



European
Commission

Study on the Scandinavian- Mediterranean TEN-T Core Network Corridor

3rd Phase
2nd Period

Final Report due in May 2022

Final 7 June 2022

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Disclaimer

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Abbreviations

ATM	Air Traffic Management
bn	Billion
CEF	Connecting Europe Facility
CNC	Core Network Corridor according to Regulation (EU) 1316/2013
DG MOVE	European Commission – Directorate General for Mobility and Transport
EC	European Commission
EIA	Environmental Impact Assessment
ERTMS	European Rail Traffic Management System
ERDF	European Regional Development Funds
EU	European Union
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
INEA	Innovation and Networks Executive Agency (EU)
IWW	Inland waterway
km	kilometre
KPI	Key performance indicator (set of indicators based on the TEN-T Regulation)
m	metre (for distances)
m	Million (for other)
MoS	Motorway(s) of the Sea
MoT	Ministry of Transport
MTMS	Multimodal Transport Market Study
MS	Member States of the European Union
n.a.	not available / not applicable
OEM	Orient / East-Med (Corridor)
OJ	Official Journal (of the European Union)
p.a.	per year / annual
RD	Rhine-Danube (Corridor)
RFC	Rail Freight Corridor
Scan-Med	Scandinavian-Mediterranean (Corridor)
TEN-T	Trans-European Transport Network
TENtec OMC	European Commission's Information System to coordinate and support the TEN-T Policy (Open Method of Coordination)
TMS	Traffic Management System
ToR	Terms of Reference

Country Codes after ISO 3166, relevant for this report:

AT	Austria
DE	Germany
DK	Denmark
FI	Finland
IT	Italy
MT	Malta
NO	Norway
SE	Sweden

1 Abstract

1.1 Abstract in English language

The present Study on the TEN-T Core Network Corridors and support of the European Coordinator follows the logic of the guidelines defining the TEN-T policy and infrastructure planning which were adopted in December 2013 and the previous 2014 (phase 1), 2015-2017 (phase 2) and 2018-2020 (phase 3) studies. The study is made of four components which build on each other: the analysis of the infrastructure with respect to the compliance with target values of the TEN-T guidelines, the setting-up and analysis of a list of projects relevant to complete the corridor by 2030, the analysis of eventual gaps between the contribution of listed projects and the targets as well as the involvement of stakeholders in corridor forum meetings and working group meetings.

The compliance analysis shows a relative high maturity of the infrastructure of the Scandinavian-Mediterranean Core Network Corridor already. The (October) 2021 project list includes 903 projects with a total cost of €217.3bn. 98 projects with an estimated cost of €13.3bn would be needed in addition to close the compliance gaps. Three corridor forum meetings and 20 working group meetings were performed under the current assignment. The elements of the 5th Work Plan of the European Coordinator were provided.

1.2 Abstract in French language

La présente étude sur les corridors du réseau central du RTE-T et le soutien au coordinateur européen suit la logique de la politique du RTE-T et des orientations de planification des infrastructures adoptées en décembre 2013 et des études précédentes 2014 (phase 1), 2015-2017 (phase 2) et 2018-2020 (phase 3). L'étude se compose de quatre volets interdépendants : l'analyse de l'infrastructure en termes de conformité avec les objectifs des orientations RTE-T ; la préparation et l'analyse d'une liste de projets pertinents pour l'achèvement du corridor d'ici 2030 ; l'analyse des écarts éventuels entre la contribution des projets énumérés et les objectifs ; et la participation des parties prenantes par le biais de forums et de réunions de groupes de travail sur le corridor.

L'analyse de conformité montre que l'infrastructure du corridor du réseau central scandinave-méditerranéen a déjà atteint un degré de maturité relativement élevé. La liste des projets de Octobre 2021 comprend 903 projets pour un coût total de 217,3 milliards d'euros. 98 projets d'un coût estimé à 13,3 milliards d'euros seraient en outre nécessaires pour combler les lacunes en matière de conformité. Trois réunions du Forum des corridors et 20 réunions de groupes de travail ont été organisées dans le cadre de la présente étude. Les éléments du 5^{ème} plan de travail du coordinateur européen ont été mis à disposition.

2 Introduction & Scope

The “Final Report” provides a management overview on activities carried out in the second period of the assignment. Its structure follows the Tasks of the Terms of Reference (ToR) which were performed by the Consortium according to the following structure. The Final Report for the first period was already provided in May 2020 and the content is not repeated here.

Figure 2-1: Overview of Tasks 1 to 5 and Responsible Partners

Project and quality management “Study on TEN-T Core Network Corridor 5”		Responsible: KombiConsult
Task 1:	Further elaborating the Corridor knowledge base	Responsible: HaCon
Task 2:	Further refining of the project list	Responsible: KombiConsult
Task 3:	Monitoring and analysing the state of project implementation and reporting	Responsible: KombiConsult
Task 4:	Providing the elements for the updates of the work plan	Responsible: HPC
Task 5:	Preparing, supporting and following up of the meetings of the Corridor Forum and its working groups	Responsible: KombiConsult

Source: Contract

The “Final Report” for the second period is due in May 2022 according to the revised Time Plan and is provided herewith.

The Publishable Executive Summary in English and French as well as the eight corridor relevant languages is provided as a separate Deliverable.

The documentation of the 17th Corridor Forum Meeting will be provided after the meeting which was re-scheduled for 28th September 2022 upon request of the EC.

3 Task 0 Project Management and general reports

The 1st period was closed by the acceptance of all Deliverables and payment of the respective amount in a letter of 23.07.2020 which confirmed the retroactive start of the 2nd period.

The 5th management meeting / kick-off meeting for the 2nd period with the EC was prepared, performed on 25.06.2020 and documented thereafter. Agreeing on the Minutes of Meeting commenced into August 2020.

Inception Report II replying to the issues raised in the 5th management / kick-off meeting was delivered end of July 2020 for agreement. Agreement under considerations was received on 27.10.2020 and the final version returned as per end of October 2020.

The 6th management meeting with the EC was prepared, performed online on 19.04.2021 and documented thereafter. A draft Minutes of Meeting was agreed for the consultant side and sent to the EC for approval. Approval was received in May 2021.

The Intermediate Report II for the 2nd period of the 3rd phase was drafted and sent to the EC for approval on 31.05.2021 together with the respective invoice. Agreement under considerations was received on 14.06.2021 and the final version returned on the same day.

An ad-hoc management meeting was organized by the EC on 14.07.2021 to agree upon the next dates.

The 7th management meeting was organized by the EC on 11.10.2021. The draft agenda was commented, and the meeting was prepared by agreeing a draft presentation for the joint working group of Task 2+3. It was performed and documented thereafter.

The 8th management meeting with the EC was originally due in March 2022, but it was organized and performed as an ad-hoc management meeting on 17.01.2022 instead in order to discuss the final phase of the study; it was concluded to complete the project as contracted by May 2022 despite the postponement of the last (17th) Corridor Forum Meeting which will be organised September 2022. The announced amendment to contract arrived in April and was confirmed in writing.

The 8th management meeting was organised by the EC on 16.05.2022. The draft agenda was commented, and the meeting was prepared by agreeing a draft presentation for the joint working group of Task 2+3. It was performed and documented thereafter.

Monthly Progress Reports were provided after each reporting period. The last (48th) report is due in June 2022 on the activities performed in May 2022.

The last and final deliverable is this Final Report.

4 Task 1 Further elaborating the Corridor knowledge base

4.1 Task 1.1 Update of the transport market study

In January 2021 the EC decided to exclude the update of the Transport Market Study from the Contract and to use the remaining budgets for the analyses on the corridor extensions, project list updates and meetings. Thus, the chapter will not appear in the Deliverable.

4.2 Task 1.2 Update of the corridor characteristics

The results are reported in the Deliverable "Corridor Study Update 2" which was completed on 31.03.2021.

4.3 Task 1.3 Identification and analysis of other EU studies

A joint working group (WG) across corridors and with the involvement of the EC has been established with the aim to agree upon a harmonized methodology. The methodology and a list of studies are included in the Inception Report. Studies assigned to the ScanMed team have been analysed and reported in the "Corridor Study Update 2".

4.4 Task 1.4 Critical review of main national policy documents

A joint working group (WG) across corridors and with the involvement of the EC has been established with the aim to agree upon a harmonized methodology. The methodology is included in the Inception Report. Studies from countries assigned to the ScanMed team have been analysed and reported in the "Corridor Study Update 2".

4.5 Deliverables of Task 1, and progress achieved

Corridor Study Update 2 was due to be delivered in November 2020. In the kick-off meeting of the 2nd period the timing was re-scheduled to February 2021 so that the analysis of the extended alignment is covered after the publication of the new CEF Regulation. Despite the pending publication it was agreed to use the shape-file data for the definition of the new alignment and work as-if the Regulation was adopted in order to maintain the deadline of end of February 2021. The Multimodal Transport Market Study (MTMS) chapter was deleted from the report and does not need to be updated.

The analysis was completed, and draft version of the Corridor Study Update sent on 26.02.2021 for comment or approval together with the recommendation to share the document at least with MS's representatives. Comments were received, dealt with and the final version of the Deliverable was provided to the EC (and MS) on 31.03.2021. Results were presented in the Forum Meeting and agreement was reached with the MS that they consider to checking and agreeing the Report at this stage rather than with the Work Plan in autumn 2021. By the deadline of end of April only AT announced to send remarks. Some IT and minor FI remarks appeared after a reminder in May 2021. The remarks were commented, presented and discussed in the restricted part of the Corridor Meeting on 24.06.2021, and they were used as input for the for the 5th Work Plan.

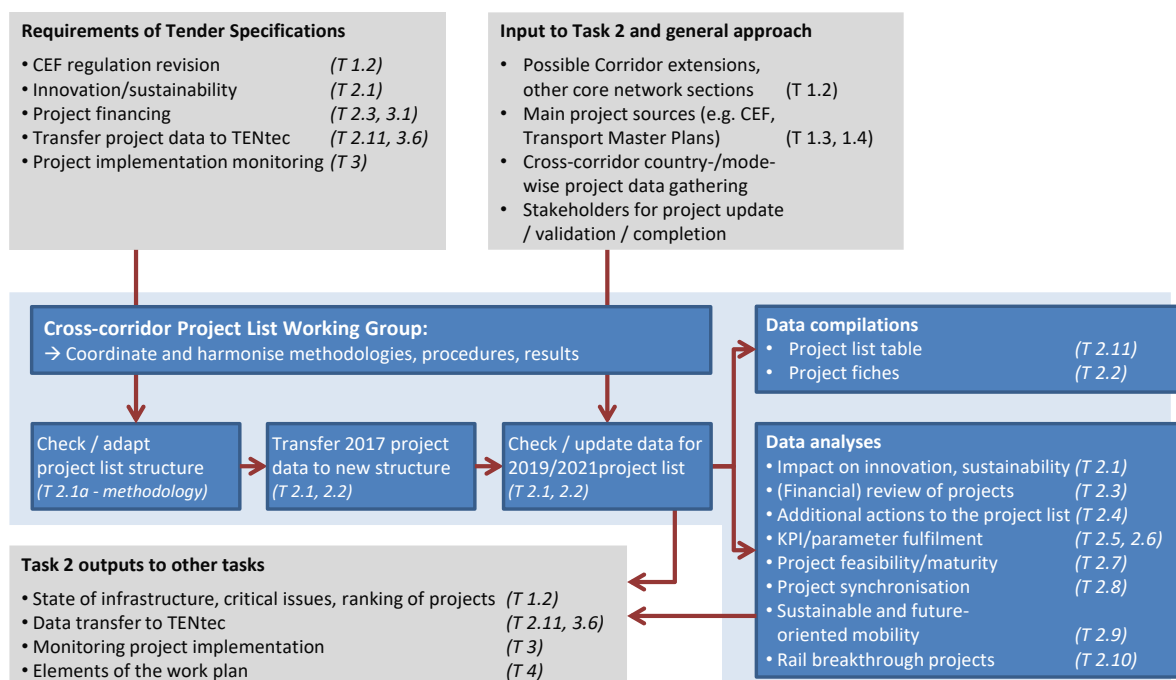
5 Task 2 Further refining of the project list

In the first two phases of the TEN-T corridor studies, it became apparent that the project list is the key tool for monitoring and coordinating the further development of the Corridor. This includes the technical analysis of projects with respect to their contribution to the Corridor objectives (cf. the “KPI” columns of the project list). Moreover, it allows mirroring the projects and their impact against the Corridor’s bottlenecks and non-compliant sections according to Regulation 1315/2013 (gap analysis).

