path Request to Path Request, according to the general agreement within the Sector to use TAF TAP messages/framework for the Path Request process, including also annual timetable
- 12.2 Assumptions are updated as TAF and TAP apply both to interoperable traffic and domestic traffic
- New diagrams are added to 12.5.1 High level Overview of the Process:
  - o Process short-term path request with declaration of pre-accepted offer – sequence of the messages (harmonization phases are not included)
  - o Process short-term path request - sequence of messages (harmonization phases are not included)
  - o Process path request (annual timetable) – sequence of messages (harmonization phases are not included)
- New process diagram is added to 12.8.4 Process «Path cancellation by RA»
- New process diagram is added to 12.8.5 Process «Path alteration by IM». New TypeOfInformation codes are added to the text according to the process diagram.
- New process diagrams are added to 12.8.6 Process «Path modification by RA» (with or without pre-accepted offer). Text is updated according to the new process diagram.

- 12.9.1 Identification of the train is updated, focusing on the Path Request ID. After a path is booked, any request for Path Modification by the RA (planning or operation) must use a new PathRequest Identifier.
- 12.9.3 Related Trains as Part of Train Activity is updated with the new Train activity types "Connecting service to other train" (0044)/"Connecting service from other train" (0045)
- Train Information is updated in 12.10.2 Structure of the Message. Proper definitions of the Reference Point and Calendar are added helping the understanding of the offsets. On Demand Paths chapter is updated as its usage is optional and according to national rules.
- Affected Section is updated according to a recent change request. Optionally BookedLocationTime (planning) or BookedLocationDateTime (operation) can be used to avoid ambiguity especially in special cases like Y or loop train runs. Similar update is added to 12.14.12 Use of Affected Section.
- 12.11.1 Message 'Path Request' is updated and specified that Path Request with status 'deletion' or 'modification' can be used only until the IM has sent a PathDetails message.
- 12.11.4 Message 'Path Details Refused' and 12.11.5 Message 'Path Cancelled' are updated additional options are removed with status 'modification'. The reason is that these messages refer to a Path Details message and is only sent once as response. So, the message status 'modification' is not allowed.
- 12.11.6 Message 'Path Not Available' is extended with the TypeOfInformation 23. It means that a Path Details message will follow.
- 12.11.10 Message 'Receipt Confirmation' is updated according to the change request with a new element RelatedSenderReference.
- 2. Subcase is removed from 12.13.3 Splitting of a train
- Recommendation is added to 12.13.5 Trains with different routes on specific days. In RA – IM communication it is recommended to use the RelatedPlannedTransportIdentifier (with specific reason) to indicate that the RA wishes to get the same route and details for both Path Requests.
- Recommendation is added to 12.13.6 Change of a booked train for certain days (e.g. planned re-routing). In IM – RA communication it is recommended to send the PathNotAvailable message for the whole path in IM territory.
- 12.13.8 Trains that cannot leave before another train has arrived (diagram dependence) is detailed now with explanation for both trains: first train A to F and second train F to A.
- 12.14.2 Loco Type Number is updated according to the recent change request and the new structure is added to the text.
- 12.14.15 Use of the Error Message is updated according to the change request with a new element MessageSenderReference
- 12.14.16 Type of Request is extended with additional explanation of the processes: study, request, modification with an indication of the messages starting and closing the processes.

- Definition of the validity period and its first/last value are updated in 12.15.1 Overview of the Calendar
- 12.18 Re-planning, a clear definition is added to indicate when the planning is finished: after a final offer has been accepted by the RA and PathDetails has been sent by IM with status "booked".
- "Last message wins" rule is detailed in 21. Data quality, relying on the MessageHeader time stamp.

