



Brussels, 16.4.2018
SWD(2018) 101 final

COMMISSION STAFF WORKING DOCUMENT
Accompanying the document

**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND
THE COUNCIL**

on the application of Regulation (EU) 913/2010, in accordance to its Article 23

{ COM(2018) 189 final }

1. GEOGRAPHICAL DEFINITION, CREATION AND MODIFICATION OF A RAIL FREIGHT CORRIDOR

1.1. Geographical definition of a Rail Freight Corridor

A RFC is defined in the Regulation and, where applicable, in its implementing acts, by a list of nodes – the principal "route" of the RFC. The RFC is further defined by the RFC governance structure through the designation of (1) railway lines connecting the nodes and (2) terminals. The RFC Management Board (MaBo) proposes the lines and terminals in the Implementation Plan, after consultation of the Railway undertaking advisory group (RAG) and of the Terminal advisory group (TAG), and the Executive Board (ExBo) approves the Implementation plan (Article 9).

The Annex of the Regulation defines nine initial RFCs (six to be established by November 2013 and three by November 2015). Regulation (EU) No 1316/2013 establishing the Connecting Europe Facility¹ (CEF Regulation) amended the routes of the initial RFCs with the aim of aligning the RFCs with the TEN-T Core Network Corridors (CNC) created by this Regulation. Different establishment dates have been introduced to implement these modifications of the initial RFCs.

List of initial RFCs²:

To be established by November 2013:
RFC 1 – Rhine - Alpine Corridor (RALP) RFC 2 – North Sea - Mediterranean Corridor (NSMED) RFC 4 – Atlantic Corridor (A) RFC 6 – Mediterranean Corridor (MED) RFC 7 – Orient/East - Med Corridor (OEM) RFC 9 – Rhine - Danube Corridor (RD) ³
To be established by November 2015:
RFC 3 – Scandinavian Mediterranean Corridor (SCANMED) RFC 5 – Baltic-Adriatic (BA) RFC 8 – North Sea-Baltic (NSB)

The designation of the lines (principal, connecting or diversionary) and terminals is essential as it defines the geographical scope where the provisions of the Regulation apply. This has been duly done for all RFCs in accordance with the corresponding establishment dates. The importance of the lines and terminals for existing and potential rail freight traffic flows, taking into account the Transport market studies, has been the main criterion, although some choices were of a more political nature. The level of ambition regarding the designation of lines, especially regarding diversionary routes, has sometimes been somewhat limited.

¹ Regulation (EU) N° 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) N°913/2010 and repealing Regulations (EC) N° 680/2007 and (EC) N° 67/2010, OJ L 348, 20.12.2013, p. 129.

² See Appendix I.

³ The principal route to be established by November 2013 comprises only lines in the Czech Republic and Slovakia. The more comprehensive Rhine-Danube RFC, as defined in the revised Annex of the Regulation, is due to be established until November 2020.

1.2. Modification of RFCs and new RFCs

The RFCs are primarily market tools and as a general principle (and reflecting a strong stakeholder requirement) they should geographically follow market needs. This concerns both the definition of the routes and the designation of the specific lines to implement a defined route. Naturally, this principle has to be balanced with strategic considerations and with taking account of infrastructure investments made/planned, in particular on the TEN-T network (see Chapter 1.3).

For the definition by the Union legislator of the initial RFC routes in the Annex of the Regulation, existing traffic flows and market needs were a central criterion, along with strategic considerations, national interests, and coherence with other EU policies, in particular the TEN-T policy and the ERTMS corridors⁴, or with sector initiatives like the RailNetEurope⁵ corridors. As mentioned earlier, the need to align the newly created CNCs and the existing RFCs, in order to ensure coherence of the two policies, further led the Union legislator to modify the RFC routes in 2013.

The Regulation gives the possibility to adapt the RFC network. Firstly, *modifications* of the lines and terminals implementing the legally defined RFC principal route can be decided through a rather light process within the RFC governance structure (via a modification of the RFC Implementation plan). Secondly, *extensions* of the principal routes of the initial RFCs or the creation of a new RFC can be proposed by the Member States concerned, after consultation of the infrastructure managers (IMs) and applicants, through Article 5 of the Regulation: the Commission checks that the criteria of Article 4 have been taken into account and adopts a decision on the compliance of the proposal with Article 5 using the comitology procedure. However, the initial routes of the initial RFCs (i.e. without extensions using Article 5) have been decided by the Union legislator and can therefore only be *modified* by ordinary legislative procedure.

In 2016 intensive discussions took place for the creation of two new RFCs, demonstrating the interest of Member States and sector stakeholders in the RFC concept. In consequence, the Commission adopted in January 2017 an Implementing Decision⁶ regarding the creation of RFC 11 Amber. Moreover, the Commission adopted in March 2018 an Implementing Decision⁷ regarding the creation of RFC 10 "Alpine - Western Balkans".⁸

⁴ The ERTMS Corridors were defined in Decision (EU) 2012/88 on the technical specification for interoperability relating to the control-command and signalling subsystems of the trans-European rail system.

