



TTR pilot PID ATL – Mannheim – Miranda de Ebro



# **Pilot Information Document**

## **Procedures for Capacity Requests**

Valid for process of timetable 2021,  
starting in 13 Dec 2020

### **2021 timetable year**



## Version Control

Version number	Date	Chapter changed	Changes
1.0	13.01.2020		Update of the whole document – detailed description on the way to handle and use capacity offer to TT 2021 <i>Integration of the comments / feedbacks received since PID Presentation on TTR ATLANTIC Pilot Meeting RU / IM :</i> <i>Michel DUPUIS, Vincent MOHSEN, Felix BARTOLOME</i>
2.0	12.02.2020		Update of the TTR publication and request description



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## 1 Introduction

In order to further harmonise the timetabling procedures between European countries, RNE and Forum Train Europe (FTE), in cooperation with the European Rail Freight Association (ERFA), launched the project 'Redesign of the international timetabling process' (TTR). The basic idea behind TTR is to better satisfy the needs of various applicants through an optimised timetabling process which provides capacity for specific purposes and safeguards some of the capacity for requests placed closer to the effective usage of the path ('Rolling Planning requests').

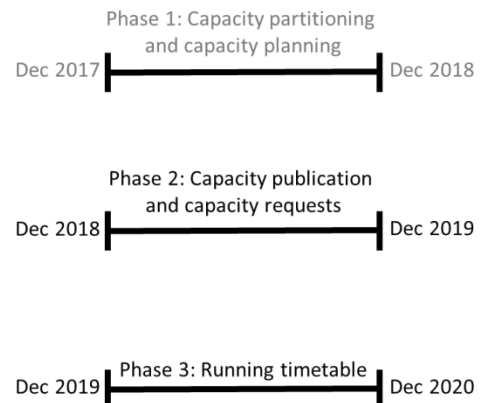
As agreed by the RNE General Assembly (May 2017) and FTE Plenary Assembly (June 2017), TTR will be implemented gradually with pilots to test some of the important and innovative TTR components. RNE and FTE defined three single line pilots, and one network pilot which will be gradually implemented on the ÖBB network from 2021. These pilots will be operative for timetable 2020 and further.

The four TTR-Pilots:



### Initial Timeline for the pilots

#### Pilot phases



The ATLANTIC Pilot covers Mannheim to Miranda de Ebro.

Due to the different needs in Spanish network the capacity products and rules are not exactly the same than in the rest of the pilot line. Therefore in each chapter of this document the general rules and principles apply for requests limited to French and German sections (Mannheim – Hendaye/Irun), while the particular rules for requests between Irun/Hendaye and Miranda de Ebro are described at the end of each chapter when different rules apply.

No commercial conditions are taken into account in this document.

The goals of the pilots are:

- Proof of the business reference model's accuracy
- Definition and specification of data reference model for capacity



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- Gathering input for process steering methods (e.g. allocation rules, commercial conditions)
- Gathering input for performance reference model
  - o Comparing capacity model with actual requests
  - o Amount of modifications/alterations
  - o Percentage of safeguarded capacity vs. residual capacity usage.

### Goals of pilot phase 1:

In 2018, close participation between involved IMs, RUs and other stakeholders has ended into a need for a capacity band. This phase of the pilot has not been successful as this capacity model could not be respected due to heavy TCRs constraints all over the line.

### Goals of pilot phases 2 and 3:

The goals of pilot phases 2 and 3 are:

- Capacity requests for timetable 2020 and further based on the capacity models created in pilot phase 1 (see 3.2. below for main results of this phase). The methods of the pilot lines are similar to each other to allow a comparison of the results.
- Quality of the timeline and allocation
- The proof of the business concept, specifically the correlation of annual timetabling capacity (ATT), capacity for TCRs (in line with the recast Annex VII) and safeguarded capacity for Rolling Planning;
- Inputs for improving the process;
- Inputs for the IT landscape (definition of requirements for IT systems);

More general information about the TTR project is available online on <http://www.rne.eu/sales-timetabling/ttr/>

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 Pilot – Mannheim – Miranda de Ebro			
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## 2 Disclaimer

This ATLANTIC Pilot Information Document (PID) describes the procedures for capacity requests on the pilot line. It describes all TTR concepts: yearly TT and Rolling Planning. The processes refer to the Network Statements of ADIF, SNCF Réseau and DB Netz as well as to the Corridor Information Document (book IV) of the RFC Atlantic. This document is revised at least every year, based on the experiences in the pilot, and it is updated before the publication of the capacity model.

