

# Study on the Rhine-Alpine TEN-T Core Network Corridor and support to Coordinator

4th Phase

Final Report May 2022

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# **Disclaimer**

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May 2022



# Version

The version 1.1 was finalized on  $30^{\text{th}}$  May 2022.



### **Abbreviations**

AF Alternative Fuels

CEF Connecting Europe Facility
CDT Commercial Delivery Time
CNC Core Network Corridor

ERTMS European Rail Traffic Management System

EU European Union

GDP Gross Domestic Product HGV Heavy Goods Vehicle

INEA Innovation and Networks Executive Agency (EU)

(since April 2021 renamed: CINEA - Climate,

Infrastructure and Environment Executive Agency)

IWW Inland waterways

km kilometre

KPI Key performance indicator
MMTMS Transport market study
MoS Motorways of the Seas

MS Member States (of the European Union)

No. Number

OMC Open Method of Coordination
PIR Project Implementation Report

PM Project management

PL Project list

RFC Rail Freight Corridor

tbd to be defined

TEN-T Trans-European Transport Network

TENtec is the European Commission's Information System

to coordinate and support the TENT-T policy

ToR Terms of Reference
QM Quality Management
WG Working Group

WP Work Plan

# Country Codes (ISO 1366)

BE Belgium
CH Switzerland
DE Germany
FR France
IT Italy

LU Luxembourg NL the Netherlands

### **Core Network Corridors**

BAC Baltic-Adriatic

NSB North Sea-Baltic

Med Mediterranean

OEM Orient East Med

SCM or ScanMed Scandinavian-Mediterranean



RALP Rhine-Alpine

ATL Atlantic

NSM North Sea-Mediterranean

RD or RDAN Rhine-Danube



# **Abstract**

The Final Report of the 4th Phase of the Rhine-Alpine Core Network Corridor Study provides an analysis of the current state developments for the growth of this Corridor, including Belgium, The Netherlands, Germany, Switzerland and Italy.

The report firstly provides an overview on the elaboration of the Corridor knowledge base, briefly describing the methodology and data analysis carried out. The study then describes one of the core activities: setting out a project list and analysing project maturity, finance and implementation difficulties. The results of the project list analysis are presented in the Project Implementation Report. Extensive consultation with different stakeholders, including national authorities and important representatives from the transport sector are reflected in the Corridor Forum and Working Group meetings minutes.

Study results have been integrated in the 5<sup>th</sup> Work Plan of the European Coordinator, which has been approved by the Member States.



# **Executive Summary**

The present report constitutes the 2<sup>nd</sup> Final Report of the 4<sup>th</sup> Phase of the Rhine-Alpine (RALP) Core Network Corridor (CNC, Corridor) Study taking place from July 2020 until May 2022. The report has been prepared by the CNC consultants Hacon, KombiConsult, Panteia, PwC, Rapp and Stratec.

The objectives of the Corridor Study, scheduled from June 2018 until May 2022, focused on further development of the CNC knowledge base, the refinement of the Work Plan of the European Coordinator, and the continuation of the stakeholders' engagement through the Corridor Forums and Working Group meetings, leading towards an agreed update of the Work Plan and assessment of the Corridor's evolution. The Corridor Study has been conducted in a close cooperation with ERTMS Consultants and took into account the ERTMS implementation plan, the Motorways of the Sea (MoS) development priorities and the Rail Freight Corridor (RFC) implementation plans.

# **Rhine-Alpine Core Network Corridor**

The Rhine-Alpine Corridor is the shortest of the nine core network corridors. At the same time, it runs through some of the most densely populated and economically strongest regions in Europe. The RALP Corridor runs through five Member States and Switzerland. France was added to the catchment area of the Corridor in light of the relevance of inland waterways and their ports along the river Rhine. Moreover, the rivers Mosel and Neckar in Germany as well as Luxembourg's inland port of Mertert are included in the Corridor. Inland waterways in Belgium are included in the North Sea-Mediterranean Corridor but are also of importance for further development of this Corridor.

The particularity of the Rhine-Alpine Corridor is the partnership with Switzerland which provides a high-quality multimodal infrastructure. Swiss representatives are members of the Corridor Forum and Swiss projects are included in the analysis of the Corridor infrastructure.

# **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. Moreover, it allows mirroring the projects and their impact against the Corridor's bottlenecks and non-compliant sections according to the TEN-T Regulation 1315/2013 (gap analysis). In the current study phase, the activities related to the project list have been continued.

# **Project Implementation Report**

The Rhine-Alpine Corridor comprises a well-developed and mature infrastructure that, to a large extend, fulfils the technical parameters of the TEN-T Regulation 1315/2013. Nevertheless, the Corridors suffers from the capacity shortages, especially in the rail freight segment, therefore the majority of the projects included in the project list of the Corridor aims at alleviating these shortages to increase effectiveness of the Corridor functioning. As of May 2022, 443 RALP relevant projects are included in the project list. This means that there are two projects less than in the last report. Of the 443 RALP relevant projects, 129 (29%) projects have already been completed by the end of December 2021. This number comprises 27 projects that have been completed by 2016, 73 projects that have been finalised between 2017 and 2020, and 29 projects that have been completed in 2021. Further 128 projects (157 minus 29 projects already completed in 2021) are still to be completed by 2025 and 134 by 2030, i.e. the target date of the TEN-T Regulation 1315/2013. However, 18 projects



are said to be completed only after that target year and for further 34 projects, the completion end date is "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 lack of data.

Nevertheless, the majority of the projects (i.e. 391) 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.

### **Corridor Forum**

The European Coordinator is assisted in the performance of his tasks concerning the Work Plan by the Corridor Forum. Due to restrictions regarding the COVID-19 pandemic in the fourth phase of the Corridor Study, the 15<sup>th</sup> and 16<sup>th</sup> Corridor Forum meetings were organised as video conferences. For these meetings, the agendas and invitation letters have been prepared in coordination with the Corridor advisor. Relevant presentations have been prepared and sent to the Corridor advisor. After approval, all relevant information has been sent out to the Forum members be email. The list of Corridor Forum Members has been continually updated. Minutes of the meetings have been drafted and coordinated with the Coordinator's advisor. Final minutes and presentations have been sent to the Forum members. The 17<sup>th</sup> Corridor Forum will take place on the 30<sup>th</sup> September 2022 in Brussels.

# **Working group meetings**

Altogether, four Rhine-Alpine working group meetings have been held in the fourth phase of the Corridor Study. They focused on the following key topics: (i) the presentation and discussion of current developments and trends with high relevance for the Corridor development such as COVID-19, (ii) the need for the improvement of rail capacity, (iii) the status of the Rhine-Alpine projects and (iv) the implementation of alternative fuels. All working group meetings were organised as in an online format (video conferences). For the preparation, implementation and follow-up of these meeting, the following steps were carried out in close cooperation with the Rhine-Alpine Corridor advisor: drafting of the agenda, selection of potential presenters, information and invitation of participants and follow-up activities such as minutes of meetings and circulation of presentations.

# **Reports prepared**

During the fourth phase of the Corridor Study different reports have been prepared including:

- Inception Report (July 2020);
- Corridor Study Update Report 2020 2021 (February 2021);
- Project Implementation Reports: 2/2020, 1/2021, 2/2021, 1/2022;
- 2<sup>nd</sup> Intermediate Report (May 2021);
- Management reports prepared on a monthly basis.