⁵ RailNetEurope (RNE) is an association set up by the majority of the European Rail Infrastructure Managers and Allocation Bodies with the aim of facilitating international traffic on the European rail infrastructure; <http://www.rne.eu/>

RNE members defined in 2005 "RNE corridors". A corridor manager was in charge of harmonising paths at the borders with the aim to improve the international capacity offer. Each IM was acting as one-stop-shop for capacity for the corridor. There was no governance structure.

⁶ Commission Implementing Decision (EU) 2017/177 of 31 January 2017 on the compliance with Article 5 of Regulation (EU) No 913/2010 of the European Parliament and of the Council of the joint proposal to establish the 'Amber' rail freight corridor, OJ L 28, 2.2.2017, p. 69

⁷ Commission Implementing Decision (EU) 2018/500 of 22 March 2018 on the compliance of the proposal to establish the Alpine-Western Balkan rail freight corridor with Article 5 of Regulation (EU) No 913/2010 of the European Parliament and of the Council, OJ L 82, 26.3.2018, p. 13

⁸ See Appendix I for the alignment of these two new corridors

As regards extensions, RFC 8 North Sea - Baltic has been extended in 2015 to southern Poland and to the Czech Republic⁹. Moreover RFC 4 Atlantic and RFC 2 North Sea – Mediterranean have also been extended through implementing decisions respectively adopted in January¹⁰ and March 2018¹¹.

1.3. Alignment with the Core Network Corridors (CNCs) and overlapping of sections

The RFCs and the CNCs were broadly geographically aligned at the creation of the CNCs in 2013. However, new extensions and the proposals for two new corridors mean this broad alignment is challenged. Moreover, the geographical alignment concerns only the *principal routes* of the RFCs and not the specific lines. This is why there is not always a perfect overlapping even for the aligned sections: some RFC lines are not CNC lines.¹²

This can be explained by the differences in the scope and objectives of the two corridor concepts. The RFCs are market tools and must therefore be geographically more flexible to follow existing and emerging market needs (hence the rather easy possibility to modify the lines within the scope of the defined routes and the possibility to modify RFC routes under conditions according to Article 5). Conversely, more stability is needed for the infrastructure development policy of the CNCs (hence CNC lines are defined in primary legislation). However, it is expected that the effects of the TEN-T infrastructure development policy will contribute to a natural convergence in RFC and CNC lines as traffic will run on the lines with the most adequate parameters.

Cooperation between the two corridor concepts, involving broadly the same countries and which are highly complementary – infrastructure development and operational improvements – is key (see Chapter 7.2.).

Finally, the RFC/CNC alignment has increased the number of overlapping sections between the RFCs. Overlaps raise challenges in terms of capacity allocation due to dual governance issues. This can create a duplication of work, leading to avoidable resource needs for the stakeholders involved in the RFCs but at the same time it can foster harmonisation due to the need for consistent approaches for overlapping sections.

2. GOVERNANCE STRUCTURE OF RFCS

To stimulate coordination and cooperation between the Member States and the IMs, as well as the railway undertakings (RUs), other applicants and terminals, and to provide continuity along the RFC, the Regulation provides for the setting up of a comprehensive governance structure (Articles 8 and 13). Each RFC shall have:

⁹ Commission Implementing Decision (EU) 2015/1111 of 7 July 2015 on the compliance of the joint proposal submitted by the Member States concerned for the extension of the North Sea-Baltic rail freight corridor with Article 5 of Regulation (EU) No 913/2010 of the European Parliament and of the Council concerning a European rail network for competitive freight, OJ L 181, 9.7.2015, p. 82

¹⁰ Commission Implementing Decision (EU) 2018/300 of 11 January 2018 on the compliance of the joint proposal submitted by the Member States concerned for the extension of the Atlantic rail freight corridor with Article 5 of Regulation (EU) No 913/2010 of the European Parliament and of the Council, OJ L 56, 28.2.2018, p. 60

¹¹ Commission Implementing Decision (EU) 2018/491 of 21 March 2018 on the compliance of the joint proposal submitted by the Member States concerned for the extension of the North Sea Mediterranean rail freight corridor with Article 5 of Regulation (EU) No 913/2010 of the European Parliament and of the Council, OJ L 81, 23.3.2018, p. 23

¹² Most of RFC lines that are not CNC lines are nevertheless on the TEN-T core or comprehensive network.

- An Executive Board (ExBo) composed of national authorities and being responsible mainly for strategic and supervisory aspects.
- A Management Board (MaBo) composed of representatives of IMs¹³ and being responsible mainly for operational aspects.
- A Corridor-One Stop Shop (C-OSS) which is a joint body of the IMs for applicants to request infrastructure capacity for freight trains crossing at least one border along the freight corridor (see Chapter 4.1).
- An Advisory Group for the managers and owners of the terminals of the corridor (TAG).
- An Advisory Group for Railway Undertakings (RAG).