In the current study phase, the activities related to the project list have been continued and expanded in several respects. Figure 5-1 provides an overview on the main work steps as well as the interrelations within the subtasks and with other tasks. They can be assigned to the following groups of subsequent activities:

1. Organisation of work,
2. Adaptation of the project list structure (sub-task 2.1),
3. Completion and update of project data (sub-tasks 2.1, 2.2, 2.9, 2.10, 2.11, 3.6),
4. Analysis and exploitation of the project list (sub-tasks 2.3-2.10).

Figure 5-1: Task 2 Methodology



Source: KombiConsult analysis based on Project List 2019 and 2021 of CNC ScanMed

5.1 Task 2.1 Regular review of the composition of the list

A joint working group (WG) across corridors and with the involvement of the EC has been established with the aim to agree upon a harmonized methodology which was rolled out in the 1st period.

The kick-off meeting of the 2nd period concluded to continue Task 2 in the same way as in the 1st period.

5.2 Task 2.2 Complete the list and its individual fiches

For the 2nd period of the 3rd phase the leaders of the joint working group (WG) across corridors proposed a timing of the activities which is also harmonized with preparing the Project Implementation Reports (Task 3). The project list update was done between December 2020 and May 2021. HaCon and KC started to update the activities and their scheduling prior to a working group meeting across corridors held in September 2020. WG-Meeting was prepared, performed and documented with some follow-up activities for HaCon and KC to describe the steps in more detail. Steps were described and shared across corridor teams in online meetings in October 2020. Works to integrate CEF Call Results, National Transport Master Plans and Resilience and Recovery Facility Fund projects, if approved, were completed early November. Sharing across corridors took place and further analysis was performed by end of November according to the jointly agreed methodology which is implemented by a couple of working group meetings. The project list was sent to the Corridor Stakeholders beginning of January 2021. Questions were replied and first feedback was incorporated.

In the Joint WG meeting for the new members of CNC ScanMed and NSB, Italy, and potentially other MS argued that they have a heavy workload in spring 2021 and recommended to postpone their feedback. Other MS stated the time horizon for updating their national transport master plans. These dates are not synchronized and it is not possible to capture them all. Therefore, it was strongly recommended to maintain the initial time plan which assures that the MS are involved twice (delivery of own projects and agreement of the list, which was often used to add further projects) by April 2021, so that the analysis (by end of May 2021) and providing the elements of the workplan can be achieved by autumn 2021. Advisors and team leaders agreed upon this "line to take".

ScanMed and other corridor team members were reminded on the milestones and details for aggregation and start of Member States approval loop discussed and agreed upon. Commenting proceeds with asking the EC "approval" by end of April so that the list was "frozen" on 03.05.2021. A few comments were directly made to specific projects while the general statement that there are airport projects which do not consider the definition of airport projects uttered by the EC in an e-mail to the consultants of 2017. The issue was resolved.

On 29.04.2021 a cross corridor working group meeting was organized to implement the next steps for completing Task 2 deliverables by June 2021.

Data gathering was completed in March, when lists were consolidated, sent to the MS for agreement by early April, consolidated again and provided as draft final list to the EC for approval by 03.05.2021. The list was frozen and delivered to the team leaders for further analysis and use in the respective corridor studies.

The final project list was provided to Panteia as an input to the "user friendly tool" as well as to the nine consortia for corridor specific analysis in May 2021.

Maps for the Project Fiches were updated or newly created and linked with the Project List into the Fiche Format. The project fiches were created and sent to the Commission by Corridor on 31.05.2021.

The "user friendly tool" is the same as agreed upon in the 1st period but it uses the most recent project list. The "user friendly tool" was prepared by Panteia centrally for all consortia and sent to the Commission by KC on 31.05.2021.

Additional projects were created by the consultants and shared among the corridors for analysis in consideration of the presentation of the project list (Deliverable) in June 2021.

The April 2021 project list included 914 projects relevant for the ScanMed corridor. The number increased from 666 projects in the 2017 list and 833 in 2019 list.

For purposes of Task 2, the April 2021 list was used, despite for Task 2.4 where the narrow update of October 2021 (903 projects in total) was used as well.

5.3 Task 2.3 Critical review of the projects

The projects data was critically reviewed in order to harmonize the information and data prior to the analysis.

5.4 Task 2.4 Propose additional Projects to the list

Additional projects, based on the consultant analysis, can only be proposed after the final list has been agreed upon. The methodology to identify such projects was agreed upon in the management meeting and is made of the following steps: Select sections or nodes which are not (yet) compliant with the TEN-T requirements (KPI); check if the final project list includes projects on those sections or in those nodes and which are marked to "achieve" such KPI in the respective cell of the list (mode specific). If no projects are in the list, or the projects are not marked to "achieve" the compliance a respective project targeting to close the "gap" is proposed by the consultants.

- For Corridor Sections or Nodes (Airports, Seaports, Rail Road Terminals) for which existing projects of the Project List do not assure compliance with respect to explicit KPIs/indicators by 2030 additionally necessary projects have been proposed after a consultant analysis.
- Measures to achieve different KPIs/indicators in one section or node have been clustered into one project. On the ScanMed corridor 98 additional projects were identified after reviewing the project list in November 2021. Their total estimated cos is € 13.3 bn
- Most of the projects concern Road (30), Airports (25 projects) followed by RR Terminals („Multimodal“, 21), Rail (11), and Seaports („Maritime“, 11).
- Sweden has the largest share of these projects (26 of 98), followed by Italy (21), Germany (15), Finland and Denmark each 9, Malta (8), Norway (7) as well as two projects on the FI/SE border and one on the NO/SE border. Too, these projects have been synchronised with the finalisation of other works projects in the same section or node or neighbouring sections with the aim to have similar completion times. The reasoning is that only harmonized parameters at synchronised times will allow a continuous use of those parameters.

Four of the rail projects and one RRT project were proposed to be completed before 2030 in order to be synchronized (in terms of technical parameters and completion time) with neighboring projects. The projects are shown in the following figure by mode of transport.

Figure 5-2: Synchronisation of additional projects

Rail:

Mode	Project ID	Project Name incl. Place, Measure	Proposed end date	Comment for reasoning
Rail	15520	Upgrade measures on section Laurila - Haparanda / Tornio-raja (Border FI/SE) to achieve Electrification and 740m train length	12/2026	Proposed project start 01/2025 after finalization of preparatory project (ID 5798). Compliance should be achieved as fast as possible. 2 years should be sufficient for electrification of 21 km section (plus one 740m siding)
Rail	5968	Southern access line to Brenner; Lotto/lot 2-4: Bolzano/Bozen; Trento/Trient; Pescantina - Verona	12/2028	<u>Synchronisation with ID 5386 (Brenner base tunnel)</u> Advance end date of existing project 5968 from 08/2035 to 12/2028 to achieve through-going compliance until 2028 of a.) Line speed on corridor section Denmark - Germany - Austria - Italy (until Firenze/Pisa/La Spezia/Ancona) b.) Train length on corridor section Denmark - Germany - Austria - Italy (until Verona)
Rail	15504	Upgrade measures on section Bicocca-Palermo to achieve P400 gauge and 740 m train length	12/2028	Synchronisation with ID 5906 (Upgrade Catania – Palermo) to achieve total compliance on Sicilian corridor section between Bicocca and Palermo until 2028

A press article followed by a communication from the BBT SE and the Italian Minister of Infrastructure and Sustainable Mobility published after the Project List was fixed, indicated that the Brenner Base Tunnel may not be completed before March-2032 so that there is less urgency to also complete the southern access lines (Project ID 5968) earlier.

Road:

Mode	Project ID	Project Name incl. Place, Measure	Proposed end date	Comment for reasoning
Road	15708	Upgrade of the road E10 Svappavaara - Riksgränsen (Border SE/NO). Extend road upgrade (Project 50011) for dual carriageway with median barrier (2+1, 100 km/h) to section Svappavaara - Kauppinen 36km.	12/2027	<u>Synchronisation with ID 50011 (E10 Kauppinen–Kiruna)</u> and 15713 to be completed at the same time (12/2027)
Road	15707	Upgrade of the road E10 Gällivare - Svappavaara. Extend existing road upgrade (Project 50012) for dual carriageway with median barrier (2+1, 100 km/h) to sections Avvakko - Gällivare 35km & Lappeasuando - Svappavaara 20km.	12/2027	<u>Synchronisation with ID 50012 (E10 Avvakko–Lappeasuando)</u> to be completed at the same time (12/2027)
Road	15706	Upgrade of the road E10 Toere - Gällivare. Extend existing road upgrade (Project 50013) for dual carriageway with median barrier (2+1, 110 km/h) to sections Toere - Morjärv 18km & Svartbyn - Gällivare 135km.	12/2027	<u>Synchronisation with ID 50013 (E10 Morjärv–Svartbyn)</u> to be completed at the same time (12/2027).
Road	15705	Upgrade of the road E4 Haparanda Border - Toere. Extend existing road upgrade (Project 50014) for dual carriageway with median barrier (2+1, 100 km/h) to section Salmis - Toere 68km.	12/2022	<u>Synchronisation with ID 50014 (E4 Salmis–Haparanda)</u> to be completed at the same time (12/2022).

Mode	Project ID	Project Name incl. Place, Measure	Proposed end date	Comment for reasoning
Road	15713	Upgrade of the road E4 Piteaa - Umeaa. Extend existing road upgrade (Project ID 50028) for dual carriageway with median barrier (2+1, 110 km/h) to section Ljusvattnet - Piteaa 105km.	12/2029	<u>Synchronisation with ID 50028</u> (E4 Daglösten–Ljusvattnet mötesseparering) to be completed at the same time (12/2029).
Road	15713	Upgrade of the road E4 Piteaa - Umeaa . Extend existing road upgrade (Project ID 50027) for dual carriageway with median barrier (2+1, 110 km/h) to section Broånge - Grimsmark 15km.	12/2029	<u>Synchronisation with ID 50027</u> (E4 Broånge–Daglösten mötesseparering) to be completed at the same time (12/2029).
Road	15713	Upgrade of the road E4 Piteaa - Umeaa. Extend existing road upgrade (Project ID 50031) for dual carriageway with median barrier (2+1, 110 km/h) to section Sikeå - Bygdeå 13km.	12/2024	<u>Synchronisation with ID 50031</u> (E4 Sikeå–Gumboda mötesseparering) to be completed at the same time (12/2024).
Road	15713	Upgrade of the road E4 Piteaa - Umeaa. Extend existing road upgrade (Project ID 50029) for dual carriageway with median barrier (2+1, 110 km/h) to section Djäknebåda - Umeaa 35km.	12/2022	<u>Synchronisation with ID 50029</u> (E4 Djäkneboda–Bygdeå) to be completed at the same time (12/2022).
Road	15720	Upgrade of the road E4 Sundsvall - Enanger. Extend existing road upgrade (Project ID 50006) for dual carriageway with median barrier (2+1, 110 km/h) to sections Gnarp - Sundsvall 43km & Kongberget - Enanger 55km.	12/2028	<u>Synchronisation with ID 50006</u> (E4 Kongberget–Gnarp) to be completed at the same time (12/2028).