# The 4th Work Plan of the European Coordinator

An important output of the Corridor study is the contribution to the 4<sup>th</sup> Work Plan of the European Coordinator for the RALP Corridor. The contribution to the Work Plan is provided by the different project tasks described below. This includes the Multimodal Transport Market Study, regular project list updates, an assessment of the project implementation status, consultation with project stakeholders during the Corridor Forum and Working Group meetings. The 4<sup>th</sup> Work Plan of the European Coordinator



was finalised on 15<sup>th</sup> May 2020 following extensive consultation and approval by the Member States.

### **Outlook**

This Final Report is covering the last two years of the Corridor Study, including reporting period June 2020 to May 2022. The proposal of the European Commission for the revision of the Regulation on the guidelines for the TEN-T development of 14<sup>th</sup> December 2021, foresees, among other important modifications supporting the achievement of the goals set by the European Green Deal and the Sustainable and Smart Mobility Strategy, the merger of the Rhine-Alpine Corridor with the North Sea-Mediterranean Corridor into the new European Transport Corridor North Sea-Alpine Corridor. This proposal is to be negotiated between the European Parliament and the Council, and it can be expected that the revised TEN-T Regulation may enter into force early in 2024.

In view of the prolonged negotiations between the European co-legislators, in order to ensure continuity of Coordinator's work, the Consultant's team has agreed to prolong its activities without additional gratification to assist with any modifications to the final version of the Coordinator's 5<sup>th</sup> Work Plan during the Connecting Europe Days 2022 in Lyon (France), as well as to prepare and conduct the last Corridor Forum Meeting on 30<sup>th</sup> in September 2022 in Brussels.

In June 2022, it was decided to prolong the contract with the consultants until December 2023 to ensure continuity of work until the new TEN-T Regulation will enter into force in 2024.



# 1 Introduction and scope

# 1.1 Outline

The present report constitutes the Final Report of the 4<sup>rd</sup> Phase of the Study on the Rhine-Alpine Core Network Corridor.

In accordance with the tender specifications, it shall contain "all the elements provided for in the descriptions of tasks 1, 2 and 3, carried out in phase II and shall take due account of the contributions made in the meetings of the Corridor Forum. It shall also contain a summary of the activities carried out under tasks 4 and 5." and the efforts, results and progress of the Contractor's work in the period June 2020 - May 2022 (i.e. 4<sup>th</sup> phase). Where deemed useful, a reference is made to deliverables and other results presented in the Appendix of this document.

- Task 1 Further elaboration of the Corridor knowledge base;
- Task 2 Further refining of the project List;
- Task 3 Monitoring project implementation and reporting;
- Task 4 Provide elements for the 5<sup>th</sup> Work Plan of the European Coordinator;
- Task 5 Corridor Forum and WG meetings;
- Task 6 Project and Quality Management;
- Task 7 Reporting and Dissemination.

# 1.2 Objectives of the study

Considering the objectives of the Corridor Study as outlined in the Tender specification, the main tasks of this assignment are:

- Support the Commission/DG MOVE and the European Coordinator, as well as analyse and report the progress made on the Corridor and monitor its evolution, including:
  - Analysing the Corridor development with respect to compliance with technical requirements and changes in the Corridor's KPIs based on the completed projects;
  - Consideration of proposed changes in the CEF 2 Regulation in relation to Corridor alignment;
  - Ensuring that the Working Groups and Corridor Forums work in a smooth and continuous way;
- Proposing a refinement of the Corridor Work Plan. This objective includes:
  - an enhancement and deepening of its knowledge base, including the assessment of its implementation by updating information on markets, technical compliance, bottlenecks, innovation projects and progress made on pilot initiatives;
  - an identification of additional projects contributing to further technical compliance and shift to environmentally friendly transport modes and removal of bottlenecks.



## 1.3 Consortium Information

The study on the Rhine-Alpine Core Network Corridor is conducted by a group of consultants, led by Hacon. The experts involved are listed below:

Table 1: Rhine – Alpine Corridor consortium and involved experts

| Partner   | Involved experts  |
|---|---|
| Hacon Ingenieurgesellschaft<br>mbH, Hannover<br>Lead Partner; | Lars Deiterding (Project Manager), Eckhard Riebe<br>(Deputy Project Manager), Dr Johannes<br>Hildebrandt, Niklas Galonske, Janina Stroh |
| KombiConsult GmbH,<br>Frankfurt/Main (DE)                     | Kai Petri (Company team leader), Uwe Sondermann   |
| Panteia BV, Zoetermeer (NL)                                   | Menno Menist (Company team leader), Maria<br>Rodrigues, Ivo Hindriks  |
| PwC EU Services EESV,<br>Brussels (BE)                        | Francesco Gargani (Company team leader), Diego<br>Artuso, Federico Perciaccante   |
| Rapp Trans AG, Zurich (CH)                                    | Jan Lordieck (Company team leader), Martin<br>Ruesch, Gianni Moreni   |
| Stratec S.A., Brussels (BE)                                   | Georges Fuchs (Company team leader), Matthieu<br>Bogaert, Antoine Martin  |

This Study is elaborated for and in close cooperation with:

 Mr Paweł Wojciechowski, the European Coordinator for the Rhine-Alpine Corridor;

and the European Commission, DG MOVE, Unit B.1, Brussels, Belgium, represented by

• Ms Beata Tuszyńska, Advisor of the Coordinator.

# 1.4 Harmonized and coherent elaboration of CNC study

In order to achieve the requested coherent approach of the analyses and to obtain coherent results, the various consultants' consortia, based on the instruction of DG MOVE, have established two cross-Corridor Working Groups, which started their work in July 2018:

- Task 2/3 Working Group addressing issues related to the project list and the project implementation reporting (KombiConsult, Hacon and all study team leaders). This working group was continued until the end of the study contract.
- The Multimodal Transport Market Study Working Group has been omitted in consultation with DG MOVE after the first part of this study phase (05/2020).

Reference is made to the first deliverable, the Inception Report Phase 3 and the Intermediate Report.

⇒ Annex 01: 2020\_RALP\_Inception Report (July 2020)

⇒ Annex 02: 2021\_RALP\_Intermediate Report (May 2021)



# 1.5 Deliverables

The following table gives an overview on the deliverables of the 4<sup>th</sup> phase of the study on the Rhine-Alpine Corridor completed between **06/2020** and **05/2022**:

Table 2: Deliverables (June 2020 – May 2022)

| Deliverable                                    | Date          | Annex No. |
|--|---------------|-----------|
| 2020_RALP_Inception Report                     | July 2020     | Annex 01  |
| 2021_RALP_Intermediate Report                  | May 2021      | Annex 02  |
| 2021_RALP_Corridor Study Update                | February 2021 | Annex 03  |
| 2021_RALP_15_Forum Presentation                | March 2021    | Annex 04  |
| 2022_RALP_Project list-short introduction      | May 2022      | Annex 05  |
| 2021_RALP_Project List with User-friendly tool | May 2021      | Annex 06  |
| 2021_RALP_Fiches                               | May 2021      | Annex 07  |
| 2020_RALP_PIR 2020-II                          | October 2020  | Annex 08  |
| 2021_RALP_PIR 2021-I                           | May 2021      | Annex 09  |
| 2021_RALP_PIR 2021-II                          | October 2021  | Annex 10  |
| 2022_RALP_PIR 2022-I                           | April 2022    | Annex 11  |
| 2021_RALP_Work Plan 5 first draft              | December 2021 | Annex 12  |
| 2021_RALP_Forum 15 Minutes                     | March 2021    | Annex 13  |
| 2021_RALP_Forum 16 Minutes                     | November 2021 | Annex 14  |
| 2020_RALP_WG_COVID-19 Minutes                  | November 2020 | Annex 15  |
| 2021_RALP_WG_Rail Capacity Minutes             | January 2021  | Annex 16  |
| 2022_RALP_WG_Alternative Fuels Minutes         | March 2022    | Annex 17  |



# 2 Task 1 - Further elaborating the Corridor knowledge base

# 2.1 Overview of Task 1

The key objective of Task 1 was to update the Corridor knowledge base and to expand it, where necessary. Task 1 includes also the Kick-off of the Corridor study work from 2018 to 2022.