The Commission has no formal role in the governance structure of a RFC, but is in practice invited as observer in ExBo meetings and in some MaBo and TAG/RAG meetings. The Regulatory Bodies (RBs) also have an important role to play by ensuring regulatory supervision (see Chapter 8) and in some RFCs a RB representative is regularly invited to ExBo meetings. Other stakeholders like National Safety Authorities (NSAs) and the European Union Agency for Railways (ERA) are also invited to some RFC meetings when relevant.

Although there is no explicit obligation stemming from the Regulation, in practice thematic working groups (WGs) composed of relevant IM experts are set up to implement the provisions of the Regulation.¹⁴ Most of the work of the RFCs is carried out in these working groups. Cross-organisation working groups (e.g. involving representatives of ministries, IMs, RUs, NSAs, RBs, etc.) have also been set up on specific topics and can be key contributors to solve issues hampering cross-border rail freight.

The governance structures of the nine RFCs have been successfully set up and the intergovernmental and sectorial cooperation required by the Regulation has been embraced. The different bodies usually strongly interact, which enables an active consultation and participation of the different stakeholders. Much has been delivered in terms of improving the cooperation and operational contacts between the stakeholders at the different levels of the governance structure. In particular, the Regulation has created or systematised contacts between those directly dealing with corridor issues but also between colleagues of the relevant departments within the organisations of the involved parties (e.g. between the IMs' timetabling departments). The creation of a "RFC community" whose objective is to make rail freight more competitive is clearly a success of the Regulation. The topics discussed within these networks extend often beyond the scope of the Regulation – such as railway noise, customs issues or even passenger related issues –, which constitutes a non-intended but expressively added value of the RFCs and the implementation of the Regulation.

¹³ And allocation bodies, where relevant.

¹⁴ For instance working groups on issues such as temporary capacity restrictions, train performance management, ERTMS, legal matters, etc.

2.1. Effectiveness of the governance structure

The Regulation provides for a governance structure which leaves a lot of freedom as to how to organise the RFC work. In practice, there are clear differences in the organisation¹⁵, activities and degree of ambition of the governance bodies of the individual RFCs. Though, one should bear in mind that the RFCs are rather new and can still be considered to be in a development phase.

MaBo & legal form

IMs are free as regards the form of organisation linked to the MaBo. A legal entity has been set up in seven of the nine RFCs in operation (six European economic interest groupings and one association). Except for one RFC, a permanent team (secretariat or Project Management Office) has been appointed to assist the MaBo and each RFC has a Managing Director or equivalent. The type of organisational structure does not seem to be a major factor impacting the effectiveness of the work of a given RFC.

Decision making principles for ExBo and MaBo

Both the ExBo and the MaBo take their decisions on the basis of consensus in accordance with Article 8 (4) and (5) of the Regulation. Decision-making by the RFCs is perceived to be rather slow, in particular by corridor users, but the principle of unanimity has helped to build the necessary trust by taking the interests of all parties into account.

Resources

The resources provided to the RFCs are an important factor determining the potential of the corridor to deliver results.

To help the involved parties to comply with their obligations, to promote an ambitious implementation of the Regulation and to support the RFCs in developing a medium-term vision, the Commission has early on created possibilities to financially support the RFCs.¹⁶ Those RFCs which have applied for funding under the instruments provided by TEN-T and CEF have generally been proactive in their approach – e.g. in terms of IT developments and studies aiming at improving cross border infrastructure management. EU funding has also driven cross-RFC harmonisation and attempts to improve the capacity products offered by the RFCs, with a key role played by RailNetEurope (RNE).

Degree of commitment of the involved parties

The effectiveness of an RFC depends on the commitment of the participating organisations; these manifest themselves e.g. by the resources allocated to the RFCs or the readiness to change national processes.

Experience shows that differences in the degree of commitment are linked to general factors, such as the importance given to rail freight in the different Member States, the degree of dominance of national interests, the market development potential or the specific regional situations (e.g. economic situation and industrial patterns).

¹⁵ Differences in the functioning of the RFCs are notable, concerning inter alia:

- the number of ExBo meetings (generally between 2 and 4 per year), the number of MaBo meetings (generally between 4 and 6 per year);
- the number of RAG/TAG meetings and importance of their input; in some RFCs the outcome of the Advisory Groups' meetings is regularly presented and discussed in ExBo meetings, while in others this is not a common practice;
- the number and nature of the activities of the working groups;
- the participation of MaBo representatives in the ExBo meetings - common practice in some RFCs, on an ad-hoc basis in others;
- the participation of RBs in ExBo and MaBo meetings.

¹⁶ DG MOVE is now implementing a CEF Programme Support Action with a budget of € 12m to support RFC activities until 2020.

High-level commitment within the organisations is central for results to be delivered. There are promising approaches, such as the regular involvement of the IM CEOs in some RFCs, the establishment of a task force of railway undertakings' CEOs, regular involvement of high-level representatives of the authorities of the Member States and the increased awareness at ministerial level¹⁷. At the same time, there are also cases where ExBo and MaBo representatives do not seem to have the competences/authorisation necessary to engage their organizations during RFC meetings.

The Commission services are actively promoting high-level commitment to RFCs within the participating organisations, e.g. in PRIME¹⁸ and RU Dialogue¹⁹ meetings, as well as in dialogues with Member States in the framework of the Rail Directors' meetings²⁰.