Rail- Road Terminals:

Mode	Project ID	Project Name incl. Place, Measure	Proposed end date	Comment for reasoning
RRT (Multi-modal)	15410	Lübeck Skandinavienkai, extension of handling track up to 740 m, electrification of access tracks / marshalling yard	12/2025	Project ID 5384: Extension of the terminal is planned to be completed by 12/2025 so that the additional project shall be as well
RRT (Multi-modal)	15424	Bari Ferruccio: extension of handling track up to 740 m	06/2025	Project ID 5334: Railway connection to Bari-Lamasinata Freight village
RRT (Multi-modal)	15427	Göteborg Arken: extension of handling track up to 740 m	12/2025	Project ID 50092: Construction of a new multimodal terminal in direct connection with container and roro terminals in the port of Gothenburg in order to accommodate increasing rail volumes.
RRT (Multi-modal)	15425	Stockholm Årsta: extension of handling track up to 740 m	12/2029	Project ID 5699: Upgrade and new sidings for 740 m freight trains on the ScanMed core network corridor in (SE)
RRT (Multi-modal)	15430	Oslo Alnabru: extension of handling track up to 740 m	12/2029	Project ID 5699: Upgrade and new sidings for 740 m freight trains on the ScanMed core network corridor in (SE)
RRT (Multi-modal)	15431	Trelleborg: extension of handling track up to 740 m, electrification of access tracks / marshalling yard	12/2029	Project ID 5699: Upgrade and new sidings for 740 m freight trains on the ScanMed core network corridor in (SE)
RRT (Multi-modal)	15432	Aarhus: to be equipped for handling all intermodal units, extension of handling track up to 740 m, electrification of access tracks / marshalling yard	12/2025	Project ID 5817: Electrification Fredericia – Aarhus

Source: HaCon, Ramböll and KombiConsult analysis based on Project List 2021 of CNC ScanMed

5.5 Tasks 2.3 / 2.5 / 2.6 / 2.7 Analysis of the list in different dimensions

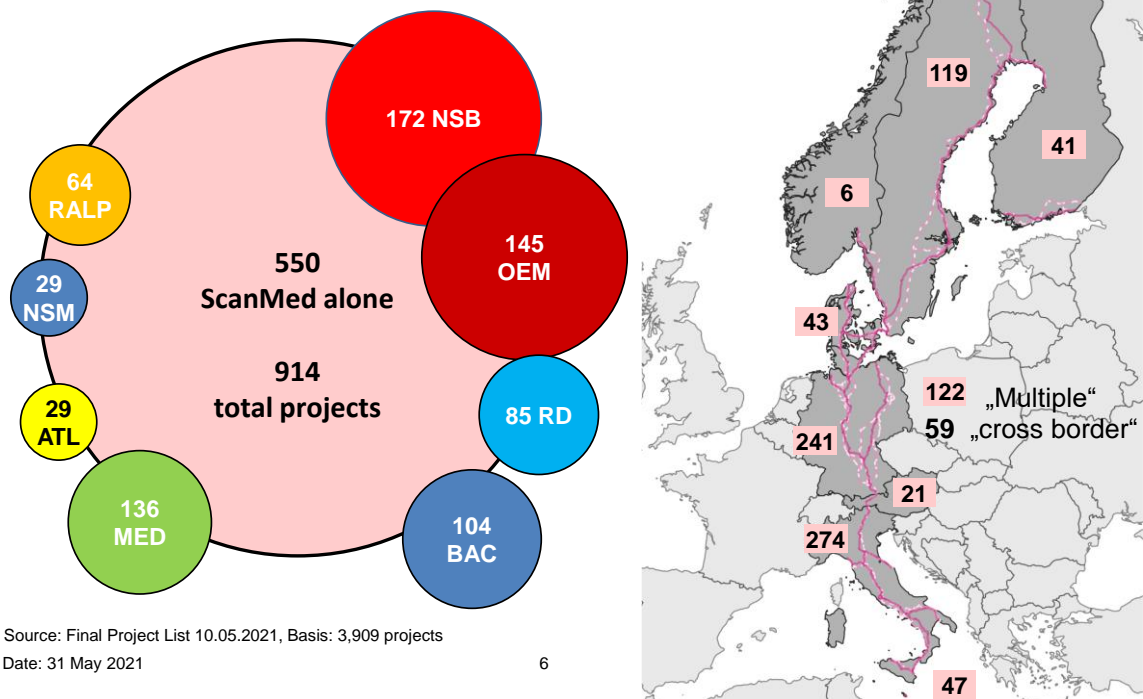
As Task 2 was due to be completed in June 2021, for purposes of Task 2, the April 2021 list (“Final Project List”) which included 914 projects relevant for ScanMed corridor was used, despite for Task 2.4 where the narrow update of October 2021 was used as well since it is relevant for the Work Plan 5. The tasks 2.3 and 2.5 – 2.7 are done together with the analysis of the list.

The list allows in particular to analyse:

- The project categories;
- The member states involved being individual states or multiple countries;
- The completion time cluster, in order to separate “accomplished” from “ongoing” or “planned” projects;
- The financial readiness and others;

Figure 5-3: Sharing of projects across corridors

Corridor Projects – Number of Projects by Country



Source: KombiConsult analysis based on Final Project List 2021 of CNC ScanMed

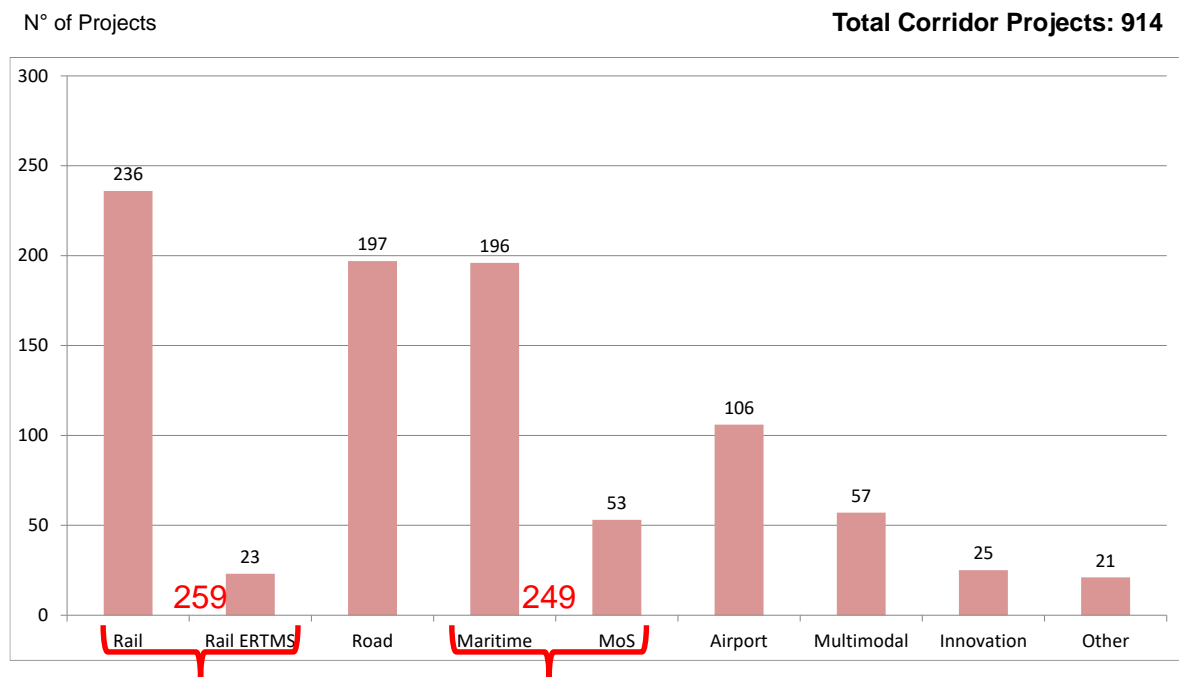
The present list includes 914 projects relevant for the ScanMed corridor which are partly shared with other core network corridors such as NSB and OEM. However, 550 projects are only on ScanMed.

The analysis is done on all 914 projects relevant for ScanMed.

The largest quantity of projects (236) are “rail” projects. They are followed by “road” (197) and maritime (196) projects. A lower number of projects can be found in the categories “multimodal”, “MoS” and “rail ERTMS”. The “innovation” cluster appears somewhat like a residual category according to the joint agreement that the “mode” should be used for the categorisation. Combining “rail” with “rail ERTMS” and “maritime” with “MoS”, most projects refer to “rail + rail ERTMS” (259) followed by “maritime + MoS” (249), but it is confirmed that the ScanMed corridor has a strong maritime dimension.

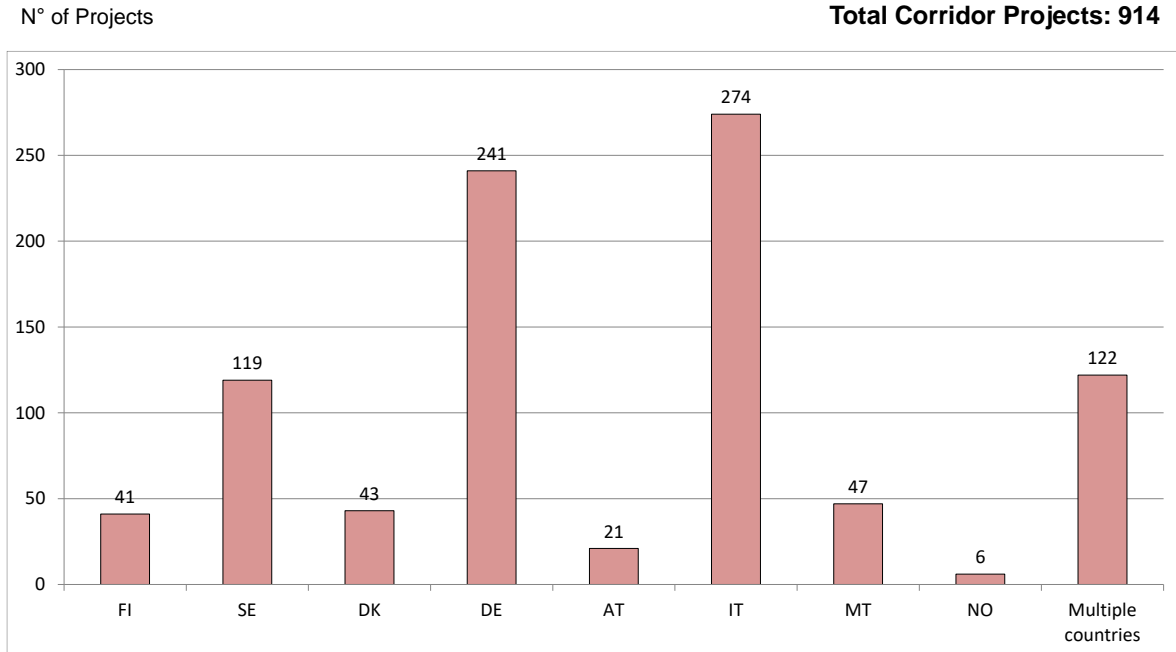
Too, the share of project by country is not equal since Italy (274) and Germany (241) carry the highest number. After the extended alignment also Sweden (119) carries a lot of projects. 122 projects involve more than one country and 59 are located on a cross border section.

