

Annex 14 – Advance Planning

Sector Handbook for the Communication between Railway Undertakings and Infrastructure Managers (RU/IM Telematics Sector Handbook)

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Version history

VERSION	RESPONSIBLE	DATE	CHANGES
-	Nicolas Jasinski	29.08.2022	-
3	Nicolas Jasinski	07.09.2022	Replacement of “Advanced Planning” by “Advance Planning”
3.1	Nicolas Jasinski	27.09.2022	<p>Updates of the message sequence 1.3:</p> <ul style="list-style-type: none"> - AB and RA added as sender of the Capacity Model Message - TOI: changed from “4” to “to be defined” - Replacement of “Central tool” by “Tool” <p>Updates of the message sequence 2.3:</p> <ul style="list-style-type: none"> - Replacement of “Central tool” by “Tool” <p>General: “Central tool” replaced by “tool”</p>
3.2	Nicolas Jasinski	28.09.2022	<ul style="list-style-type: none"> - 1.2.1: additional description for the Type of Request paragraph. - Updates of the message sequence 1.3: “Capacity Needs Announcement” has been added to the description of the first message (CapacityModelMessage)

An essential component of the Timetabling and Capacity Redesign (TTR) process is the advance planning which is one of the key factors to make an optimal use of the available infrastructure capacity in an efficient manner. Advance planning requires an early knowledge about the market needs and available capacity, but also the temporary capacity restrictions.

The publication of capacity availability and needs, the coordination between the Infrastructure Managers and Allocation Bodies for capacity optimisation and the availability of the capacity modelling results/status are, among others, relevant for the Path Request and Path Allocation processes.

Purpose of this document

The purpose of this document is to describe the messages and elements used for the information exchange about Capacity Modelling and Planning.

Please note that this document does not intend to describe the Temporary Capacity Restrictions process. Please refer to Annex_12.3_Temporary Capacity Restriction (TCR): for the publication of TCRs.

1. Capacity and needs publication

1.1. Description

1.1.1. Capacity publications from IMs/ABs

The first and most important step is to make plans about how the infrastructure will be used in the future. IMs start with the capacity strategy plans and according to the strategy, IMs continue with the traffic volumes plans.

These plans IMs can do on their own or in consultation with Applicants, where the Applicants are invited to announce their capacity needs and ideas about future traffic. Applicants can send their future capacity needs and IMs can take these capacity needs into account in the creation of a capacity model.

On international lines, harmonisation with involved IM(s) is essential. This includes studies about routings and frequencies of national and international connections on the network.

In the preparation of the capacity models, IMs must consider the TCRs that can have a negative impact on the planned traffic.

IMs/ABs shall publish their forecasted infrastructure capacities for a given timetable period. Two types of capacities exist:

- Positive capacity: available capacity on a network.
- Negative capacity: Temporary Capacity Restrictions (TCRs) and any other non-available capacity.

Applicants shall publish their capacity needs for a given timetable period.

Some of the tools to which the capacity publications may be sent are the following:

- European Capacity Management Tool (ECMT): for the publication of all positive and negative capacities (except TCRs)
- TCR Tool (please refer to Annex_12.3_Temporary Capacity Restriction (TCR): for the publication of TCRs

1.1.2. Capacity needs from applicants

A Capacity Needs Announcements (CNA) is an early information to IMs about the future planned traffic. CNAs are a very important instrument within the TTR process that gives all Applicants a great chance to participate in the design of the future capacity, where Applicants can influence that:

- Capacity products prepared by IMs reflect the expected market needs,
- Capacity usage is balanced between freight services, passenger services, and capacity restrictions,
- TCRs are planned considering, as much as possible, the market needs

Applicants shall publish their forecasted capacity needs for a given timetable period. These publications are announced needs and are not binding.

1.2. Applicable messages

1.2.1. Capacity Model Message

The Capacity Model Message shall only be used for the publication of capacity in terms of traffic volumes by the IMs/ABs and for the publication capacity needs by the applicants. Please find below the general structure of this message.

Message header

Standard to all RA/IM messages and has no specificities for Advance Planning process.

Administrative Contact Information

Used for the administrative contact information of the capacity model’s creator.

Type Of Request

Type of Request “2” shall be used for the publication of capacity and the announcement of capacity needs.

Type of Request “3” shall be used for the update of already published capacity and already announced capacity needs.