Cooperation of RFC and CNC structures

RFCs and CNCs have developed relations mainly based on mutual information sharing. Initially there were criticisms about double work, but working relations have since improved and regular contacts take place in most RFCs (through occasional or regular participation in respective meetings). The Commission services promote the development of synergies between the two complementary structures. For instance, the EU coordinator for the Orient/East-Med core network corridor launched a common initiative with the respective RFC aiming at improving operational conditions along the corridor.

Advisory Groups (RAG and TAG)

An early, active and constant involvement of RUs and terminals is crucial in order to enhance the market orientation of the RFCs. The degree of participation and interest of the RUs in the RAGs and of the terminals in the TAGs vary according to the corridors. The perceived added-value of the RFC for their business is naturally the key factor, all the more so given that financial and human resources of most terminals and RUs are limited.

RAG meetings allow a regular dialogue between IMs and RUs and enable the RUs to table issues hampering their operations. Thanks to the good interactions within the governance structure, issues for which IMs have no direct competence have been forwarded through the appropriate channels depending on the topic at stake. However, there is a risk of loss of interest of RUs and terminals if they do not see enough progress being made in solving the issues raised. Sometimes a limited understanding by IMs, RUs and end-customers of the distribution of competences and the applicable EU and national procedures/legislative framework results in a misalignment of expectations: while from an operational and market point of view some issues need to be solved urgently, the existing procedures and the need to find an agreement among multiple parties make such a quick resolution difficult.

The terminals feed the corridors with traffic and have therefore been given an important place in the Regulation. However, their participation and interest in the RFCs are currently quite low. This is partly to be explained by the fact that there are different types of terminals and therefore different operational processes, different goals and needs. Moreover – and this also applies to RUs in RAGs – many terminals appear within several RFCs, which multiplies the

¹⁷ Such as the 2016 Ministerial Declaration "Rail Freight Corridors to boost international rail freight" (Rotterdam, 21 June 2016, see <https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/news/doc/2016-06-20-ten-t-days-2016/rfc-declaration.pdf>), the Sector Statement on Rail Freight Corridors (Brussels, 20 May 2016, see http://www.cer.be/sites/default/files/publication/Corridor_Sector_Statement_20160520_final.pdf) and a side event assembling the transport ministers of Rhine-Alpine RFC at the ITF 2017 in Leipzig (see https://2017.itf-oecd.org/sites/2016.internationaltransportforum.org/files/documents/en/pdf-joint_Presserelease-ITF-Corridor_side_event_31%2005%202017-final.pdf).

¹⁸ European Network of rail IMs gathering IMs and DG MOVE.

¹⁹ Platform gathering RUs and DG MOVE.

²⁰ Meetings gathering the rail Directors of the EU Transport Ministries and DG MOVE.

number of meetings and can lead to discouragement. However, some RFCs are currently developing interesting approaches to better involve terminals (see Chapter 4.5).

The absence of certain types of stakeholders in the governance structure – such as intermodal operators, shippers and forwarders –, is sometimes seen as a limitation for progress. Some RFCs have launched voluntary initiatives to better involve them, in particular through the organisation of periodic strategy meetings (see Chapter 5.1).

2.2. A European rail network for competitive freight

The Regulation aims for the development of a European rail network for competitive freight. Indeed, practice has shown that a common approach at RFC level is important as trains often run over several corridors.

Thus cross-RFC coordination and cooperation quickly appeared as a need and has been initiated by the parties involved early on, e.g. through cross-RFC harmonisation and exchange of good practices. This development mainly results from the fact that a significant number of organisations are participating in more than one RFC.

The different governance layers players have organised/are starting to organise themselves as follows:

- The MaBos are cooperating through the "RFC Network", facilitated by RNE.
- The ExBos are also cooperating in the framework of the "Network of ExBos" (NExBo).
- A coordination of RAG input is made by the Union Internationale des Chemins de Fer (UIC) in the framework of the "ECCO group".
- TAG cooperation is supported by the Union International for Road-Rail Combined Transport (UIRR).

3. TRANSPORT MARKET STUDY AND IMPLEMENTATION PLAN

3.1. Transport Market Study

A Transport Market Study, to be regularly updated, has to be performed by the MaBo of each RFC (Article 9(3)). The Transport Market Study, through examining the existing freight market and its development potential, is a key element to guide RFC development. It supports the designation of RFC lines and the evaluation of the need for capacity for freight trains on the corridor.

Each RFC in operation has carried out a Transport Market Study, in general one or two years before their entry into operation. Some RFCs established in 2013 are in the process of updating their Transport Market Study, others envisage doing so.

