MEDITERRANEAN
RAIL FREIGHT CORRIDOR
Spain-France-Italy-Slovenia-Croatia-Hungary

IMPLEMENTATION PLAN

2027 TIMETABLE YEAR

Version control

Evolution Index	Date	Modification/comments	Written by
V2Dec2016	2 December 2016	General Update including the new line Nimes Montpellier	PMO
V09Jan2017	09 January 2017	Executive Board Comments	PMO
V19Jan2017	19 January 2017	Línea Figueras Perpignan S.A. took over the Infrastructure Manager competencies from TP FERRO	PMO
V24Febr2017	24 February 2017	SZ-I contact update	PMO
V08Jan2018	08 January 2018	Yearly update	PMO
V26Jan2018	26 January 2018	New maps	PMO
V11Oct2018	11 October 2018	MED RFC GA approval new member joined	PMO
V4Dec2018	4 December 2018	New maps	PMO
V26Apr2019	26 April 2019	Correction of misspellings	PMO
V18Nov2019	18 November 2019	RFI List of Projects update	PMO
V03Dec2019	3 December 2019	MED RFC GA approval of the yearly updates of technical parameters, bottlenecks in Chapter 2 and list of projects, ERTMS deployment and forecasts for 2025 and 2030 in Chapter 6.	PMO
V5Febr2020	5 February 2020	SZ-I List of Projects update	PMO
V26August2020	26 August 2020	Correction of misspellings	PMO
V08Dec2020	8 December 2020	MED RFC GA approval of the yearly updates in Chapter 2 and in Chapter 6	PMO
V08Dec2020	8 December 2020	MED RFC GA approval of Transport Market Study update in Chapter 3	PMO
V11Jan2021	11 January 2021	MED RFC ExBo approval of Market Analysis Study update in Chapter 3	PMO
V18Jan2021	18 January 2021	Correction of typos in Market Analysis Study update in Chapter 3	PMO
V22Jan2021	22 January 2021	RFI representation update	PMO

V8Febr2021	8 February 2021	Correction of typos in List of Measures in Chapter 4	PMO
V6August2021	6 August 2021	Fundamental update (Chapters 1 4 and 5)	PMO
V22Sept2021	22 Sept 2021	Fundamental update (Chapters 1 4 and 5)	GA
V26Oct2021	26 Oct 2021	Fundamental update (Chapters 1 4 and 5)	ExBo
V27Oct2022	27 Oct 2022	Corridor objectives Chapter 5	ExBo
V01Dec2022	01 Dec 2022	Yearly regular update	GA
V09Jan2023	09 January 2023	New link to the CID Book	PMO
V17Oct2023	17 October 2023	Yearly regular update	GA
V25Oct2023	10 November 2023	ExBo approval of the update	ExBo
V17Dec2024	17 December 2024	ExBo approval of the update	ExBo
V09Jun2025	09 June 2025	Organisational	PMO
V04Jul2025	04 July 2025	Organisational	PMO
V11Dec2025	11 December 2025	GA approval	GA
V09Jan2026	09 December 2026	ExBo approval	ExBo
V14Jan2026	14 January 2026	Company name change (KTI) Update of RFC Governance Chart (RFI)	PMO

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1 Introduction

The Rail Freight Corridors (RFCs) have been established to strengthen Europe-wide rail freight transport by removing bottlenecks and technical barriers across Countries, especially at the borders. The Improvement of the connections to freight terminals and in between industrial areas, HUBs and the most populated locations is also a fundamental step to boost rail freight traffic and multimodality. The Mediterranean RFC is committed to enhance performance quality and cooperation, coordination, and harmonisation across the rail sector.

A key focus was addressed to respond to the needs for improvements of the cross-border freight traffic, fostering co-operation across borders both at the level of Member States and rail infrastructure managers (based on the rules set in the Framework for Capacity Allocation on the one hand and coordinating the international rail freight capacity on the other hand) with a sufficient involvement of users and terminals in the development of the European rail freight system. Therefore, several governance layers have been put in place to channel and articulate the different needs of the stakeholders and finally to make decisions accordingly.

All these activities shall support the modal shift from road to rail and lead to meet the targets of the transport and environmental policy of the European Union. In order to be competitive with other modes of transport, international and national rail freight services, which have been opened up to competition since 1 January 2007, should be able to benefit from a good quality service in terms of capacity, infrastructure, and traffic management.

Legally, the RFCs are based on the Regulation (EU) 913/2010, which entered into force on 9 November 2010. The date for the establishment of the RFC Mediterranean was set on 10th November 2013.

Since the initial Implementation Plan in 2013 and the major update in 2016 (when Croatia joined), the update is based on the requirements of CID Common Structure developed under the umbrella of RailNetEurope (RNE). Otherwise, the document is updated yearly as regards Chapter 2 “Corridor Description”.

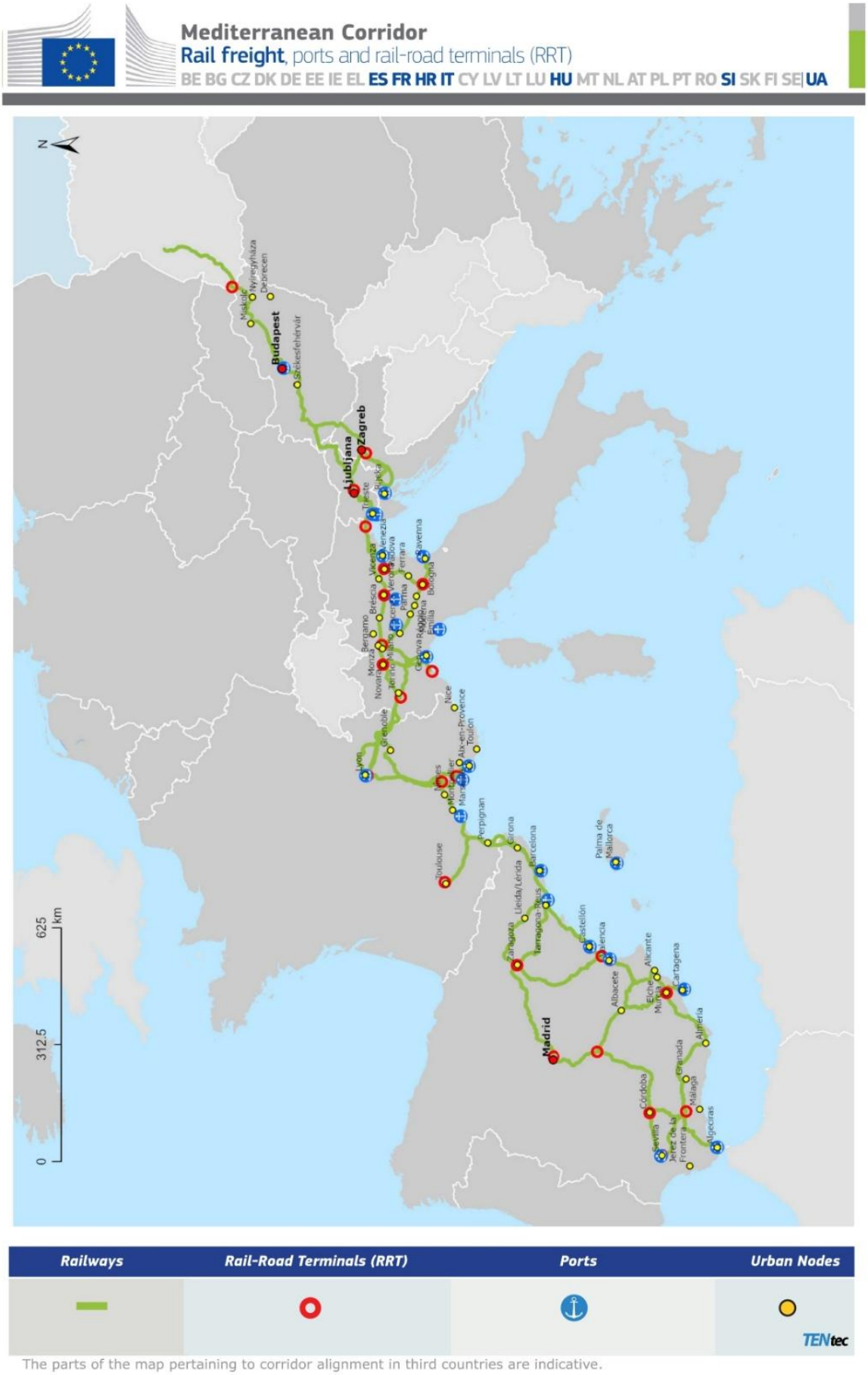
1.1 Regulation (EU) 2024/1679 on Union guidelines for the development of the trans-European transport network, amending Regulation (EU) 2021/1153 and (EU) No 913/2010

With the publication of the revised TEN-T Regulation (EU) 2024/1679 (hereinafter referred as: TEN-T Regulation) also Regulation (EU) 913/2010 (hereinafter referred as: Regulation) was amended and the 11 RFCs gradually evolved to 9 RFCs in alignment with the European Transport Corridors (ETC).

The European Transport Corridors should help to develop the infrastructure of the trans-European transport network in such a way as to address bottlenecks, enhance cross-border connections and improve efficiency and sustainability, to increase the competitiveness of international rail freight in terms of performance, capacity allocation, harmonisation of procedures and reliability with the aim to support the shift from road to rail and to promote the railway as a sustainable transport system.

Amendments to the Regulation are available in Article 67 of the TEN-T Regulation, which lays down rules for the organisation, governance and management of international rail corridors for competitive rail freight with a view to developing a European rail network for competitive freight. It sets out rules for the organisation, management and the indicative investment planning of freight corridors.

In Annex III to this Regulation the new alignment is set, including freight railway lines of the of the European Transport Corridors. The freight arm of the Mediterranean ETC is shown on the picture below.



The parts of the map pertaining to corridor alignment in third countries are indicative.

1.2 Aim of the Implementation Plan

The Implementation plan is periodically updated, following its first submission to the Executive Board in 2013. It has different purposes:

- First, it is a management tool for the Executive Board (ExBo) and the Management Board (MB) or General Assembly (GA) members, to present the numerous tasks that derive from the operation, also supporting the supervision role of the ExBo set out in Article 8 of the Regulation. In this regard, it is a basic document that shall be regularly updated with the yearly changes and progresses along the corridor. It is a point of reference that also supports the work of the Member IMs/ABs.
- Second, the Implementation Plan aims at presenting in a transparent way to all the stakeholders and potential users the main characteristics of the corridor, the measures taken, and the planned procedures of corridor operation. It is regularly published on the website of Med RFC and RailNetEurope's Customer Information Platform (CIP).
- Third, the yearly update of the Chapters "Corridor Description" supports the customers to understand the infrastructure developments over time. The regular update (every 4 years) of the other Chapters, such as "Market Analysis Study", "List of Measures" and "Objectives and performance of the corridor" shows the strategic developments of the corridor.
- Fourth, the purpose of the Implementation Plan is to keep track of the progresses and achievements generated by the activity of the Mediterranean RFC and check regularly the progress made.

This new version was approved by the Executive Board on the **9th January 2026.**

2 Corridor Description

The definition and exact description of lines and terminals contained in this Rail Freight Corridor, according to the definition of freight corridor (Article 2.2.a of the Regulation), has been a task developed by the Management Board in cooperation with the relevant Infrastructure Managers, and involving the Advisory Groups.

All Mediterranean RFC locations included in the Annex II of the Regulation have been adequately incorporated into this Corridor.

The selection of railway lines and terminals is based on current and expected traffic patterns and information provided by the Infrastructure Managers and the results of Transport Market Study. Especially where various alternative options exist, the lines suitability to freight traffic with regard to infrastructure parameters like maximum gradients, permitted train-lengths, axle-loads and loading gauges have been taken into account.

Designated lines, given the important traffic flows that already exist, coincide with those largely used today. Besides, the main lines along the principal route outlined in the Regulation together all the amendments Almeria–Valencia / Algeciras / Madrid–Zaragoza / Barcelona–Marseille–Lyon–Turin–Milano–Verona–Padua / Venice–Trieste / Koper–Ljubljana / Rijeka–Zagreb–Budapest–Záhony, the corridor includes routes frequently used for re-routing trains in case of disturbance on the principal lines and connecting lines, sections linking terminals and freight areas to the main lines.

In some cases, parallel railway lines have been included in order to provide sufficient capacity in this corridor. In addition, lines that may not play an important role for long-haul freight traffic today but may do so in the future are included. All railway lines with dedicated capacity and expected to hold pre-arranged train paths, have been designated to this corridor.

When it comes to terminals, all terminals along designated lines have been designated to the corridor as well, except if a terminal does not have any relevance for the traffic in the corridor. Each Port along the corridor has been considered as a single terminal, even in the case that they hold in their facilities more than one rail intermodal or freight yard. The railway lines of this Corridor connect terminals of relevance to rail freight traffic along the principal route, especially:

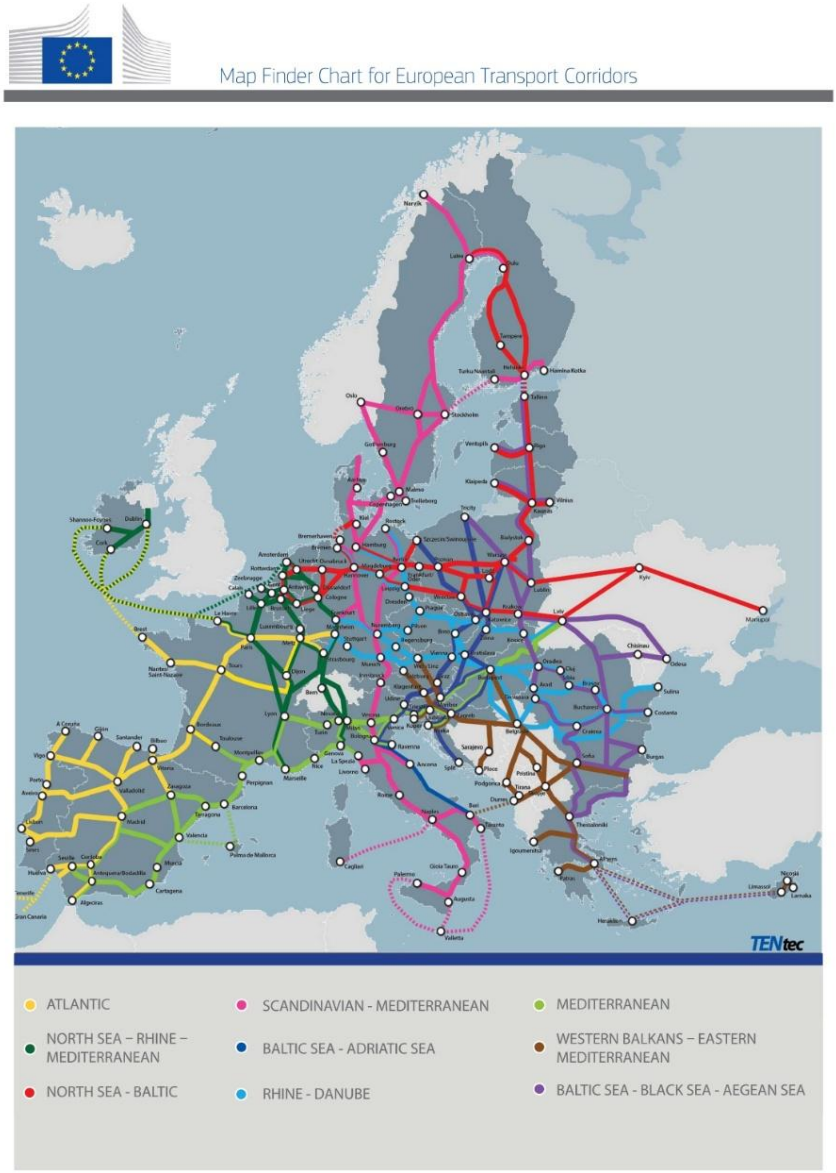
- marshalling yards
- major rail-connected freight terminals
- rail - connected intermodal terminals in seaports, airports and inland waterways

According to Article 9.1.a of the Regulation, railway lines and terminals designated to this corridor are exactly and unambiguously described in this Implementation Plan, by the maps and detailed tables included in therein. The Implementation Plan provides information on the bottlenecks along the corridor, as well as an overview over existing traffic patterns (both freight and passenger traffic). The Regulation promotes the harmonization of infrastructure with the specific objectives to remove bottlenecks and to harmonize relevant parameters like train lengths, train gross weights, axle loads and loading gauges. Reference is made to the TEN-T projects, emphasizing that interoperability is an essential feature of the RFCs. The characterization of the corridor included in this chapter of the Implementation Plan is essential to achieve these goals.