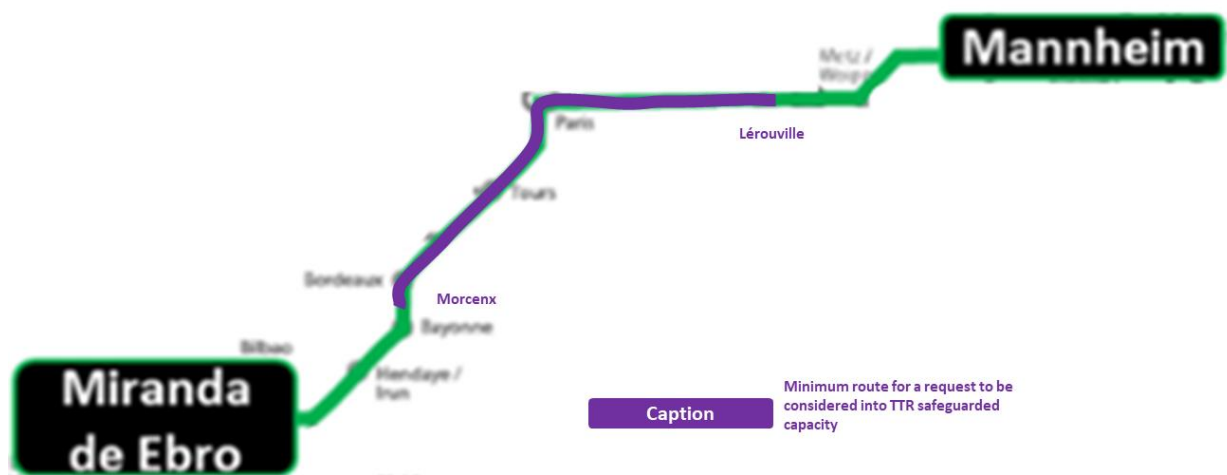


The TTR pilot is accessible for all applicants that fulfil the national requirements of each involved infrastructure territory.

Changes in the legal basis of this document (e.g. changes in EU regulations, Framework for Capacity Allocation or national regulations) will be implemented with each revision. Any changes during the running allocation process will be communicated directly to the applicants through publication by the involved IM.

### 3 ATLANTIC Pilot description

#### 3.1 Geographical boundaries of the pilot



TTR Atlantic Pilot scope

ATLANTIC Pilot documents are uploaded in RNE CMS Platform (<https://cms.rne.eu/ttr-communication-platform/atlantic-pilot-library>).

#### 3.2 Capacity model

In pilot phase 1 the capacity model has been developed for the pilot line. It has been subject to harmonization at German-French border (Forbach). The capacity model for the Spanish section is independent from the rest of the pilot line as the different gauge of the track and the necessary operations in the border terminals obliges to have different paths than those defined in France.

The capacity model visualizes at an early stage the share of capacity dedicated to commercial capacity (partitioned between “Annual Timetabling (ATT)” and “Rolling Planning (RP)”) and capacity dedicated to “temporary capacity restrictions” (TCRs) or Maintenance Windows<sup>1</sup>.

<sup>1</sup> Maintenance Windows are a subgroup of TCRs that are planned frequently mostly on a weekly basis in timetable year 2020.



The main differences between PaPs and Safeguarded Capacity (“SC”) are the following:

- SC is fully “flex”. The border point - as well as all other location points - is also “unlocked”.
- SC is published with a set of generic parameters (train length, weight, speed...). The speed limit is 100 km/h, the weight is 1800 tons and the train length is 750 meters (France)/650 meters (Germany). On the Spanish network, the speed limit is 100 km/h, there carried weight is 1000 tons and the train length is 450 meters.
- SC was not given any PaP-ID but a generic name: “NS/SN Capacity X”.  
Example: “NS Capacity 1” for the first slot available within the first bandwidth in the direction Mannheim-Hendaye.