## Version 3.0.2 from the 15/06/2021

### CRs approved by ERA and JSG

#### TAF TSI maintenance release 2.4.0 (15.6.2020):

- CR 472 Update of TrainCompositionMessage with complex TrainActivityType
- CR 473 Correction of Error: Requested Calendar BitmapDays
- CR 474 New TypeOfInformation for acceptance and rejection of Draft and Final offer
- CR 475 Specification for number in "message type" for national messages
- CR 477 Addition of a Related Identifier Section in TrainRunningForecast and Information
- CR 478 Cancellation of train object
- CR 479 Addition of the a new code for the element TractionMode to identify "PushPullTrain"
- CR 480 Change of annotation of data type "Time" in xsd
- CR 482 Change of process to reject path offer
- CR 485 Identification of a Section (Operation)
- CR 489 Indication of coasting in Path construction
- CR 491 Error in pattern for LocoTypeNumber
- CR 492 TAF revision - Common Interface specification Annex D.2, Appendix E
- CR 493 Customer information in WagonReleaseNoticeMessage
- CR 494 Customer information in WagonDepartureNoticeMessage
- CR 495 Specification of the Limit Speed in the PlannedTrainData
- CR 496 Extension and clarification of overhaul date information in RSDS message
- CR 497 Spelling mistake in element "MultilateralAuthorisationCountries"
- CR 498 Clean up of code list of element "RouteClass"
- CR 500 Cardinality mistake of element "LoadChangeDevice" in RSRD design dataset
- CR 501 Representation of NOI TSI in RSDS message
- CR 502 New TypeOfInformation code for "draft no alternative available"
- CR 508 New message header element MessageDateTimeCreated
- CR 509 TrainRunningInterruptionMessage additional element "InterruptionStatus"
- CR 512 New Subsidiary Location Type Code for ENEE Codes
- CR 515 Error in xsd of TAF TrainComposition message (duplex of OTN)
- TAF TSI maintenance release 2.4.1 (03.09.2020):
- CR 472 Update of TrainCompositionMessage with complex TrainActivityType
- CR 491 Error in pattern for LocoTypeNumber
- CR 496 Extension and clarification of overhaul date information in RSDS message

#### TAF TSI maintenance release 2.5.0 (25.11.2020):

- CR 481 - New TypeOfInformationCodes
- CR 486 - Change to TrainCCSystem element and code
- CR 449 - Change of company code to 4-letter-alphanumeric merged
- CR 554 - PlannedDateNextOverhaul is not optional but it should be according to CR, OverhaulValidityPeriod missing
- CR 569 - Restriction of 'CargoCodingType' inconsistent
- CR 568 - Optional LimitedQuantityIndicator for type DanGoodsType
- CR 564 - Incorrect reference in documentation of element ExceptionalGaugingCode
- CR 551 - Element AirBrakedMass documentation is changed
- CR 570 - New Subsidiary Location Type Code for Intermodal Terminals
- CR 553 - Types 0046 and 0047 are missing from the annotation in the element TrainActivityType
- CR 567 - Change of documentation of element SerialNumber of complex type LocoTypeNumber
- CR 552 - Annotation formatting is changed in element LocoTypeNumber
- CR 550 - Duplicated definition of DateLastOverhaul element
- CR 549 - Make element BookedLocationTime global
- CR 514 - Add new optional element PlannedSpeed to PlannedTrainTechnicalData
- CR 575 - Shift of elements TrainCC\_System and TrainRadioSystem
- CR 574 - Errors in structure CombinedTrafficLoadProfile in xsd
- CR 526 - Code list TrainActivityType update
- CR 513 - Wagon Interchange Sub Notice message
- CR 516 - Interchange Reporting Removal
- CR 519 - New enumeration value for OSJD system based locations is needed for LocationSubsidiaryCode
- CR 560 - New element type of used hybrid power unit in TractionDetails
- CR 561 - Code list for element "Type of used hybrid power unit" in structure TractionDetails
- CR 563 - Supplement of element "TiltingFunction" in Structure PlannedTrainTechnicalData
- CR 566 - Supplement of reason for using RelatedPlannedTransportIdentifier (RPTID)
- CR 573 - Error in element InteropCapability
- CR 577 - Clean up of code list of element NormalLoadingGauge
- CR 578 - Update annotation of element LoadTableStars
- CR 581 - Addition of codes for element BrakeType
- CR 582 - New codelist for element ReasonOfReference
- CR 583 - PathSectionNotification message: OperationalTrainNumberIdentifier
- CR 585 - Make field TractionMode optional in planning messages
- CR 588 - TAF TrainCompositionMessage: Change of cardinality of the element ResponsibilityNextSection
- CR 589 - Handover and Transfer point description in XSD
- CR 590 - TRF Message : Multiple Train Location Reports
- CR 591 - Incorrect definition of codelist in element TractionType
- CR 592 - Double code "Final offer rejected" in codelist for TypeOfInformationCode
- CR 594 - Addition of CouplingType as child of WagonTechData
- CR 595 - Addition of ParkingBrakeForce as child of WagonTechData
- CR 598 - Modification of annotation for element "PlannedJourneyLocation" in XSD
- CR 599 - Change of Annotation for element LengthOfSetOfCarriages
- CR 600 - Fix error in XSD for Push/Pull train
- CR 601 - TOM Combined Model – Update of the ObjectType codelist with the Route
- CR 602 - TOM Combined Model – Creation of new element OffsetToReference in PlannedCalendar
- CR 604 - Change of type for element TrainCC\_System in xsd
- CR 609 - Deletion of element "TrainCC\_Syst" in xsd