During the second period from 2020 to 2022, this task has been performed between December 2020 and February 2021. It builds on the 2014-2017 corridor knowledge base, where a large number of analyses and data have already been conducted. In order to visualize the Corridor development and evolution a consistent and comparable methodology with respect to the previous studies was applied. It provides input for the upcoming Tasks 2 and 4, which will eventually feed into the 5<sup>th</sup> Work Plan of the Coordinator.

The results were presented in the Corridor Study Update 2, provided in February 2021.

⇒ Annex 03: 2021\_RALP\_corridor Study Update Report (February 2021)

To improve the Corridor's knowledge base, four subtasks were identified:

- 1.1 Multimodal Transport Market Study (MTMS) for the RALP Corridor,
- Update of Corridor characteristics, the state of the infrastructure with respect to Article 39 of the TEN-T Regulation 1315/2013, as a result of the on-going Corridor infrastructure projects,
- 1.3 Identification and analysis of other EU studies and relevant policy actions;
- Review of the main national policy documents of the Corridor Member States and assessment of the impact on CNC development.

With the start of the second part of this study phase (06/2020), task 1.1, the *Multimodal Transport Market Study*, has been omitted. For the team involved on this task in the previous round, a large extent of time was dedicated to collecting data on current transport flows. The data collected were mostly statistical data, available with two years of delay. In other terms, repeating the exercise of Task 1.1 during the current phase would have not provided any relevant results in terms of estimating COVID-19 effects on traffic flows.

Given the above, it was agreed during the Management Meeting held on 25<sup>th</sup> June 2020 and confirmed on 20<sup>th</sup> January 2021<sup>1</sup>, to suspend the MTMS analysis.

The following sections describe the results which were elaborated and achieved after the presentation of the above-mentioned deliverables (with the exception of the MTMS – see below).

<sup>&</sup>lt;sup>1</sup> E-mail from Silke Brocks of 20<sup>th</sup> January 2021



# 2.2 Task 1.2 - Updated analysis of the characteristics of the Corridor and the state of the infrastructure

The objective of this task was to provide an update to the characteristics of the Corridor for the years 2018, 2019 and 2020. This is carried out by tracking and monitoring the achievements in terms of KPIs per TEN-T Core Corridor section and node, according to the infrastructure targets and definitions set out in Regulation No. 1315/2013, Article 39.

The country experts updated the KPI data for the Rhine-Alpine Corridor network up to December 2020. This was done on the basis of the project list and local knowledge of completed projects on the network. The task 1.2 analysis concludes with an overview of the critical issues that remain to reach compliance. These critical issues were updated based on the most recent project list and they fed into the 5<sup>th</sup> Work Plan.

# 2.3 Task 1.3 - Identification and analysis of other EU studies and relevant policy actions

The objective of this task was to identify and analyse other relevant EU studies and policy actions in terms of their impact on the functioning and further development of the Corridor.

The studies and policies covered topics, such as Motorways of the Sea, ERTMS, alternative fuels, ITS, urban nodes, cross-border issues, Good Navigation Status, climate change, military mobility, the Green Deal and resilience.

Based on a common methodology among all CNCs, the conclusions and findings of the respective studies in terms of their impact on the functioning and the further development of the Corridor were part of the Corridor Study Update Report II and were presented in the 15<sup>th</sup> Corridor Forum in March 2021.

- ⇒ Annex 03: 2021\_RALP\_corridor Study Update Report (February 2021)
- ⇒ Annex 04: 2021\_RALP\_15\_Forum Presentation (March 2021)

# 2.4 Task 1.3 - Identification and analysis of other EU studies and relevant policy actions

In addition to task 1.3, this task referred to a critical and expert review of the main national policy documents of the Corridor Member States, such as national transport strategies or national development plans, and an assessment of their impact on the Corridor. Each CNC study consortium was responsible for the analysis of several Member States and sharing the results with all other Corridors.

Studies and national policy documents were identified and for each Member State and have been collected in an Excel database and reviewed per country and per topic (macro regional, feasibility studies, transport development, governance and strategy papers). The database contains the following elements: study information, scope, year of publication, availability to public, Corridor, main findings and a check for a link to Corridor topics (KPIs, urban nodes, AF, climate change, etc.).

Conclusions and findings of the respective studies in terms of their impact on the functioning and further development of the Corridor were part of the Corridor Study Update Report II and were also part of the presentation during the  $15^{th}$  Corridor Forum in March 2021.

- ⇒ Annex 03: 2021 RALP corridor Study Update Report (February 2021)
- ⇒ Annex 04: 2021\_RALP\_15\_Forum Presentation (March 2021)



# 3 Task 2 - Further refinement 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 comparing the projects and their impact against the Corridor's bottlenecks and check how they overlap with non-compliant sections according to Regulation 1315/2013 (gap analysis).

In this study phase, the activities related to the project list were continued. In principle, the methodologies and working procedures established in the period 2018-2020 have proven to be efficient to deliver results in desired timing and quality. Therefore, these methodologies have been applied also during this study phase without substantial changes.

Figure 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. Adaption 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).

**Requirements of Tender Specifications** Input to Task 2 and general approach CEF regulation revision · Possible Corridor extensions. (T 1.2)• Innovation/sustainability (T2.1)other core network sections (T 1.2) Project financing (T 2.3, 3.1) · Main project sources (e.g. CEF, • Transfer project data to TENtec (T 2.11, 3.6) Transport Master Plans) (T 1.3, 1.4) • Project implementation monitoring (T 3) Cross-corridor country-/modewise project data gathering Stakeholders for project update / validation / completion Cross-corridor Project List Working Group: Data compilations (T2.11)→ Coordinate and harmonise methodologies, procedures, results Project list table **Project fiches** Check / update data for Check / adapt Transfer 2017 project data to new structure . (T 2.1a - methodology) (T 2.1, 2<u>.2)</u> • (Financial) review of projects (T 2.3)(T 2.1, 2.2) • Additional actions to the project list (T 2.4) • KPI/parameter fulfilment • Project feasibility/maturity Task 2 outputs to other tasks (T2.8)• State of infrastructure, critical issues, ranking of projects (T 1.2) Sustainable and future- Data transfer to TENtec. (T 2.11, 3.6) Monitoring project implementation (T3)• Elements of the work plan (T4)

Figure 1: Task 2 – main process steps and interrelations

Source: Hacon

Again, discussion and agreement on common approach as well as coordination of work was carried out by a cross-corridor working group. This working group consisted of the project list lead partners from all consortia and tackled all project list related issues from Task 2 and Task 3. The working group was led by Hacon (in relation to Task 2) and KombiConsult (in relation to Tasks 3.1-3.3). During the past period, several working group meetings took place (online), particularly in order to prepare the management meetings with the Commission and the "big" project list update.