On the French-German section, a part of the commercial capacity has been safeguarded in the form of one capacity bandwidth per direction, instead of conventional preconstructed paths or PaPs. **Each bandwidth contains for TT 2021 4 slots from Hendaye to Mannheim and one more from Hendaye to Forbach for prespecified trains (see §3.5.1).** The commercial offer underlying these bandwidths has been designed with the purpose of higher reliability along the year for RUs and indirectly for final customers. This guaranteed capacity is a result of observations of current traffic which has been confirmed by RUs’ preannouncements.

As a result, the features of these capacity bandwidths jointly prepared by SNCF Réseau and DB Netz for long-distance freight services are the following:

- **Direction Mannheim -> Hendaye**
  - Capacity for above mentioned prespecified trains from Monday to Friday on 48 weeks, departure between 8:51 and 13:51.
- **Direction Hendaye -> Mannheim**
  - Capacity for above mentioned prespecified trains from Monday to Friday on 48 weeks, departure between 11h15 and 19h15.

Amongst those 5 slots per direction:

- One is planned to be dedicated to Rolling-planning without any multiannual consideration.
- 4 of this safeguarded capacity address the global journey
- 1 / 5 of this safeguarded capacity address the French scope only

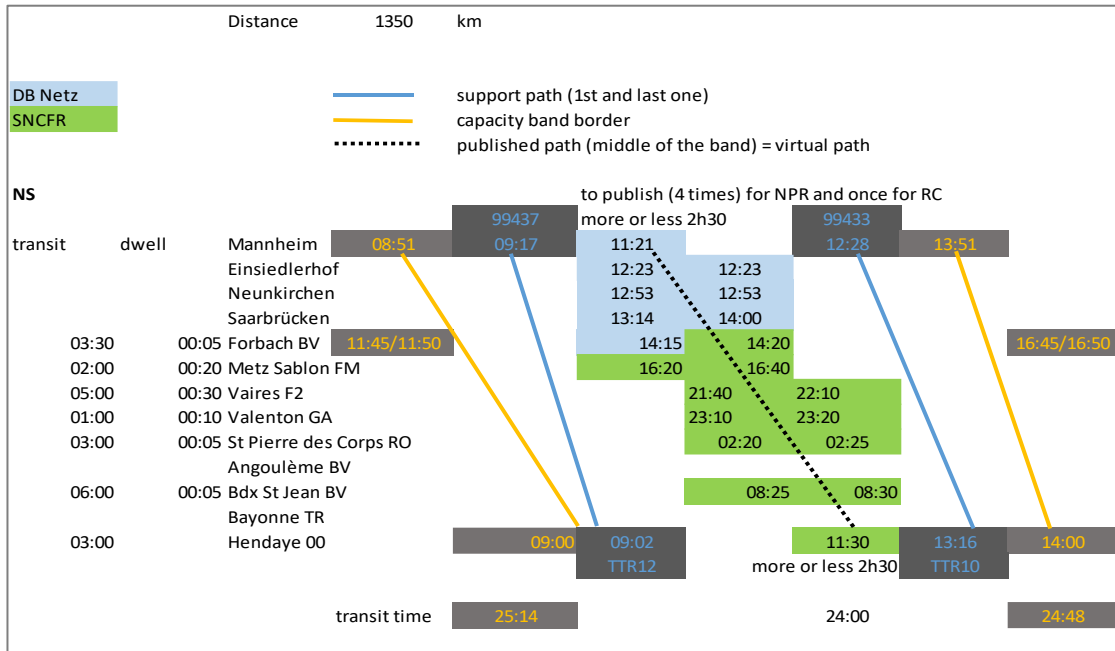
On the Spanish section, 1 capacity band per direction is designed for each kind of product (Annual Request and Rolling-Planning). In each capacity band 1 slot is safeguarded. The capacity bands are defined as follows:

- Direction Hendaye → Miranda
  - Capacity for 1 train from Monday to Sunday for the whole TT departing at 18:45 plus/minus 45 minutes for annual requests.
  - Capacity for 1 train from Monday to Sunday for the whole TT departing at 16:00 plus/minus 45 minutes for Rolling-Planning.
- Direction Miranda → Hendaye
  - Capacity for 1 train from Monday to Sunday for the whole TT arriving at 15:30 plus/minus 45 minutes for annual requests.
  - Capacity for 1 train from Monday to Sunday for the whole TT arriving at 20:00 plus/minus 45 minutes for Rolling-Planning.