Figure 5-4: Projects by Category



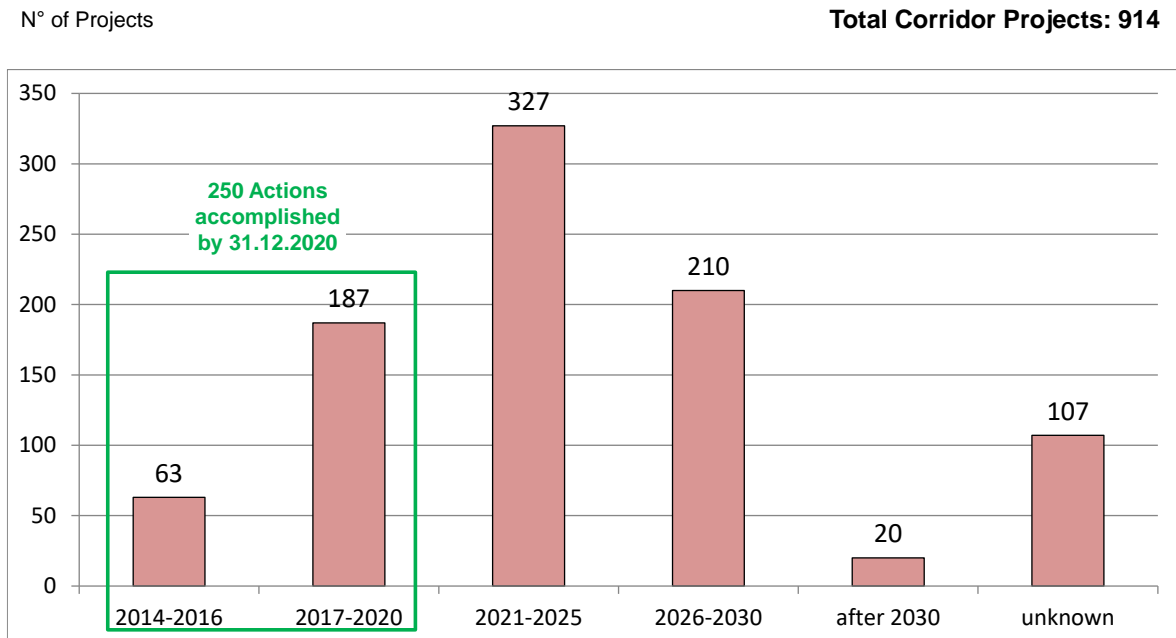
Source: Final Project List 10.05.2021, Basis: 914 projects, „Rail+Road“ category disappeared to re-harmonize with other CNCs

Figure 5-5: Projects by Country



Source: Final Project List 10.05.2021, Basis: 914 projects, country pairs (e.g. DE/DK) replaced to re-harmonize with other CNCs

Figure 5-6: Number of Projects by Completion Time Cluster (Reporting Date 05/2021)



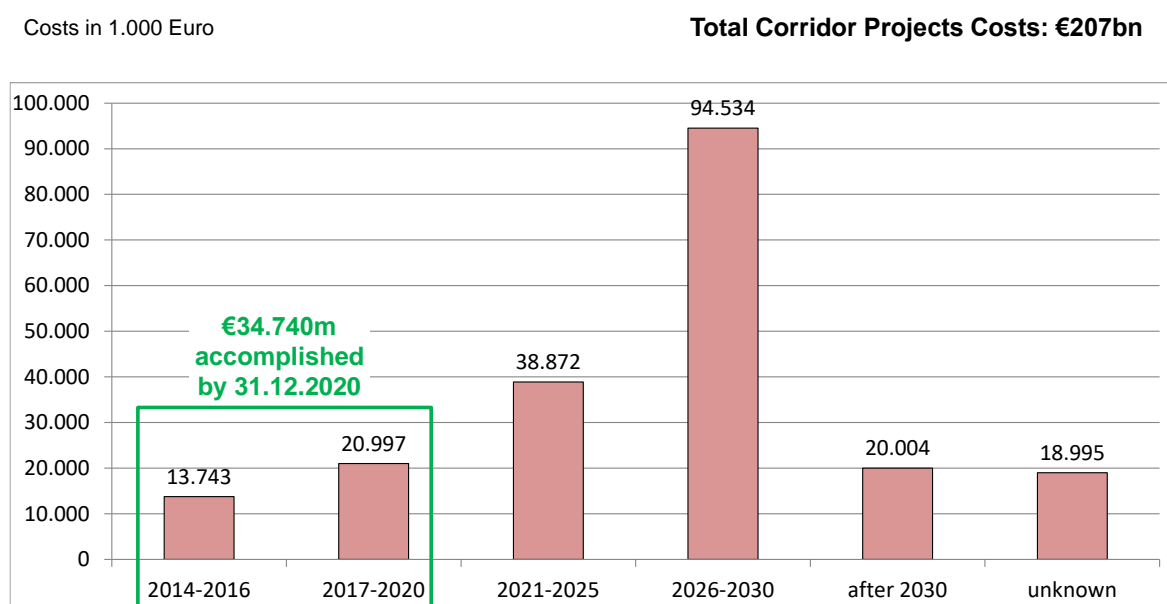
Source: Final Project List 10.05.2021, Basis: 914 projects of which 807 or 88% known completion time cluster

Source: *KombiConsult analysis based on Final Project List 2021 of CNC ScanMed*

By the reporting date in June 2021, 914 ScanMed relevant projects are included in the Project list, of which 250 are already completed since the adoption of the TEN-T

Guidelines (cut-off date end 2020). In order to maintain the completion time clusters over time 63 projects from the 2014-2016 cluster and 187 projects from 2017-2020 timeframe were added to derive this figure. Further 327 projects are to be completed by 2025 and 210 by 2030, the target date of the Regulation. However, 20 projects are said to be completed only after that target year and for 107 projects the completion end date is even “unknown”. This missing information is partially due to the current uncertainty about the completion time, e.g. projects that are in the planning stage, and partially due to not existing data. Nevertheless, with 787 projects, the majority of the projects is expected to be completed by 2030, and it is assumed that the vast majority of projects with “unknown” status will also be completed by 2030.

Figure 5-7: Total Cost (in Million €) by Completion Time Cluster



Source: Final Project List 10.05.2021, Basis: 914 projects of which 807 or 88% with known completion time cluster

Source: *KombiConsult analysis based on Final Project List 2021 of CNC ScanMed*

Based on the 2021 project list, for 732 (80%) out of the 914 ScanMed relevant projects the project costs are known. These 732 projects sum up to a total of about €207bn envisaged project costs, with an average of ~€283m per project. As can be seen in Figure 5-7, most of the project costs are foreseen for projects to be finalised in the timeframe between 2026-2030 (€94.5bn). Until 2030, the target date of the Regulation, the costs of all projects completed and envisaged to be finalised until then cumulate to a total of €188.1bn. Nevertheless, a relatively high amount of about €20bn (~10% of all project costs) is foreseen for a small number of projects, in fact 20, to be finalised only after 2030. For 107 projects with cumulated costs of ~€19bn the completion date is even “unknown”.

However, project specific costs show a large variety, reaching from about €50.000 (category “maritime”) up to €7,1bn (category “rail”) per project. As concerns the cost allocation per category, Innovation, Multimodal and Motorway of the Seas projects have the lowest share with summarising to just 2.8% of the total costs altogether. The biggest share by far, with about 57% of all project costs, are allocated to the category rail, followed by road with about 17%.

5.6 Task 2.8 Analyse and assess the coordination and synchronization of projects

This chapter provides results on the monitoring of difficulties jeopardizing completion of the Corridor and Requesting EU Coordinator's action.

Based on the methodology provided in chapter 2, Corridor Forum Members were asked to state any difficulty in the implementation of a specific project by answering the following question:

"Does this project show any difficulties, which jeopardize the completion of the Corridor by 2030? Please describe the nature of the difficulties and explain why they jeopardize the completion of the Corridor. Please indicate, if and what kind of support you may need from the European Coordinator".

The individual texts received back from the stakeholders was analysed and presented. Since the nature of "difficulties" may be manifold and project specific we will not be able to cluster them ex-ante but only after their receipt (ex-post), if at all.

As an outcome of the analysis of the "comments" column in the 2021 Project list, it was reported that four projects show difficulties which may jeopardize the completion of the Corridor by 2030, as follows:

Figure 5-8: Projects with stated implementation difficulties (Status 5/2021)

TEN-T Project ID	Project promoter: Project name	Project category	KPI(s) achieved	Project end date	Total costs (official) m€	Total project financing approved (yes/no)
5182	Jernbanedirektoratet (Norwegian Railway Directorate): Construction of 57km of double-track railway along with capacity improvements in 4 railway stations.	Rail	<ul style="list-style-type: none"> - ERTMS implementation - Line speed \geq 100 km/h (Core freight lines) - KPI: Axle load \geq 22.5 tonnes (Core freight lines) - Train length \geq 740m (Core freight lines) - Elimination of current or potential future capacity bottleneck - Removal of single-track section 	unknown	unknown	no
5408	Copenhagen Malmo Port AB: Planning and Implementation of an onshore power supply	Maritime	Availability of clean Fuels	10/2025	unknown	no
5650	Jernbanedirektoratet (Norwegian Railway Directorate): Implementation of ERTMS system	Rail ERTMS	ERTMS implementation	12/2034	1.146	Yes
5592	Rostock Port GmbH: Construction and provision of LNG	Maritime	Availability of clean Fuels	07/2024	96,8	Yes

Source: KombiConsult analysis based on 05/2021 Project List of CNC ScanMed

Latest details of those projects are reported in the Project Implementation Report 2022-1.

Despite the fact, that **no** support from the European Coordinator was explicitly requested by Member States and stakeholders, the following projects deserve special attention. From the 127 projects with finalisation date "after 2030" or "unknown" these 12 projects are specifically relevant for the completion of the corridor since they would achieve at least one "KPI". The same list has been analysed and reported in the PIR 2021-1 and has been updated with respect to finance and maturity data in PIR 2021-2 and PIR 2022-1.

Figure 5-9: Rail projects with end date "unknown" or "after 2030" and at least one "KPI to be achieved" (Status 5/2021)

TEN-T Project ID	Project promoter/ Project name	Project category	KPI(s) achieved	Project end date	Total costs (official) M€	Total project financing approved
Norway						
5182	Jernbanedirektoratet (Norwegian Railway Directorate): Construction of 57km double-track railway and capacity improvements in 4 stations.	Rail	ERTMS Line speed \geq 100km/h Axle load \geq 22.5t Train length \geq 740m	unknown	un-known	no
5185	Jernbanedirektoratet: Follobanen	Rail	ERTMS Line speed \geq 100km/h Axle load \geq 22.5t Train length \geq 740m	12/2034	1.146	Yes
Finland						
5439	Finnish Transport Agency: Improvement of the section Espoo - Karjaa	Rail	-Axle load \geq 22.5t -Train length \geq 740m	unknown	un-known	n.a.
5691	Finnish Transport Infrastructure Agency: Improvement of the section Imatra - border	Rail	-Electrification -Line speed \geq 100km/h -Axle load \geq 22.5t -Train length \geq 740m	unknown	un-known	n.a.
5848	Kupittaa-Turku double track and Turku Railway Yard development, Turku Travel center (connected to project ID 5440 Turku-Salo railway improvement)	Rail	-Electrification -Axle load \geq 22.5 tonnes	unknown	70	no
Sweden						
5174	Swedish Transport Administration: Göteborg - Landvetter-Airport - Borås (Airport connection)	Rail	Electrification Track/ Structure/ Intermodal gauge ERTMS Line speed \geq 100km/h Axle load \geq 22.5t Train length \geq 740m	unknown	3,486	no
5407	Swedish Transport Administration: Hallsberg - Åsbro (Ettapp/Phase 3)	Rail	Line speed \geq 100km/h Train length \geq 740m	unknown	344	no

TEN-T Project ID	Project promoter/ Project name	Project category	KPI(s) achieved	Project end date	Total costs (official) M€	Total project financing approved
50033	Swedish Transport Administration: Norrbottenbanan Dåva-Skellefteå, new railway	Rail	-ERTMS implementation -Line speed >= 100 km/h -Axle load >= 22.5 tonnes -Train length >= 740m	12/2032	1.178	Yes
50096	Swedish Transport Administration: Ostkustbanan, Gävle-Kringlan, capacity enhancement, new double track	Rail	-ERTMS implementation -Line speed >= 100 km/h -Axle load >= 22.5 tonnes -Train length >= 740m -Removal of single track section	Unknown	522	Yes
Germany						
5757	DB Netz: NBS/ABS Hamburg-Hannover, ABS Langwedel – Uelzen, Rotenburg – Verden – Minden / Wunstorf, Bremerhaven – Bremen – Langwedel (Optimised Alpha E)	Rail	-Electrification -ERTMS implementation -Line speed >) 100km/h -Axle load >= 22,5t -Train length >= 740m	> 2030	3.891	yes
TEN-T Project ID	Project promoter/ Project name	Project category	KPI(s) achieved	Project end date	Total costs (official) M€	Total project financing approved
Italy						
5968	RFI: Southern access line to Brenner; Lotto/lot 2-4: Bolzano/Bozen; Trento/Triente; Pescantina - Verona	Rail	Electrification Track/ Structure/ Intermodal gauge ERTMS Line speed >= 100km/h Axle load >= 22.5t Train length >= 740m	05/2035	3,404.4	No*
5979	RFI: Upgrade Verona Q.E. NEW	Multimodal	740m train terminal accessibility	unknown	unknown	n.a.

