

CORRIDOR INFORMATION DOCUMENT – BOOK V

Implementation Plan

Timetable 2024



Co-funded by the European Union



Version Control

Version	Date	Reviewed by	Edited by	Summary of Changes
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1. Introduction

The Rail Freight Corridors (RFCs) were established according to the <u>Regulation (EU) No 913/20101</u> of September 22, 2010, concerning a European rail network for competitive freight (hereinafter: Regulation), which entered into force on November 9, 2010.

The purpose of the Regulation is to create a competitive European rail network composed of international freight Corridors with an elevated level of performance. It addresses topics such as governance, investment planning, capacity allocation, traffic management and quality of service and introduces the concept of Corridor One-Stop-Shops (C-OSS). In total, eleven Corridors are now implemented, and subsequent Commission Decisions determined several Corridor extensions. The Corridors' map is displayed on the Customer Information Platform (CIP). The Corridors' role is 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.

This update of the Scandinavian – Mediterranean Rail Freight Corridor (hereinafter: ScanMed RFC) Implementation Plan is mainly about new developments and a refresh of topics not covered by its previous versions. It is foreseen to be updated yearly. The focus is on:

- New strategic missions of ScanMed RFC
- New approach and update of Investment Plan
- > Update of the European Railway Traffic Management System (ERTMS) deployment
- Adaptations to the routing of ScanMed RFC since the last update in 2015





2. Corridor Description

The Corridor's railway lines are divided into:

Nodes Railway Node or Junction Border Point Terminal Handover Point Expected Node RFC Line Category Principal Diversionary Connecting A Connecting B Expected Network+

- Principal lines on which Pre-Arranged Paths (PaPs) are offered.
- Diversionary lines on which PaPs may be considered temporarily in case of disturbances, e.g., long-lasting major construction works on the principal lines.
- Connecting lines linking the Corridor's lines to a terminal (on which PaPs may be offered but without an obligation to do so).
- Expected lines: any of above-mentioned which are either planned or under construction but not yet completely in service. An expected line can also be an existing line which shall be part of the RFC in the future.

For further details on the geographical alignment of the Corridor please refer to the <u>CIP</u>.

2.1. Key Parameters of Corridor Lines

Regulation (EU) 913/2010 – Article 9 (1.a) also requests a description of the characteristics of the freight corridor. ScanMed RFC also uses CIP to inform about the following line properties:

- Line category (Load model)
- Traction Power
- Signalling Groups
- Intermodal Freight Code
- Gauging
- Gradient
- Number of tracks

In CIP, this information is given on the map. The user can select the different categories to see the applicable values on the whole Corridor but also on single line sections.





2.2. Corridor Terminals

Article 18 of the Regulation obliges the MB of the Corridor to publish a list of terminals belonging to the Corridor and their characteristics in the Corridor Information Document (CID - Chapter 3).

In accordance with Article 2.2c of the Regulation, 'terminal' means 'the installation provided along the freight corridor which has been specially arranged to allow either the loading and/or the unloading of goods onto/from freight trains, and the integration of rail freight services with road, maritime, river and air services, and either the forming or modification of the composition of freight trains; and, where necessary, performing border procedures at borders with European third countries'.

According to Implementing Regulation (EU) 2177/2017, operators of service facilities, hence also terminal operators, are obliged to make available detailed information about their facilities to the IMs. The purpose of this CID section is to give an overview of the terminal landscape along the Corridor while also including relevant information on the description of the terminals via links, if available.

The terminals along the Corridor are also displayed in a map in the CIP and on the Rail Facilities Portal.

The information provided in this CID section and in the CIP are for information purposes only. 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. Bottlenecks

Transport and infrastructure bottlenecks can affect the normal flow of transportation, causing unnecessarily long travel times, delays, congestions, costs, etc. To understand where bottlenecks exist, it is import first to clarify what transport bottlenecks are, what kind of bottlenecks exist, and to cluster them. Besides physical infrastructure restrictions, also administrative, regulatory, and operational bottlenecks can have a negative effect on the flow of transportation. Especially on cross-border sections on rail there can occur many hindrances other than just physical infrastructure restrictions. For the purposes of this study, we use the 'bottleneck' definition adopted in the TEN-T (Trans European Network) Regulation, which is, according to Article 2(q), the following: "'bottleneck' means a physical, technical, or functional barrier which leads to a system break affecting the continuity of long-distance or cross-border flows and which can be surmounted by creating new infrastructure or substantially upgrading existing infrastructure that could bring significant improvements which will solve the bottleneck constraints.