2.1 Key Parameters of Corridor Lines

MED ETC has connections with all other ETCs in Europe and some of their sections are overlapping (see map below).

- ATLANTIC ETC in Spain
- NORTH SEA-RHINE-MEDITERRANEAN ETC in France and Italy
- SCANDINAVIAN-MEDITERRANEAN ETC in Italy
- BALTIC SEA-ADRIATIC SEA ETC in Italy, Slovenia, Croatia and Hungary
- WESTERN BALKANS-EASTERN MEDITERRANEAN ETC in Italy, Slovenia, Croatia and Hungary
- RHINE-DANUBE ETC in Hungary and Ukraine
- BALTIC SEA-BLACK SEA-AEGEAN SEA ETC in Hungary
- NORTH SEA-BALTIC ETC in Ukraine



The length of the Mediterranean RFC is over **8 thousand kilometers**, according to the table shown below.

	LENGTH
SPAIN	3,829 km
FRANCE	1,617 km
ITALY	1,581 km
SLOVENIA	430 km
CROATIA	375 km
HUNGARY	715 km
TOTAL	8,547 km

The description of Mediterranean RFC includes a list of:

- all railway lines or sections designated to the Corridor, with precise description of beginning and ending points;
- all the terminals designated to the Corridor.

Article 9 of the Regulation requests a description of the characteristics of the freight corridor. For designated lines, the description comprises a detailed and systematic definition of all infrastructure parameters relevant for rail freight traffic, also focusing on the TEN-T requirements, including:

- Type of line: freight line of the Mediterranean ETC
- Section length: in kilometres
- Track gauge: International Standard gauge (1435 mm) or Iberian gauge (1668 mm)
- Number of tracks: Single or double track
- Maximum train length: maximum train length guaranteeing a flawless run along a whole section of the corridor, including traction
- Axle load: maximum loading gauge guaranteeing a flawless run along a whole section of the corridor
- Load per meter: Maximum load per meter guaranteeing a flawless run along a whole section of the corridor
- Train speed: Maximum general speed limit allowed on each line
- Loading gauge: maximum dimension for the freight and passenger vehicles especially in the tunnels
- Power supply: Type of current and voltage for electrified lines (DC 1.500V, DC 3.000V & AC 25.000V)
- Signalling and interlocking systems: Type of signalling systems implemented on each line
- Gradient: Maximum line gradient in both directions of each line of the corridor (Towards NE – Algeciras-Madrid to Záhony and towards SW Záhony to Madrid-Algeciras)

Together with the other RFCs, RFC Mediterranean also uses Customer Information Platform (CIP) to inform about the complete set of line properties.

To find the desired parameters CIP should be visited at: https://cip.rne.eu

2.1.1 Spain

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL								AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING SYSTEM				GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	BTT(Telephone Block System)	ASFA (Automatic Train Protection)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
SPAIN	**ALGECIRAS - CORDOBA**																																				
	ALGECIRAS - SAN ROQUE-LA LINEA	13.85		x	x								x							x			x					x	GHE16	P/C 45/364	x				x				23	22
	SAN ROQUE-LA LINEA - GAUCIN	43.50		x	x								x							x			x				x		GHE16	P/C 45/364	x				x				23	22
	GAUCIN - RONDA	48.93		x	x								x							x			x					x	GHE16	P/C 45/364	x				x				23	22
	RONDA - ALMARGEN-CAÑETE LA REAL	40.01		x	x							x								x			x					x	GHE16	P/C 45/364	x				x				18	24
	ALMARGEN-CAÑETE LA REAL - BOBADILLA	30.11		x	x								x							x			x				x		GHE16	P/C 45/364	x				x				18	24
	BOBADILLA - FUENTE DE PIEDRA	11.71		x	x								x							x			x				x		GHE16	P/C 45/364			x		x				20	20
	FUENTE DE PIEDRA - LA RODA DE ANDALUCIA	12.59		x	x								x							x			x				x		GHE16	P/C 45/364			x		x				20	20
	LA RODA DE ANDALUCIA - PUENTE GENIL	22.59		x	x								x							x			x				x		GHE16	P/C 45/364			x		x				20	20
	PUENTE GENIL - MONTILLA	27.41		x	x									x						x			x				x		GHE16	P/C 45/364			x		x				20	20
	MONTILLA - VALCHILLON	41.81		x	x								x							x			x				x		GHE16	P/C 45/364			x		x				20	20
	VALCHILLON - CORDOBA	10.40		x	x									x						x			x				x		GHE16	P/C 45/364			x		x				20	20
	BOBADILLA - SEVILLA - CORDOBA																																				
	BOBADILLA - FUENTE DE PIEDRA	11.71		x	x								x							x			x				x		GHE16	P/C 45/364			x		x				18	27
	FUENTE DE PIEDRA - LA SALUD	132.60		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			10	16
	LA SALUD - PUERTO DE SEVILLA	4.73		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			10	16
	LA SALUD - LA NEGRILLA	5.65		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	LA NEGRILLA - MAJARABIQUE-ESTACION	9.66		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	MAJARABIQUE-ESTACION - LOS ROSALES	26.85		x		x							x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	LOS ROSALES - LORA DEL RIO	20.10		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	LORA DEL RIO - PALMA DEL RIO	23.04		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	PALMA DEL RIO - EL HIGUERON	43.07		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	EL HIGUERON - CORDOBA	5.86		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			12	11
	BOBADILLA - GRANADA - ALMERIA																																				
	BOBADILLA - ANTEQUERA	15.94		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			14	15
	ANTEQUERA - ARCHIDONA [1]	19.55		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			30	28
	ARCHIDONA - LOJA [1]	35.11		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			30	28
	LOJA - GRANADA [1]	52.47		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			16	13
	GRANADA - MOREDA [1]	56.47		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			22	23
	MOREDA - HUENEJA-DOLAR	123.13		x	x						x									x			x				x		GHE16	P/C 45/364	x					x			22	22
	MOREDA - ALMERIA	78.72		x	x						x									x			x				x		GHE16	P/C 45/364			x			x			7	28
	CORDOBA - MANZANARES																																				
	CORDOBA - ANDUJAR	79.13		x	x									x						x			x				x		GHE16	P/C 45/364			x		x				12	11
	ANDUJAR - ESPELUY	22.15		x	x								x							x			x					x	GHE16	P/C 45/364			x		x				12	11
	ESPELUY - LINARES-BAEZA	26.30		x	x								x							x			x					x	GHE16	P/C 45/364			x		x				13	5
	LINARES-BAEZA - VADOLLANO	8.56		x		x							x							x			x					x	GHE16	P/C 45/364			x			x			16	13
	VADOLLANO - VENTA DE CARDENAS	40.28		x	x									x						x			x				x		GHE16	P/C 45/364			x			x			16	13
	VENTA DE CARDENAS - SANTA CRUZ DE MUDELA	26.99		x	x								x							x			x				x		GHE16	P/C 45/364			x			x			16	13
	SANTA CRUZ DE MUDELA - MANZANARES	41.66		x		x							x							x			x				x		GHE16	P/C 45/364			x			x			16	13
	MANZANARES - MADRID																																				
	MANZANARES - ALCAZAR DE SAN JUAN	49.30		x		x							x							x			x				x		GHE16	P/C 45/364			x			x			5	6
	ALCAZAR DE SAN JUAN - VILLACAÑAS	27.89		x		x							x							x			x					x	GHE16	P/C 45/364			x			x			5	6
	VILLACAÑAS - CASTILLEJO-AÑOVER	56.23		x		x												x		x								x	GHE16	P/C 45/364			x			x			5	6
	CASTILLEJO-AÑOVER - ARANJUEZ	14.51		x		x									x					x			x					x	GHE16	P/C 45/364			x			x			5	6
	ARANJUEZ - PINTO	27.62		x		x								x						x			x					x	GHE16	P/C 45/364			x			x			22	22
	PINTO - SAN CRISTOBAL INDUSTRIAL	10.39		x		x								x						x			x					x	GHE16	P/C 45/364			x			x			22	22
	SAN CRISTOBAL IND. - MADRID-SANTA CATALINA	5.24		x		x								x						x			x				x		GHE16	P/C 45/364			x			x			22	22
	MADRID-SANTA CATALINA - MADRID-ABROÑIGAL	1.74		x		x						x								x			x				x		GHE16	P/C 45/364			x			x			22	22
	MADRID - ZARAGOZA																																				
	VILLAVERDE BAJO - VALLECAS-INDUSTRIAL	7.46		x		x								x						x			x	x					AF 4.0	P/C 80/400			x			x			25	25
	VALLECAS-INDUSTRIAL - VICALVARO	3.96		x			x							x						x			x				x		AF 4.0	P/C 80/400			x			x			25	25
	VICALVARO - SAN FERNANDO DE HENARES	7.14		x		x							x							x			x				x		AF 4.0	P/C 80/400			x			x			25	25
	SAN FERNANDO DE HENARES - GUADALAJARA	38.60		x		x						x								x			x				x		AF 4.0	P/C 80/400			x			x			25	25
	GUADALAJARA - CALATAYUD	166.34		x		x						x								x			x				x		AF 4.0	P/C 80/400			x			x			25	25
	CALATAYUD - RICLA-LA ALMUNIA			x	x							x								x			x				x		AF 4.0	P/C 80/400			x			x			24	25
	RICLA-LA ALMUNIA - GRISEN			x		x						x								x			x				x		AF 4.0	P/C 80/400			x			x			24	25
	GRISEN - CASETAS	13.13		x		x						x								x			x				x		AF 4.0	P/C 80/400			x			x			24	25
	CASETAS - ZARAGOZA PLAZA	22.21		x		x											x			x			x			x			AF 4.0	P/C 80/400			x		x				24	25
	ZARAGOZA - TARRAGONA (via Tardienta)																																				
	ZARAGOZA PLAZA - LA CARTUJA	21.33		x	x							x								x			x	x					GHE16	P/C 45/364			x			x			17	18
	LA CARTUJA - TARDIENTA	61.41		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			10	14
	TARDIENTA - SELGUA	69.49		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			17	18
	SELGUA - LLEIDA-PIRINEUS	61.17		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			17	18
	LLEIDA-PIRINEUS - LA PLANA-PICAMOIXONS	69.45		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			17	17
	LA PLANA-PICAMOIXONS - REUS	18.24		x	x							x								x			x					x	GHE16	P/C 45/364			x			x			3	14
	REUS - TARRAGONA	17.88		x		x							x							x			x					x	GHE16	P/C 45/364			x			x			1	15
	ZARAGOZA - REUS (via Samper)																																				
	LA CARTUJA - SAMPER	72.58		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			17	18
	SAMPER - REUS	156.10		x	x								x							x			x					x	GHE16	P/C 45/364			x			x			17	18

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING SYSTEM				GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	BT(Telephone Block System)	ASFA (Automatic Train Protection)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
SPAIN	**ALMERÍA - MURCIA**																																						
	ALMERIA - LORCA-SUTULLENA (section under construction)																																					-	-
	LORCA-SUTULLENA - MURCIA MERCANCIAS	58.47		x	x							x								x			x				x		GHE16	P/C 45/364	x				x				-	-
	MURCIA - CARTAGENA																																						
	MURCIA MERCANCIAS - EL REGUERON	15.84		x	x								x							x			x							GHE16	P/C 45/364			x		x				13	18
	EL REGUERON - PUERTO DE ESCOMBRERAS	54.94		x	x								x							x			x							GHE16	P/C 45/364			x		x				15	14
	ALCAZAR DE SAN JUAN - ALICANTE																																						
	ALCAZAR DE S.J. - CHINCHILLA DE MONTEARAGON	150.31		x		x							x							x			x							GHE16	P/C 45/364			x		x				6	6
	CHINCHILLA DE MONTEARAGON - LA ENCINA	121.38		x		x							x							x			x				x			GHE16	P/C 45/364			x		x				25	30
	LA ENCINA - ALACANT-TERMINAL			x		x							x							x			x							GHE16	P/C 45/364			x		x				6	15
	MURCIA - CHINCHILLA																																						
	MURCIA - CHINCHILLA DE MONTEARAGON	141.27		x	x							x								x			x				x			GHE16	P/C 45/364	x				x				18	15
	LA ENCINA - VALENCIA																																						
	LA ENCINA - XATIVA	49.91		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	17
	XATIVA - VALENCIA-F.S.L.MERCANCIAS	53.63		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				7	11
	ZARAGOZA - SAGUNTO																																						
	ZARAGOZA PLAZA - BIF. TERUEL	8.66		x		x						x								x			x			x				GHE16	P/C 45/364			x		x				20	19
	BIF. TERUEL - TERUEL	162.40		x		x						x								x			x							GHE16	P/C 45/364			x		x				20	19
	TERUEL - SAGUNTO	136.67		x		x						x								x			x							GHE16	P/C 45/364			x		x				24	24
	VALENCIA - CASTELLÓN																																						
	VALENCIA-F.S.L.MERCANCIAS - SAGUNTO	29.00		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				5	5
	SAGUNTO - CASTELLO DE LA PLANA	40.52		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				11	14
	CASTELLÓN - TARRAGONA																																						
	CASTELLO DE LA PLANA - VINAROS	77.56		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				13	12
	VINAROS - L'ALDEA-AMPOSTA-TORTOSA	38.45		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				13	12
	L'ALDEA-AMPOSTA-TORTOSA - TARRAGONA			x		x						x								x			x							GHE16	P/C 45/364			x		x				13	12
	LA PLANA-PICAMOIXONS - S. VICENÇ DE CALDERS																																						
	LA PLANA-PICAMOIXONS - S. VICENÇ DE CALDERS	36.14		x	x							x								x			x				x			GHE16	P/C 45/364			x		x				8	14
	TARRAGONA - BARCELONA AREA																																						
	TARRAGONA - S. VICENÇ DE CALDERS	24.87		x		x					x									x			x				x			GHE16	P/C 45/364			x		x				9	6
	S. VICENÇ DE CALDERS - VILAFRANCA DEL PENEDE	24.19		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				13	14
	VILAFRANCA DEL PENEDES - MARTORELL CENTRAL	27.12		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	MARTORELL CENTRAL - CASTELLBISBAL	4.00		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	BARCELONA AREA																																						
	CASTELLBISBAL - AGUJAS LLOBREGAT	4.04		x	x							x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	AGUJAS LLOBREGAT - BIF. NUDO MOLLET	20.69	x	x		x						x								x			x				x			GHE16	P/C 45/364			x		x				30	30
	BIF. NUDO MOLLET - MOLLET-SANT FOST	1.76		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				30	30
	AGUJAS RUBI - RIU LLOBREGAT	5.27		x	x							x								x			x				x			GHE16	P/C 45/364			x		x				30	30
	AGUJAS MOLINS - RIU LLOBREGAT	3.93	x	x	x												x			x			x				x			GHE16	P/C 45/364			x		x				30	30
	RIU LLOBREGAT - BARCELONA-CAN TUNIS	14.61	x	x		x						x								x			x				x			GHE16	P/C 45/364			x		x		x		14	13
	BARCELONA-CAN TUNIS - BARCELONA-MORROT	4.61	x	x		x						x								x			x				x			GHE16	P/C 45/364			x		x				14	13
	BARCELONA AREA - FRENCH BORDER (classic line)																																						
	MOLLET-SANT FOST - GRANOLLERS-CENTRE	10.35		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				18	15
	GRANOLLERS-CENTRE - GIRONA-MERCADERIES	65.76		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				10	4
	GIRONA-MERCADERIES - GIRONA	2.96	x	x		x											x			x			x				x			GHE16	P/C 45/364			x		x				10	10
	GIRONA - VILAMALLA	36.38	x	x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	VILAMALLA - FIGUERES	5.55		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	FIGUERES - PORTBOU	26.16		x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	PORTBOU - CERBÈRE FRONTIÈRE (ES-FR)	1.22	x	x		x						x								x			x				x			GHE16	P/C 45/364			x		x				15	15
	BARCELONA AREA - INTERNATIONAL SECTION (high-speed line)																																						
	BIF. NUDO MOLLET - GIRONA	76.75	x			x											x			x			x				x			GC	P/C 80/400				x	x	x	x		28	30
	GIRONA - FIGUERES-VILAFANT	34.93	x			x											x			x			x				x			GC	P/C 80/400				x	x	x	x		18	18
	FIGUERES-VILAFANT - LIMITE ADIF - LFPSA	2.76	x			x											x			x			x				x			GC	P/C 80/400				x	x				18	18
	INTERNATIONAL SECTION																																						
	LIMITE ADIF/LFP - LFP/SNCF Réseau	44.66	x			x												x		x			x				x			GC	P/C 80/400				x	x				18	18