- CR 610 - Missing values in TractionType element
- CR 611 - Addition of new JourneyLocationTypeCode "09 Network border"
- CR 612 - New element ReferenceTrainIDSubCalendar (Output from TOM Project)

#### Sector only CRs approved by JSG until 31 December 2020 (sector xsd 2.5.0.0.)

- CR SMO ID: 135
- CR SMO ID: 148
- CR SMO ID: 161
- CR CMO ID: 163
- CR SMO ID: 203
- CR SMO ID: 215
- CR SMO ID: 216
- CR SMO ID: 217
- CR SMO ID: 218
- CR SMO ID: 219
- CR SMO ID: 220
- CR SMO ID: 224
- CR SMO ID: 225
- CR SMO ID: 231
- CR SMO ID: 232

#### Sector only CRs approved by JSG until 01 June 2021 (sector xsd 3.0.0.0)

- CR SMO ID: 156 removal of Wagon-Interchange messages from the official schema, moving them to Sector-only part of the schema
- CR SMO ID: 218 additional action: RollingStockIdentification complex element removed due to replacement with UnitIdentification
- CR SMO ID: 221 - update CoachOrTrainsetCommercialData cardinality. The rest of CR was implemented in the previous version
- CR SMO ID: 253 adding the Activites to PassengerTrainComposition
- CR SMO ID: 254 adding the Paramters to PassengerTrainCompositionJourneySection

2021-06-25 TCR tool messages, elements and code lists added in the sector part – first release sector xsd 3.0.0.0

#### 2021-07-14 adaptation to ERA XSD 3.0.2 (sector xsd 3.0.2.0)

CR ERA 566/Sector adapted CRM SMO ID 172, 267: ReasonOfReference set optional. Official version will be updated by Nov 2021 accordingly (SMO CR ID 269 pending)

CR 612: New element ReferenceTrainIDSubCalendar (Output from TOM Project), "PathNotAvailableMessage" corrected

CR 612/SMO ID 256 correction by the sector: PathRequestMessage was also listed in the original CR text, therefore, the new element is added by the sector. Waiting for ERA to update the official version - Nov 2021

Sector correction of the mistake in the ErrorMessage: the wrong pattern on ErrorCode element is commented out - in order to be able to use ErrorMessage. Waiting for the correction in the official ERA schema (to be corrected with November 2021 release, SMO CR ID 258 noted).

Sector internal correction compared to sector schema xsd 3.0.0.0: LocationDateTime brought back to the TrainLocationReport.

## Sector Messages adapted

CR SMO ID 256 correction of the sector messages: adding the ReferenceTrainIDSubCalendar to OIM, PCM, ULM.