Summary

In the framework of the present study bottlenecks and missing links hampering the further development of particularly rail transport for both passenger and freight in the STRING stretch of the TEN-T ScanMed Core Network Corridor (CNC) between Oslo and Hamburg have been analysed. A 'missing link' is a missing piece of infrastructure. The Fehmarn Belt Fixed Link is the prominent example where its completion, including the hinterland connections in Denmark and Germany would be able to modally shift volume to rail significantly and contribute to regional integration just as the Öresund bridge has done since its completion. Because of its positive impact, regional stakeholders have put forward the concept of further fixed links between Sweden and Denmark, namely the HH project which will be made of a road and rail connection between Helsingborg and Helsingør as well as the Öresund Metro which will represent a dedicated regional rail passenger line between Malmö and Copenhagen, both also aimed at relieving capacity constraints on the Öresund. To read the complete bottleneck study, please refer to <u>Annex 3</u>. This study was performed and published by Ramboll and KombiConsult and published on February 10, 2021.

2.4. RFC Governance

In accordance with Article 8 of the Regulation, the governance structure of the Corridor assembles the following entities:

- The Executive Board (ExBo), which is composed of the representatives of the Ministries of Transport along the Corridor.
- The Management Board (MB), which is composed of representatives of the IMs and (where applicable) Allocation Bodies (Abs) along the Corridor, responsible for the development of the Corridor. The MB is the decision-making body of the respective Corridor.

Information on the current RFC Governance structure is provided only in CID section 1 to avoid redundancies. This section can be downloaded in <u>CIP</u> under Information Documents.



3. Market Analysis Study

To create a European network for competitive rail freight, the EU Regulation (EU) No 913/2010 introduced a package of measures to be implemented on the nine initial RFCs. The Corridor "Stockholm - Malmö - Copenhagen - Hamburg - Innsbruck - Verona – Palermo," then designated as Rail Freight Corridor 3 (RFC 3), is one of them. Annex 2 of Regulation (EU) No 1316/2013 extended RFC 3 to Oslo, Trelleborg, Livorno, La Spezia, Ancona, Bari, Taranto, and Augusta and renamed it into the Scandinavian – Mediterranean Rail Freight Corridor. The Corridor corresponds to the former RFC 3, into operation from November 10, 2015, and the above-mentioned extensions integrated from at latest November 10, 2018. A Transport Market Study (TMS) was carried out in 2014 according to Article 9.3 of the Regulation, aimed to provide the Infrastructure Managers (IMs) with a detailed analysis of the freight market development and future customer demand on the Corridor.

In 2019, ScanMed RFC started an interaction with a consortium for the development of a TMS on Intermodal Costs, which was completed in the autumn of 2020. With this study, ScanMed RFC obtained an in-depth analysis of its position in a competitive context as well as the strengths and weaknesses of international rail freight against other transport modes as regards costs, vital elements for the further development of its product portfolio, and how to improve its market knowledge.

Some focus points of the study included:

- Understanding the strengths and weaknesses of international rail freight against other transport modes regarding costs in the Corridor's relevant market area.
- Learning about the future development of its product portfolio.
- Reaching improved market knowledge for further customer prospection.
- Realizing the analysis applied to rail and road in Italy, Austria, Germany, Denmark, Sweden, and Norway.

The study explains how several influencing factors can prevent a higher market share for Combined Transport (CT) or rail while describing the competitive risk for rail freight.

Though this study focused on the cost-aspect of competitiveness, the final recommendations include factors that have an indirect influence on the choice of transport mode, such as:

- Track access and energy cost
- Rail carriers' time buffers
- Effectiveness of the employment of resources
- The option of high-quality train paths for rail freight services



Start Can

To facilitate the scaling of results and comparisons between transport modes, the study implemented a cost-driven approach and was divided into three parts:

- A general analysis applied to rail, road, and short-sea shipping in Norway, Sweden, Denmark, Germany, Austria, and Italy
 - of cost drivers and cost structure for international freight from the perspective of a freight 0 forwarder and of a freight carrier.
 - of cost impacting parameters as well the sensitivity of each transport mode to the evolution of these parameters.
- A sensitivity analysis for a sample of Origins and Destinations (O/Ds), which are vital to ScanMed RFC.
- Conclusions as regards the objectives of the study and recommendations for further market prospection given winning new freight carriers and forwarders to international rail traffic.