[1] - Freight traffic temporarily closed due to major infrastructure changes (future scenario to be defined).

2.1.2 France

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED					LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING			SYSTEM			GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 kV DC	3 kV DC	25 kV AC	ASFA (automatic train protection)	KVB(control by beacons)	SCMT (automatic train protection)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
FRANCE	**FRENCH BORDER - PERPIGNAN (classic line)**																																							
	CERBÈRE FRONTIÈRE (ES-FR) - CERBÈRE	0.96	x	x		x											x			x			x						GB	P/C 45/364			x		x					-	-
	CERBÈRE - ELNE	28.06	x			x											x			x			x						GB	P/C 45/364		x			x					11-15	11-15
	ELNE - PERPIGNAN	14.02	x			x											x			x					x				GB1	P/C 45/364		x			x					6-10	6-10
	INTERNATIONAL SECTION - PERPIGNAN (high-speed line)																																							
	LFP/SNCF Réseau - PERPIGNAN E/S FAISCEAU	2.45	x			x											x			x			x						GC	P/C 80/400				x						16-20	16-20
	PERPIGNAN E/S FAISCEAU - PERPIGNAN	5.76	x			x											x			x			x					x	GB1	P/C 45/364		x			x					<5	<5
	PERPIGNAN - NÎMES																																							
	PERPIGNAN - NARBONNE	62.53	x			x											x			x			x			x			GB1	P/C 45/364		x			x					<5	<5
	NARBONNE - MONTPELLIER (LATTES)	96.79	x			x											x			x			x				x		GB1	P/C 45/364		x			x					<5	<5
	MONTPELLIER (LATTES) - NÎMES	63.98	x			x											x			x			x				x		GB1	P/C 45/364		x			x					<5	<5
	NARBONNE - TOULOUSE																																							
	NARBONNE - TOULOUSE MATABIAU	143.63	x			x											x			x			x				x		GB	P/C 45/364		x			x						
	MONTPELLIER - NÎMES (OC'VIA high-speed)																																							
	MONTPELLIER - NÎMES (OC'VIA high-speed)	80.00	x			x											x			x			x					x	GC	P/C 70/400				x					x	11-15	11-15
	NÎMES - AVIGNON (via Remoulins)																																							
	NÎMES - VILLENEUVE-LÈS-AVIGNON - RAC SUD	36.00	x			x											x			x			x						GB1	P/C 45/364		x			x					6-10	6-10
	VILLENEUVE-LÈS-AVIGNON - RAC SUD - AVIGNON	4.15	x			x											x			x				x					GB1	P/C 45/364		x			x					6-10	6-10
	AVIGNON - MIRAMAS (via Tarascon)																																							
	AVIGNON - TARASCON - BIF RAC NORD	20.35	x			x											x			x			x						GB1	P/C 45/364		x			x					<5	<5
	TARASCON - BIF RAC NORD - TARASCON	1.51	x			x											x			x			x						GB1	P/C 45/364		x			x					6-10	6-10
	TARASCON - BIF RAC NORD - MIRAMAS	46.81	x			x											x			x			x						GB1	P/C 45/364		x			x					6-10	6-10
	MIRAMAS - AVIGNON (via Cavaillon)																																							
	MIRAMAS - AVIGNON (via Cavaillon)	67.74	x			x											x			x			x						GB1	P/C 45/364		x			x					6-10	6-10
	MIRAMAS - FOS-VIGUERAT																																							
	MIRAMAS - LAVALDUC	15.19	x			x											x			x			x						GB	P/C 45/364		x			x					6-10	6-10
	LAVALDUC - FOS-VIGUERAT	11.47	x			x											x			x			x						GB	P/C 45/364		x			x					6-10	6-10
	MIRAMAS - MARSEILLE																																							
	MIRAMAS - L'ESTAQUE	42.89	x			x											x			x			x						GB	P/C 45/364		x			x					<5	<5
	L'ESTAQUE - MARSEILLE ST CHARLES	10.08	x			x											x			x			x						GB	P/C 45/364		x			x					<5	<5
	AVIGNON - LYON (via Peyraud - Givors)																																							
	AVIGNON - VILLENEUVE-LÈS-AVIGNON - RAC NORD	4.07	x			x											x			x			x						GB1	P/C 45/364		x			x					6-10	6-10
	VILLENEUVE-L.-AVIGNON R.N. - LE TEIL (ARDÈCHE)	80.44	x			x											x			x				x					GB1	P/C 45/364		x			x					6-10	6-10
	LE TEIL (ARDÈCHE) - GIVORS-CANAL	136.35	x			x											x			x				x					GB1	P/C 45/364		x			x					6-10	6-10
	GIVORS-CANAL - LYON-GUILLOTIÈRE	17.83	x			x											x			x				x					GB1	P/C 45/364		x			x					11-15	11-15
	AVIGNON - MONTMÉLIAN (via Valence)																																							
	AVIGNON - PORTES-LÈS-VALENCE	113.66	x			x											x			x			x						GB	P/C 45/364		x			x					<5	<5
	PORTES-LÈS-VALENCE - VALENCE - BIF CAGNARD	8.18	x			x											x			x			x						GB	P/C 45/364		x			x					<5	<5
	VALENCE - BIF CAGNARD - MOIRANS	78.43	x			x											x			x								x	GB1	P/C 45/364				x						<5	<5
	MOIRANS - GRENOBLE	14.81	x			x											x			x			x						GB	P/C 45/364				x						<5	<5
	GRENOBLE - MONTMÉLIAN	59.82	x			x											x			x								x	GB1	P/C 45/364				x						<5	<5
	LYON - CHAMBÉRY (via Bourgoin-Jallieu)																																							
	LYON-GUILLOTIÈRE - BOURGOIN-JALLIEU	36.99	x			x											x			x						x			GB1	P/C 45/364				x							
	BOURGOIN-JALLIEU - ST-ANDRÉ-LE-GAZ	20.22	x		x												x			x						x			GA	P/C 45/364				x							
	ST-ANDRÉ-LE-GAZ - CHAMBÉRY	37.18	x		x												x			x						x			GA	P/C 45/364				x							
	LYON - MONTMÉLIAN (via Culoz)																																							
	LYON-GUILLOTIÈRE - LYON-ST-CLAIR	10.86	x			x											x			x						x			GB1	P/C 45/364				x						6-10	6-10
	LYON-ST-CLAIR - AMBÉRIEU	51.19	x			x											x			x						x			GB	P/C 45/364				x						6-10	6-10
	AMBÉRIEU - CULOZ	50.31	x			x											x			x				x					GB1	P/C 45/364				x						11-15	11-15
	CULOZ - MONTMÉLIAN	47.63	x			x											x			x					x				GB1	P/C 45/364				x						6-10	6-10
	MONTMÉLIAN - MODANE - FR/IT BORDER																																							
	MONTMÉLIAN - ST-AVRE-LA-CHAMBRE	46.57	x			x											x			x						x			GB1	P/C 45/364				x						6-10	16-20
	ST-AVRE-LA-CHAMBRE - ST-JEAN-DE-MAURIENNE	7.81	x			x											x			x					x				GB1	P/C 45/364				x						6-10	16-20
	ST-JEAN-DE-MAURIENNE - MODANE	29.78	x			x											x			x					x				GB1	P/C 45/364				x						6-10	26-30
	MODANE - FR/IT BORDER	11.39	x			x								x						x					x				GB1	P/C 45/364			x				x			6-10	26-30

2.1.3 Italy

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING SYSTEM				GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	BCA (sleeper counting block)	BACC (automatic blocking)	SCMT (automatic train protection)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
ITALY	**FR/IT BORDER - TORINO**																																						
	FR/IT BORDER - TORINO S.PAOLO	89.65	x			x								x[1]							x			x					GB	P/C 45/364			x			x			28	1
	TORINO - NOVARA																																						
	TORINO S.PAOLO - TORINO PORTA SUSA	3.20	x			x								x1							x			x	x					GB1	P/C 80/410			x			x			0	13
	TORINO PORTA SUSA - NOVARA	95.02	x			x								x1							x			x					x	GB1	P/C 80/410			x			x		x	14	13
	NOVARA - MILANO																																						
	NOVARA - MILANO LAMBRATE	53.72	x			x								x							x			x					GB1	P/C 80/410			x			x		x	7	15
	MILANO LAMBRATE - MILANO SMISTAMENTO	3.78	x			x						x									x			x					GB1	P/C 80/410			x			x			0	6
	MILANO - TORTONA																																						
	MILANO LAMBRATE - MILANO ROGOREDO	5.79	x			x								x							x			x			x		GB1	P/C 80/410			x			x			0	5
	MILANO ROGOREDO -VOGHERA	53.46	x			x								x							x			x				x	GB	P/C 45/364			x			x			10	8
	VOGHERA - TORTONA	16.20	x			x								x							x			x					GB	P/C 45/364			x			x			6	6
	TORINO - ALESSANDRIA																																						
	TORINO S.PAOLO - TORINO LINGOTTO	4.83	x			x								x							x			x	x				GB	P/C 45/364			x			x			5	11
	TORINO LINGOTTO - ALESSANDRIA	85.76	x			x									x						x			x					GA	P/C 32/351			x			x			5	12
	NOVARA - ALESSANDRIA																																						
	NOVARA - ALESSANDRIA	66.58	x			x							x								x			x		x				GB1	P/C 80/410			x			x			7	7
	ALESSANDRIA - TORTONA																																						
	ALESSANDRIA - TORTONA	21.91	x			x								x							x			x					GB	P/C 45/364			x	x		x			6	4
	TORTONA - NOVI LIGURE																																						
	TORTONA - RIVALTA SCRIVIA	7.28	x			x								x							x			x		x				GC	P/C 45/364			x			x			6	6
	RIVALTA SCRIVIA - NOVI LIGURE	11.06	x		x										x						x			x				x		G1	P/C 32/351			x			x			9	0
	ALESSANDRIA - NOVI LIGURE																																						
	ALESSANDRIA - NOVI LIGURE	21.61	x			x									x						x			x	x					G1	P/C 32/351			x			x			11	0
	ALESSANDRIA - GENOVA (via Ovada)																																						
	ALESSANDRIA - OVADA	33.26	x		x									x												x				G1	P/C 45/364			x			x			0	15
	OVADA - GENOVA SAMPIERDARENA	39.36	x		x					x											x			x		x				G1	P/C 45/364			x			x			16	16
	GENOVA-SAVONA																																						
	GENOVA SAMPIERDARENA - GENOVA VOLTRI FM	9.47	x		x									x							x			x	x					G1	P/C 45/364			x			x			6	7
	GENOVA VOLTRI FM - SAVONA	29.37	x		x									x							x			x				x		G1	P/C 32/351			x			x			6	6
	MILANO-PARMA-BOLOGNA																																						
	MILANO ROGOREDO - PARMA (via Piacenza)	116.55	x			x									x						x			x				x		GA	P/C 45/364			x			x		x	7	9
	PARMA - BOLOGNA CENTRALE	90.39	x			x									x						x			x				x		GA	P/C 45/364			x			x		x	8	8
	MILANO - VINCENZA																																						
	MILANO SMISTAMENTO - BRESCIA	75.18	x			x											x				x			x			x			GC	P/C 80/410			x			x		x	6	12
	BRESCIA - VERONA PORTA NUOVA	64.64	x			x									x						x			x				x		G1	P/C 80/410			x			x			6	10
	VERONA PORTA NUOVA - VICENZA	51.66	x			x									x						x			x	x					G1	P/C 80/410			x			x		x	5	9
	VICENZA - PADOVA																																						
	VICENZA - PADOVA	30.27	x			x									x						x			x				x		GC	P/C 80/410			x			x	x		5	3
	BOLOGNA - PADOVA																																						
	BOLOGNA CENTRALE - FERRARA	46.83	x			x									x						x			x					GB	P/C 80/410			x			x			10	10
	FERRARA - PADOVA	75.75	x			x									x						x			x				x	GB	P/C 45/364			x			x			11	11
	BOLOGNA-RAVENNA (via Faenza)																																						
	BOLOGNA CENTRALE - FAENZA	49.09	x			x									x						x			x				x	GB	P/C 45/364			x			x			7	7
	FAENZA - RAVENNA	33.41	x		x							x									x			x					GB	P/C 32/351			x			x			11	11
	VICENZA-PORTOGRUARO (by Cittadella)																																						
	VICENZA - CASTELFRANCO VENETO	35.53	x			x								x							x			x	x					GB	P/C 80/410			x			x			6	7
	CASTELFRANCO VENETO - TREVISO CENTRALE	24.53	x			x								x							x			x		x				GB	P/C 80/410			x			x			1	4
	TREVISO CENTRALE - PORTOGRUARO CAORLE	52.46	x		x									x							x			x				x		GB	P/C 80/410			x			x			5	4
	PADOVA - PORTOGRUARO																																						
	PADOVA - VENEZIA MESTRE	28.50	x			x									x						x			x						GC	P/C 80/410			x			x			3	3
	VENEZIA MESTRE - PORTOGRUARO CAORLE	59.34	x			x								x							x			x		x				GB	P/C 80/410			x			x			8	7
	PORTOGRUARO - BIVIO D'AURISINA																																						
	PORTOGRUARO CAORLE - CERVIGNANO-A.G.	28.05	x			x										x					x			x				x		GB	P/C 80/410			x			x			5	7
	CERVIGNANO-A.G. - BIVIO D'AURISINA	29.12	x			x									x						x			x			x			GB1	P/C 80/410			x			x			13	7
	BIVIO D'AURISINA - TRIESTE																																						
	BIVIO D'AURISINA - TRIESTE CAMPO MARZIO	19.94	x			x									x						x			x	x					GB1	P/C 80/410			x			x			6	14
	BIVIO D'AURISINA - VILLA OPICINA IT/SL BORDER																																						
	BIVIO D'AURISINA - VILLA OPICINA	14.97	x			x									x						x			x	x					GB1	P/C 80/410			x			x			15	0
	VILLA OPICINA - IT/SL BORDER	3.99	x			x									x						x			x						GB1	P/C 80/410			x			x			10	0

[1] - The maximum train length could be up to 600 m after verification of RFI.