CR SMO ID 263 : element Push-Pull in PassengerTrainCompositionMessage

CR SMO ID 264 : new element ReferenceTRID in ObjectInfoMessage

CR SMO ID 265 and 266 : new codes N and O for ObjectInfoType (in ObjectInfoMessage)

## Sector Handbook Changes

### Part A Changes

- Added new Chapter 8 – Objects Identifiers – related to TrainID implementation.
- Route object with its description and identifier has been added. The relation of the Route object to the existing object has been added. (8.2.3)
- Reference TRID Reference calendar has been added (8.2.3.6)
- The entity relationship and the ownership of the objects (including the Route) has been added (8.2.3.7)
- Completely reorganized Chapter 9 – Reference Data – Updated definitions of primary and subsidiary locations added, detailed data management processes described and updated list of actors with their definitions. Additional data management processes described and included related to role of NCPs and NAEs.
- Added Annex 9.4 – list of all subsidiary location type codes

### Part B Changes

- Path Modification process has been extended with options whether the RO ID remains the same or not (12.8.6)
- New chapter has been added about the update procedure of the object Route (12.8.9)
- Identification of the train (12.9.1) chapter has been updated according to the combined Train Object Model and the new object Route.

- The Train Information has been updated (12.10.2) so that the Route element can be delivered to the IMs in the PRM.
- Business scenarios have been updated so that they include information about the Reference Train ID and the object route.
- Loco Type Number (12.14.2) has been updated, so that SerialNumber can be utilized in Planning too.
- Reason of Reference chapter (12.14.18) has been added
- Offset to Reference has been included in the Application of the Calendar in the Messages (12.15)
- New annex about the Temporary Capacity Restrictions (TCR) has been added (Annex 12.3)

### Part C Changes

- The whole part C has been revised
  - o Process diagram in 13.1 has been removed
  - o Rolling stock restrictions have been removed
  - o New chapter 12.6 Accuracy of train running forecast information has been added
  - o New Chapter 19 Combined Transport has been added

### Version 3.1.0 from the 15/12/2021

2022-04-13 adaptation to ERA XSD 3.1.0 (sector xsd 3.1.0.1)

CR ERA 546 Set "LivestockOrPeopleIndicator" to non-mandatory

CR ERA 576 Error in taf\_tap\_codelist\_sector.xsd at element "TypeOfRequestCode"

CR ERA 613 Change in the frequency of occurrence of attribute "JourneyLocationTypeCode"

CR ERA 629 Order of JourneySection in TrainCompositonMessage upside down

CR ERA 630 Update annotation of longitude and latitude elements

CR ERA 635 Include BookedLocationDateTime and ReferencedLocationDateTime in TrainDelayCauseMessage

CR ERA 637 Include BookedLocationDateTime and ReferencedLocationDateTime in TrainRunningInterruptionMessage

CR ERA 638 Duplicate SpecialServiceDescriptionCode element

CR ERA 639 Creation of two codes ReasonOfReference

CR ERA 641 New TrainTypeCode

CR ERA 644 Extension of TRI to allow localisation between PLC/SLC locations, for GNSS and ETCS

CR ERA 645 Change on TrainRunningForecastMessage as consequence of CR 644(precise localisation between locations)

CR ERA 647 Defining BitmapDays as global element

CR ERA 648 Change of structure TrainActivityType

CR ERA 650 JourneySectionOrigin/Destination defined twice

CR ERA 651 Update of LocationSubsidiaryTypeCode

CR ERA 652 Introduction of information about telematics device reference data

CR ERA 654 ProcessType as new optional field

## Sector Messages adapted

TAP code list integrated - only 4 codelists are used - they are added here and the references in the elements that use them are fixed accordingly, as it was done in 3.0.2.0 already.

CR SMO ID 285 ObjectInfoMessage: Leading agencies added to OIM

CR SMO ID 289 ObjectInfoMessage: structure of TrainInformationExtended and PathInformationExtended changed: reference to Identifiers replaced previous RelatedPlannedTransportIdentifiers

CR ERA 654/CR SMO ID 284 - additions to sector schema: ObjectInfoMessage, PathCoordinationMessage, PathSectionNotificationMessage are updated with the new optional element ProcessType on the root element level

CR SMO ID 246 New sector message TrainRunningStatusReportMessage added. Remark from SMO: GeographicCoordinates complex element is not extended with the elements Altitude and SRID because the official global element GeographicCoordinates was not accordingly updated by ERA within the CR 644 for the XSD version 3.1.0

CR SMO ID 269, CR SMO ID 289 and CR SMO ID 298 ReasonOfReference should be optional: After withdrawing CR 269 by mistake, new CRs were created and approved by JSG. Since they will be in ERA's official schema in the release in June 2022 they are released now in Sector schema.