This "big" project list update started with the preparation phase in autumn 2020 and ended with the formal approval of the project list by DG MOVE on 3 May 2021. During this period, the following main steps were executed:

- Preparation of the overall project list by the Consultants (all consortia; coordination by Hacon, KombiConsult), based on version project list 09/2020 (PIR 2/2020)
  - a. General check of project data and correction, if necessary
  - b. Adding relevant projects from CEF calls 2018/2019 as well as from national Transport Master Plans and National Recovery & Resilience Facility Fund (RRF); consideration of Corridor extensions following from the "Connecting Europe Facility II" proposal<sup>2</sup> of 13 March 2019 and of projects located on these extensions
  - c. Check overlapping of existing and new projects; eliminating double entries and merging of information, if applicable
- 2. Splitting-up overall project list between ~ 40 MS/stakeholder related sub-lists
  - a. Assign responsible consultant to each sub-list
  - b. Send out sub-lists to MS/stakeholders by responsible consultant
- 3. Check/update project sub-lists by respective MS/stakeholder; consolidation of feedback by Consultants in charge
- 4. Compilation of updated sub-lists to new overall project list; consistency and plausibility checks (Hacon)
- 5. Check of overall project list by Member States and Commission; approval by Member States
- 6. Final check and approval of updated project list by DG MOVE
- 7. Application of "User-friendly Tool" to the overall project list (Panteia)
- 8. Check, gathering and creation of maps for project fiches (all consortia, coordination by Hacon)
- 9. Creation of project fiches and provision in a web space  $31^{\rm rst}$  May 2021 (Hacon)
- 10. Analysis of project list and preparation of charts for Corridor Workshop (instead of Corridor Forum Meeting) 31<sup>rst</sup> May 2021

For more details on the Task 2/3 conclusions and work steps, please take note of the guidance document ("RALP\_Project list-short introduction"), in Annex 5.

- ⇒ Annex 05: RALP\_Project list-short introduction.pdf (May 2022)
- ⇒ Annex 06: RALP\_Project List with User-friendly tool (May 2021)
- ⇒ Annex 07: RALP\_Project fiches (May 2021)

Council of the European Union, Proposal of the European Parliament and of the Council establishing the Connecting Europe Facility and repealing Regulations (EU) 1316/2013 and (EU) 283/2014, Brussels 13.03.2019 (2018/0228/COD).



# 4 Task 3 - Monitoring and analysing the state of project implementation and reporting

# 4.1 Overview on efforts for project implementation monitoring

The project implementation monitoring builds on the requirement that biannual updating the entire project list (see Chapter 3) as well as the Work Plan of the European Coordinators (see Chapter 5) should be accompanied by a more frequent status analysis of the projects. This shall allow the Commission and the Coordinator to counteract in case of inconsistencies and delays. This project monitoring relates to sub-tasks 3.1-3.3 (see, Figure 2 red frame).

3.2 Data 3.1 Data gathering & compilation Reports 2017 Project List + 2018-1 = Sep **→** 2019-1 = May → 2019-2 = Oct → **→** Maturity and 2020-1 = Apr → 2020-2 = Oct **→** 2021-1 = May **→** 2021-2 = Oct **→** → 2022-1 = Apr 3.6 Update the KPI parameters in the TENtec OMC June 2019 3.6 Update the KPI parameters in the TENtec OMC June 2021

Figure 2: Task 3 - Detailed work programme and interrelations

Source: Consultant's presentation at Kick-off meeting, updated for October 2021

For this purpose, "narrow updates" of the project list are performed every six months between the regular complete updates (2019 and 2021) in order to trace the implementation progress of existing projects. "Narrow update" means that Member States and other stakeholders are requested to update selected project parameters, which are particularly relevant for the semi-annual monitoring:

- Project maturity and implementation;
- Project costs and financing/funding.

Based on this approach, the PIRs 2/2020, 1/2021, 2/2021 and 1/2022 have been provided to DG MOVE by respective deadlines:

- PIR 2/2020, submitted in October 2020; basis: narrow project list update 10/2020;
- PIR 1/2021, submitted in May 2021; basis: complete project list update 05/2021);
- PIR 2/2021, submitted in October 2021; basis: narrow project list update 10/2021;



This "narrowly updated" version of the project list has also been used as basis for 5<sup>th</sup> Work Plan (see Chapter 5);

PIR 1/2022, submitted in April 2022; basis: narrow project list update 04/2022.

see Annex 08: Project Implementation Report 02/2020 (October 2020)

see Annex 09: Project Implementation Report 01/2021 (May 2021)

see Annex 10: Project Implementation Report 02/2021 (October 2021)

see Annex 11 Project Implementation Report 02/2022 (April 2022)

# 4.1.1 Main results of the Project implementation monitoring

The following paragraphs comprise the most important results from the Project Implementation Reports. The detailed outcomes of the analyses are available in the PIR documents attached (see listing at the end of this chapter).

# <u>Project maturity - Completion time clusters:</u>

By the reporting date, 443 RALP relevant projects are included in the Project List. This means that there are two projects less than in the last report. Of the 443 RALP relevant projects, 129 (29%) projects have already been completed by the end of December 2021. This number comprises 27 projects that have been completed by 2016, 73 projects that have been finalised between 2017 and 2020, and 29 projects that have been completed in 2021. Further 128 projects (157 minus 29 projects already completed in 2021) are still to be completed by 2025 and 134 by 2030, i.e. the target date of the TEN-T Regulation 1315/2013. However, 18 projects are said to be completed only after that target year and for further 34 projects, the completion end date is "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 lack of data.

Nevertheless, the majority of the projects (i.e. 391) 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 3: Evolution of Maturity criteria "expected completion time" since the first Project Implementation Report

| Report N°          | 1/2018  | 1/2019  | 2/2019  | 1/2020  | 2/2020  | 1/2021  | 2/2021  | 1/2022  |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Reporting Date     | 09/2018 | 05/2019 | 10/2019 | 04/2020 | 10/2020 | 05/2021 | 10/2021 | 04/2022 |
| Project Status     | 11/2017 | 12/2018 | 06/2019 | 12/2019 | 06/2020 | 12/2020 | 06/2021 | 12/2021 |
| 2014-2016          | 30      | 28      | 29      | 29      | 28      | 27      | 27      | 27      |
| 2017-2020          | 108     | 130     | 125     | 112     | 109     | 81      | 81      | 73      |
| 2021-2025          | 46      | 97      | 98      | 113     | 111     | 154     | 156     | 157     |
| 2026-2030          | 57      | 102     | 110     | 112     | 113     | 134     | 132     | 134     |
| after 2030         | 1       | 11      | 11      | 10      | 10      | 11      | 11      | 18      |
| unknown            | 76      | 51      | 41      | 45      | 42      | 39      | 38      | 34      |
| Total              | 318     | 419     | 414     | 421     | 413     | 446     | 445     | 443     |
| Thereof completed* | 30      | 62      | 66      | 80      | 86      | 108     | 116     | 129     |

*n1:* additional/obsolete projects according to Project List updates

nx: completed projects according to respective project status

\*: completed projects until "Project Status", presently 12/2021

Source: KombiConsult analysis based on status 04/2022 Project List of RALP



Actually, only the update of the Project List every two years shall lead to a modification of the number of projects and their allocation to the completion time clusters. Nevertheless, it showed that even when "only" updating the maturity criteria, this led to a modification of the number of projects and their allocation. Additionally, projects that were marked "completed" in previous lists have been re-assessed by the stakeholders and marked as 'ongoing' so that also the number of projects completed in the "past" periods 2014-2016 and 2017-2020 has been changed.