2.1.4 Slovenia

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING SYSTEM			GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	PZB (intermittent autom. train control)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
SLOVENIA	**IT/SL BORDER - DIVAČA**																																				
	IT/SL BORDER - SEŽANA	3.29	x			x									x						x			x				GB&G2	P/C 99/429			x		x	x		10	0
	SEŽANA - DIVAČA	9.61	x			x									x						x			x				GB&G2	P/C 99/429			x		x	x		8	0
	DIVAČA - KOPER TOVORNA																																					
	DIVAČA - KOPER TOVORNA	45.33	x		x								x							x			x			x			GB&G2	P/C 90/410			x		x	x		20	25
	DIVAČA - LJUBLJANA																																					
	DIVAČA - LJUBLJANA	82.85	x			x									x						x			x				GB&G2	P/C 82/412			x		x	x		8	12
	LJUBLJANA - ZIDANI MOST																																					
	LJUBLJANA - ZIDANI MOST	63.79	X			X								x							x			x				GB&G2	P/C 80/400			x		x	x		1	3
	ZIDANI MOST - DOBOVA SL/HR BORDER																																					
	ZIDANI MOST - DOBOVA	48.60	x			x								x							x			x				GB&G2	P/C 99/429			x		x	x		1	4
	DOBOVA - SL/HR BORDER	2.16	x			x								x							x			x				GB&G2	P/C 99/429			x		x	x			
	ZIDANI MOST - HODOŠ SL/HU BORDER																																					
	ZIDANI MOST - PRAGERSKO	72.94	x			x									x						x			x				GB&G2	P/C 99/429			x		x	x		9	9
	PRAGERSKO - HODOŠ	100.58	x		x												x				x			x				GB&G2	P/C 80/400			x		x	x		10	11
	HODOŠ - SL/HU BORDER	0.90	x		x												x				x			x				GC	P/C 70/400				x	x				

2.1.5 Croatia

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD				LOAD PER METER				MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE	INTERMODAL FREIGHT CODE	TRACTION POWER				SIGNALLING SYSTEM			GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	25 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	8.8 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	PZB (intermittent autom. train control)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
CROATIA	**RIJEKA - ZAGREB**																																					
	RIJEKA - SUŠAK-PEĆINE	2.96	x		x					x											x					x				GB	P/C 52/368				x	x			26	0
	RIJEKA BRAJDICA - SUŠAK PEĆINE	2.94	x		x						x										x					x				GB	P/C 52/368				x	x			21	0
	SUŠAK PEĆINE - ŠKRLJEVO	9.01	x		x					x											x					x				GB	P/C 52/368				x	x			26	0
	BAKAR - ŠKRLJEVO	11.76	x		x					x											x					x				GB	P/C 52/368				x	x			26	0
	ŠKRLJEVO - LOKVE	40.36	x		x					x											x					x				GB	P/C 52/368				x	x			26	17
	LOKVE - MORAVICE	37.69	x		x					x											x					x				GB	P/C 52/368				x	x			3	18
	MORAVICE - OGULIN	29.73	x		x									x							x					x				GB	P/C 52/368				x	x			3	8
	OGULIN - KARLOVAC	56.12	x		x								x								x					x				GB	P/C 80/410				x	x			5	8
	KARLOVAC - ZAGREB RK OS	53.66	x		x								x								x					x				GB	P/C 80/410				x	x			7	8
	SL/HR BORDER - ZAGREB																																					
	SL/HR BORDER - SAVSKI MAROF	5.08	x			x									x						x						x			GC	P/C 80/410				x	x			0	3
	SAVSKI MAROF - ZAPREŠIĆ	6.56	x			x									x						x						x			GC	P/C 80/410				x	x			0	1
	ZAPREŠIĆ - ZAGREB ZAP. KOLODVOR	13.02	x			x									x						x						x			GB	P/C 80/410				x	x			3	3
	ZAGREB ZAP. KOLODVOR - ZAGREB RK	22.16	x		x										x						x						x			GB	P/C 80/410				x	x			3	4
	ZAGREB - KOPRIVNICA HR/HU BORDER																																					
	ZAGREB RK -SESVETE	11.99	x			x									x						x						x			GC	P/C 80/410				x	x			6	5
	SESVETE - DUGO SELO	10.16	x			x									x						x						x			GC	P/C 80/410				x	x			1	5
	DUGO SELO - KOPRIVNICA	49.27	x			x												x							x[1]				x	GC	P/C 80/410				x	x	x[2]		11	6
	KOPRIVNICA - NOVO DRNJE - HR/HU BORDER	13.41	x			x												x			x				x				x	GC	P/C 80/410				x	x			3	4

[1] - section Križevci - Koprivnica 25 tonnes per axle and 8.8 tonnes per meter

[2] - section Dugo Selo- Križevci - ETCS L1

2.1.6 Hungary

		SECTION LENGTH	TRACK GAUGE		NUMBER OF TRACKS			MAXIMUM TRAIN LENGHT (incl. loco) TECHNICAL										AXLE LOAD			LOAD PER METER			MAXIMUM FREIGHT TRAIN SPEED				LOADING GAUGE[1]	INTERMODAL FREIGHT CODE[1]	TRACTION POWER				SIGNALLING SYSTEM			GRADIENT	
		km	1435 mm	1668 mm	Single	Double	Triple or more	< 300 m	300 - 349 m	350 - 399 m	400 - 449 m	450 - 499 m	500 - 549 m	550 - 599 m	600 - 649 m	650 - 699 m	700 - 750 m	> 750 m	20.0 tonnes per axle	21.0 tonnes per axle	22.5 tonnes per axle	6.4 tonnes per meter	7.2 tonnes per meter	8.0 tonnes per meter	≤ 60 km/h	61-80 km/h	81-100 km/h	101-120 km/h	≥ 121 km/h			Non-electrified	1.5 KV DC	3 KV DC	25 KV AC	EVM (automatic train protection)	ETCS L1	ETCS L2	‰ direction A-B	‰ direction B-A
HUNGARY	**SL/HU BORDER - ZALASZENTIVÁN (GYSEV)**																																					
	SL/HU BORDER - ŐRISZENTPÉTER	6.10	x		x										x					x		x				x			GC	P/C 70/400				x	x		12	12
	ŐRISZENTPÉTER - ZALASZENTIVÁN	46.10	x		x										x					x		x				x			GC	P/C 70/400				x	x		12	12
	HR/HU BORDER - ZALASZENTIVÁN (GYSEV)																																					
	HR/HU BORDER - GYÉKÉNYES	1.05	x		x									x							x	x				x				GC	P/C 70/400				x	x		3	3
	GYÉKÉNYES - MURAKERESZTÚR	16.10	x		x									x							x	x				x				GC	P/C 70/400				x	x		4.0	5.0
	MURAKERESZTÚR - NAGYKANIZSA	12.80	x		x									x							x	x				x				GC	P/C 70/400				x	x		4.9	1.7
	NAGYKANIZSA - ZALASZENTIVÁN	52.40	x		x									x							x	x			x					GC	P/C 70/400	x						1.7	6.2
	ZALESZENTIVÁN - BOBA (GYSEV)																																					
	ZALESZENTIVÁN - BOBA	47.00	x		x										x					x		x				x			GC	P/C 70/400				x	x		13	11
	BOBA - SZÉKESFEHÉRVÁR (GYSEV)																																					
	BOBA - SZÉKESFEHÉRVÁR	113.49	x		x										x					x		x			x					GC	P/C 70/400				x	x		11	11
	SZÉKESFEHÉRVÁR - FERENCVÁROS (MÁV)																																					
	SZÉKESFEHÉRVÁR - PUSZTASZABOLCS	29.00	x		x										x					x		x				x			GC	P/C 70/400	x						8	8
	PUSZTASZABOLCS - KELENFÖLD	48.80	x			x											x			x			x					x	GC	P/C 70/400				x	x	x	9	8
	KELENFÖLD - FERENCVÁROS	5.92	x			x											x			x			x		x				GC	P/C 70/400				x	x	x	1	4
	FERENCVÁROS - NYÍREGYHÁZA (MÁV)																																					
	FERENCVÁROS - KŐBÁNYA FELSŐ	4.79	x			x											x			x		x							GC	P/C 70/400				x	x		6	1
	KŐBÁNYA FELSŐ - MEZŐZOMBOR	220.21	x			x											x			x				x					GC	P/C 70/400				x	x		7	9
	MEZŐZOMBOR - NYÍREGYHÁZA	45.38	x		x												x			x				x					GC	P/C 70/400				x	x		3	3
	NYÍREGYHÁZA - ZÁHONY (MÁV)																																					
	NYÍREGYHÁZA - TUZSÉR	58.32	x			x											x			x		x							GC	P/C 70/400				x	x		3	4
	TUZSÉR - ZÁHONY	7.89	x		x												x			x		x							GC	P/C 70/400				x			2	7

[1] - Loading gauge and profile values are valid for trains operating with extraordinary consignment permit (RK)

2.2 Corridor Terminals

Freight terminals, inland ports, maritime ports and airports connect transport modes in order to allow multi-modal transport of goods. Where freight terminal means a structure equipped for transhipment between at least two transport modes and for temporary storage of freight such as seaports, inland ports, airports and (dry ports) rail-road terminals. Freight terminals for the transhipment of goods within the rail mode and between rail and other transport modes are one of the components of railway transport infrastructure. The technical equipment associated with railway lines includes electrification systems, equipment for the loading and unloading of cargo in stations, logistic platforms and freight terminals. It includes any facility necessary to ensure the safe, secure and efficient operation of vehicles.

Terminal requirements relate to the anticipated scale and nature of the freight and the operations involved in accessing sidings and handling the transfer of the cargo. This can split between the rail-side operations and the road/water/air-side operations.

In general, a terminal needs to be:

- alongside an existing railway line
- alongside a major highway route
- just on the bank of sea bay or bank of an inland waterway
- on flat terrain, level with the railway line
- near to the origin/destination of freight
- distant from residential areas
- next to developable land for expansion

For intermodal terminals additional requirements are:

- room to store containers
- hard standing
- space for crane/stacker movements
- at least 3 running lines together with reception sidings
- space for road vehicles' movements

The railway lines, and where appropriate rail ferry lines of a RFC, connect a terminal of relevance to rail freight traffic along the route to:

- marshalling yards
- major rail-connected freight terminals
- rail-connected intermodal terminals in seaports and along inland waterways

A list of the terminals designated to the corridor has been worked out, agreed upon and regularly updated. The designation is based on national assessment and evaluation (to be updated according to Transport Market Study and consultation with the Terminal Advisory Group). All nodes indicated in the Annex of Regulation 913/2010/EU are connected.

More than 100 terminals have been included in Mediterranean RFC, according to the following distribution:

- Spain: 56 terminals
- France: 26 terminals
- Italy: 12 terminals
- Slovenia: 7 terminals
- Croatia: 8 terminals
- Hungary: 10 terminals

The list of terminals is available in CID Book Section 3 Terminal Description at a link:

https://www.medrfc.eu/publications/corridor-information-document/

The terminals along the Corridor are also displayed in the interactive map of CIP. The user can visualise the terminals on the interactive map or by clicking the button *"RFP Information"* on top of the screen to get a list of terminals for the selected Corridor. The Corridor cannot guarantee that the terminals in the CIP are exhaustively displayed and that the information is correct and up to date.

2.3 Capacity Bottlenecks

MED RFC carried out a Capacity Study in 2014. For common understanding the same definition of bottlenecks as per set in (5) of Definitions Article 3 of Regulation (EU) No 2024/1679 was used. Bottleneck means a physical, technical, functional, operational or administrative barrier which leads to a system break, including systematic congestion or standstill, affecting the continuity of traffic for long-distance or cross-border flows.

All the analysis, assessments and classifications were made upon definition above. The key technical parameters, infrastructure requirements set in Articles 15-18 of the TEN-T Regulation, were considered obligatory and common part of the future elements of the transport infrastructure for both passengers and freight transport capacity.

- full electrification of the line tracks and sidings;
- at least 22,5 t axle load;
- 100 km/h line speed;
- freight trains with a length of 740 m;
- full deployment of ERTMS;
- track gauge for railway lines 1.435 mm.

Identification of bottlenecks

Identification and classification of bottlenecks as a process is deriving from 2 different channels, with respect to the different kinds of traffic (freight and passenger). As a step to make a prioritization of the bottlenecks and stakeholder needs, the outcome of the classification is depending on the internal procedures of the IMs. Basically, 3 levels of priority can be set: top, medium and low priority.

- The identification is based on the experiences and findings by the traffic management professionals of the IMs, as a part of their everyday job. Realising the constraints generated especially during the peak periods.
- Another channel of identification is based on the stakeholders' consultation, both on national and RFC level (TAG/RAG events). Of course, these channels are mainly dealing with problems of the freight RUs.

Removal of bottlenecks

This Implementation Plan provides a description of the main bottlenecks identified along the corridor, integrating information given by Infrastructure Managers. This analysis can help Member States, Infrastructure Managers and other stakeholders to prioritize key infrastructural and capacity projects, which possibly constitute bottleneck removal actions.

Improvements in performance and infrastructure parameters, the effects on the corridor are available together with the identical bottleneck description.

Development and implementation of these projects are critical to increase rail services and improve performance of rail freight sector.

2.3.1 Spain

Track gauge

As the Iberian gauge in most of the Spanish sections of Mediterranean RFC, penalizes rail transportation competitiveness. It is remarkable the effort from Adif and Spain carrying out to overcome this situation along the Mediterranean RFC coastline, in a process on which current passengers and freight traffic is living together with the works.

One of the key works currently in progress is the change of the track gauge, from Iberian to UIC, along the stretch between Castellón and Vandellós (Tarragona), which means the first case of a conventional section on which no further Iberian gauge will be available. The first phase of the preparatory works started in 2023, and the second phase -the actual gauge change- is planned for 2027 so as its finalization would be aligned with all the ongoing actions for UIC implementation with third rail in the coastline of the Corridor. Also, in coordination with the improvement of TEN-T parameters for freight traffic of the Sagunto – Teruel line, which once the Castellón – Vandellós will be ready for UIC, may be used as a diversionary route for Iberian gauge.

Maximum train length

Today is possible to set paths for 750 m train length between Barcelona Can Tunis terminal and Perpignan, through the UIC gauge High Speed Line. South to Barcelona, existing limitations to 750 m train length, are foreseen to be solved alongside with the UIC implementation towards Tarragona and Valencia, in the coming years, which would improve rail transportation competitiveness.