As explained in the competitive risk for rail freight, there are several influencing factors which prevent a higher market share for CT or rail only. And even if this study was concerned with the cost aspect of competitiveness, the final recommendations also included aspects which have an indirect influence on the choice of transport mode. Nevertheless, this list cannot be considered as exhaustive, as there are other aspects such as research needs and research funding that cannot be addressed in this context. The recommendations included not only the direct sphere of influence of infrastructure managers, but also that of other actors and state bodies. Part of the Intermodal Cost study is published on our website. Railway Undertakings (RUs) and all stakeholders were invited to contact us so we could present the study together.



Ten use cases were made and presented. The following main findings could be deducted:

- The effects of the mid-term forecast 2025 development did not show any change regarding the most cost-effective mode of transport compared to the use cases.
- The cost increases are often the highest in the CT supply chains.
- For all transport modes the main cost drivers remain the same. No significant changes can be depicted for the different scenarios, which have been analysed in the use cases.
- In most use cases there is a significant difference between the increase in road-only costs compared with rail, which is either reducing the advantage in rail transport costs or increasing the advantage of road in use case 3. This effect is even stronger in the pessimistic scenario.



At the beginning of 2023 ScanMed RFC, in cooperation with all RFCs and with the support of RailNetEurope (RNE), committed to develop a joint updating of their individual TMSs, based on common Guidelines and methodologies as defined as result of a feasibility study for a whole European TMS conducted in 2022 by RNE through the involvement of an external supplier.

The study entails three main tasks:

- The first task (Task 1) is related to the definition of the study methodology in agreement with RNE and the four sponsor RFCs.
- The second task represents the core of the market analytical activities to be performed under the study. It is divided into two phases. The first phase (Task 2a) aims to analyse the market's current situation along the RFCs by means of a joint transport market study. The second one (Task 2b) concentrates on the forecasts for the different RFCs as well as on the visualisation of the results, including recommendations for the RFCs.
- The third task (Task 3) provides transport market studies for all RFCs and a final report on the work carried out, with considerations on the European Rail Network for Competitive Freight.

Based upon this process, at the end of the project, an updated TMSs for all 11 corridors will be available, validated by the stakeholders and based on a harmonised set of data, procedures and tools while addressing specificities of the RFCs. Furthermore, the study will also provide results, outcomes, and recommendations for the entire European Rail Network for Competitive Freight. The study started in June 2023 and is assumed to be completed by the end of 2024.



4. List of Measures

Implementation Plan updates:

This chapter is not applicable for updates and thus only contains references and links to <u>CID</u> Book 4.

4.1. Coordination of planned temporary capacity restrictions

See <u>CID</u> section 4, chapter 4.

4.2. Corridor One-Stop-Shop

See <u>CID</u> section 4, chapter 2.

4.3. Capacity Allocation Principles

See <u>CID</u> section 4, chapter 3.

4.4. Applicants

See <u>CID</u> section 4, chapter 3.2.

4.5. Traffic Management

See <u>CID</u> section 4, chapter 5.

4.6. Traffic Management in Event of Disturbance

See <u>CID</u> section 4, chapter 5.3, which also includes information on International Contingency Management (ICM).

4.7. Quality Evaluation

Quality Evaluation. See Chapter 5 below.

4.7.1. Performance Monitoring Report

Performance monitoring report. See Chapter 5 below.



4.7.2. User Satisfaction Survey

See Chapter 5 below.

4.8. Corridor Information Document

The CID is set up to provide all Corridor-related information and easily guide applicants and other interested parties through the workings of the Corridor in line with Article 18 of the Regulation. This CID applies RNE's "CID Common Texts and Structure" so that applicants can access similar documents for different Corridors and in principle, as in the case of the national Network Statements (NS), find the same information in the same place in each one. For ease of understanding and to respect the particularities of some Corridors, common procedures are always written at the beginning of a chapter.

To view CID 2024, please head to <u>CIP</u>.

5. Objectives and performance of the Corridor

The aim of the Corridor's Train Performance Management (TPM) is to measure punctuality, analyse weak points and recommend corrective measures, thus managing the performance of international train services and improving punctuality across borders and handover points.

The Corridor's performance is monitored with different Key Performance Indicators (KPIs), which are harmonised (commonly applicable) for all RFCs based on the RNE "Guidelines on the KPIs of the Rail Freight Corridors." The latest document concerning ScanMed RFC can be downloaded at <u>RFC3 KPIs</u>.