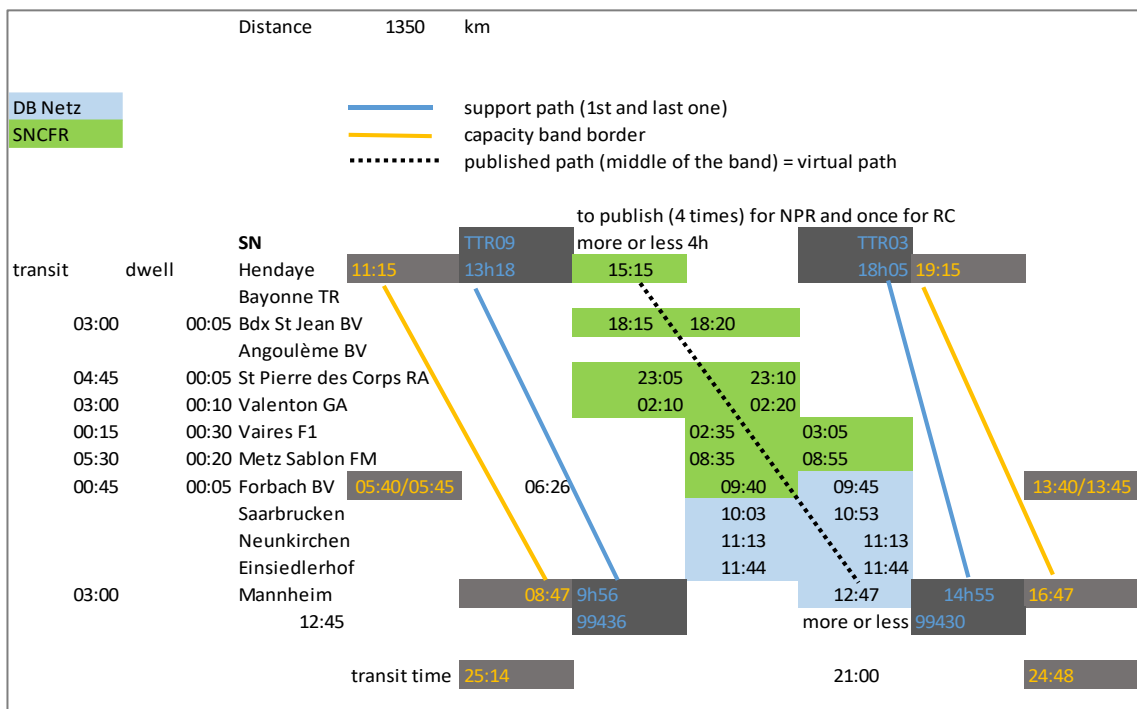


### 3.3 Publication of the safeguarded capacity

The commercial offer (ATT and RP) is a set of “virtual” paths which do not represent the support paths prepared by timetable planners of involved IMs (preconstructed Timetable) to represent and preserve the capacity bandwidths in their respective 24h graphic views. The timeline of the published paths represent a kind of median offer for each bandwidth. For each capacity bandwidth, the same virtual path is published many times.