For a better understanding and graphical visualisation, two outputs are needed: the absolute figures showing the quantity of projects and the standardized figure (showing the relative share cumulating to 100%). Figure 4 and Figure 5 provide a template for such graphical presentation, filled with the current data available from the respective Project Lists. The graphic presents the number of projects per completion time cluster and the number of completed projects.

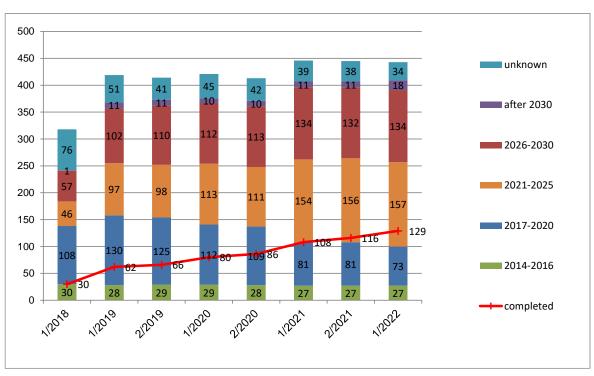


Figure 4: Evolution of Maturity criteria "expected completion time" since the first Project Implementation Report (N° of projects)

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

100% 10% 11% 90% 2% 3% unknown 2% 80% 0% after 2030 309 70% 60% 2026-2030 50% 23% 2021-2025 35% 40% 30% 29% 2017-2020 09 .89 189 169 2014-2016 10% 0% completed 17020 1/2019 212019 12022 212020 1/2021 212022

Figure 5: Evolution of Maturity criteria "expected completion time" since the first Project Implementation Report (Share of projects)

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

All the three ways of presentation allow for monitoring and tracing the maturity criterion bi-annually. Starting with the first Project Implementation Report 1/2018 (project status 11/2017), the main results of the evaluation can be summed up in the following way:

- Since the first Project Implementation Report, further 125 RALP relevant projects have been added to the Project List. Taking into account that some projects were deactivated meanwhile, this number actually might have been higher. The number of projects relevant for the RALP Corridor thus increased from 318 projects in the first Project Implementation Report up to 443 projects in the current Project Implementation Report;
- Since the first Project Implementation Report, further 99 projects have been completed (project status 12/2021). The numbers of completed projects thus more than quadrupled from 30 (9% share) to 129 projects (29% share);
- The number of projects with unknown completion date could be decreased by 42 projects from 76 to 34, taking also into account that at least 125 projects were added to the Project List meanwhile;
- The number of projects foreseen for completion beyond 2030 increased from one to 18 projects;
- Projects with late finalisation date (i.e. 2026-2030, after 2030) comprise particularly 66 rail projects (Rail + Rail ERTMS), followed by 47 road projects and 16 projects concerning IWW. All other categories have 23 projects in these time clusters altogether;
- Most projects where the finalisation is unknown are also Rail + Rail ERTMS projects (9), followed by Road (8). The other categories are equal or below five projects respectively;
- Of the 129 projects that have been completed so far, most projects refer also to project category Rail (Rail + Rail ERTMS) with 37 projects, followed by Road



(31), IWW (18), and Multimodal (16). The other projects are equal or below seven projects each.

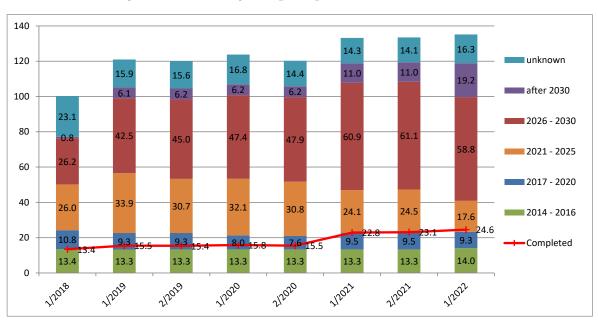
This interpretation describes the present situation and the evolution since the first Project Implementation Report.

# Project finance - Official costs by completion:

Figure 6 and Figure 7 visualise the number of official project costs (i.e. cost figures verified by the project promoters) per completion time cluster, as absolute figures and as relative shares, cumulating to 100%.

Since the first Project Implementation Report 1/2018, the overall official projects costs have increased from  $\in$  100.3 bn to  $\in$  135.2 bn.

Figure 6: Diagram of finance criterion "project costs (official)" by completion time in the Implementation Reports [€ bn]



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



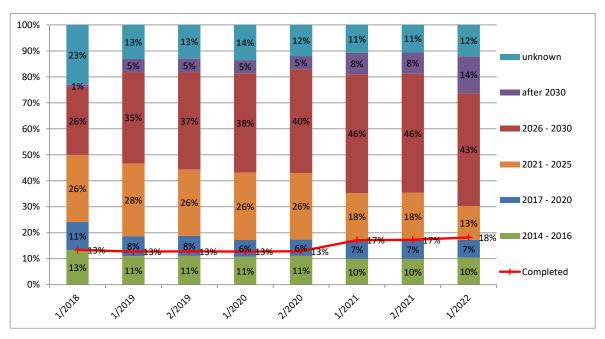


Figure 7: Diagram of finance criterion "project costs (official)" in the Implementation Reports [share of completion time clusters]

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

Summarising, the PIRs show the following main developments:

- Since the first Project Implementation Report, the value of completed projects increased from about €13.5bn to €24.6bn, increasing its share from 13% to 18%;
- The project costs in the several timeframes from 2017 to 2025 decreased, while the project costs in the timeframes from 2026 to "after 2030" increased;
- The project costs allocated to projects of which the completion time is unknown decreased from €23.1bn to €16.3bn; it is still a high value for projects, of which the completion date is unknown. However, in comparison with the 2017 Project List and taking into account that there are at least 125 RALP relevant projects more in the April 2022 Project List, it means that either the planning of many projects is well in progress, or more projects are in the realisation phase, or, finally, the quality of the Project List has improved;
- Projects with late (2026-2030, after 2030) finalisation date, particularly comprise 66 projects in category Rail + Rail ERTMS, which also represent the biggest share with €47.3bn costs, followed by Road (€22.4bn costs) and Maritime (€3.7bn costs);
- Most costs allocated to projects where the finalisation is unknown are by far Rail + Rail ERMTS (€13.7bn costs), followed by Road with €2.4bn. The other categories cumulate to €0.1bn costs altogether in this category;

Out of 129 projects that have been completed so far, most project costs refer also to project category Rail + Rail ERTMS with  $\in$ 19.6bn, followed by Road ( $\in$ 3.2bn costs) and IWW ( $\in$ 0.7bn costs). The other categories are all below  $\in$ 0.4bn and have costs of  $\sim$  $\in$ 1.0bn cumulatively.