Type Of Information

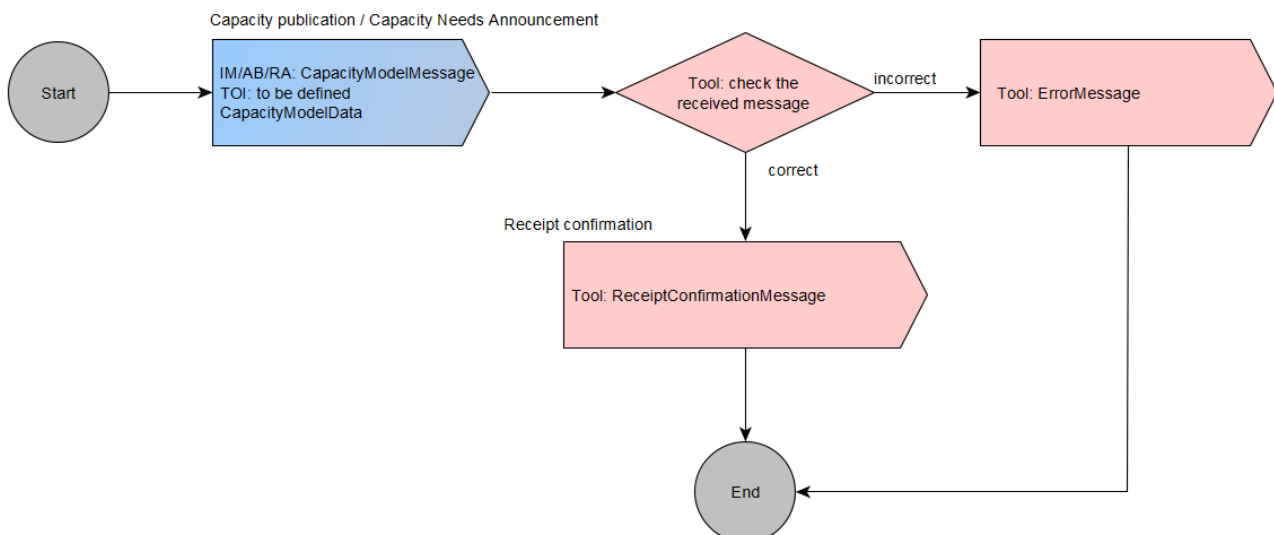
Standard to all RA/IM messages and has no specificities for Advance Planning process.

Capacity Model Data

Element containing information about the capacity model the sender intends to create with this message. Below are listing some of the child elements:

- Identifiers: store the capacity model object(s)
- Capacity portioning type: capacity product type that indicates the partition where the particular capacity product belongs to
- TrafficContracted: Provides information whether the need is already contracted or not
- TypeOfContract: information about the contract type, like framework agreement or any other
- MaxJourneyTime: to be used only for the CNA to indicate the limit of the journey time from origin to the destination, wished by the applicant

1.3. Message sequence



2. Capacity Product search

2.1. Description

The Capacity Product Search message shall be used to search for all kinds of capacity positive and negative). The technical attributes for searching are contained in the Searching Criteria of the message in the current TAF/TAP TSI schema, containing the parameters for each object type (temporary capacity restriction, catalogue path, path, capacity model and capacity needs announcements).

The national application shall send the Capacity Product Search message to search for the capacity that is in the focus of their needs, and the Capacity Product message shall return the list of all capacities that fulfil the searching parameters.

Some of the tools to which the capacity publications may be sent are the following:

- European Capacity Management Tool (ECMT): for positive and negative capacities
- TCR Tool (please refer to Annex_12.3_Temporary Capacity Restriction (TCR): only available for IMS/ABs for TCRs search

2.2. Applicable messages

2.2.1. Capacity Product Search Message

The Capacity Product Search Message shall be used to search for positive and negative capacities. An IM may also use this message type in order to search for capacities on locations located on neighbouring network.

Message header

The message header is common to all RA/IM messages and has no specificities for Advance Planning process. Please find below the general structure of this message.

Search Criteria

- TCR criteria: to search for TCRs
- Positive Capacity Product Criteria: to search for capacity objects
- Capacity Model Criteria: to search for capacity model and capacity needs announcements objects

2.2.2. Capacity Product Message

The Capacity Product Message shall be used to return the result for Capacity Product Search Message. It contains the TCRs, and capacity objects stored in a given tool and matching the search criteria provided in the Capacity Product Search Message. Please find below the general structure of this message.

Message header

The message header is common to all RA/IM messages and has no specificities for Advance Planning process. Please find below the general structure of this message.

TCRs

TCRs matching the search criteria provided in the Search Capacity Product Message.

Catalogue Paths

Catalogue Paths matching the search criteria provided in the Search Capacity Product Message.

Paths

Paths matching the search criteria provided in the Search Capacity Product Message.

Capacity Models

Capacity Models match the search criteria provided in the Search Capacity Product Message. The objects that will be returned as a part of the capacity model are CM (capacity model) and CN (capacity needs announcements).

2.3. Message sequence