As the RFCs function as a network, there is a need to harmonise the data collection among the different RFCs as well as to better monitor cross-RFC and even non-RFC freight traffic flows. This has led to the idea of conducting a common EU-wide Transport Market Study in the coming years, with a possible coordination role by RNE. The goal is notably to develop a joint database of origins and destinations and a common market report, which would serve as a basis for the update of the Transport Market Studies of the individual RFCs. Both the

stakeholders (IMs, RUs, terminals, end-customers) and the Commission services²¹ are supporting the idea.²²

3.2. Implementation plan

The RFC MaBo has to draw up an implementation plan, which the ExBo has to approve (Article 9). The Implementation Plan contains the measures necessary for creating the RFC, the description of the RFC (including its bottlenecks), the essential elements of the Transport Market Study, the RFC objectives (in particular in terms of performance), the investment plan and the measures to implement the different provisions of the Regulation (coordination of works, the C-OSS, capacity, traffic management, performance monitoring, etc.). The Implementation Plan should be periodically reviewed to reflect progress made.

The Implementation Plan contains the description of the specific lines of the RFC, which means that the Regulation applies on these lines through adoption of the Implementation Plan by the ExBo. All Implementation Plans of the initial nine RFCs have been adopted and published.

There are currently reflections on the role and purpose of the Implementation Plan after the RFCs' entry into operation, as it has so far been a document focusing mostly on RFC establishment.

4. CORRIDOR-ONE STOP SHOP AND PROVISION OF CAPACITY

The following closely interrelated elements of the Regulation were designed to bring a real added-value to the international rail freight market:

- (1) the setting-up of a Corridor One-Stop Shop (C-OSS) to facilitate the process for requesting infrastructure capacity for international freight services along the RFC;
- (2) the elaboration of a framework for capacity allocation (FCA), defined by the ExBos, establishing the rules for the allocation of the infrastructure capacity on the RFC;
- (3) the provision of RFC infrastructure capacity dedicated to freight trains (hereinafter "RFC dedicated capacity"), consisting of pre-arranged train paths (PaPs) and reserve capacity (RC).

These elements are described in the following sections.

4.1. C-OSS concept and implementation

The C-OSS is set up by the MaBo for applicants to request and receive answers concerning rail capacity for freight trains crossing at least one border in a single place and in a single operation (Article 13). The C-OSS should provide information on the capacity available for trains running on the RFC and on the conditions of use of the RFC. The C-OSS is thus designed to be a coordinator, service and information provider for the benefit of the potential applicants for infrastructure capacity on the corridor. Moreover, as regards the RFC dedicated capacity, the C-OSS takes the allocation decision.

The C-OSS has been successfully set up for each operational RFC. Since RUs and IMs are active on various RFCs, standardised processes and tools for the functioning of the C-OSS have been developed by RNE. The main IT tools used by the C-OSS, such as the capacity booking tool "Path Coordination System", the "Charging Information System" and the "Train

²¹ The Commission services are developing an Integrated Transport Model of Europe, Trimode, which should be operational by 2019 under Horizon 2020 programme. Discussions are ongoing with the RFCs and RNE for a potential use of Trimode for developing an EU-wide Transport Market Study.

²² See both Sector Statement and the Sector Input Paper prepared by CER, EIM, RFCs on a Potential Revision of the Rail Freight Regulation 913/2010/EU
http://www.cer.be/sites/default/files/publication/Corridor_Input_Paper_CER_EIM_RFCs_final_20151203.pdf

Information System" displaying real-time train information, were pre-existing but the creation of the RFCs has been a driver for their further development and improvement. These tools are also used for other international traffic, including passenger traffic, and even for some national traffic.

The different C-OSS managers closely cooperate through the so called "C-OSS community".

The C-OSS is one of the Regulation's central concepts to simplify cross-border rail freight business and is generally well perceived. There is a very positive feedback on the service-orientation and pro-activeness of the current C-OSS and RFC staff. However, there are also challenges or underdeveloped potential:

- In practice, most C-OSSs consists of one person, which limits the tasks they can take on. The C-OSS staff relies on the support of the participating IMs. If the C-OSS does not have sufficient resources, mandate or a good quality capacity product to offer to the applicants, it cannot play its full role of facilitator of cross-border rail freight.
- According to the Regulation, *any request for infrastructure capacity* for a freight train crossing at least one border along the corridor can be addressed to the C-OSS. This possibility seems not to be used currently.

In addition, the C-OSSs are generally not used to propose other capacity products or other services than the RFC dedicated capacity. However, some RFCs are currently working on developing new capacity products and services (see Chapter 4.3).

- All RFCs have decided that requests for RFC dedicated capacity have to be submitted through the "Path Coordination System" tool. Efficiency and user-friendliness of the Path Coordination System therefore have direct consequences on the perceived added-value of both the C-OSS and RFC dedicated capacity and, more generally, on the overall success of the RFCs. However, many users complain, sometimes strongly, about the lack of user-friendliness of the Path Coordination System.²³ In a situation where users even question the added-value of the RFC dedicated capacity offered by the C-OSS compared to "classical" coordinated international train paths, an inadequate booking system further discourages potential users.
- The simplification potential of the C-OSS has not been fully realised. For example, none of the C-OSS has been enabled to handle requests for modifying the PaPs after their allocation. This is due to the fact that all C-OSSs have been set up as stand-alone entity with a staff usually limited to one person. Applicants still have to address the individual IMs and use the national booking systems for any modifications.²⁴ Another example is that the customers still have to sign one infrastructure usage contract per IM, although the C-OSS could be the single interface for signing the different contracts (or one single contract could be developed).
- The management of the capacity on the sections common to several RFCs, by the C-OSSs involved, requires strong coordination and may be challenging.