## Sector Handbook Changes

Chapter 3 – Management Summary updated

Chapter 12.5 to 12.8.8 – Process descriptions updated for all planning process types

Chapter 12.14.8 – Timing at location chapter updated

Chapter 12.14.9 – Dwell time updated

## Version 3.2.0 from the 15/12/2022

CR ERA 644 Extension of TRI to allow localisation between PLC/SLC locations, for GNSS and ETCS

CR ERA 660 Update Timing at location in the PathDetailsMessage - Additional TimerQualifierCode

CR ERA 661 New TypeOfInformation values related to route update process

CR ERA 662 Insufficient annotation for new global element BitmapDays and inconsistency

CR ERA 670 Update annotation for ScheduledTimeAtHandover and ScheduledTimeAtTransfer

CR ERA 671 Creation of "TrainNotReadyDescription" to give reason why train is not ready in "TrainReadyMessage" (TRM)

CR ERA 672 Addition of element ReasonOfReference to ops messages and code for traffic management

CR ERA 673 Error in xsd 3.1.0 concerning element ReasonOfReference

CR ERA 674 New attribute "Operational strength of the train coupling" in structure PlannedTrainTechnicalData

CR ERA 675 New attribute "BogieWagonsOnly" in structure PlannedTrainTechnicalData

CR ERA 676 Renaming the process types "Pre-arranged Path published by RFC" and "Catalogue Path published by IM"

## Sector Messages adapted

TAP code list integrated - only 4 codelists are used - they are added here and the references in the elements that use them in the official ERA schema are fixed accordingly in this version, as it was done since 3.0.2.0 already.

Related information for the sector: the FacilityTypeDescriptionCode (TAP 9039 Code List) has added 2 new values. These are integrated here accordingly.

CR SMO ID 294 TCR part: Update TCRTYPE of the TCRMessage with the TCRID

CR SMO ID 295 TCR part: Move CoordinatingIM and AdministrativeContactInformation elements to the TCRTYPE structure of the TCRMessage

CR SMO ID 300 TCR part: Update "BitmapDays" in the TCRMessage with BitmapWeek type - referenced only to RoughDates

**Sector schema remark:** *JourneySectionOrigin and JourneySectionDestination are the official schema since 3.2.0, not any more in the sector-only part - they are removed from sector-only section.*

Error correction in ObjectType element. TCR (TC) enumeration entry was missing.

## Sector Handbook Changes

Chapter 12.8.1 to 12.8.8 removed

Chapter 12.8.7 moved to 12.5.12

Updated Chapters 12.10.1 and 12.14.16

Added Chapter 12.14.17

Annex 13 Updated

Added new Annex 14: Advance Planning v3.2

## Version 3.3.0 from the 26/04/2023

ERA CR 450 Documentation of the TAF TSI code lists

ERA CR 642 Usage of other ValidityPeriod in LocatoinFileDataset message

ERA CR 643 ValidityPeriod defined twice

ERA CR 653 Extend ReceiptConfirmationMessage for operational usage

ERA CR 668 Delete Existing ConsignmentOrderMessage

ERA CR 669 Add new message ConsignmentOrderMessage

ERA CR 690 MessageType: Reserving values for SFERA messages at a European level

ERA CR 691 New element type of used hybrid power unit in LocIdent

ERA CR 697 Addition of element Notes into TAF TrainCompositionMessage

ERA CR 698 End of Train Interruption: explicit notification

## Sector Messages adapted

TAP code list integrated - only 4 codelists are used - they are added here and the references in the elements that use them in the official ERA schema are fixed accordingly in this version, as it was done since 3.0.2.0 already.

SMO CR 301 CapacityProductSearchMessage added

SMO CR 302 CapacityProductMessage added

SMO CR 303 CapacityModelMessage added

SMO CR 319 TypeOfUsedHybridPowerunit added to UnitData in PassengerTrainCompositionMessage

## Sector Handbook Changes

Updated Chapter 8.2.3

Updated Chapters 12.1 and 12.5