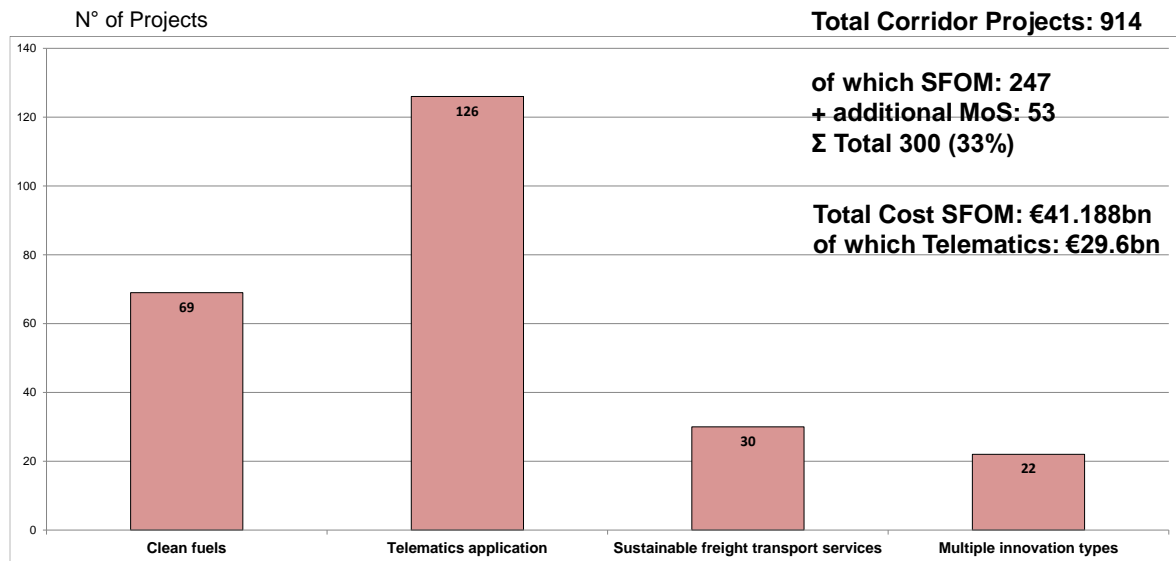
* Project is Part of the Italian Recovery and Resilience Plan 2021

Source: KombiConsult analysis based on the updated 2021 Project List of CNC Scan-Med

5.7 Task 2.9 Building on the innovative flagship projects and pilot initiatives

Following the jointly agreed definition of “sustainable and future oriented mobility projects” between DG MOVE and the Consultants, the respective projects were marked in the Project List. The analysis shows the following results: From the 914 projects included in the list 247 would qualify as “sustainable and future oriented mobility” projects. If we also add the 53 “MoS” projects that fall under this category this leads to a total of 300 projects (33%).

Figure 5-10: Innovative flagship projects and pilot initiatives (SFOB)



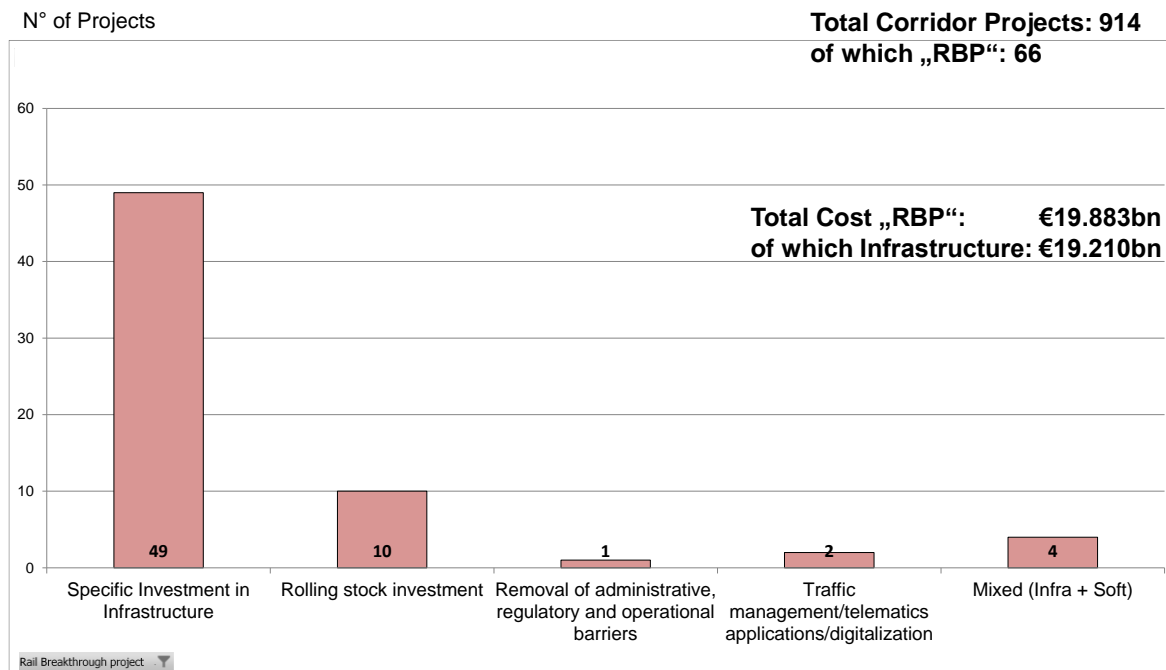
Source: Final Project List 10.05.2021, Basis: 914 projects

Source: *KombiConsult analysis based on Final Project List 2021 of CNC ScanMed*

5.8 Task 2.10 Identify projects that would qualify as rail breakthrough projects

Following the jointly agreed definition of “rail breakthrough projects” the respective projects were marked in the Project List. The analysis shows the following results: From the 259 “rail” and “rail ERTMS” projects included in the list 66 would qualify as “breakthrough” projects.

Figure 5-11: Rail Breakthrough projects (RBP)



Source: Final Project List 10.05.2021, Basis: 914 projects

Source: KombiConsult analysis based on Final Project List 2021 of CNC ScanMed

5.9 Task 2.11 Prepare project list information including the geographic coordinates

The list of information has been jointly agreed in the working group and resulted in the number, names and definition of the “columns” of the project list. The list information was approved by DG MOVE.

The list includes geo-coordinates and the TENtec section code according to the jointly agreed methodology.

5.10 Deliverables of Task 2, and progress achieved

The Project List update 2021 was due to be delivered in May 2021 and has been delivered on 10.05.2021. Approval was received.

According to the experience from the 1st period, that was fine-tuned and agreed upon in the Management Meeting in April 2021, it came along with the draft Final Presentation of the Project List, Final Project Fiches and the User-friendly Tool in May 2021, and was completed by the draft Final Presentation on the project List by end of June and by the Final Presentation by end of July 2021. The draft final presentation, Fiches and Tool were delivered on 31.05.2021. It was updated after the Corridor Meeting and provided on 30.06.2021 for approval, together with the list of additional projects. Approval was received in July 2021.

As agreed upon in the 6th Management meeting the “narrow” update, performed under Task 3, was used to update the user friendly tool once more and deliver it to the EC in November 2021 for information an usage.

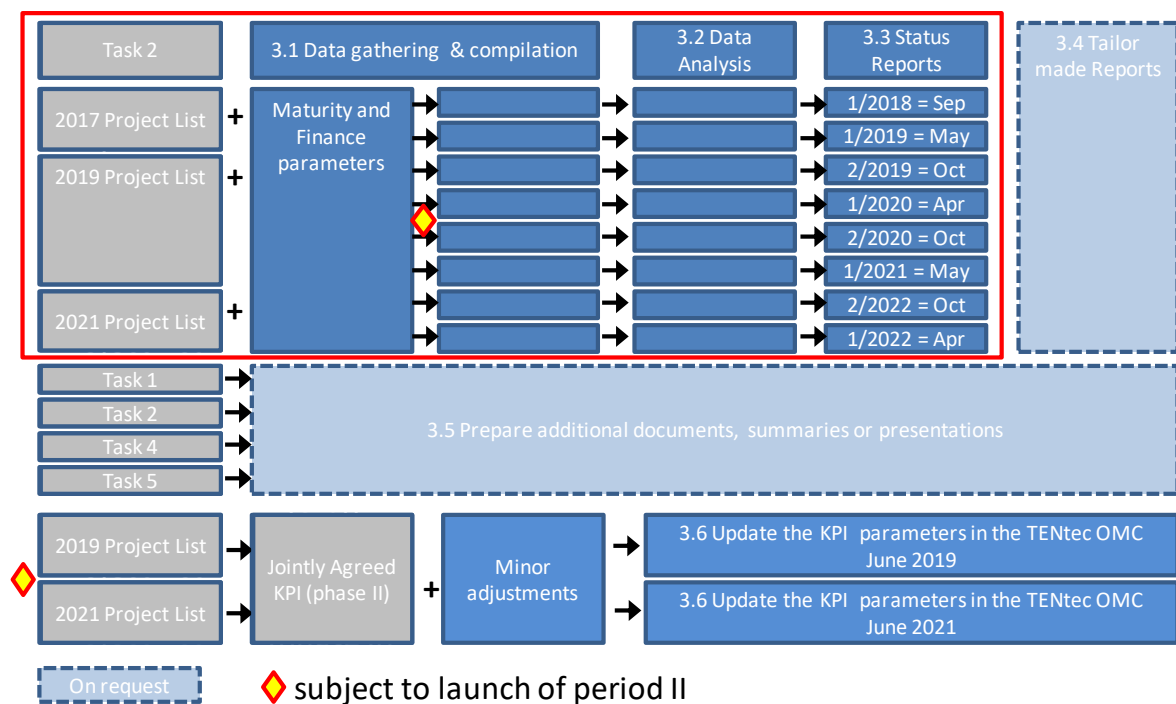
The critical review (“financial sustainability analysis”) was performed on the updated project list, presented to the Forum Members in November 2021 and was integrated in the draft Work Plan.

6 Task 3 Monitoring and analysing the state of project implementation and reporting

Task 3 builds on the requirement that biennial updating the entire project list and the Work Plan of the European Coordinators should be accompanied by a more frequent status analysis of the projects, which allows the Commission and the Coordinator to counteract in case of inconsistencies and delays. Therefore, the implementing stages of projects and their financing have been **monitored twice a year** throughout study phase III (June 2018 – May 2020) and phase IV (June 2020 – May 2022).

The monitoring process is a matter of Task 3.1, while Task 3.2 analyses the progress of the projects with respect to the updated data, Task 3.3 finally compiles the results (reporting). Task 3.4 provides input to the Coordinator’s missions and Task 3.5 prepares further documents including results from other tasks. Both Task 3.4 and 3.5 are subject to specific request. Additionally, Task 3.6 is foreseen by the Commission to derive the KPIs update based on TENtec OMC and to up-date the TENtec OMC with data from completed projects. The relation of the specific sub-tasks to Task 2, the updating of the entire project list (within Task 2) and the monitoring of progress on maturity and finance within Task 3.1, 3.2 and 3.3 as well as the other three sub-tasks of this Task 3 are visualised in the diagram below.