Many of the elements presented relate more broadly to the general question in how far the IMs consider the C-OSS as a means to achieve their own objectives for rail freight market

²³ An improved version of Path Coordination System has been rolled out in the beginning of 2016 and a new version, which would solve part of the problems identified, will be implemented soon. Some stakeholders ask for a total redesign of the system.

²⁴ There is a question of IT-tools (e.g. existence – or not - of interfaces between Path Coordination System and national systems) and of human resources for the C-OSS. More generally, the work of the C-OSS stops after the allocation of the PaPs, while an oversight/coordination function between pre-booking and X-2 (meaning 2 months before the timetable change, which is the second Sunday of December) has been proposed by some stakeholders to increase the value-added of the C-OSS.

development. It shows that the C-OSS could have an untapped potential in terms of simplification for users and the variety of capacity products and services offered.

Currently the tasks of the C-OSSs are generally limited to the construction, offer and allocation of RFC dedicated capacity; their role stops after the allocation phase. In this respect, the Rail Freight Corridors are of the opinion that in the medium to long term the role of the C-OSS should be broadened to include other pre or after sales activities.²⁵

Overall, the C-OSSs are today not perceived by customers as a *truly* single contact point for capacity.

4.2. Framework for capacity allocation

According to Article 14(1), the ExBo has to define the framework for the allocation of the infrastructure capacity on the freight corridor (hereinafter FCA for Framework for Capacity Allocation). The FCA is a central document which sets the rules for the allocation of RFC dedicated capacity by the C-OSS. In this way, the FCA fosters harmonisation of national allocation rules for trains utilising RFC dedicated capacity.

An FCA has been adopted by each RFC as required. As with many other aspects, the need for common rules and harmonisation has quickly emerged, since having different allocation processes on different RFCs adds complexity. Common rules are particularly of interest for the Member States involved in several RFCs. This is why in November 2015, after a progressive harmonisation process and several rounds of negotiations between ExBos, MaBos, Regulatory Bodies and Commission services, a FCA common to all nine RFCs was developed. The common FCA means that all Member States participating in at least one operational RFC, as well as Switzerland and Norway, agreed on common allocation rules for RFC dedicated capacity. The common FCA is a success and represents a tangible step towards the creation of a RFC network for competitive freight and achieving a Single European rail area.

Moreover, these negotiations effectively launched the cross-RFC cooperation at Member States level and the Network of Executive Boards (NexBo) was created as a consequence of this process.

4.3. RFC dedicated capacity

The Regulation requires the C-OSS (in Articles 14(3), 14(5) and 13(3)) to offer infrastructure capacity in the form of pre-arranged paths (PaPs) available in the application phase for the annual timetable and reserve capacity (RC) available at short notice. PaPs are designed to meet medium-to long-term capacity needs, while RC addresses temporary capacity needs for rather short notice traffic.²⁶

4.3.1. Pre-arranged paths (PaPs)

On the basis of an evaluation of capacity needs by the MaBo (taking into account the Transport Market Study, the capacity requests during past timetable periods and framework agreements), IMs jointly define and organise international PaPs for freight trains. PaPs should facilitate journey times, frequencies, times of departure and destination and routings suitable for freight transport services with a view to increasing the transport of goods by freight on the freight corridor.

²⁵ See the Sector Input Paper prepared by CER, EIM, RFCs on a Potential Revision of the Rail Freight Regulation 913/2010/EU Position paper for evaluation.

²⁶ In addition, some RFCs have introduced "late requests" for PaPs – i.e. PaPs to be requested and allocated after the normal annual timetable allocation phase, until two months before the publication of the new timetable. Not all the RFCs offer the possibility for late requests.

PaPs are pre-constructed at an early stage in the timetabling process. Thus, they can potentially be of higher quality than "classical" international paths, as more capacity is available facilitating the construction and coordination across borders. In some cases, this potential to construct high-quality PaPs has been realised. The introduction of the PaP concept has contributed to a more streamlined and coordinated timetabling process among IMs and has boosted the interest in rail freight both at EU and national level.

The nine RFCs currently in operation fulfil their obligation to offer PaPs but the quantity and quality of PaPs offered varies substantially depending on the RFC and the region considered. Overall, it is very difficult to draw conclusions on the added-value of the PaPs as currently offered.

While the added value of PaPs can be significant in the case of limited available capacity, customers raised different, sometimes related concerns whether the PaPs meet market expectations, e.g.:

- the PaPs constructed and offered do not offer additional quality and/or certainty compared to "classical" international paths ;
- the quantity of PaPs offered is too limited to enable applicants to meet their needs;
- at comparable path quality, there is no added value to go through the C-OSS, i.e. the C-OSS does not sufficiently simplify the planning process.

These issues will be discussed in more detail below.