Lack of capacity for international Rail Transport

During 2024 and 2025 discussions promoted by Med RFC on capacity and traffic coming scenarios (highlighting the specific session organized the 3rd of June 2024), it seems that capacity and traffic management inside the different Terminals and Ports, including their respective connections with the main line, are key to be assessed and aligned with the expected comprehensive management and performance of the Corridor.

In that referred scope, Spanish IMs in charge of the HSL showed during 2024, they are open to study concrete proposals form the RUs if they come with the project to use night paths, during week labour days, along the HSL connecting Perpignan and Barcelona. However, it shall be pointed out that night traffic is authorised during 2 nights per week since 2023, but no (0) capacity request for night slots have been received in 2023, 2024 and 2025. If the case this demand is going to come, then, to reach interesting timetables for the market will depend also in the availability of resources by RUs and Terminals to make shunting and load-unload operations during the night. When this demand would eventually show up, a start-up "re-action" from the Rail system, should come in order to provide an efficient answer to the market. But finally, up to the date, it seems IMs, RUs and Terminals/Ports are not offering to the market a comprehensive approach for night opening. This is a field of interest in order to identify potential operational bottleneck removal actions, linked in the background with business and probably labour conditions.

Regarding the management of the capacity allocation by the IMs to the RUs, the market asked in 2023 the three concerned IMs in the FR-ES border to move forward "framework agreements" in the line Barcelona – Perpignan at least, which would bring to the Rail operators and customers a certain period ahead with a steady picture for the business. But by the moment, during 2024 and 2025 we haven´t note, apparent steps on this way.

An important element gathered during 2024 and 2025 from the stakeholder's consultation, in relation with the new Rail system needs along the Corridor if traffics is going to increase, is the relatively poor number of tracks to park train compositions for no-short stages, such in the origin or destination of the international transport services, as in some handing over intermediate stations along the international route. This is in Spain a potential short-term operational bottleneck to be evaluated alongside the Corridor. In the case of Barcelona Can Tunis terminal is a constraint today.

Also, during the referred session of the 3rd of June, it was identified an infrastructure issue that the designed UIC implementation through the third rail tracks between Barcelona and Tarragona, is going to bring. It is a short stretch around 1 km of single track with UIC gauge, at the station of Sant Vicenç de Calders. It is an apparently small point, but which from the traffic management point of view in case of disruption in that station by any fault, could become an operational bottleneck.

Access to Ports and Terminals and Other Rail Facilities

The access to ports and terminals will be adopted to UIC Gauge in parallel with the installation of UIC Gauge along the corridor. As one of main operational bottlenecks to boost the traffic through the HSL to the French Border, it is the improvement of the current UIC gauge access to the Port of Barcelona: first steps of the administrative process by the Spanish Ministry once the approval in June 2023 of the so-called "Proyecto Básico". During 2024, the Design contract has been awarded, with an execution time of 48 months. Once this phase will finish, more detail conditions will be known on the further Construction phase.

In between Barcelona and the French border, a new freight terminal with UIC gauge, La Llagosta, is expected to enter in its first phase of operation by early 2026, under a concession regime exploited by international transport operator Hupac.

Towards the south of Barcelona, UIC gauge is being laid out by mean of third rail on the existing tracks. During 2024 works aimed to pass through Castellbisbal node in UIC gauge has been finished, even the proper connection with SEAT factory was forecasted for second half of 2025. Coming works impacting Rail traffic are going to be addressed during 2026 in order to reach Tarragona Port and industrial manufacturers around, tentative in 2026.

In the other bound, considering the increasing traffic in the multimodal connections of the Mediterranean Ports with the North of Africa, which are demanding Rail capacity inland, the Algeciras and Seville lines are object of different actions to improve not only capacity but infrastructure performance and reliability. Works and significant Temporary Capacity Restrictions were in 2025 and are forecasted in 2026 and 2027 between

Algeciras and Zaragoza with the aim to prepare the infrastructure in running semi-trailers on the wagons, the so-called Rolling Motorways.

Even in a less visible layer of the Rail system, exchanges with the stakeholders are bringing up that Maintenance Facilities for Rolling Stock in UIC gauge (locos, wagons, passenger units), are going to be an impacting operational bottleneck element. To count with the Classic FR-ES Cross-border section terminals in PortBou and in Cerbère, as a potential complex on which Maintenance Facilities in UIC could be suitable to be developed, is being put on the table of Med RFC as an input, that could be a possible solution for is "hidden" bottleneck of UIC Maintenance Facilities lack.

Temporary Capacity Restrictions Impact

As the relevant impact of infrastructure works on traffic around the Spanish part of Corridor, in other countries too, RUs are insisting and explaining the economic damage in their respective business and the envisaged difficulties in getting back the lost customers. Discussion on the Rail political sphere is happening in relation with the possibility or not to provide aids to the affected operators by these scenarios. From the Corridor perspective, and based on the stakeholders' consultation, the impact on RUs in terms of extra cost can be identified as a current key operational bottleneck, notwithstanding the IMs can coordinate themselves to offer international alternative Rail routes. Rail Network configuration is not always addressing enough efficient alternatives for allowing the RUs business to continue.

2.3.2 France

New line Montpellier-Perpignan

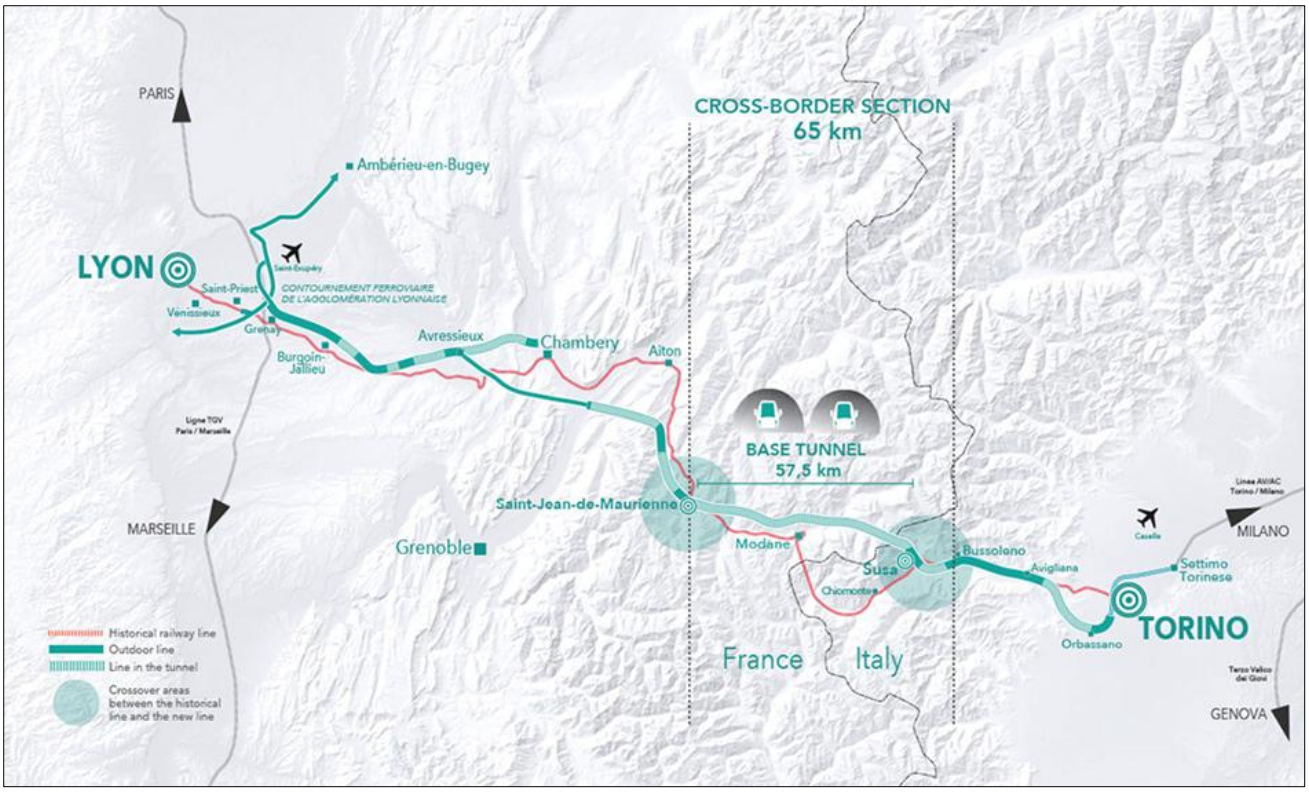
This new line will be the chain to join the Spanish high-speed section Barcelona-Figueres and its link with Perpignan with the new bypass between Nîmes and Montpellier and the lines to Lyon, will be effective in several phases:

- a first phase between Montpellier and the east of Béziers - this phase corresponds to the sections of the rail network currently the busiest. It is planned to be in operation in 2034
- subsequent phases between Béziers and Perpignan. It is planned to be in operation in 2040 (assuming no changes to the project (currently being consolidated).

The mixed use of the line freight/passengers, which will allow avoiding the saturation of the current axe and holding the increase of trucks traffic in the French motorway A9. It will also allow capacity and speed increases in the rail corridor.

Rail link Lyon - Turin

The project to link Lyon, Chambéry and Turin includes the creation of a 140 km line. A real alternative to the road, this new route will facilitate exchanges and travel for all train users. It will be a tremendous driving force for local economic development and will also be an open door to Europe. It is expected to be commissioned by 2033 (currently being consolidated).



The cross-border section of the Lyon-Turin freight and passenger railway line extends over a stretch of 65 km between Susa in Piedmont and Saint-Jean-de-Maurienne in Savoy. The main feature of the work is the 57.5 km long Mont Cenis base tunnel – 12.5 km in Italy and 45 in France – linking the international stations of Saint-Jean-de-Maurienne and Susa, which constitute the connection points to the respective national lines in France and Italy.

Tunnel Euralpin Lyon Turin (TELT) is a company owned 50% by the Italy state, 50% by the French state. This company is not part of the MED RFC, together with the corresponding line.

The works carried out by SNCF Réseau will be carried out in two phases:

- phase 1: the work will start on the Lyon-Chambéry axis. The works will consist of a 78 km mixed line for passengers and freight between Lyon and Avressieux (entry into Savoy) via the Dullin l'Epine tunnel
- phase 2: the works include the construction of the first part of the freight route between Avressieux and Saint-Jean-de-Maurienne. The route will pass through the Chartreuse, Belledonne and Glandon tunnels and will allow the passage of the large gauge rail motorway. Of the 62 km of new line created, 53 km will pass through these tunnels. A viaduct will be built to cross the A41 and Isère rivers

The objectives of this project are numerous: by facilitating the extension of the high-speed network, this new line will allow an increase in TGV frequencies and the introduction of high-speed TER services. Faster journeys will thus facilitate the movement and exchange of travelers across the Alps. Specifically, for freight, it will be a concrete and sustainable alternative to road transport. This new route will guarantee an efficient link for companies using freight transport. They will also benefit from a wider choice of services available: rail motorway, conventional freight, or combined freight. They will also be able to take advantage of a new direct route between the Lyon railway junction and Italy

The Lyon railway junction

This junction is:

- on the Northern Europe - Mediterranean axis and on 2 European freight corridors (RFC Mediterranean and RFC North Sea – Med)

- at the heart of national and international high-speed links
- on a territory of 7.9 million inhabitants in Auvergne-Rhône-Alpes with a strong demographic growth

Located at the convergence of 15 European, national and regional railway lines, the Lyon railway junction is extremely busy, and its infrastructure is at the limit of capacity. This is why a short and medium-term mobilization plan has been put in place with the objective of restoring the system's robustness by acting on all components: operations and standards, equipment, regeneration of installations and investment works. This plan was approved by ministerial decision on 2 June 2015.

2.3.3 Italy

New High-Speed Line Milano - Venezia

The main works for quadrupling of the Treviglio-Brescia line, as first functional phase of the new High Speed line Milano-Verona, has been completed in 2016.

Works for section Brescia - Verona - Vicenza have already started.

The high-speed line between Milano and Venezia will enhance capacity to the Mediterranean Corridor both for freight and passenger trains. It will guarantee a system of four tracks with separation for trains with different speed, and it will increase the quality and the punctuality of the traffic. This is particularly relevant in the Verona Node where there will be separate routes for long distance trains, regional trains and freight trains.

Also, it will be a reduction of long-distance trains travelling times between Milano and Venezia.

The new line will have the following technical characteristics:

Brescia – Verona

- Maximum speed 300 km/h
- Maximum gradient 12 ‰
- Signalling: ERTMS level 2

Verona – Vicenza (First Phase)

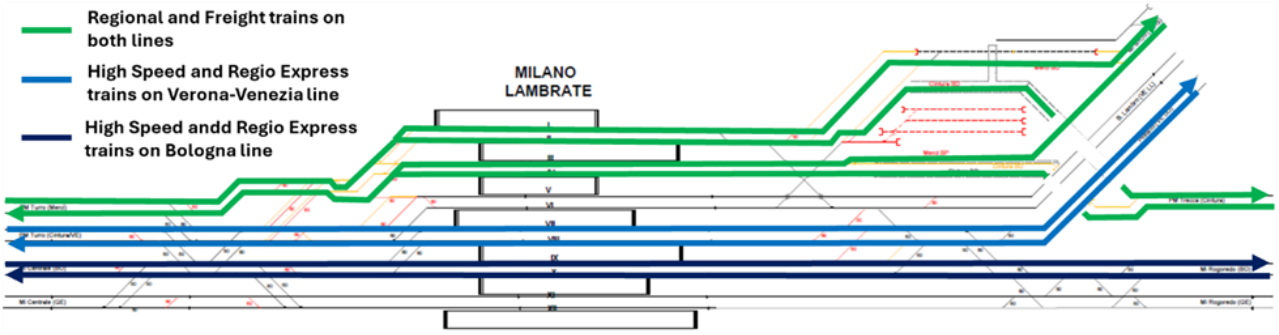
- Maximum speed 250 km/h
- Maximum gradient 12 ‰
- Signalling: ERTMS level 2

Milano Node upgrading (Milano Lambrate, Milano Certosa)

The node of Milan is characterized by a high promiscuity of rail traffic due to overlapping of metropolitan, regional, long distance and freight traffic. Such a state of promiscuity, combined with a high volume of traffic, actually prevents the increase of regional traffic of the Milan area and undermines the freight transport development.

Within the framework of the Torino – Padova project, many actions are provided related to the node of Milan, which actually consist of a new traffic management control centre, and in the section Milano Smistamento – Milano Lambrate – Milano Greco Pirelli – Monza, a new interlocking system equipped with shorter sections, completed in 2025. These interventions will allow a rationalization of traffic management and an increase in the capacity offered by the existing infrastructure.

With the increase of rail traffic witnessed in recent times along the main lines, stations of old conception as Milano Lambrate have become bottlenecks, either for passenger or freight traffic. One of the initiatives considered a priority to strengthen the capacity of Milan Lambrate node regards the specialization of lines by traffic type. A new project has been drafted to separate passenger from freight traffic by limiting as much as possible interference.



Furthermore, the new interlocking of Milano Certosa, in project phase, will include two new tracks 750 meters long, enhancing the overall quality of the operations inside the Node.

Upgrading of Venezia-Trieste (speeding up of existing line)

The upgrading of the existing Venezia–Trieste line is one of the most significant projects in the Northeast of Italy. The main objective is to reduce travel time between Venezia and Trieste and to increase capacity between Venezia Mestre and Monfalcone to up to 10 trains per hour in each direction. The upgrade will eliminate the current speed restrictions for trains with an axle load of 22.5 tons and improve the layout of certain stations, ensuring track lengths of 750 meters.