# <u>Project finance – Financing sources:</u>

Figure 8 and Figure 9 allocate the official project costs to the financing and funding sources in absolute and relative figures, regardless of this financing has been classified as "approved", "potential" or "unknown".



Most of the project costs (about 55%) are envisaged to be covered by the State. The rest of the envisaged financial contribution of only about 12% is shared between all other sources, such as EU or regional financing, and thus they play a rather smaller role. The share of costs where their financing is "open" decreased significantly from 63% (Project Implementation Report 2018-1) to 33% now. Figure 8 and Figure 9 show these shares in absolute and relative terms for the April 2022 Project List.

140,000 120,000 44,207 50,853 52,194 100,000 51,203 50.995 49,441 49,577 Open Other 80,000 7,60 7,964 Private 6<mark>3,10</mark>9 7,426 7,385 7,484 IFI **,71**3 **1,71**3 60,000 EU Regional/Local 40,000 State 7**4,53**5 65,890 67,201 60,336 61,023 60,225 Completed 59,768 20,000 24,578 22,845 2<mark>3,11</mark>4 15,803 15,429 1<mark>5,49</mark>3 1<mark>5,45</mark>5 13,450 212022 212019 212020 712028 1/2019 1/2020 1/2021 1/2022

Figure 8: Evolution of project financing sources and value of completed projects (official costs only) [€ bn]

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

100% 90% 33% 38% 39% 80% 41% 41% 41% 42% 70% 63% Open 6% Other 60% 6% 6% 6% 6% 6% ■ Private 1% 1% 2% 50% 1% IFI **E**U 40% 0% 1% Regional/Local 30% State 55% 49% 50% 49% 50% 49% 50% -completed 20% 35% 18% 17% 17% 10% 13% 13% 13% 13% 13% 0% 12022 1/2019 212020 1/2018 2/2019 1/2020 1/2021 212021

Figure 9: Shares of project financing sources [shares] and value of completed projects (official costs only)

Source: KombiConsult analysis based on 04/2022 Project List of RALP)

# <u>Project finance – levels of financing commitment:</u>

The level of financing commitment is an important indicator for evaluation of the project implementation. This is expressed by the share of "approved" against "potential" and "unknown" financing. This analysis includes official costs of ongoing and planned projects only; they are basis for the calculation of "relevant costs". In contrast, finalised projects are excluded, as these projects must have already been financed completely.

Figure 10 shows the development of the highest financing level ("approved") since the first PIR in 2018.

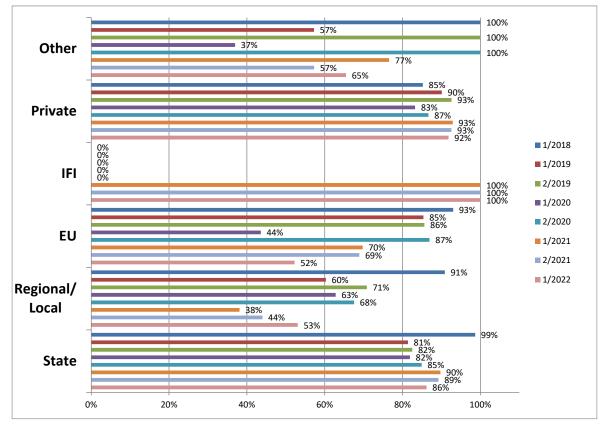


Figure 10: Evolution of share of "approved" financing by source on the CNC RALP

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

From the  $\[ \le \]$ 135.2bn of total project costs included in the April 2022 Project List, the amount of around  $\[ \le \]$ 24.6bn (or 18%) comes from the projects completed by the end of December 2021 and thus  $\[ \sim \]$ 2110.6bn (82%) correspond to the costs of the ongoing or planned projects. Out of these costs,  $\[ \sim \]$ 84.4bn (76%) have an indicated financing source and as stated above, for  $\[ \in \]$ 71.2bn (64%) of these costs the financing is already approved. "Private" (92%) and "State" (86%) financing sources still show very high approval rates. With 53% in the current report for "Regional/Local" and 52% for "EU" financing sources, the financing is approved for more than half of the envisaged financing. As for the first five Project Implementation Reports, no IFI financed costs were indicated at all. Since Report 1/2021,  $\[ \]$ 1.0bn (for one particular project) has been still declared as 100% approved and financed by IFI.

### Project implementation difficulties:

Based on the methodology provided in PIR 1/2018, Corridor Forum Members were asked in the course of the project list update to state any difficulty in the implementation of a specific project by answering the following questions:

"Does this project show any difficulties, which jeopardize the completion of the Corridor by 2030?

"If yes: 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. Please describe the nature of the difficulty, why it jeopardizes the completion of the Corridor as well as why and how the European Coordinator should act."



As an outcome of the analysis of the current "comments" column in the April 2022 Project List, it was reported that no project shows difficulties, which may jeopardize the completion of the Corridor by 2030.



# 5 Task 4 – Providing the elements for the updates of the Work Plan

The key objective of Task 4 was to further update the Coordinator's Work Plan into its 5<sup>th</sup> consecutive edition scheduled for delivery in the end of 2021.

According to the requirements of the original ToR, Task 4 should have included the following sub-tasks:

- Plan for removal of technical and physical bottlenecks (incl. deployment of interoperable transport systems)
- Identification of administrative and operational barriers
- Analysis of state and future potential of innovation deployment
- Impact of climate change on existing infrastructure and measures to enhance resilience
- Impact on emissions, noise and mitigation
- Economic impact evaluation of accomplished projects

Compared to the 4<sup>th</sup> Work Plan prepared in 2019, a new structure for the 5<sup>th</sup> Work Plan was agreed upon, which included the elaboration of Tasks 4.1 and 4.2, while Tasks 4.3 to 4.6 in the above were partly tackled within other analyses/contexts. For the purposes of the 5<sup>th</sup> Work Plan, Tasks 4.1 and 4.2 were updated according to the work carried out during the third phase of the Corridor study-second period 2020-2022, while the new content agreed did not include Tasks 4.3, 4.4, 4.5 and 4.6. The part on the Multimodal Transport Market Study was also omitted.

Notably, the 5<sup>th</sup> Work Plan is the last one adopted under the current TEN-T Regulation and under the current mandate of the European Coordinators. It is also the one in the aftermath of a global pandemic. Therefore, compared to its previous editions, the emphasis was on the COVID-19 impact and the latest and future political/regulatory developments (i.e. TEN-T revision process, Green Deal, revision of other directives such as AFI Directive, adoption of CEF 2, etc.) and their related impact on the Corridor and its implementation and financing.

Other new elements introduced included the historical evolution of KPIs from 2014 to 2020 conducted also on an individual country level in order to better identify where problems existed.

### 5.1 Status of the Work Plan

The first draft common  $5^{th}$  Work Plan's structure was originally sent to the nine CNC consortia by Mr P. Vankerckhoven, on  $2^{nd}$  April 2021 and discussed at the 6th Management Meeting ( $19^{th}$  April 2021).

Following a CNC Consortia internal discussion led by Panteia, a proposal of the main steps and deadlines to be met was presented and discussed in detail with the Corridors' Advisors during the 7<sup>th</sup> Management Meeting on the 11<sup>th</sup> October 2021, where additional clarifications were given by DG MOVE. The final structure was approved at the meeting.