Figure 6-1: Task 3 - Detailed work programme and interrelations



Source: Consultant’s presentation at Kick-off meeting, updated for Working Group Meeting on 12th of July 2018, confirmed in the 5th management meeting in May 2020

The “PIR”-reports are formal deliverables and due in Month September 2020 to April 2022. The first report (September 2018) included also considerations and agreement on the methodology, while further reports (every 6 month) have been prepared on the basis of the agreed methodology and include only the presentation of results in **Power Point format**. In order to present comparable results across the nine Core Network Corridors the first Report was used as a template for all nine Corridors. The 2nd and further reports included the updated results per corridor.

Starting with the Project Implementation Report 2019-1 DG MOVE has requested to report also on the “**commercial delivery time**” as the outcome of Task 3.5. The report is provided in chapter 6 of all following PIRs respectively. The present Deliverable reports the results of the last PIR 2022-1 which refers to the project list update due in April 2022.

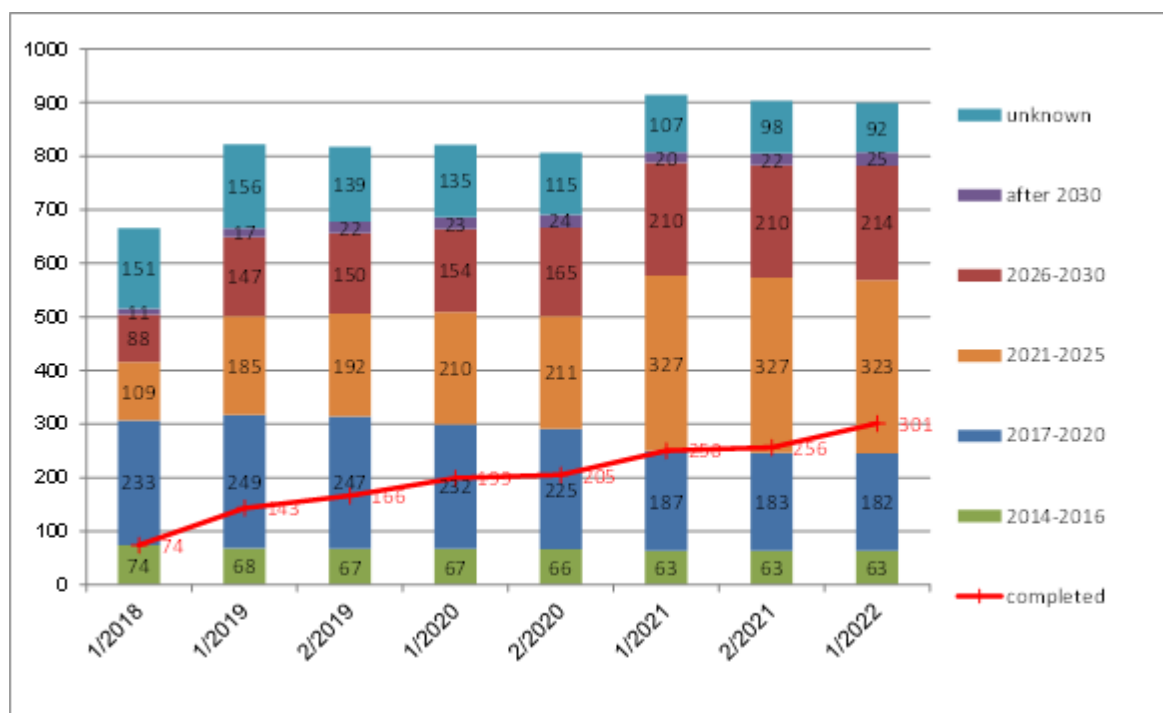
6.1 Task 3.1 Monitor the implementation of the Corridor projects equally

A joint working group (WG) across corridors and with the involvement of the EC has been established with the aim to agree upon a harmonized methodology. The methodology is included in the Inception report.

6.2 Task 3.2 Analyse the progress of projects

The progress is analysed according to the joint methodology focusing on maturity and finance criteria.

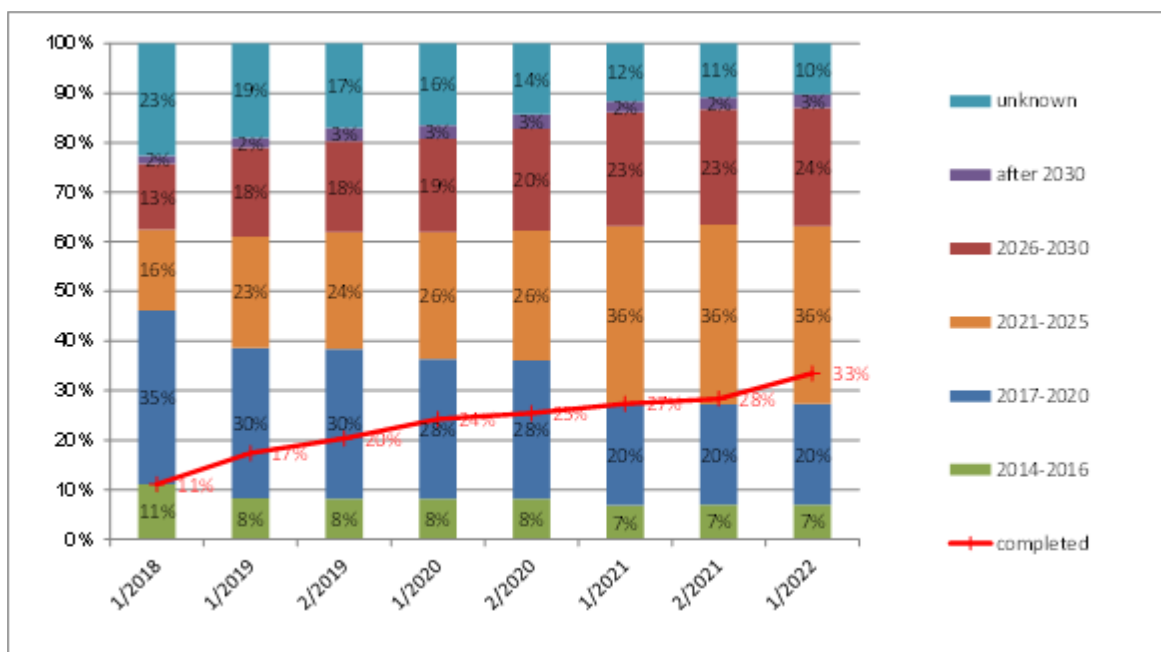
Figure 6-2: Evolution of Maturity criteria “expected completion time” since the first Implementation Report (N° of projects)



Source: KombiConsult analysis based on the 04/2022 Project List of CNC ScanMed

The graphic presents the number of projects per completion time cluster and the number of completed projects.

Figure 6-3: Evolution of Maturity criteria “expected completion time” since the first Implementation Report (Share of projects)



Source: KombiConsult analysis based on 04/2022 Project List of CNC ScanMed

All ways of presentation (see Figure 6-2, Figure 6-3) allow for monitoring and tracing the maturity criterion bi-annually. Starting with the first Project Implementation Report 1/2018, the main results of the current status of evaluation can be pointed out, as follows:

- Since the first Project Implementation Report, 233 ScanMed relevant projects have been added to the Project List. Considering that projects were deactivated meanwhile, this number might be higher. The number of projects relevant for the ScanMed corridor thus increased from 666 projects in the first Project Implementation Report up to 899 projects in the current Project Implementation Report;
- Since the first Project Implementation Report (project status 11/2017), further 227 projects were completed (project status 12/2021). The number of completed projects thus increased from 74 (11% share) to 301 projects (33% share), meaning about one third of the envisaged projects;
- The number of projects for which the completion time is unknown, decreased by 59 projects from 151 to 92, despite the fact that at least 233 projects were added to the project list meanwhile;
- The number of projects, for which the completion time is beyond 2030, increased from 11 to 25 projects;
- Projects with late (2026-2030, after 2030) finalisation particularly refer to transport mode Rail + Rail ERTMS with 99 projects in these time clusters, followed by Road (59) and Maritime (44);
- Most projects where the finalisation is unknown are of the same categories with 21 Rail + Rail ERTMS projects, followed by 18 Maritime projects and 15 Road projects;

- Of the 301 projects that are completed so far, most projects refer to project category Road (67), followed by Rail + Rail ERTMS (58), Maritime (56), MoS and Airport (40 each) and Multimodal (25).

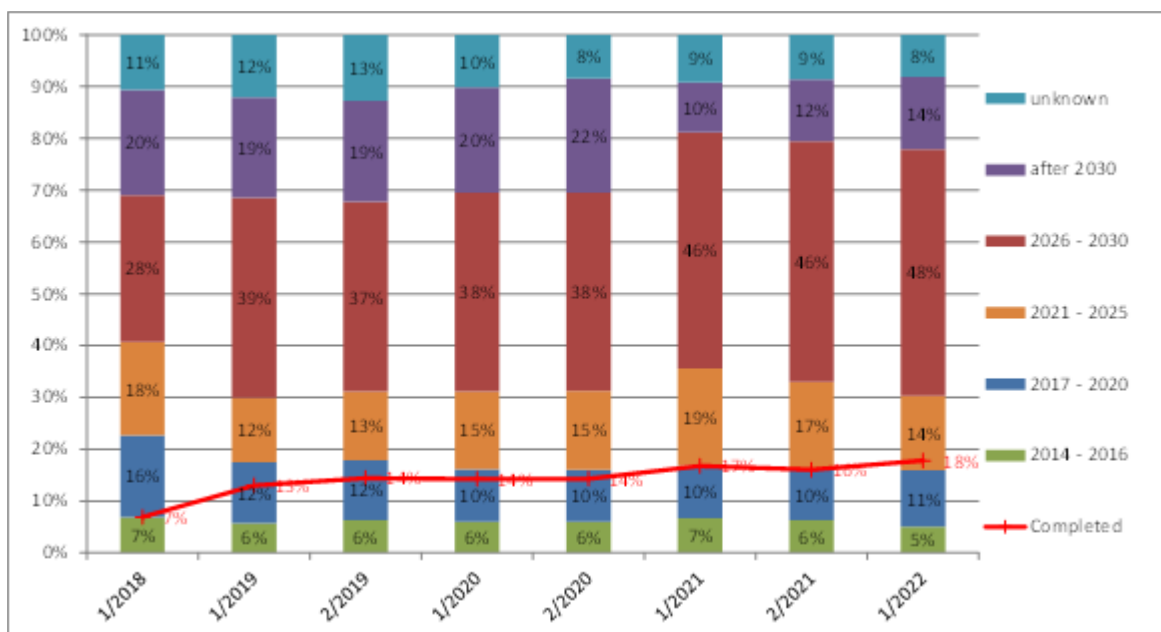
As it was done for the number of projects, the overview for the project cost allocation by completion time clusters has changed after updating the project list in 2019, 2020, 2021 and will do so in 2022 respectively. For this reason, the graphical visualisation for the absolute costs (see Figure 6-4) and share of costs (see Figure 6-5) is based on the past and most recent (April 2022) project list data so far.