The number of block section will be increased with the installation of the new signalling system. These will allow increase in both capacity and speed as well. The current signalling system permits maximum speed of 150 km/h.

The project will be developed according to the following construction phases:

1) New Signalling System (2025/2027)
2) Removing of principal level crossing (2025/2027)
3) Route variants between Mestre and Ronchi (phase 2)
4) New Line between Ronchi and Aurisina (phase 3)

The project is partially funded (only phase 1). The initiation of the other phases is conditional upon the allocation of the required financial resources.

2.3.4 Slovenia

Lack of capacity in lines

The rising volume of traffic, with simultaneously increasing demands in terms of quality and quantity, requires a unique, harmonized and generally valid understanding to be developed as regards available railway-infrastructure capacity. According to UIC Leaflet 406 single-track is considered as 100% utilized if the percentage of capacity utilization approaches to 85%. For double tracks with mixed traffic is this percentage 75%.

Slovenia has temporarily limited capacities on the following line sections:

- Divača-Koper, single track line (capacity of the line is 94 trains/24h), capacity consumption is 102 %, - in July 2018 the section was declared as congested
- Ljubljana-Divača, double track line (capacity of the line is 153 trains/24h), capacity consumption is 83 %.

At some railway stations in Slovenian part of MED RFC, has been also elaborated lack of the capacities. Railway nodes with the lack of the capacities:

- Ljubljana railway node (due to the peak hours for passenger trains, short station tracks),
- Zidani Most railway node (due to the peak hours for passenger trains, lack of tracks and short tracks).

Some measures to increase the capacities and eliminate the bottlenecks at the critical railway sections and nodes have already been started:

- Divača-Koper, the second, new track of the total length of 27.1km is under construction. All main structures i.e. the tunnels and viaducts have been completed. The new section will be put into operation as a single track in 2026, enabling between Divača and Koper two single track lines will be available for utilisation.
- Ljubljana-Divača: the upgrading of the existing two track line started in 2021. The section between Ljubljana and Brezovica has been completed and put into operation. Currently, the works are in progress between Brezovica and Borovnica and on several other sites. The construction works along the whole line are to be finished by 2027.
- Ljubljana railway node: upgrading of the Ljubljana central station has started with the first phase comprising of the new Dunajska overpass construction, which is expected to be put into operation in 2025. For the second phase of the works on the main passenger station, the contract has been signed with the completion of works foreseen by the end of 2026.
- Zidani Most railway node: installation of the new signalling system and the construction of 9 overpasses in total, to eliminate the bottleneck is in progress.

Axle loads and train weight limits

Category D3 (Load per unit length 7,2 t/m and axle load 22,5 t) is considered as normal category for the Slovenia's rail lines for international transit traffic. The goal targeted by development projects is to ensure the axle load D4 (8,0 t/m and 22,5 t) on entire Mediterranean RFC sections in Slovenia.

Train length

Maximum permitted length of freight trains in Slovenia is 740 meters (with traction included). On particular lines permitted length is extra restricted because of short station tracks.

Currently there are restrictions on the following lines:

- Sežana border – Ljubljana maximum permitted length of the train 600 m.
- Divača – Koper tovorna 525m
- Pragersko – Ormož – Hodoš border 600 m
- Dobova border – Zidani Most - 570 m
- Zidani Most – Ljubljana - 570 m

Our goal is to increase the length on all lines of Mediterranean RFC to 740m.

Tunnel Restrictions

The tunnel restrictions, with regard to the special dimensions of particular wagons in a train in a combined transport are considered with the codification of lines. Now we have on section Gornje Ležeče – Pivka because of tunnel restriction codification for combined transport reduced on profile P/C 82/412.

2.3.5 Croatia

Considering the current traffic volume there is no real bottlenecks on the line, but of course there are some obstacles in existing infrastructure characteristics that could cause bottlenecks in the future if the traffic volume will significantly increase.

On the October 29, 2025 – The new Rijeka Gateway Container Terminal, the most advanced and fully automated container terminal in this part of Europe, was officially opened on the Zagreb Pier in the Port of Rijeka. This project represents one of the most significant logistics investments in the modern history of Rijeka and Croatia so the traffic volume will increase and the only bottleneck on the the existing M202 Zagreb-Rijeka line will be the mountain part from Škrljevo to the Ogulin station. HŽI is planning to invest in a whole new

double railway track from Karlovac to Skradnik – Krasica-Tijani also following the Regulation 2024/1679 Union guidelines for the development of the trans-European transport network.

Section line Rijeka – Skrad

On the section line Rijeka – Lokve due to the very unfavourable relief features of the line there are huge inclines / declines and thus great ruling line resistance up to 29 daN/t. Consequently, the train mass is limited and there is a need for two traction locomotives or a stronger one. In addition to this, till the Skrad station, tracks for the reception and dispatching of trains at the railway stations are less than 500 meters long. This of course limits the traffic flow and the line capacity as a whole. Given the existing configuration, as a possible solution arises the construction of a new railway line to bypass the hills, so-called "lowland line", which is in preparation. The EIA for the new railway line Skradnik-Krasica-Tijani is in the procedure.

Section line Zagreb RK – Karlovac

In order to enhance the competitiveness of corridor line from the port of Rijeka to Central Europe and further, there is a plan to build the second track on the line section Hrvatski Leskovac – Karlovac in the time horizon 2022 – 2027. With much more favourable characteristics of the future railway infrastructure, the requirements for the corridor traffic will be met as well as increase in line capacity according to European standards.

Section line Dugo Selo – Koprivnica – St. Border

In order to enhance the competitiveness of corridor line from the port of Rijeka to Central Europe and further, there is a plan to build the second track on the line section Dugo Selo - Koprivnica – State border – (Hungary) in the time horizon 2016 – 2026. With much more favourable characteristics of the future railway infrastructure, the requirements for the corridor traffic will be met as well as increase in line capacity according to European standards.

Section line Karlovac-Oštarije

In order to enhance the competitiveness of corridor line from the port of Rijeka to Central Europe and further, there is a plan to build new double railway line on the section Skradnik-Karlovac in the time horizon eventually by the year 2033.

2.3.6 Hungary

Budapest southern ring railway (Kelenföld – Ferencváros section, MÁV)

The main bottleneck of the Hungarian section of the RFC is the Danube crossing in Budapest, which is the only high-capacity Danube railway bridge in Hungary. The previous double track bridge was replaced by three single track bridges in 2022 to increase capacity by 50%. In order to utilize the new bridge span, the Kelenföld – Ferencváros section of the line need to be upgraded to 3 tracks, partially 4 to tracks. The construction works were started in 2024 is expected to be completed by the end of 2028.

Budapest – Miskolc (MÁV)

The complex reconstruction on the Budapest-Ferencváros – Kőbánya Felső – Miskolc RFC corridor line between Rákos and Hatvan stations has been finished. Axle load was increased to 22,5t and new electronic interlocking and ETCS L2 was installed in the upgraded section. However, the Ferencváros – Kőbánya Felső – Rákos section continues to be a gap in the ETCS L2 availability.

Székesfehérvár – Boba line section (GYSEV)

This line currently does not operate.

Zalaszentiván–Nagykanizsa line section (GYSEV)

The only section without electrification in the Hungarian part of the RFC continues to be a bottleneck in the north-south traffic. The design speed of the section is 100/80 km/h, but speed restrictions apply. Maximum train length is 600m. No GSM-R or ETCS installed. Reconstruction project to TEN-T parameters (750 m, ETCS) is in preparation phase, expected to finish in ~2030.

Hungarian Ukrainian Cross-Border section (Záhony – Chop and Eperjeske – Batevo, MÁV)

State of play:

- Single-track line without signaling blocks between Záhony and Tuzsér, with frequent passenger and local freight services limiting capacity for international freight trains.
- Single-track, dual-gauge railway bridge at the border.
- Non-electrified border crossing between Chop and Záhony stations.
- Outdated signaling systems: Záhony marshalling yard and Záhony passanger station use an outdated mechanical interlocking system without individual exit signals.
- Insufficient capacity at Záhony passenger station: Záhony passenger station has only five tracks with platforms and lacks passenger car storage tracks. Long border police inspections further decrease capacity.
- Záhony marshalling yard: Out of 18 tracks, only 8 are operational, and just 2 (Tracks V and VI) have been renovated. To meet the needs of the currently active ten freight railway companies, at least 12 of the 18 tracks need to be renovated.
- Tuzsér station: The left siding loop requires reinforcement.
- Eperjeske marshalling yard: Arrival tracks II and VII-IX need reinforcement.

Anticipated developments:

Traffic data shows an increase in standard-gauge (1,435 mm) traffic, with further growth expected. Transhipment facilities are being constructed on the Ukrainian side, and a standard gauge line between Chop and Uzhorod has been operational since August 2025. As the Ukrainian overhead line operates at 3kV DC, the electrification of border crossings on the Hungarian side will require multi-system electric locomotives.

2.3.7 Congested infrastructure

As per the provision of Directive 2012/34/EU Congested infrastructure means an element, a section of infrastructure for which demand for infrastructure capacity cannot be fully satisfied during certain periods even after coordination of the different requests for capacity. In these cases, after a thorough capacity analysis a Capacity-enhancement plan are required to draft by the infrastructure manager, to include a measure or series of measures with a calendar for their implementation which aim to alleviate the capacity constraints which led to the declaration of an element of infrastructure as congested infrastructure.

There is no infrastructure declared congested on the network of Mediterranean RFC.

2.4 RFC Governance

Article 8 of the Regulation (EU) 913/2010 (re-confirmed in Article 8, point 35 of Regulation (EU) No 2024/1679) defines three levels in the governance structure:

The Executive Board (ExBo): shall be composed of representatives of the authorities of the Member States concerned. The body is responsible for defining the general objectives of the freight corridor, supervising and taking the necessary measures for improvement of the project. The participation of each Member State is obligatory.

The Management Board (MB): For each freight corridor, the Infrastructure Managers concerned and, where relevant the Allocation Bodies as referred, shall establish a Management Board responsible for taking all operative measures for the implementation of the regulation. The participation of each IM and AB is obligatory.

The MB makes its decisions based on a mutual consent. The MB was established by the signature of a Memorandum of Understanding among the parties, signed already in April 2012. Effective 1st of January 2014 the Management Board took the form of a EEIG (European Economic Interest Grouping). As a consequence, the role of the Management Board was taken over by the G**eneral Assembly of EEIG Mediterranean RFC (hereafter: GA).** On the 7th of July 2016 HZI joined the EEIG and AZP left the EEIG. The EEIG was also renamed EEIG for Mediterranean RFC. On 11th October Oc' Via from France joined the EEIG.

A Permanent Management Office (hereafter PMO) was set up in Milan (Italy) to support the implementation of the Mediterranean RFC and to ensure the functioning of the EEIG. The migration of Corridor D EEIG towards

Mediterranean RFC EEIG was implemented in early 2014. The PMO is led by the Managing Director and was composed of two other fulltime dedicated people in the start-up phase: one Infrastructure Advisor (who is also the EEIG Deputy Director) and one OSS leader. The corridor one-stop-shop is applying the dedicated C-OSS model of RNE from the 1st of July 2013.

Six EU Member States (Spain, France, Italy, Slovenia, Croatia and Hungary) are now involved in Mediterranean RFC. The Management Board has 10 members: 9 Infrastructure Managers and 1 Allocation Body.

9 Infrastructure Managers and 1 Allocation Body

Advisory Groups (AGs): The MB set up Advisory Groups made up of:

- **Railway Undertakings** interested in the use of the corridor.
- **Managers and Owners of the Terminals** of the freight corridor including, where necessary, sea and inland waterway ports. These AGs may issue an opinion on any proposal by the MB, which has direct consequences for them. They may also issue their own-initiative opinions. The MB shall take any of these opinions into account.

The voice of customers is taken into account via the Terminal Managers and the Railway Undertakings Advisory Groups. Participation to AGs is on a voluntary basis. Advisory Groups members have a dedicated area in the Mediterranean RFC website, where all the materials under consultation are available. To join the Advisory Groups please contact the Permanent Management Office (PMO) and/or the representatives of the Advisory Group. One representative for each Advisory Group has been nominated to coordinate the position of the group. The Advisory Groups' opinion has to contain both majority and minority opinions. The organizational structure of the Corridor is included in the Internal Regulations of EEIG Mediterranean RFC.

The managers of the EEIG are appointed by the General Assembly with a mandate for 3 years.

Managing Director - EEIG Manager: Mrs. Sandra Ferrari

Deputy Managing Director - EEIG Manager: Mr. József Ádám Balogh

Manager - EEIG Manager: Mrs. Nikolina Ostrman.

The General Assembly of Mediterranean RFC acts as Management Board. The General Assembly of Mediterranean RFC meets regularly, at least twice a year at the headquarters of the EEIG (Milano – via Ernesto Breda 28). The Chairman of the General Assembly is Mr. Manuel Besteiro. The EEIG managers are usually appointed for three years' renewable period unless otherwise decided by the General Assembly of the EEIG. The Managers are tasked with ensuring that operational and technical tasks incumbent upon the EEIG are duly accomplished, in accordance with the relevant provisions of the Regulation (EU) 913/2010, with the decisions and guidelines of the General Assembly and with the opinions and decisions of the Executive Board. The President of the EEIG coordinates the activity of the Managers and ensure the respect of the Act of Incorporation, of the internal Rules and of the Regulation 913/2010. He is not dedicated full time to the EEIG; he has an institutional role and is entitled to represent the EEIG in international events and before the European Commission, RNE and other European Institutions. As far as these functions are concerned, he can be replaced by the PMO Managing Director. He supervises the external relations of the EEIG, in cooperation with the Chairman of the GA and with the other two Managers, ensuring consistency of different information flows concerning the EEIG (website, publications, press release, leaflets, etc.). As far as these functions are concerned, he can be replaced by the PMO Managing Director.

Coordination Group

Member	Representative
Administrador de Infraestructuras Ferroviarias (ADIF)	Manuel Besteiro
Línea Figueras Perpignan S.A. (LFP)	Petros Papaghiannakis

Société Nationale des Chemins de fer Français Réseau (SNCF Réseau)	Claire Hamoniau
Oc'Via	Kévin Kuba
Rete Ferroviaria Italiana (RFI)	Laura Fortunato
Slovenske Železnice-Infrastruktura d. o. o. (SŽ-I)	Bojan Kovačević
HŽ Infrastruktura d.o.o. (HŽI)	Ivana Zanki
Győr-Sopron-Ebenfurti Vasút Zrt. (GYSEV)	Ágnes Lengyelné Kerekes
MÁV Pályaműködetetési Zrt. (MÁV)	Lőrinc Czakó
Institute for Transport Sciences and Quality Control in Building (KTI)	Dóra Kondász

The Coordination Group was set up in order to support the Management Board members and the Permanent Management Office. In particular, the Coordination Group carries out the following activities:

- Ensures a high-level general follow-up and coordination of the activities defined by the GA of the EEIG, in cooperation with the Managing Director of the PMO, with the Working Groups and with the Chairman of the GA.
- Contributes to prepare decisions of the GA and to their implementation.
- Advises and supports the PMO.
- Ensures an efficient communication flow between the EEIG (GA, Managers, PMO, Working Groups) and the internal structures of the EEIG Members, acting as contact point between national and corridor level.