Quantity and quality of PaPs offered:

Practice shows that on several RFCs only a small part of the capacity needed by the market for the annual timetable is provided in the form of PaPs. This low amount of dedicated capacity can be partly explained by the fact that IMs consider the first years of RFC operation as a testing phase. However, in some RFCs IMs have been reluctant to provide capacity to the RFCs. In some cases this incited Ministries to intervene through the ExBo. In other RFCs the amount of PaPs is more significant. Some RFCs have still little experience so far.

The low amount of PaPs offered on certain corridor sections can make the offer unattractive because of the low likelihood that an applicant will get PaPs adapted to his needs. This in turn can lead to fewer requests and to an impression that the concept does not work. This is illustrated by the fact that on many RFCs applicants continue to use "classical" international paths allocated by the individual IMs.

At the same time, some commercial or timetabling departments of the infrastructure managers seem not to be convinced about the added-value of the PaP for IM business.

As regards quality, some RUs have complained (strongly in some cases) about the inadequate quality of the PaPs offered. In some cases, even PaPs with uncoordinated times at the borders have been reported. It is not possible to conclude how common such cases are. At the same time, a few RUs consider that the quality of the international train paths has increased since PaPs were introduced.

The RUs are a key player in the elaboration process of the PaP offer, notably via the RAGs, where they can raise awareness on their capacity needs and quality issues. The RFCs are also strengthening the involvement of RUs through asking them to annually indicate their capacity needs ("capacity wish-list"), before starting the PaP construction phase.

Modifications or cancellations of the PaPs

PaPs are apparently often modified several times, or cancelled, before the running day, either at the request of the applicant or at the request of the IMs.

However, this is very difficult to monitor since after the allocation by the C-OSS, the national sections composing the PaPs are "handed over" to the individual IMs and in almost all cases

are further handled by them as if they were "classical" national paths. It means that they are not "flagged" as being PaPs and that the modifications made are not traceable. Besides the fact that having a record of their modifications can give an insight into their market adequacy, this notably raises the question whether the application of Article 14(8) of the Regulation can be assured. According to this Article a PaP may not be cancelled less than 2 months before its scheduled time, save in the case of force majeure, if the applicant concerned does not give its approval for such cancellation. If a PaP has been modified several times, it is not clear if it has still the "status" of a PaP and whether the guarantee deriving from Article 14 (8) is still valid.

The many modifications or cancellations requested by the applicants themselves can be explained by the fact that requests in the annual timetable process are designed to meet medium-to long-term capacity needs. However, a significant part of the market is more volatile and the exact capacity needs are not known very long in advance. Short term needs should ideally be addressed by ad-hoc requests (including reserve capacity), but due to the risk of shortage and/or low quality of such ad hoc capacity, the applicants prefer in practice to request capacity in advance in the framework of the annual timetable process, so as to secure a sufficient amount of capacity of quality.²⁷ This leads to a suboptimal management of infrastructure capacity and to a waste of resources since, when the needs become more precise, modifications or cancellations are requested.²⁸ It is very important to note that this is a general phenomenon concerning equally "classical" paths and PaPs; however the introduction of the RFC dedicated capacity (PaP and reserve capacity) seems for the moment not to have improved the situation. Initiatives, presented in Chapters 4.3.2 and 4.3.3, aim to address this issue.

Likewise, as regards modifications or cancellations requested by the IMs (e.g. due to capacity restraints caused by late announced works), IMs are rarely treating PaPs differently from other paths. It means that the PaP concept as such is thus not questioned since the impact is similar for PaPs and "classical" paths. However, IM processes have not yet been modified to give PaPs more added-value.

Innovations of the "PaP product"

Conscious that the ideal formula may not have yet been found, the RFC stakeholders have discussed and developed new ways of implementing the PaP concept. To increase flexibility (e.g. in terms of intermediate stops, arrival/departure time), flex-PaPs were introduced.

4.3.2. Reserve capacity and ad-hoc capacity

According to Article 14(5) of the Regulation, IMs shall, if justified by market need, jointly define the reserve capacity (RC) for international freight trains and keep this reserve available within their final working timetables to allow for a quick and appropriate response to ad hoc requests. RC requests are thus a certain type of ad hoc requests.

In practice, RC is proposed in the form of PaPs, or in the form of slots (i.e. time windows). The "slot" approach gives more flexibility to IMs (as well as to applicants), as the specific paths are not defined at the time of the offer. However, for the same reason, on lines with scarce capacity available, there is also a higher risk that applicants get capacity of lower quality. The slot approach brings little difference to the "classical" ad-hoc requesting process, although the requests are placed through the C-OSS.

²⁷ This situation does not apply everywhere: there are different regional situations and on some networks, especially in Central and Eastern Europe, there are much less capacity issues and therefore much of the infrastructure capacity needs are met through ad-hoc requests.

²⁸ Cancellation fees in the different Member States vary. Nevertheless it should be noted that in some RFCs, IMs have harmonised or are in the process of harmonising at least the schedules for cancellation fees.