Figure 6-4: Evolution of Total Cost (in Million €) by completion time cluster since the first Implementation Report



Source: KombiConsult analysis based on 04/2020 Project List of CNC ScanMed

Figure 6-5: Evolution of Share of Total Cost (in percentage) by completion time cluster since the first Implementation Report



Source: KombiConsult analysis based on 04/2022 Project List of CNC ScanMed

All ways of presentation (see Figure 6-4, Figure 6-5) allow for monitoring and tracing the project financial status criterion bi-annually. Starting with Project Implementation Report 1/2019, the main results of the current status of evaluation are pointed out, as follows:

- Since the first Project Implementation Report, costs of completed projects more than doubled from about €14,0bn to currently €39,7bn, increasing its share from 7% to 18%;
- The project costs for timeframes 2014–2016, 2017–2020, 2021–2025 and “after 2030” decreased and only the project costs for “2026 – 2030” increased, which indicates a general delay in project completion;
- The project costs allocated to projects of which the completion time is not known further decreased from €21,4bn to €18,1bn since the first Project Implementation Report. Though the amount decreased considerably from an all-time high of about €28,0bn in the report 2019-2, it is still a high amount for projects where it is not known when they will be finished;
- As most projects with late (2026–2030, after 2030) finalisation particularly refer to transport mode Rail + Rail ERTMS (99 projects), they also represent by far the biggest cost share with €89,2bn, followed by Road (€23,1bn), Maritime (€8,7bn), Airport (7,7bn), and Multimodal (€7,3bn);
- Most costs allocated to projects where the project finalisation is unknown are also Rail + Rail ERTMS (€11,1bn), followed by Road (€2,1bn) and Maritime (€1,1bn)
- Of the 301 projects that are completed so far, most project costs refer to project category Rail + Rail ERTMS with €20,1bn, followed by Road (€11,0bn), Airport (€2,6bn), Maritime (€2,4bn) and MoS (€1,5bn).

6.3 Task 3.3 Prepare regular and ad-hoc project implementation status reports

Project Implementation Report 2020-2 was delivered in October 2020 and approved in January 2021.

Project Implementation Report 2021-1 was delivered in May 2021 and approved in June 2021.

Project Implementation Report 2021-2 was delivered and approved in October 2021.

Project Implementation Report 2022-1 was delivered and approved in May 2022.

Discussion with Advisor and BCP Secretary about progress in BCP, was done also in June and September 2020 as well as in October and November 2020.

Investigation of the (German) Federal Administrative Court result on the Fehmarn Belt crossing was expected by early November, analysed and communicated to the Coordinator and Advisor.

Updating of TENtec OMC was under permanent discussion since the functionalities do not allow a proper updating of the voluntary data (assignment of TENtec sections to corridors or even better Corridor Consortia), while the updating of the contracted data would be no problem. Data was downloaded, updated and uploaded for the sections and nodes under responsibility of ScanMed; problems occurred; status of part of "Mos" was cleared in June 2021.

The PIR 2021-2 was presented in the Corridor Forum Meeting on 25.11.2021.

6.4 Task 3.4 Provide, upon demand, tailor made information for the Coordinator

In the framework of this task coordination with activities of the Brenner Corridor Platform were done in throughout the second period.

Special analysis of the project list with respect to Sustainable and Future Oriented Mobility was carried out in June 2021, too.

6.5 Task 3.5 Upon specific request, prepare additional documents

DG MOVE requested (under Task 3.5 and according to their precise "Guidelines") to deliver information on "Commercial Delivery Times" every six month as part of the PIR. A proposal was sent for approval. It was applied so that the planned budget foreseen for Task 3.4 (10 days in 4 years) will be fully used: 3 days for contacting the stakeholders and setting up the first survey in May 2019 and then 1 day for collecting the data, analysing and presenting the data every 6 months (7 times in four years). The proposal and the results were agreed with the approval of the respective PIRs.

For the intermodal rail service B between a Baltic Sea Port and a freight hub in Northern Italy which focuses on general cargo the respective times and punctuality figures were obtained and monitored continuously.

Figure 6-6: ScanMed Service B - Time Table Data 2020 and 2021 and punctuality for reporting period

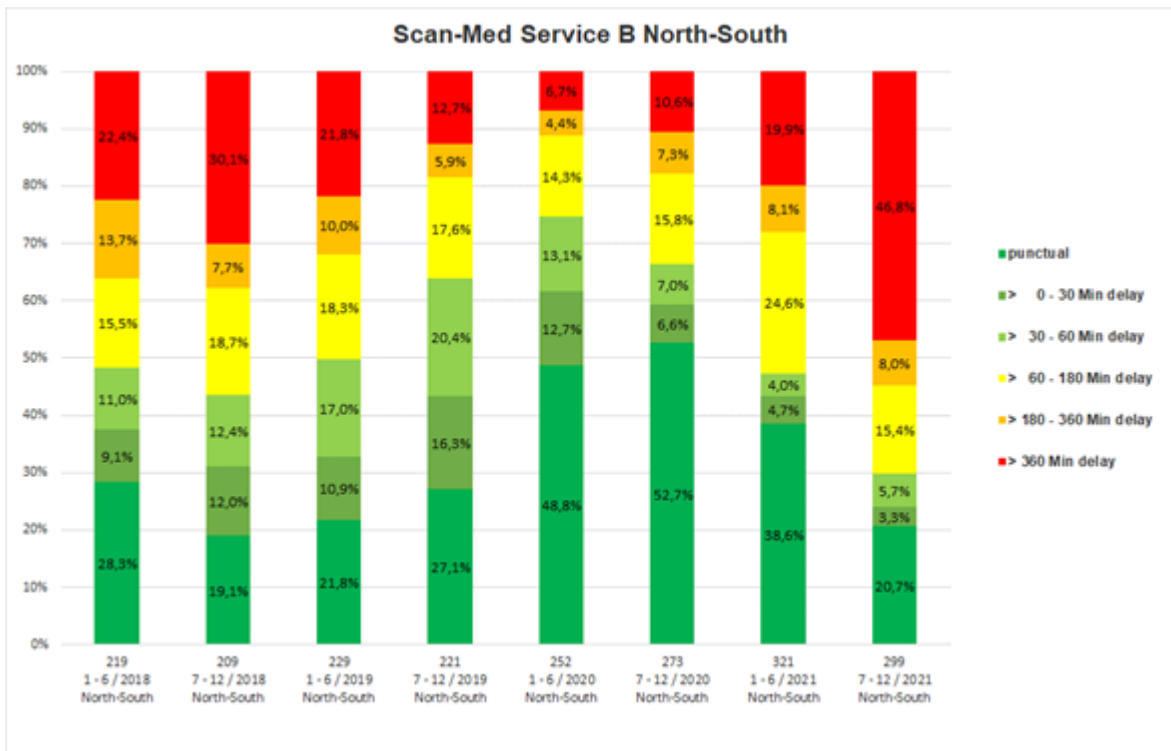
Year	2020				2021			
	North-South		South-North		North-South		South-North	
Month	1-6	7-12	1-6	7-12	1-6	7-12	1-6	7-12
Departure time	09:20	09:20	02:57	02:57	08:05	08:05	20:30	20:00
Pick-up time	12:00	12:00	03:30	03:30	13:30	13:30	02:40	02:00
Journey Time hh:mm	26:40	26:40	24:33	24:33	29:25	29:25	30:10	30:00
Average speed Km/h	≈ 48	≈ 48	≈ 52	≈ 52	≈ 44	≈ 44	≈ 43	≈ 43
Punctuality (< 60 Min delay)	75%	66%	75%	73%	47%	29%	63%	34%
N° of services > 20/month	252 Yes	273 Yes	254 Yes	280 yes	321 yes	299 yes	320 yes	300 yes

Source: KombiConsult analysis based on recent service agreement of freight forwarders

The evolution of punctuality is displayed in the following diagrams.

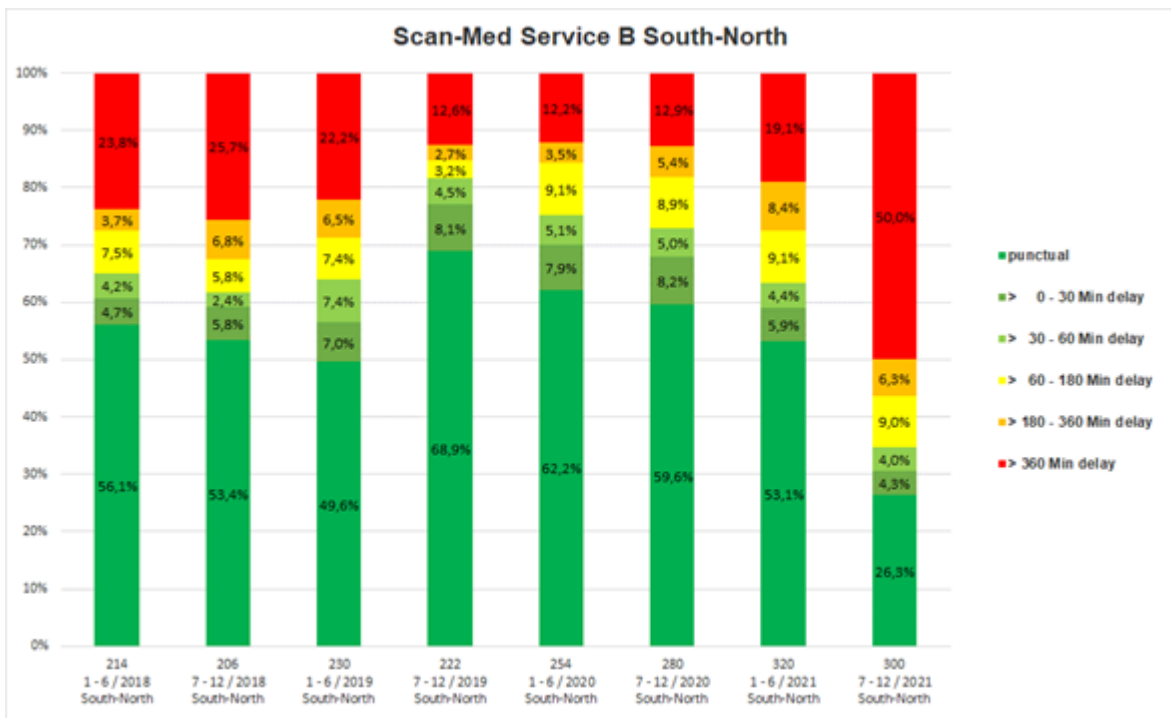
Punctuality of the south-north trains was usually better than the opposite direction despite the last period. Both directions showed a positive development until the 4th reporting period (2020), whereas the quality declined after that. For the north-south trains the punctuality - if a delay of one hour is accepted - decreased from 48% to 30% with a high of 75% in the first half of 2020, and for the opposite direction it decreased from 65% to 35%, despite a high of 81% in the second half of 2019.

Figure 6-7: ScanMed Service B Direction North-South Evolution of Punctuality 1-12/2018 and 1-12/2021



Source: KombiConsult analysis 04/2022

Figure 6-8: ScanMed Service B Direction South-North Evolution of Punctuality 1-12/2018 and 1-12/2021



Source: KombiConsult analysis 04/2022

6.6 Task 3.6 Update of the technical parameter data in TENtec OMC

The methodology was agreed upon in the inception report and was rolled out on the basis of the approved final project list by end of August 2019. For all completed projects (end date 2018), which improve or achieve at least one of the mode specific KPI and which allow a clear localisation of the infrastructure measure, the relevant parameter (location latitude/longitude according to the “middle” of the project) were updated in TENtec by providing respective tables of technical parameters for all modes.

After the “TENtec in-build validation mechanism date” has expired the data are regarded as accepted.

6.7 Deliverables of Task 3, and progress achieved

Project Implementation Report 2020-2 was delivered in October 2020 and approved in January 2021.

Project Implementation Report 2021-1 was delivered in May 2021 and approved in June 2021.

Project Implementation Report 2021-2 was delivered and approved in October 2021.

Project Implementation Report 2022-1 was delivered and approved in May 2022.