The Coordination Group organises at list two live meetings per year and videoconference meetings when needed.

Advisory Groups

The kick-off meeting for the setting up of the Advisory Groups of Mediterranean RFC was held in Budapest on 30th November 2012. The preparation of this meeting was based on a wide involvement of the stakeholders interested in the use of Mediterranean RFC, according to the principles of transparency and equality.

The following Advisory Groups meeting were organised so far by Mediterranean RFC:

Year	Event	Venue	Date
2012	TAG-RAG	Budapest (HU)	30/11/2012
2013	TAG-RAG	Barcelona (ES)	18/04/2013
2013	TAG-RAG	Marseille (FR)	29/10/2013
2014	TAG-RAG	Milano (IT)	12/03/2014

2014	TAG-RAG	Koper (SI)	30/10/2014
2015	TAG-RAG	Madrid (ES)	23/04/2015
2015	TAG-RAG	Budapest (HU)	19/11/2015
2016	TAG-RAG	Montpellier (FR)	26/05/2016
2017	TAG-RAG	Milano (IT)	26/01/2017
2017	TAG-RAG	Ljubljana (SI)	14/11/2017
2018	TAG-RAG	Valencia (ES)	31/05/2018
2018	TAG-RAG	Budapest (HU)	28/11/218
2019	TAG-RAG	Marseille (FR)	27/02/2019
2019	TAG-RAG	Rijeka (HR)	26/09/2019
2020	TAG-RAG	On-line event	24/09/2020
2021	TAG-RAG	On-line event	10/02/2021
2021	TAG-RAG	On-line event	14/09/2021
2022	TAG-RAG	On-line event	16/03/2022
2022	TAG-RAG	On-line event	24/11/2022
2023	TAG-RAG	On-line event	25/05/2023
2023	TAG-RAG	Seville (ES)	23/11/2023
2024	TAG-RAG	On-line event	12/03/2025
2024	TAG-RAG	Budapest (HU)	07/11/2024
2025	TAG-RAG	Modane (FR)	25/05/2025
2025	TAG-RAG	Milano (IT)	28/10/2025

Mediterranean RFC organizes two TAG-RAG meetings per year, which alternatively take place on **the eastern or on the western** part of the Corridor.

Starting from the 6th Mediterranean RFC TAG-RAG meeting, the Management Board decided to introduce a new role within the context of the Advisory Groups: a **representative for each Advisory Group** in order to make the consultation process more effective and more useful for RUs and TMs. The representatives will encourage coordination within each Advisory Group and also towards other external institutions.

The Advisory Groups meetings are organised in order to establish a regular dialogue of the freight corridor management with its stakeholders. The consultation mechanism is mainly based on electronic tools (e-mail and website), on national contact points for operators (in order to facilitate communication and information) and on specific questionnaires to be used for collecting remarks and suggestions from Advisory Groups. This approach responds to the following aims:

- smooth, flexible and transparent communication flow between Management Board and Advisory Groups
- cost-effective system (2 meetings per year)
- wide-ranging involvement of Railway Undertakings and Terminals
- involvement of owners / operators potentially interested to join Advisory Groups, through publication of documents on the corridor website (invitation, presentations, minutes of meeting, etc.)
- efficient collection of opinions raised by railway operators

- direct contacts at local level (the use of national language can be very important for small operators mainly on technical matters)

In order to facilitate communication with local operators a national contact point is made available for each country concerned by the corridor, in charge of collecting the interests of participation at national level:

Member	Country	Contact name	E-mail	Telephone
ADIF	Spain	Manuel Besteiro	mbesteiro@adif.es	+34 913007772
LFP	ES/FR	Petros Papaghiannakis	ppapaghiannakis@lfpperthus.com	+34 972678800
SNCF Réseau	France	Claire Hamoniau	claire.hamoniau@reseau.sncf.fr	+33(0)153943325
Oc'Via	France	Kévin Kuba	k.kuba@ocvia.fr	+33 4 3448 00 61
RFI	Italy	Laura Fortunato	l.fortunato@rfi.it	+39 313 8088234
SŽ-I	Slovenia	Bojan Kovačević	bojan.kovacevic@slo-zeleznice.si	+386 129 12 317
HŽI	Croatia	Ivana Zanki	ivana.zanki@hzinfra.hr	+385 1 378 3358
GYSEV	Hungary	Ágnes Lengyelné Kerekes	akerekes@gysev.hu	+36 30 565-77-80
MÁV	Hungary	Zoltán Nagy	nagy11.zoltan@mavcsoport.hu	+36 15113799
KTI	Hungary	Dóra Kondász	kondasz.dora@kti.hu	+36 30 758 7298

For consultation of applicants likely to use the corridor (art. 10 of Regulation 913/2010), the first draft of the Implementation Plan is submitted to the Advisory Groups of Mediterranean RFC taking place in spring. All RUs and terminal owners/managers which cannot attend physical meetings but are interested in the use of Mediterranean RFC and/or in the activity of the Advisory Groups may be involved by means of public information on https://www.medrfc.eu/ and direct contact with national contact persons. Moreover, the intention is to invite all the operators to each meeting so that new membership may always be possible. The composition of the Advisory Group is thus open and flexible, membership is not fixed, allowing newcomers the possibility to join the activity at any time, as recommended by Regulation 913/2010 and by the Handbook ("New membership should always be possible, and the composition of the Advisory Groups should be revised from time to time to allow an adjustment of the representation." - Handbook, point 3.4.1)

In order to ensure efficiency to physical meetings, attendance may depend on the number of requests ("Since any operator can claim to be interested in the use of the corridor, the number of possible participating in the Advisory Groups could be too high. Operators of different sizes and with different business models should be represented" - Handbook, point 3.4.1-3.4.2). According to a decision of the Executive Board of Mediterranean RFC, terminal owners/managers not giving the information requested by the Management Board will not be accepted into the Advisory Groups and their terminals can be excluded from the corridor.

Permanent Management Office

A Permanent Management Office (hereafter PMO) for Mediterranean RFC was set up in Milan (Italy) in a RFI fenced area during summer 2013 for daily corridor operations, leaded by the Italian partner RFI, to support the implementation of the Mediterranean RFC and to ensure the functioning of the EEIG. The selection of staff was made by the Management Board on 9th April 2013 among the candidates promoted by the Members, on the basis of specific evaluation criteria. The PMO is composed of 3 full time personnel: one Managing Director from RFI (Italy), one Deputy Director-Infrastructure Manager from MÁV (Hungary) and one OSS leader from

SNCF Réseau. Each Member is responsible for the contractual relationship with its candidates selected for the PMO; terms and conditions of employment for PMO staff will be defined through specific agreements between the EEIG Mediterranean RFC and the Member promoting the candidate. In late 2014, the EEIG GA decided to hire a fulltime Office Assistant to support the work of the PMO and at the beginning of 2017 a part time Project Manager.

The internationality of the team is considered as a key requirement to ensure a fair balance of representation among the partners and a corridor-oriented perspective overcoming national views.

Managing Director – Sandra FERRARI

The PMO is led by the Managing Director, who is a full-time manager dedicated to the EEIG and Mediterranean Corridor RFC. He is the head of the PMO and the main coordinator of all corridor related activities. He is responsible for the correct implementation of all tasks and obligations ensuing from the Regulation. The objectives and mission of the Managing Director are defined by the General Assembly of the EEIG.

Deputy Director / Infrastructure Advisor – József Ádám BALOGH

He is a full-time manager dedicated to the EEIG and Mediterranean RFC. As Infrastructure Advisor, he also has the responsibility to constantly update and collect the technical parameters of the corridor, control and draft the geographical description of the network and complete the CID.

C-OSS Leader – Jose Antonio Grau Gregorio

The OSS leader has the role to be the single contact point for applicants to request and receive rail infrastructure capacity for freight trains (Pre-Arranged Paths and Reserve Capacity) crossing at least one border along the corridor. The OSS leader handles communication process between IMs, ABs and other C-OSSs and Terminals linked to the corridor. The objectives and mission of the OSS leader are defined in the Internal Regulations of Mediterranean RFC. His tasks are set in the Directive 2001/14/EC and Regulation (EU) 913/2010.

Project Manager –

According to the decision of the General Assembly of Mediterranean RFC one Project Manager joined the PMO September of 2024. Under the monitoring of the Managing Director, he is responsible for different projects concerning the corridor developments and more generally she supports the PMO staff. Among others he is responsible, under the supervision of the Managing Director, preparation and coordination of the reporting procedure for the Connecting Europe Facility funding.

Administrative Assistant – Pamela CHIARAPPA

According to the decision of the General Assembly of Mediterranean RFC one Administrative Assistant joined the PMO. Under the monitoring of the Managing director, she is responsible for the administrative management of the EEIG and she supports the PMO staff in all the operational and administrative issues.

Working Groups

The Working Groups were set up in 2013, and their tasks are described in the Internal Regulations of Mediterranean RFC EEIG, these working groups are composed of experts appointed by the Members of the EEIG. The staff of the Permanent Management Office coordinate them. They assist the PMO and the Coordination Group in their work.

Currently there are four Working Groups:

Infrastructure WG

This Working Group is in charge of the following tasks:

- review and update the Investment Plan along the corridor
- identify the bottlenecks along the corridor

- follow, with the Infrastructure Advisor of the PMO, the Capacity Study and the TMS
- update the infrastructure parameters (lines and terminals) constituting the Mediterranean Corridor
- interoperability
- analyse the outcomes of the Transport Market Study in order to improve the quality of the corridor

Traffic Management WG (TM WG)/Train Performance Management WG (TPM WG)

The Infrastructure Advisor leads these Working Group. The WG is in charge of the following tasks:

- Harmonization of national approaches in order to set up corridor model for traffic management
- Harmonization of national approaches in order to set up corridor model for traffic performance management
- Cooperate in drafting the CID
- Define the Priority rules
- Draft the performance management report
- Propose the corridor objectives.

Capacity & TCR WG

It assists the C-OSS in the coordination of the path requests and in the construction of the PaPs (Pre-arranged Paths). Moreover, it is in charge of the following tasks:

- Promote compatibility between the Performance Schemes along the corridor.
- Propose the corridor objectives.
- Cooperate in drafting the CID.
- Promote coordination of works along the corridor aiming to minimize traffic disruptions.

Financial WG

The WG is in charge of the following tasks:

- Prepare the budget.
- Analyse the balance sheet.
- Prepare the General Assembly members for the approval of the budget and the balance sheet.

According to the future needs, the above-mentioned Working Groups may be modified or substituted by others. New Working Groups may also be set up when needed in order to deal with further issues that may arise.

3 Transport Market Study

3.1 Background

Regulation (EU) 2024/1679 ‘Article 9 Measures for developing the freight corridor, point 3. defines that the management board shall carry out and periodically update a Transport Market Study relating to the observed

and expected changes in the traffic on the freight corridor. In 2024 the version of 2020 has been updated.

Mediterranean RFC TMS UPDATE in 2024 results within the 2024 joint TMS update of the existing 11 RFCs belonging to the European Rail Network for competitive freight.

Over the past decade, RFCs elaborated first TMSs and, in most cases, TMS updates. However, these studies were carried out without a common approach or a shared methodological framework. To support the RFCs in achieving compliance with the above requirement in a coordinated and harmonised manner, the Management Boards of the 11 RFCs decided to execute a Joint TMS Update under the coordination of RailNetEurope (RNE). The main findings and results of the 2024 TMS Update for the RFC MED are summarised in the recent TMS update.

3.2 Transport Market Study 2024

The complete TMS is available at: https://www.medrfc.eu/publications/transport-market-study/

4 List of Measures

Since the corridor has already been implemented, the subchapters 4.1 – 4.6 are not applicable for updates. The state of play and further developments regarding concrete measures and procedures is included in Section 4 of the CID.

4.1 Coordination of planned temporary capacity restrictions

4.1.1 Background

Independent Temporary Capacity Restrictions Working Group (TCRs WG) was established to focus on the tasks connected with capacity restrictions planning, coordinating and publishing. TCRs WG meets 2 times per year. All WG members confirm the purpose to improve the TCRs planning and coordinating process along on RFC MED taking into account the related RNE guidelines as well. Some specificities will remain in the RFC MED information procedure of TCRs which were requested by our business clients during the TAG/RAG meetings.

4.1.2 Legal framework

TCRs WG processes are based especially on Article 12 “Coordination of works” of the European Regulation No 913/2010 giving the responsibility for TCRs coordination and publication to RFC Management Board.

Additionally, the European Union recognised the need for common rules to enhance the competitiveness of the railways, thus, the revised Annex VII (recast in 2017) of the Directive 2012/34/EU obliges the IMs to involve known and potential applicants, main operators of service facilities, terminals and other IMs affected by a TCR already at an early stage.

The harmonised implementation of the legislation is also a clear business demand, therefore, the document “Procedures for Temporary Capacity Restriction Management” (hereafter TCR Handbook, approved by the RNE General Assembly on 7 December 2021) defines how to handle each step of the TCR management process both to ensure smooth and reliable TCR planning, coordination and publishing according to the deadlines set in Annex VII of the Directive 2012/34/EU.

The Handbook has been designed also to cover RFC processes and thus replace all previous RNE/RFC guidelines covering this subject, such as “Guidelines for Coordination / Publication of Planned Temporary Capacity Restrictions for the European Railway Network” version 3.0.

So, the Handbook is considered to be a main legal basis for TCRs WG activities. TCRs WG members fully respect these Guidelines and follow them for securing proper environment for coordination of TCRs.

4.1.3 Tasks of the TCRs WG

The TCR WG is coordinated by C-OSS Leader, and it assists the C-OSS in the coordination of works. The TCR Coordinator facilitates and stimulates, when necessary, coordination of TCRs, together with the members by:

- Promoting and coordinating of works along the corridor aiming at minimizing traffic disruptions.
- Enhancing the necessity for IMs to harmonise TCRs for customers.
- Steering the coordination process according the RNE Handbook.
- Ensuring the process of measure and quality evaluation of TCRs Coordination and Publication.
- Following the output of bilateral meetings taking place along the corridor.
- Developing the environment for publication of unplanned (not within the scope of RNE TCR Handbook) and extraordinary capacity restrictions to avoid train delays and other undesirable circumstances.
- Supporting the development of a TCR coordination and planning process to improve rail freight traffic.

- Cooperating with C-OSS to improve the quality of train path allocation.
- Triggering additional harmonisation of TCRs, when necessary.
- Ensuring common publication of TCRs twice a year on Mediterranean website.
- Ensuring the link between RNE TCR group and all IMs of the corridor and especially in following the development of RNE TCR Tool.

Based on the regular up-date of the information on TCRs the first conclusion is that there are lot of works, which will be executed by the IMs in the coming years on corridor lines. The GA will monitor the situation and will make efforts to harmonize the coordination of the works according to the TCR Handbook.

The TCR WG enforces to start bilateral or trilateral coordination in those cases, where this is appropriate by the RNE rules. Good coordination of TCR can positively influence the service level and quality on RFC MED. TCR is an important topic for the business partners, publication and coordination on time can facilitate the related procedures for all concerned partners.

4.1.4 Coordination and Publication of planned Temporary Capacity Restrictions

In line with Article 12 of the Regulation, the Management Board of the freight corridor shall coordinate and ensure in one place the publication of planned Temporary Capacity Restrictions (TCRs) that could impact the capacity on each Rail Freight Corridor. TCRs are necessary to keep the infrastructure and its equipment in operational condition and to allow changes to the infrastructure necessary to cover market needs. According to the current legal framework (see 4.4.2), in case of international traffic, these capacity restrictions have to be coordinated by IMs among neighbouring countries.