In addition, and in line what was agreed, the following external inputs were sent to the Consultant and included in the 5<sup>th</sup> Work Plan:

- ERTMS Corridor specific analysis: ERTMS deployment and EDP compliance delivered by ERTMS DMT Consultant;
- Motorways of the Seas: MoS Deployment Plan common text (generic for all 9 CNCs) delivered by MoS Consultant Circle;



- Deployment of alternative fuels infrastructure: common text delivered by DG MOVE;
- Urban Nodes: common text delivered by DG MOVE;
- Green Deal and the Recovery and Resilience Fund: common text delivered by DG MOVE;
- New Connecting Europe Facility (CEF2): common text delivered by DG MOVE;
- Military Mobility in the network development plans: common text delivered by DG MOVE;
- TEN-T Revision: common text delivered by DG MOVE.

Task 4 was elaborated in the last quarter of 2021, with a first draft of the Work Plan submitted to the Corridor Advisor on the 10<sup>th</sup> of December 2021. The activity required contributions from all partners of the consortium. Following a revision based on comments received from the Corridor Coordinator and Advisor, a finalised draft was submitted on the 31<sup>rst</sup> of January 2022. The latter was approved by DG MOVE and sent to the representatives of the Member States on the 2<sup>nd</sup> of February 2022.

Following the first round of consultation and receipt of MS comments and recommendations, an updated version was sent out at the end of March 2022 to the respective ministries responsible for transport in the Members States of the Corridor for the second round of consultations.

The main elements of the draft of the 5<sup>th</sup> Work Plan were presented by the advisor of the European Coordinator on the Rhine-Alpine Corridor meeting in the framework of the Connecting Europe Days in Lyon on 30 June 2022. Following the discussion with participants of the above-mentioned meeting which gathered over 100 participants, the draft of the 5<sup>th</sup> Rhine-Alpine Work Plan was submitted to Member States in July 2022 for a final round of consultations. The draft had been updated with information concerning the impact of war of aggression by Russia on Ukraine and its consequences for the development and functioning of the Corridor. Only minor factual remarks were received from one Member State following the last round of consultations, which have been accepted. The final version of the 5<sup>th</sup> Work Plan of the Rhine-Alpine Corridor was sent out to the involved Member States Ministers responsible for transport with request for their approval as required by the TEN-T Regulation. The process of consultations has been conducted by the advisor and followed closely by the European Coordinator. The final version of the 5<sup>th</sup> edition of the RALP Work Plan is expected to be presented at the 17<sup>th</sup> RALP Corridor Forum scheduled to take place in Brussels on 30 September 2022.

# 5.2 The 5th Work Plan

The Work Plan presents the technical and financial basis for the development and realisation of the Corridor, reflecting the outcomes of the analyses performed by the Consultant during the period 2020-2022 under Tasks 1-3, and more specifically, drawing upon:

- The Project list 2021 (project implementation status as of June 2021)
- The KPIs (status June 2021)
- The Corridor Fora, Working Groups Meetings and Coordinator's missions

A short summary of its main contents per individual chapters is provided below.

• Chapter 1 sets the framework for this Work Plan edition in terms of key past events and future political developments, while also outlining the Corridor's main achievements in the time elapsed since the previous version.



- Chapter 2 presents the Corridor characteristics including its new alignment and current compliance for each individual transport mode, as well as the KPIs' evolution since the beginning of the Corridor studies per each RALP country.
- Chapter 3 presents the RALP Corridor identified projects to be realised by 2030, as well as persisting bottlenecks per mode and missing links expected by 2030.
- Chapter 4 includes an overview of deployment plans of MoS, alternative fuels and development of urban nodes.
- Chapter 5 deals with the funding needs of the Corridor, analysing the economic and financial aspects of the projects included in the RALP project list. It also presents summary information on the Green Deal and Recovery and Resilience Fund, the new CEF2, the proposed TEN-T revision and the inclusion of Military Mobility in the network development plans.

In the conclusion (Chapter 6), the Consultant fed into the Coordinator's recommendations which pointed out to the progress made, difficulties encountered, priorities and challenges for the future and the contribution to the Green Deal objectives.

⇒ Annex 12: RALP\_Work Plan 5 draft (December 2021)



# 6 Task 5 - Preparing, supporting and following up of the meetings of the Corridor Forum and its Working Groups

# **6.1 Meetings of the Corridor Forum**

The European Coordinator is assisted in the performance of his tasks concerning the Work Plan by the Corridor Forum. Due to restrictions regarding the COVID-19 pandemic in the fourth phase, these meetings were organised as online video conferences.

- The 15<sup>th</sup> Corridor Forum planned for June 2020 was cancelled due to the COVID-19 crisis. Instead, a virtual Corridor Workshop was organised and took place on 22 March 2021. The following topics were discussed / presented in the meeting:
  - State of Play on the ongoing TEN-T CNC study
  - State of Play on working groups
  - Update on TEN-T revision and the European Rail Year
  - o Financial instruments for transport in the new budgetary perspectives
  - o Reporting on the Connecting Europe Facility Grant Agreements
- ⇒ Annex 13: 2021\_RALP\_Forum 15 Minutes (March 2021)
  - The 16th Corridor Forum took place on 25 November 2021 via online video conference. The following topics were discussed / presented in the meeting:
    - State of Play of the TEN-T CNC study
    - Preview to the 5th Work Plan
    - Review of the Coordinator's activities
    - TEN-T Revision process
    - CEF calls state of play
- ⇒ Annex 14: 2021\_RALP\_Forum 16 Minutes (November 2021)
  - The 17<sup>th</sup> Corridor Forum will take place on 30 September 2022 in Brussels. The following indicative topics might be discussed/presented in the meeting:
    - Future of the TEN-T CNC study
    - Presentation of the 5th Work Plan
    - Review of the Coordinator's activities
    - TEN-T revision process
    - CEF1 and CEF2 calls state of play

For all meetings, the agenda and invitation letter have been prepared in coordination the Corridor advisor. A presentation has been prepared and sent to the Corridor advisor. After approval, all relevant information has been sent out to the Forum



members be email. The list of Corridor Forum Members has been continually updated. Minutes of the meetings have been drafted and coordinated with DG MOVE. Final minutes and presentations have been sent to the Forum members.

# **6.2 Working Group Meetings of the Corridor Forum**

This section describes the working group meetings which were held in the fourth phase of the Corridor studies. For the preparation, implementation and follow-up of these meetings, the following steps were carried out in close cooperation with the Rhine-Alpine Corridor advisor: (1) drafting of an agenda, (2) selection of potential presenters, (3) information and invitation of participants and (4) follow-up activities such as minutes of meetings and provision of presentations. All working group meetings were organised as online video conferences.