Furthermore, new common goals and targets to improve punctuality have been agreed upon, namely:

- To separate the measuring of these figures by ScanMed TPM Working Group (WG) on the Corridor's cross-border stretches, such as the Munich – Verona and the Malmö – Maschen lines, where we can work more realistically to improve punctuality.
- It is on these stretches that our influence is most felt through North and South Regional WGs, so we should make use of it.
- ScanMed will start focusing on these common values, but only as a base on which to we can start to build our action. Once we are diving deeper into the issue, we can reassess our ambitions and change our goals.

$(delay \le 30 minutes)$ $(delay \le 30 minutes)$ 2022: 62.0% 2022: 48.0% 2021: 66.0% 55.0% 2021: 2020: 71.0% 2020: 64.0% Common ambitions for 2024 60.0% 2024: 70.0% 2024:

With regards to what mentioned above, we also measure customer satisfaction with the Corridor through the User Satisfaction Survey (USS). To view the latest survey results, click here: RFC3 USS 2023.

This year's USS is based on a relaunched version from 2022, which was optimized to better suit the needs of the invitees and the RFC Network. The broad questions covered most of the topics investigated in previous years. However, in 2023 all the questions were open for commentary. This simplification was done hoping not only to gather more feedback but also more specific input concerning insights or issues that participants would like to highlight. Moreover, interviews were possible again in 2023. These Q&A sessions followed the same script as the questionnaire, although follow-up questions might come up during the meetings.

Punctuality at origin (RFC entry)

Punctuality at destination (RFC exit)



OVERALL SATISFACTION WITH THE RFC



6. Investment Plan

This chapter includes a list of the foreseen projects along the Corridor. Investments are based on national investment plans and correlate with the work plan developed for the CNC. The CNCs are a European Union (EU) initiative to implement a core network by removing bottlenecks, building missing cross-border connections, and promoting modal integration and interoperability for passenger and freight traffic to turn Europe's patchwork of roads, railways, airports, and canals into a genuinely European and unified trans-European transport network.

The national Ministries are obliged to comply with the TEN-T requirements of the Regulation (EU) 1315/2013 on the defined network, including the deployment of ERTMS by 2030. As regards ERTMS, the European Commission decided on a European Deployment Plan (Implementing Regulation 2017/6/EU) which includes the Corridor deployment by and beyond 2023.

The Investment Plan will be presented as <u>Annex 1</u> below.

6.1. Capacity Management Plan

Principally, the RFCs deal with two types of capacity. One is the capacity on Corridor paths (Prearranged Paths – PaPs, and Reserve Capacity – RC), as well as on feeder/outflow and on connecting sections to terminals. The other one is the capacity of the infrastructure along the Corridor. Strong interdependency exists between these types of capacity because the more the infrastructure capacity is and the better the infrastructure parameters are, the more and higher quality paths can be dedicated for international rail freight. The overall dedicated capacity on Corridor paths is managed by the C-OSS. This is the capacity dedicated for international rail freight that the IMs/ABs assign to be managed by the C-OSS. The Corridor paths are pre-defined and synchronized by the IMs/AB before handing over



to the C-OSS. They already consider the available infrastructure capacity. Capacity of feeder/outflow and connecting sections to terminals is planned on demand by the IMs/AB based on requests indicated to the C-OSS. Scheduling of this capacity also considers the existing condition of the infrastructure. More to be clarified in our CID (see references in chapter 4).

6.2. List of projects

In Art. 11 §1(a) of the Regulation it is requested that the Investment Plan includes a "list of projects foreseen for the extension, renewal or redeployment of railway infrastructure." The latest version of ScanMed RFC's list of projects and investments is attached in <u>Annex 1</u>.

6.3. Deployment Plan

Please see Annex 2.

6.4. Reference to EU contribution

The Corridor's activities are co-funded by the EU through a Technical Assistance (TA) under the Connecting Europe Facility (CEF), which is administered by the European Climate, Infrastructure and Environment Executive Agency (CINEA). The TA's duration covers the period from 1/10/2021 to 31/12/2024.

6.5. Annexes

- Annex 1 Investment Plan
- Annex 2 Deployment Plan
- > Annex 3 <u>STRING Bottleneck Analysis</u>
- > Annex 4a Longer and Heavier Trains Study Presentation Results Phase 1 and 2
- Annex 4b Longer and Heavier Trains Study Publication Phase_1 and 2
- Annex 4c Longer and Heavier Train Study Summary Report