All information on the coordination of planned temporary capacity restrictions can be found in Section 4, Chapter 4.4 of the CID.

4.2 Corridor OSS

According to Article 13 of the Regulation, the GA of the Corridor has established a C-OSS. The tasks of the C-OSS are conducted in a non-discriminatory way, and it maintains confidentiality regarding applicants.

C-OSS Leader coordinates the C-OSS WG, and it assists the C-OSS in the coordination of the path requests and in the construction of the PaPs (Pre-arranged Paths). Moreover, it is in charge of the following tasks:

- Analysis of current traffics and possible developments.
- Coordination of Pap offers before each publication (annual and Reserve Capacity).
- Analysis, definition and follow up of new products and projects along the Corridor (Short Term products, Timetable Redesign, feasibility studies...).
- Providing National figures enabling the assessment of the corridor activity in comparison with the whole traffic and contributing to KPI calculations.
- Proposing corridor objectives regarding Corridor's products.
- Review and Update Corridor Information Document Section 4.

All information on the Corridor One Stop Shop can be found in Corridor Information Document Section 4, Chapter 4.2.

4.3 Capacity Allocation Principles

The decision on the allocation of PaPs and RC on the Rail Freight Corridor is taken by the C-OSS on behalf of the IMs/ABs concerned. As regards feeder and/or outflow paths, the allocation decision is made by the relevant IMs/ABs and communicated to the applicant by the C-OSS. Consistent path construction containing the feeder and/or outflow sections and the corridor-related path section has to be ensured.

All information on capacity allocation can be found in Section 4, Chapter 4.3 of the CID.

4.4 Applicants

In the context of a Rail Freight Corridor, an applicant means a railway undertaking or an international grouping of railway undertakings or other persons or legal entities, such as competent authorities under Regulation (EC) No. 1370/2007 and shippers, freight forwarders and combined transport operators, with a commercial interest in procuring infrastructure capacity for rail freight.

Applicants shall accept the general terms and conditions of the Rail Freight Corridor in PCS before placing their requests.

All information on applicants can be found in Section 4, Chapter 4.3.2 of the Corridor Information Document.

4.5 Traffic Management

In line with Article 16 of Regulation, the GA of the freight corridor has put in place procedures for coordinating traffic management along the freight corridor.

Traffic Management is the prerogative of the national IMs and is subject to national operational rules. The goal of Traffic Management is to guarantee the safety of train traffic and achieve high quality performance. Daily traffic shall operate as close as possible to the planning.

Having regard the impact of the COVID-19 in 2020 and 2021, RFC MED Traffic Management could maintain the smooth train run on the whole Corridor among 6 member states. Thanks to the close cooperation of the stakeholders the unexpected challenges of the pandemic helped us to strengthen the reliable usage of the corridor lines.

In case of disturbances, IMs work together with the RUs concerned and neighbouring IMs in order to limit the impact as far as possible, to provide possible alternative routes for the traffic and to reduce the negative impact occurred on the network. Detailed description is under sub-chapter 4.6.

National IMs coordinate international traffic with neighbouring countries on a bilateral level. In this manner they ensure that all traffic on the network is managed in the most optimal way.

All information on traffic management can be found in Section 4, Chapter 4.5 of the CID.

4.6 Traffic Management in the Event of Disturbance

The goal of traffic management in case of disturbance is to ensure the safety of train traffic, while aiming to quickly restore the normal situation and/or minimise the impact of the disruption. The overall aim should be to minimise the overall network recovery time.

In order to reach the above-mentioned goals, traffic management in case of disturbance needs an efficient communication flow between all involved parties and a good degree of predictability, obtained by applying predefined operational scenarios at the border.

Since 2021 communication between stakeholders in case of international disruptions is also supported by RNE TIS Incident Management tool. The communication procedure and the available tools are described in Section 4. Chapter 4.5.3 of CID Book.

All information on traffic management in the event of disturbance can be found in Section 4, Chapter 4.5.3 of the CID, including the International Contingency Management.

4.6.1 International Contingency Management

As the consequence of the Rastatt incident, DB and RFC Rhine-Alpine early 2018 made an initiative to set up a Handbook for proper handling of international disturbances in duration of longer than 72 hours. After concluding the key elements and conclusions of the Rastatt incident a working document was elaborated which initiative was also supported by the sector and by the European Commission (DG-MOVE).

In the ICM Handbook there is a detailed description about solutions to support the concerned dispatchers in case of big incidents. RNE, as the honest broker, will continuously update this document, which is the basic document for RFCs in Europe. All related information is registered in a digital archive, in CMS. The IM members of RFC MED TPM Coordination provided the data to set up the rerouting overview and operational scenario. The GA of RFC MED approves the document year after year, which is available on the corridor website. The Excel file consists of all the parameters of the available alternative routes if there is a disruption with a forecasted impact on the affected section of more than three calendar days or a disruption with high impact on international traffic.

The available rerouting overview is considered as the first step, and it could be developed in the future. If the costumers need more information for such cases, the TPM Coordination is the responsible body on RFC MED to discuss the proposals and working out a solution to provide it. The efficiency of the rerouting overview rises since the existing plans of RUs are partly incorporated into the document, which is being continuously reviewed and updated. RFC MED takes this ICM as a living document and each year the TPM group revise the data and the content of the rerouting scenarios. These useful re-routing scenarios have already been applied in operation.

In May 2020, the revision of the ICM Handbook was started by collecting input. Six task forces were working intensively to prepare the new proposal, integrating the experiences gained during real interruptions and fine-tuning the ICM processes and procedures to facilitate their implementation. This significant step forward has been reached by applying the new rule for mandatory usage of the TIS Incident Management Tool which promises a more effective contingency management Europe wide. The primary focus of the project team was the handling of freight trains in case of contingencies; however, the handbook can also be applied for passenger trains. The process was optimised by making some parts optional to simplify implementation and make it more effective. Besides the mentioned changes, new capacity and path coordination procedures were added and updated to better allocate capacity based on a consensual agreement and following the RNE Path Alteration process. The new allocation principles based on the RU's share during the last 30 days prior to interruption were prepared as the distribution-key of last resort. The IMs are not bound to apply these allocation principles if a better and acceptable result can be reached without them.

This Handbook complements the national incident management of the individual European infrastructure managers and the requirements of the OPE TSI (Commission Regulation 2019/773 on the technical specification for interoperability relating to the operation and traffic management subsystem of the rail system) and other regulations referring to incident management as defined in this document.

The revised ICM Handbook was approved by the General Assembly of RNE on 19 May 2021, effective from January 2022. The capacity allocation related procedures will be effective from timetable period 2024, as these procedures must be first published in the Network Statements.

4.7 Corridor Information Document

The Corridor Information Document (CID) is published every year on the second Monday of January (X-11) every and is kept regularly up to date.

The CID is published and available under the following links:

- RFC MED website https://www.medrfc.eu/publications/corridor-information-document/
- Customer Information Platform (CIP) https://cip-online.rne.eu/
- Network and Corridor Information System (NCI) https://rne.eu/it/products/nci/

4.8 Quality Evaluation

Quality of service on the freight corridor is a comparable indicator (set of indicators) to those of the other modes of transport. Service quality is evaluated as a performance. Performance is measured with Performance

Indicators. These indicators are the tools to monitor the performance of a service provider. What regards the international rail freight services the obligation is based on the provisions of Article 19 of the Regulation.

4.8.1 Performance Monitoring Report

RFC Mediterranean publishes its Annual Report on its website. The report is based on the RNE Guidelines on the Key Performance Indicators of the Rail Freight Corridors:

https://rne.eu/wp-content/uploads/Guidelines_KPIs_of_RFCs_V5.0.pdf

It provides recommendations for using a set of KPIs commonly applicable to all RFCs.

More information on KPIs and objectives can be found in chapter 5 of the Implementation Plan.

5 Objectives and performance of the corridor

5.1 Objectives of the Corridor

5.1.1 General Objectives

The objectives of Mediterranean RFC are in line with the Sustainable and Smart Mobility Strategy of the European Commission. Free movement of goods across the (internal) borders is a fundamental and basic aim of a Single European Rail Market, as a part of a Single European Transport Area. Improving connectivity and access to the internal market for all regions of the Med RFC catchment area is a pivotal intention based on an efficient and interconnected multimodal transport system, for freight, together with supporting the idea to increase the rail freight traffic by 50% by 2030.

For Boosting rail freight, Mediterranean RFC shall:

- strengthen the cross-border coordination among the stakeholders;
- perform a better overall management of the rail freight corridor for the benefit of the customers;
- support to bridge the missing links to multimodal terminals and establish an end-to-end approach.

5.1.2 Operational Priorities

Under Article 19 of the revised TEN-T Regulation the Executive Board and the Management Board shall make all possible efforts to ensure by 31 December 2030, that, on the RFC Mediterranean as the rail freight backbone of the Mediterranean European Transport Corridor, the quality of services provided to railway undertakings and technical and operational requirements for infrastructure use do not prevent the operational performance of rail freight services along the European Transport Corridors from meeting the following target values:

A) at least 75% of the freight trains crossing at least one border along the European Transport Corridor arrive at their destination, or at the external Union border if their destination is outside the Union, at their scheduled time or with a delay of less than 30 minutes by reasons that are attributable to the infrastructure manager(s) of the Union: delays occurring in and attributable to third countries that are crossed by freight trains shall not be taken into account.

B) for each cross-border section, the dwelling time of all freight trains crossing the border between two Member States does not exceed 25 minutes on average, except at the section where change of track gauge takes place or where the checks carried out at a border where the controls have not yet been lifted on trains in application of point 1.2 of Annex VI to regulation (EU) 2016/3992 do not allow for this time-limit to be complied with: the dwelling time of a train on a cross-border section means the total additional transit time that can be attributed to the existence of the border crossing, irrespective of procedures or considerations of infrastructural, operational, technical and administrative nature: dwelling time does not include the time that cannot be attributed to the border crossing, such as

operational procedures carried out in facilities located in the proximity of the border crossing but not intrinsically related to it.

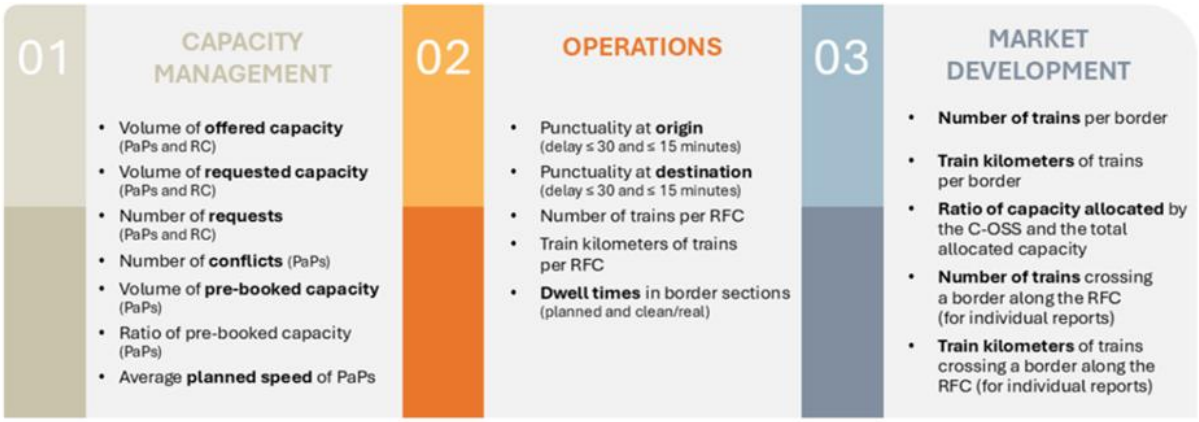
The Corridor aims to meet the requirements of the Regulation within the deadline set by the TEN-T Regulation.

5.2 Performance of the Corridor

The performance of the corridor is monitored with different KPIs, which are harmonised (commonly applicable) with all Rail Freight Corridors, based on the RNE Guidelines on the Key Performance Indicators of the Rail Freight Corridors: https://rne.eu/corridor-management/rfc-kpis/

The KPIs are monitoring different aspects of RFC performance:

- Capacity Management KPIs
- Operations KPIs
- Market Development KPIs



Timeline: In 2025 for TT 2026 (but also, retrospectively)

Timeline: In 2025 for 2024 – publication depending on the assessment of data quality

Capacity management KPIs monitor the performance of the Mediterranean RFC in constructing, allocating and selling the capacity of the Corridor, in terms of:

- Volume of offered capacity (PaPs and RC)
- Volume of requested capacity (PaPs and RC)
- Number of requests (PaPs and RC)
- Number of conflicts (PaPs)
- Volume of pre-booked capacity (PaPs)
- Ration of pre-booked capacity (PaPs)
- Average planned speed of PaPs

Operations KPIs monitor the performance of the traffic running along Mediterranean RFC in terms of punctuality and volume of traffic:

- Punctuality at origin
- Punctuality at destination
- Number of trains on the RFC
- Train kilometers of trains on the RFC
- Dwell times in border sections[1]

[1] Target values set out in Article 19 of Regulation (EU) 2024/1679 do not apply to sections where a change of track gauge takes place.

Market development KPIs monitor the capability of the Mediterranean RFC in meeting the market demands in terms of:

- Number of trains per border
- Train kilometers of trains per border
- Ratio of capacity allocated by the C-OSS and the total allocated Capacity

Publication of the results

The results of the performance monitoring (KPIs) together with the Performance Report (under Article 19.2 of the Freight Regulation) are published once a year:

- on the web site of Mediterranean RFC, at: https://www.medrfc.eu/publications/annual-reports/
- Transparent, harmonised sharing of KPIs is one of the requirements of the sector towards the RFCs under Priority 9 of the Rotterdam Sector Statement. Therefore, the RFCs also make available on RNE's website a joint and harmonised overview of the figures of their commonly applicable KPIs. Under the below link, the figures are summarised both per RFC showing the evolution of their performance over the years and per year displaying an overview of the commonly applicable KPIs of all RFCs for the year concerned at: https://rne.eu/corridor-management/rfc-kpis/
- Besides, the RFCs publish KPIs figures on an annual basis via the Customer Information Platform (CIP) at: https://cip-online.rne.eu/topology/information-documents

5.3 Train Performance Management (TPM)

The TPM activity is coordinated by a Train Performance Management Working Group set up in order to establish a permanent body for the coordination and exchange of TPM issues among RUs, Terminals and IMs on Med RFC. Detailed information about this activity can be found in Section 4, Chapter 4.6 of Corridor Information Document (CID).

6 Cooperation and consultation in the frame of the Implementation Plan

6.1 Procedure of the cooperation with the advisory groups

In order to fulfil the requirement on the consultation of the Railway and Terminal Advisory Groups on infrastructure and investment needs, a consultation of RAG and TAG has been carried out on the Mediterranean ETC Project List of rail related projects during April/May 2025.

6.2 Views and assessment of advisory groups regarding corridor development

The outcomes of this consultation can be found under the following links:

https://www.medrfc.eu/publications/corridor-information-document/

Direct link to document

Disclaimer
The comments and observations referenced herein reflect the views of the TAG and RAG only and do not require validation by the Executive Board. These views may not fully align with the corridor's planning, and divergences may exist.

6.3 Results of the consultation of the draft Implementation Plan

Since the corridor has already been implemented, this chapter does not apply.

Annexes