- November 2020: The meeting "Covid-19 Need for strategic changes in the development of the Rhine Alpine Corridor". The following topics were discussed / presented in the meeting:
  - o Influence of COVID-19 on transport volumes in the Corridor
  - o Intermodal transport during COVID-19
  - o COVID-19 and public transport
  - o COVID-19 impact on supply chains
- ⇒ Annex 15: 2020\_RALP\_WG\_COVID-19 Minutes (November 2020)
  - January 2021: "Improving Capacity for Rail Transport on the Rhine-Alpine Corridor". The following topics were discussed / presented in the meeting:
    - $\circ$  Development of rail infrastructure capacity bottlenecks on RFC Rhine-Alpine
    - Capacity constraints in terminals
    - Improving capacity utilisation by innovative planning and management tools
- ⇒ Annex 16: 2021\_RALP\_WG\_Rail Capacity Minutes (January 2021)
  - June 2021: "Project List for the Rhine-Alpine Corridor". The following topics were discussed / presented in the meeting:
    - o Current status of the Project List for Rhine-Alpine Core Network Corridor
    - Key cross-border rail projects on the Rhine-Alpine Corridor (Karlsruhe-Basel in Germany and Chiasso-Milano in Italy)
  - March 2022: "Alternative fuels on the Rhine-Alpine Corridor". The following topics were discussed / presented in the meeting:
    - o Proposal for Regulation on Alternative Fuels Infrastructure
    - CCNR roadmap for reducing inland navigation emissions and the related challenges
    - o HyTrucks Hydrogen-powered trucks on the road



- Developing Sustainable Aviation Fuel (SAF)
- RH2INE Kickstart IWT 12 Hydrogen-powered ships on the water until 2025
- Roadmap towards a carbon neutral Rhine-Alpine Corridor

⇒ Annex 17: 2022\_RALP\_WG\_Alternative Fuels Minutes (March 2022)

Additionally, a Corridor Meeting for the Rhine-Alpine Corridor will be held during the Connecting Europe Days in Lyon on 28<sup>th</sup> June 2022. The following topics shall be presented/discussed in the meeting:

- The draft of the 5<sup>th</sup> Work Plan of the European Coordinator
- The impact of the war in Ukraine on the Rhine-Alpine Corridor.



# 7 Project and quality management

# 7.1 Overview on PM/QM efforts

Project management and coordination activities are a continuous activity in order to fulfil the subtasks of each work package. Reference is made to the QM criteria set out in the technical offer. Main efforts in this field include:

- Regular communication of team leader and senior experts with the Policy Advisor at DG MOVE by phone and email and through management meetings;
- Regular gathering of Corridor knowledge and information exchanges within the CNC study team by means of phone conferences and emails;
- Regular checks of quality, timeliness and language quality of analyses and deliverables;
- Active participation in cross-corridor working groups responsible for a follow-up and discussion of intermediate results achieved;
- Integration of senior experts for internal supervision of quality and efficiency.

Besides the present Final Report, further main results of this activity are:

- The Inception Report II (provided in July 2020, see Annex 1)
- The Intermediate Report II (provided in May 2021, see Annex 2)
- The regular Monthly Activity Report issued by the CNC study team leader for the interest of and discussion with the Policy Advisor (see Annex 22).
- Participation and follow-up of the Management Meetings and connected bilateral meetings between study team leader and policy advisor.

# 7.2 Management Meetings

Management meetings of the 2018-2022 Core Network Corridor Studies (CNC) are scheduled by DG MOVE and are jointly prepared by the contractors responsible for the 9 CNCs (and MoS & ERTMS) and DG MOVE.

- 25 June 2020: "5<sup>th</sup> Management Meeting" on CNC & MoS & ERTMS studies was held in the form of an online conference. The following topics were discussed/presented in the meeting:
  - Update on CEF I reflow call, next MFF and recovery funds
  - State of play and activities of the horizontal priorities ERTMS and MoS and their link with the CNC
  - CNC studies: Analysis of work done so far and outlook on the work to be done
- 19 April 2021: "6<sup>th</sup> Management Meeting" on CNC Studies was held in the form of an online conference. The following topics were discussed/presented in the meeting:
  - Update on the state of play of the TEN-T revision and CEF II adoption
  - Update and discussion on deliverables of CNC studies
  - o Rail freight commercial delivery times: outcome of consolidated analysis



- o Follow-up on open issues with regard to TENtec.
- 11 October 2021: "7<sup>th</sup> Management Meeting" on CNC Studies was held in the form of an online conference. The following topics were discussed/presented in the meeting:
  - o Short update on the state of play of the TEN-T revision
  - Deliverables of CNC tasks 2 and 3
  - Work plans of the Core Network Corridors
  - Work plans of the horizontal priorities ERTMS and MoS
- 17 January 2022: "Extraordinary Management Meeting" held again as an online conference. The following topics were discussed/presented in the meeting:
  - Discussion on contract amendment to extend service period after June 2022 without additional fee. Joint statement of the consultants has been submitted to DG MOVE B1 Head of Unit on 20<sup>th</sup> January 2022.
  - Amended service contract was provided on 15<sup>th</sup> March 2022 and signed on 28<sup>th</sup> April 2022.
- 15 March 2022: "Information meeting" of the European Coordinators and DG MOVE with stakeholders from all the CNCs, as well as from MoS and ERTMS on the proposed revision of the TEN-T was held in an online format.
  - Consultant has supported the organisation by providing updated list of the RALP Corridor stakeholders for invitation.
- 16 May 2022: Final "Management Meeting" on CNC studies was held as an online conference. The following topics were discussed/presented in the meeting:
  - o Remaining deliverables to be finalised by June 2022
  - o Preparation of the 17th Corridor Fora in September 2022 in Brussels;
  - $\circ$  State of play of consultations with the Members States of the  $5^{th}$  Work Plans
  - Information on the Connecting Europe Days: 28-30 June 2022;
  - State of play of TEN-T Regulation revision



# 8 Summary and next steps

The 4<sup>th</sup> phase of the studies on the TEN-T Core Network Corridors and the support of the Coordinator have again shown a highly professional conduct regarding the analysis and reporting on behalf of the Consultants, laying at the same time solid ground for a smooth operation of the Corridor Forum and the Work of the Coordinator. All agreed tasks were successfully performed, and all outputs were delivered in a timely manner as well as in the foreseen quality.

This is especially true, taking into account the period of COVID-19 pandemic, as the Consultant together with Coordinator and DG MOVE managed to convert all Corridor Forum, Management Meetings, as well as meetings of the Corridor Working Groups into internet-based video conferences without significant loss of meeting qualities.

A backbone of quality management were the earlier set-up internal structures and all efforts to extend the coherent methodological approach among the nine CNCs, especially by providing harmonized deliverables to the Coordinators and their advisors, via shared elaboration of inputs and joint utilization of results throughout the various consortia using high levels of communication and scheduling. The set-up of expert groups on the main tasks (Task 2+3) has proven a successful approach.

The proposal of the European Commission for the revision of the guidelines for the TEN-T development of 14<sup>th</sup> December 2021 foresees, among other important modifications that support the achievement of the goals set by the European Green Deal and the Sustainable and Smart Mobility Strategy, a merger of the Rhine-Alpine Corridor with the North Sea-Mediterranean Corridor into the new European Transport Corridor North Sea-Alpine Corridor. This proposal is to be negotiated between the European Parliament and the Council, and it can be expected that the revised TEN-T Regulation may enter into force early in 2024.

In view of the prolonged negotiations between the European co-legislators, in order to ensure continuity of Coordinator's work, the Consultant's team has agreed to prolong its activities without additional gratification to assist with any modifications to the final version of the Coordinator's 5<sup>th</sup> Work Plan during the Connecting Europe Days 2022 in Lyon (France), as well as to prepare and participate in the Corridor Forum Meeting on 30 September 2022 in Brussels.

In June 2022, it was decided to prolong the contract with the consultants until December 2023 to ensure continuity of work until the new TEN-T Regulation will enter into force in 2024.