North-South Direction



South-North Direction





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TT2021 - N-S		PCS view					Capacity Band		
Path ID		NS-NPR 1	NS-NPR 2	NS-NPR 3	NS-NPR 4	NS-RP 1	from	to	
DB Netz	Parameters	Train lenght	700	700	700	700	680		
		weight of Set of carriage	1800	1800	1800	1800	1705		
		Train max Speed	100	100	100	100	90		
		Running days	1-7	1-7	1-7	1-7	1-6		
		PCS Note	Any	Any	Any	Any	to confirm		
		Delta			02:30				
	Mannheim	dep	11:21	11:21	11:21	11:21		08:51	13:51
	Einsiedlerhof	arr							
		dep	12:23	12:23	12:23	12:23			
	Neunkirchen	arr							
		dep	12:53	12:53	12:53	12:53			
	Saarbrücken	arr	13:14	13:14	13:14	13:14			
		dep	14:00	14:00	14:00	14:00			
	Forbach	arr	14:15	14:15	14:15	14:15	14:15	11:45	16:45
	<i>Protected Border</i>				yes				
SNCF R	Parameters	Train lenght	700	700	700	700	700		
		weight of Set of carriage	1800	1800	1800	1800	1800		
		Train max Speed	100	100	100	100	100		
		Running days	1-7	1-7	1-7	1-7	1-7		
		PCS Note	Any	Any	Any	Any	Any		
		Delta			02:30				
	Forbach	dep	14:20	14:20	14:20	14:20	14:20	11:50	16:50
	<i>Protected Border</i>				no				
	Metz	arr	16:20	16:20	16:20	16:20	16:20		
		dep	16:40	16:40	16:40	16:40	16:40		
	Vaires	arr	21:40	21:40	21:40	21:40	21:40		
		dep	22:10	22:10	22:10	22:10	22:10		
	Valenton	arr	23:10	23:10	23:10	23:10	23:10		
		dep	23:20	23:20	23:20	23:20	23:20		
	St Pierre	arr	2:20	2:20	2:20	2:20	2:20		
		dep	2:25	2:25	2:25	2:25	2:25		
	Angoulême	arr							
		dep							
	Bordeaux	arr	8:25	8:25	8:25	8:25	8:25		
		dep	8:30	8:30	8:30	8:30	8:30		
	Bayonne	arr							
	dep								
Hendaye	arr	11:30	11:30	11:30	11:30	11:30	09:00	14:00	

Description of the Virtual paths – North-south direction

TT2021 - S-N		PCS view					Capacity Band		
Path ID		NS-NPR 1	NS-NPR 1	NS-NPR 1	NS-NPR 1	SN-RP 1	from	to	
SNCF R	Parameters	Train lenght	700	700	700	700	700		
		weight of Set of carriage	1800	1800	1800	1800	1800		
		Train max Speed	100	100	100	100	100		
		Running days	1-7	1-7	1-7	1-7	1-7		
		PCS Note	Any	Any	Any	Any	Any		
		Delta			04:00				
	Hendaye	dep	15:15	15:15	15:15	15:15	15:15	11:15	19:15
	Bayonne	arr							
		dep							
	Bordeaux	arr	18:15	18:15	18:15	18:15	18:15		
		dep	18:20	18:20	18:20	18:20	18:20		
	Angoulême	arr							
		dep							
	St Pierre	arr	23:05	23:05	23:05	23:05	23:05		
		dep	23:10	23:10	23:10	23:10	23:10		
Valenton	arr	02:10	02:10	02:10	02:10	02:10			
	dep	02:20	02:20	02:20	02:20	02:20			
Vaires	arr	02:35	02:35	02:35	02:35	02:35			
	dep	03:05	03:05	03:05	03:05	03:05			
Metz	arr	08:35	08:35	08:35	08:35	08:35			
	dep	08:55	08:55	08:55	08:55	08:55			
Forbach	arr	09:40	09:40	09:40	09:40	09:40	05:40	13:40	
<i>protected border</i>				no					
DB Netz	Parameters	Train lenght	700	700	700	700	700		
		weight of Set of carriage	1800	1800	1800	1800	1800		
		Train max Speed	100	100	100	100	100		
		Running days	1-7	1-7	1-7	1-7	1-7		
		PCS Note	Any	Any	Any	Any	Any		
		Delta			04:00				
	Forbach	dep	09:45	09:45	09:45	09:45	09:45	05:45	13:45
	<i>Protected Border</i>				yes				
	Saarbrücken	arr		10:03	10:03	10:03	10:03		
		dep		10:53	10:53	10:53	10:53		
Neunkirchen	arr								
	dep		11:13	11:13	11:13	11:13			
Einsiedlerhof	arr								
	dep		11:44	11:44	11:44	11:44			
Mannheim	arr		12:47	12:47	12:47	12:47	08:47	16:47	

Description of the Virtual paths –South-North direction

For the Spanish section the support paths have been described in chapter [§3.2](#)



### 3.4 TT2021 process timeline

The overview with the deadlines for the different requests of capacity can be described as following:

Date / Deadline	Date in X-System	Description of Activities
13 January 2020	X-11	Publication of the TTR offer in the PID
14 April 2020	X-8	Last day to request SC capacity ATT process, placed on time
13 August 2020 – 11 November 2021	X-4 - X+11	Application phase for RPR
13 August 2020 – 06 December 2021	X-4 - X+12	Allocation phase for RPR