7 Task 4 providing the elements for the updates of the work plan

7.1 Structure of Task 4

Task 4 is made of six (sub-)tasks:

Task 4.1 Removal of physical and technical barriers

Task 4.2 Identification of potential administrative and operational barriers

Task 4.3 Analysis of the corridor's current state and its future potential

Task 4.4 Identification of possible impacts of climate change

Task 4.5 Identification of possible impact of the corridor deployment on health

Task 4.6 Ex-post evaluation of the economic impact

The Commission provided a template of the 5th workplan and a cross corridor working group has elaborated a methodology including a template of the elements of the Work Plan. The agreed structure and content was the following:

- 1 Towards the Scan-Med Corridor Fifth Work Plan
 - 1.1 Introduction
 - 1.2 Achievements along the Corridor
- 2 Characteristics of the Scan-Med Corridor
 - 2.1 The new alignment under CEF 2
 - 2.2 State of compliance with TEN-T infrastructure parameters in 2021 and evolution of the KPIs over time
 - Rail - Situation by June 2021
 - Road - Situation by June 2021
 - Seaports - Situation by June 2021
 - Airports - Situation by June 2021
 - Rail-Road Terminals - Situation by June 2021
- 3 Inventory of what has still to be realised by 2030
 - 3.1 Rail
 - 3.2 ERTMS deployment
 - 3.3 Road
 - 3.4 Maritime Ports and MoS
 - 3.5 Airports
 - 3.6 Multimodal
 - 3.7 Implementation difficulties
- 4 Deployment and development plans and the revision of the TEN-T guidelines
 - 4.1 Deployment plan of MoS
 - 4.2 Plans for the deployment of alternative clean fuels infrastructure

- 4.3 The development of Urban Nodes by 2030
- 4.4 The revision of the TEN-T guidelines
- 5 Funding and Financing Tools
 - 5.1 Update the Corridor funding needs
 - 5.2 The Green Deal and the Recovery and Resilience Fund
 - 5.3 The new CEF 2
 - 5.4 The inclusion of Military Mobility in network development plans
- 6 The European Coordinator's recommendations and future outlook

The methodology included that specific input was to be provided by the Commission as common text for all Work Plans and by the "MoS"- and "ERTMS"-Consultants respectively. Such input was received and copied into the respective chapters.

7.2 Deliverables of Task 4, and progress achieved

A draft report on the elements of the Workplan was provided to DG MOVE before Christmas 2021. First comments were received on 21.12.2021, analysed, assigned to contributing consortium partners and checked for improvement within two weeks (16.01.2022). The Advisor reworked the structure and a draft to be send to the MS was provided on 16.02.2022. A first round of comments was received and bilaterally replied to the respective MS in March and April 2022. Agreed changes and comments were used to provide a consolidated final draft of the Work Plan to the Advisor on 05.05.2022. Unfortunately, some questions and requirement for update are related to the ERTMS chapter. Since that chapter was only copied to the Work Plan from the ERTMS study which was completed before the ERTMS DIP was agreed by the MS and the contract with the ERTMS consultant expired the ERTMS Unit of DG MOVE has to follow the comments now.

In the 8th management meeting on 16.05.2022 the Commission explained that those updates will be included, the final version sent to the MS for agreement, the Work Plan will be presented by the European Coordinator in the respective Corridor Meetings during the Connecting Europe Days in Lyon on 28.06.2022, and will be provided to the (Corridor) Ministers of Transport for approval right after the meeting.

8 Task 5 Preparing, supporting and following up of the Corridor Forum and its working groups

8.1 Task 5.1 Provide support for the organisation of 2 corridor forum meeting p.a.

The 15th CFM was initially scheduled for May 2020 but shifted to the 25.06.2020. In order to avoid overlapping with the TEN-T Days in Croatia in May 2020, where a "corridor meeting" was foreseen, the CFM was re-scheduled and corridor forum members were informed accordingly. Finally, with the outbreak of the COVID-19 disease and countermeasures neither the TEN-T days nor the 15th CFM could take place until the end of the 3rd phase. A specific online meeting with the MS representatives will be organised on 22.06.2020.

After some initial discussion and planning the 15th CFM originally scheduled for June 2020 was focused on a "corridor meeting" with MS to discuss the impact of COVID-19 on the Corridor (see 16th meeting).

The (15th) CFM is scheduled for November 2020. EC internal discussion about if, how and when to organise meeting continued in autumn 2020. From ScanMed perspective an online meeting would be meaningful to maintain the interactive dialogue with the stakeholders. The original date passed without a formal conclusion. A next meeting was eventually scheduled for March 2021. The (mid) March date would fit into the overall timing since results of the corridor characteristics tasks could be presented by then. It was strongly advised to keep these dates.

Further CFM could take place in June 2021 (after the project list approved and can be presented) and November 2021 (after the elements of the 5th Work Plan can be presented). This dialogue with stakeholders is quite important for the acceptance of the entire "coordination" and should be maintained and communicated coordinate across the nine CNC.

Corridor Forum Members were informed on recent activities by a circular letter pinpointing to the Video messages of the European Coordinator, the Work Plan IV and other issue end of July 2020.

Corridor Forum Members, in particular regions, urban nodes, airports and ports were informed about "Horizon 2020 Green Deal Call" in Circular Letter in September 2020.

Corridor Forum Members, including new alignment ones, were informed about the (draft) CEF II Evaluation Criteria, the Joint Conference with the MoS Coordinator on the "Baltic Sea" and the Joint Working Group Meeting ScanMed/NSB for the new members.

Corridor Forum Members, including new alignment ones, were informed about the ongoing TEN-T Regulation impact assessment and invited to contribute to it.

The 15th Corridor Forum Meeting was prepared, performed and documented by end of March 2021. Later it was renamed and renumbered to a Corridor Meeting rather than the 15th Corridor Forum Meeting.

The 16th Corridor Forum Meeting originally foreseen in June 2021 – to present the Final Project List – should then take place in November since not all Advisors agreed to the June meeting. The June meeting announced to the ScanMed stakeholders was therefore performed as a "corridor meeting" (see Task 5.2) instead. As safe the date was circulated to the Corridor Forum Members together with the announcement of the opening of the CEF Call 2021 and the respective Information day on 27.09.2021.

Invitation and agenda were sent out on 28.10.2021. The meeting was prepared, performed on 25.11.2021 and was documented in December 2021.

A 17th Corridor Forum Meeting was scheduled for May 2022. Upon request of the EC it was rescheduled to September 2022. Corridor stakeholders were invited for a meeting in which the Coordinators presented the Commission proposal of the new TEN-T Regulation on 15.03.2022 and will be invited to the Connecting Europe Days in France in June 2022.

A circular letter to the corridor stakeholders informing about the recent activities and next steps was sent on 22.02.2022.

A further circular letter informing about the progress of the Work Plan 5, the AFI-Regulation, the Connecting Europe Days in Lyon and the 17th Corridor Forum Meeting that shall take place on 28th of September 2022 will be send in May 2022 – eventually only after the management meeting with the EC took place on 16th of May.

8.2 Task 5.2 Organise of average up to 6 working groups meetings per year

The numbering of meetings continues from the first period of the 3rd phase.

A 16th meeting convening the Member States to discuss the impact of COVID-19 on transport and the dissemination of the 4th Work Plan was prepared, performed and documented in June 2020.

A 17th meeting convening the persons involved in updating the project list was prepared, performed and documented in September 2020 and October 2020.

A 18th meeting to inform about the evolution of TENtec and to share the progress of the Project List update with EC was performed on 27.10.2020.

A 19th meeting on the functionalities of TENtec was performed on 19.11.2020.

A 20th meeting for “onboarding” the stakeholders resulting from the new alignment was prepared, performed on 24.11.2020 - jointly with NSB - and documented thereafter.

A 21th meeting on the Baltic Sea basin was prepared and performed jointly with the MOS, NSB and OEM corridors on 02.12.2020.

A 22nd meeting on the use of TENtec for the new alignment and its potential updating was performed on 02.12.2020.

A 23rd meeting was prepared and performed on the 01.02.2021 on the status of the Brenner Corridor Platform jointly with the European Coordinator, the advisor and the BCP Secretariat.

A 24th meeting was prepared and performed on the 25.03.2021 with the Member States (restricted meeting following the 15th CFM) and documented. Draft Minutes of Meeting were circulated for agreement until end of April 2021. No comments were received so that the Minutes were agreed upon in the next meeting (24.06.2021).

A 25th meeting on the use of TENtec OMC for updating infrastructure characteristics was performed on 22.04.2021.

A 26th meeting on the ScanMed sections and nodes surrounding the “Bothnian Gulf” was prepared performed on the 05.05.2021 and documented. Comments were incorporated and accepted in the next meeting (24.06.2021).

A 27th meeting on the ScanMed sections and nodes around the "STRING" region was prepared performed on the 28th of May 2021 and documented. Minutes of Meeting were adopted in the next meeting (24.06.2021).

A 28th meeting was scheduled for 24th of June at the date of the Corridor Forum meeting. It was prepared, performed and documented.

A 29th meeting was prepared, performed on the same day but restricted to the Member States and Norway. It was documented as well.

A 30th meeting on the ScanMed sections and nodes around the "Brenner" region was scheduled for the 5th of July 2021. It was prepared, performed and documented. The minutes of meeting was commented and a final version distributed in August 2021.

A 31st meeting on the ScanMed sections and nodes around the "MED" region was scheduled for the 13th of July 2021. It was prepared, performed and documented.

A 32nd meeting was prepared, performed and documented on the 7th of July to renew and update the October 2018 agreement about the sharing of tasks between the BCP and the Working Group South of the RFC ScanMed. The minutes of meeting was commented and a final version distributed in August 2021.

A 33rd meeting was prepared, performed on the 25.11.2021 for the Members States representatives of the Corridor Forum. It was documented in December 2021 accordingly.

A 34th meeting was organised jointly with the Brenner Corridor Platform (BCP) as a BCP Plenary Meeting on 10 December 2021. It was documented in December 2021 accordingly.

A 35th meeting was organised as Brenner Corridor Platform Chairs meeting jointly with the BCP Secretariat on January 25, 2022. It was documented in January 2022 accordingly.

A 36th meeting is planned to tackle the RFC ScanMed and TEN-T ScanMed cooperation proposed by the CEF-II and TEN-T Regulation (under revision) at the level of president of the board and managing director as well as European Coordinator level. This is not time sensitive since the cooperation is generally good, overlapping of working groups was agreed and RFC made a presentation in the 16th Corridor Forum Meeting. E-Mail exchange between EC and RFC was prepared; the meeting is now scheduled for 13-14 June 2022 in DK.

Planning of topics and stakeholders for the remaining year 2021 and 2022 continued with the Advisor and the Co-ordinator. An update phone call took place on 27.08.2021. Also the preparation of the 16th Corridor Forum Meeting was used to update the planning. It was concluded that all relevant issues were treated (modally and regionally) at least one since the beginning of the studies and that the current situation does not allow the personnel meetings required to treat further issues. Further meeting opportunities were shared with the Advisor also in April 2022.

Results of an investigation visit to Göteborg (Port of Gothenburg, Trafikverket, Westlänken/West Link Project) and Hamburg (RFC ScanMed RAG/TAG meeting), both in May 2022, were shared with the Advisor in preparation of the Connecting Europe Days and the Corridor Forum Meeting.

8.3 Task 5.3 Present the progress of the study

The progress of the study was presented at each of the working group meetings and corridor forum meetings.

8.4 Task 5.4 Manage and update the established list of stakeholders

The list of stakeholders was taken from the 2015/2017 study, continued in the first period, is being updated continuously and was used for communication with the stakeholders.

Upon request of TIS an extract of the list was provided to them for the support study on the evaluation of the TEN-T guidelines undertaken by DG MOVE.

Upon request of the Commission an extract of the list was provided to Circle for the support of the joint MoS/CNC meetings per sea basin.

Upon request of the Commission an extract of the list was provided to Circle for the support of the meeting presenting the status of the TEN-T Regulation in March 2022.

9 Conclusions and Recommendation to the European Commission

The coordination across corridors which is foreseen for parts of the activities in the ToR and which is carried out in the management meetings and in respective working groups between the management meetings shall be maintained.

In the June 2019 Corridor Forum Meeting stakeholders brought the question on which Deliverables are provided by the Studies and which are shared with the Forum Members. The Advisors were asked to prepare a “line to take” across Corridors.

Member States uttered their concern about the 6-monthly “narrow” updated of the project list since the progress of large-scale infrastructure projects is not that fast and actual information hardly available in consolidated form. They wanted the Co-ordinator and Advisor to take care that this activity is not continued in the next phase of the corridor studies.