### 3.5 How to request capacity

Requests placed with following eligibility criteria should receive an answer inside the capacity offered described in [§3.2](#)

#### 3.5.1 Eligibility criteria for the safeguarded (“SC”) capacity

The capacity bandwidths (as defined in [§3.2.](#)) have been prepared according to a set of predefined parameters. **To be considered as eligible** the requests placed by RUs have to respect the following features:

- Freight services;
- International request (placed via PCS) or national request (placed via GESICO/TPN);
- **Geographic scope:** Should contain at least Morcenx to Lerouville section with no more than 90 minutes stopping requested in total between those stations;
- **Time constraints:** Should be included in the timeframe of the bandwidth described in this document;
- Should be included in the space-time window :
  - o North-South : between 15h20 and 20h20 at Lérouville; between 7h00 and 12h00 at Morcenx
  - o South-North : between 13h15 and 21h15 at Morcenx ; between 03h25 and 11h25 at Lérouville
- Technical characteristics: 1800 tons, 100km/h, electric traction, MA100 MALOUR BB37000

If ever the request contains Saturday / Sunday, it remains globally acceptable and might lead to two different offers with different performance levels and time.



For the Spanish territory the required features are:

- Freight services
- International traffic only
- Timetable to be inside the +/- 45 minutes band in all the route
- 1000 tons, 450 meters, 100km/h and electric traction. Technical parameters can be upgraded under acceptance of the IM.

### 3.5.2 Tools for placing requests

Applicants have the following choice on the tool they use to place their TTR eligible orders.

PCS is the single tool for placing and managing international path requests linked to capacity displayed in it (i.e. safeguarded capacity and remaining RFC ATL's PaPs) on the pilot.

National tools (GESICO in France, TPN in Germany) are used to manage national requests on the national sections of the TTR Pilot line.

## 4 Annual timetable requests

### 4.1 Impact TTR pilot on Annual timetable requests

The annual timetable process and deadlines on the pilot line are unchanged. The Pilot does not aim testing all new aspects (including change X-8 => X-8.5 as new deadline for annual requests) of the TTR project.

### 4.2 Timeline

Applicants can request capacity during the already existing timeframe mentioned in Network Statement documents.

### 4.3 Handling of requests

A task force between involved IMs and C-OSS will coordinate the use of the safeguarded capacity according to the full received requests (national and international), in order to provide an answer to the customers in due time (X-7,5) for international request received by the C-OSS.

In case of higher number of requests than the dedicated safeguarded capacity offer, the priority will be given to the requests having the highest product length of journey \* number of days.

On DB Netz network the national IT system is the only tool to place request for modification and cancellation

### 4.4 Timetable construction rules

The actual existing rules are implemented, as described in the network statements of SNCF Réseau, ADIF and DB Netz

The only impact the pilot has on the annual time table process is related to the safeguarded capacity: as stated in [§3.2](#), one part of the slots included in the capacity bandwidths is open for requests placed before the deadline (X-8) and another part of the slots is open for rolling planning requests (i.e. at earliest from X-4), provided in both cases they fit to the characteristics defined (see [§ 3.5](#)).



As part of the TTR pilot, based on data provided by SNCF Réseau, ADIF and DB Netz, the Atlantic C-OSS will publish in PCS safeguarded capacity for rolling planning requests. This capacity needs to remain unspoilt during the annual timetable process on the pilot line.

In case annual requests overlap with safeguarded capacity for rolling planning requests the IM's will apply the following rules:

- If it's possible inside the bandwidth, the support path is changed and the ATT request is provided.
- If it's not possible, the answer to the other train request is given with a proposal consistent with the support path.

If a request for TCR that was not foreseen in the capacity model conflicts with safeguarded capacity for rolling planning, the IM will respect this safeguarded capacity and will find another solution for the maintenance request. Force majeure situations are exceptions to this rule. Already attributed paths are dealt with Annex VII rules.

The part of safeguarded capacity open for annual requests shall only be requested to serve eligible traffic. Support paths prepared by IMs for internal management of the bandwidths can be adapted only if the features of these bandwidths remain untouched in terms of performance, availability and number of possible slots. These requests have the same level of priority as requests for PaPs or national preconstructed paths.

**MISSING INFORMATION ABOUT DRAFT AND FINAL OFFER (like for RP, see article 6.7 and 6.8)**

## **5 Late path request**

### **5.1 Impact TTR pilot on late path request**

The request after deadline process is similar to the current late path request process and is unchanged on the pilot lines. The only impact the pilot has on the late path request process is related to the safeguarded capacity for rolling planning. This process is described in [§5.3](#).

### **5.2 Timeline**

The applicant can place requests in the time starting **from the 14<sup>th</sup> of April 2020**.

### **5.3 Timetable construction rules**

The actual existing rules are implemented, as described in the network statements of SNCF Réseau, ADIF and DB Netz

As part of the TTR pilot, based on inputs provided by SNCF Réseau, ADIF and DB Netz, the Atlantic C-OSS will publish in PCS safeguarded capacity for rolling planning requests. This capacity needs to remain unspoilt during the Late Path Request process on the pilot line. In case late path requests overlap with safeguarded capacity for rolling planning requests the same rules as [§4.4](#) apply.



## **6 Rolling planning requests**

The first goal of RP is to offer RUs the possibility to request at a later moment with the guarantee to have the same performance as an ATT request (no earlier than X-4 and generally speaking in a “rolling way” from M-4 to M-1 before the first day of operation) prespecified capacity as described in the capacity model to make a better fit to the market demands.

This means that requests can be placed for one day to 1 year. In concrete terms, the capacity assigned to “Rolling Planning” in the capacity model can be requested starting on 13<sup>th</sup> of August 2020 for requests over TT2021. Out of the TTR guaranteed capacity, one capacity would be dedicated to Rolling-planning test.

It has been decided that for the time being, multi annual aspects for RP requests will not be experienced within TTR Pilots. The answer provided by IM(s) is therefore a train path limited to the ongoing timetable.

### **6.1 Timeline**

Rolling planning requests can be triggered between one month and four months from the first day of requested operation.

### **6.2 Scope for Rolling Planning requests**

The scope of RP requests covers a specific family of standardised paths. The closer from standards they are, the more likely it is to provide a quality answer to the requests.

After D-30, RP capacity is no longer available and unused capacity is shifted back to conventional allocation process. Requests placed after D-30 are not eligible to Rolling Planning, such requests should be placed under the late request process.

### **6.3 Operative process**

The IM strictly applies the ‘first come – first served’ rule during the pilot phase. The paths will be constructed within the RP safeguarded capacity volume for timetable 2021.

If there is remaining capacity in RP safeguarded capacity, capacity is delivered for all requested days. If RP capacity is already used on some operations days, rejection is expressed day by day. RU has to place a late request for rejected days.

Applicants may request RP capacity for periods from 1 day to the end of Timetable 2021.

### **6.4 Publication of Rolling Planning available capacity<sub>T</sub> and conditions of the paths**

Based on input provided by SNCF Réseau, ADIF and DB Netz, the Rolling Planning capacity and the conditions of the paths are published by the Atlantic C-OSS in PCS.

### **6.5 Timeframes of the safeguarded rolling planning capacity**

RP capacity is safeguarded until 30 days before day of operation. After 30 days the safeguarded capacity is used by the IM for any kind of path request or TCRs.



## 6.6 Tools for handling the requests

The leading tool for placing the international **RP** requests is PCS.

For national requests, applicants sending requests for RP to the IM shall use PCS or GESICO / TPN.

The following matrix shows for each step of the process which tool is considered as the leading tool.

Phase	Application and allocation (X-2 till X+12)	Withdrawal	Modification	Cancellation	Alteration
Tools	PCS (International or national request) GESICO / TPN (national request)	GESICO / TPN	GESICO TPN	GESICO TPN	GESICO TPN

## 6.7 Draft offer

Applicants will receive a draft offer as soon as possible but at the latest within 30 days after the RP request has been placed.

## 6.8 Final offer

Applicants shall receive the final offer no later than 10 calendar days before train run. All applicants involved shall accept or reject the final offer within 5 calendar days in PCS for international capacity, in GESICO & TPN for national capacity.

- Acceptance > leads to allocation
- Rejection > leads to withdrawal of the request