The fact that applicants request capacity in the framework of the annual timetable to be sure to get enough of good quality capacity, even if normally ad hoc capacity would better meet their needs, leads to little capacity being available for RC. A low offer can mean that it is not worthwhile for a RU to look if there is suitable RC.

Deadline for submission of reserve capacity requests

The question of the deadline, decided by the MaBo, for submitting RC requests is essential as it has an effect on the attractiveness of rail in volatile and fluctuating market segments. For these markets, the applicant should be able to request capacity as close as possible to the day of the train run.

The need for harmonising the deadline has quickly appeared to avoid different deadlines for traffic passing from one RFC to another and has been set at 30 days. For some RFCs, it has meant changing to less ambitious deadlines for the sake of harmonisation. Indeed, in general, where there is less capacity shortage, requests on ad-hoc basis (i.e. not in the framework of the annual timetable process) are more frequent, which makes it more important to offer RC or other ad-hoc capacity with attractive deadline. This example perfectly illustrates the pros and cons of harmonisation. Many customers consider that a deadline of 30 days is not sufficiently attractive, especially when taking into account that deadlines for path requests in national processes are often substantially shorter.

Pilot projects for ad-hoc products on the RFCs

More flexibility in the timing for requesting the paths is thus required by the applicants. IMs recognise the need to significantly shorten the response time for ad-hoc requests. Applicants are in favour of a response time of less than 10 days, with an optimum target being closer to 3 days. This goal is hard to achieve due to IM's different internal processes and the need for international coordination. Moreover, if the C-OSSs are involved, it is challenging to handle short notice requests given their current structure. It should also be taken into account that on congested lines it is difficult to construct quality paths with limited remaining capacity available at such short notice.

However, there are very positive developments. Pilot capacity products are being developed, with the aim of meeting this need of a short deadline before the train run. Four pilot projects on four different RFCs are now ongoing or in preparation. Their conditions vary (number of days; role of the C-OSS as leader, or as customer interface with one IM as leader; tailor-made path or PaP offered), so this will enable to compare the effectiveness of each solution.

4.3.3. Timetable Redesign Project, RFC dedicated capacity and other capacity products

If RFC dedicated capacity is often deemed to not fully meet market needs, this is due not only to the features of the PaP and RC concepts the way they are implemented by the IMs or the added-value of the C-OSS, but might also be related to the timetabling process as such. The "Redesign of the International Timetabling Process (TTR)" project²⁹ by RNE and Forum Train Europe (FTE)³⁰ with the support of ERFA³¹, aims at fully reshuffling the timetabling process through harmonising at European level and bringing the whole timetabling process closer to market needs, while considering the specificities of each segment (passenger/freight, domestic/cross-border).

²⁹ <http://www.rne.eu/sales-timetabling/ttr/>

³⁰ European association of railway undertaking; <http://www.forumtraineurope.eu/home/>

³¹ The European Rail Freight Association

It should be noted that the cooperation among the timetabling departments, notably initiated within the framework of the Regulation, has most certainly helped to launch a deeper dialogue on timetabling processes and contributed to the launch of the project.

Three pilots will start soon to gain experience and refine the processes where needed. These pilots will run on lines which form part of three RFCs. Although TTR implementation could potentially improve on the current situation through better meeting the needs of the different market segments, it is a long-term perspective and its full implementation is expected to take several years. In the meantime, a compliance assessment of the TTR elements with national and Union legislation, primarily with Directive 2012/34/EU establishing a single European railway area³² and with the Regulation, is necessary.

However, given the current difficult situation of rail freight, the Regulation does not prevent IMs and the C-OSSs from developing and offering additional capacity products to match market needs in the shorter term.

4.4. General considerations

As the above demonstrates, the way the PaP and RC concepts is implemented shows both their adequacy and inadequacy to market needs, as many factors enter into play.

More experience has to be gathered in order to be able to make a clear assessment of the RFC dedicated capacity, and particularly the PaP concept. Nevertheless, so far, results of the implementation of the Regulation are mixed.

4.5. Coordination with terminals

The Regulation requires the IMs and the TAGs to ensure optimal coordination between the operation of the railway infrastructure and the terminals (in Article 16(2)) and to publish the list and characteristics of terminals along the corridor (in Article 18, point (b)).

The processes and timeline for terminal capacity planning are different than for rail capacity and this makes coordination difficult.

Nevertheless, some RFCs are studying how to strengthen cooperation and in particular to ensure a more efficient use of capacity both on RFCs and in terminals and at the same time improve the quality of rail services. RFC SCANMED is notably testing an interesting approach, proposing three choices to terminal operators for their degree of cooperation/coordination with the C-OSS/RFCs:

- the C-OSS refers to the website and booking tool of the terminal;
- the C-OSS displays the capacity available in the terminal;
- the C-OSS and the terminal prepare coordinated capacity and the C-OSS offers this integrated rail-terminal capacity; the terminal and C-OSS remain responsible for taking the allocation decision for their own capacity.

The degree of cooperation is therefore chosen on a case-by-case basis, acknowledging the different business and operational models of the various terminals.

There is a need for further study and practical experience on how to best organise cooperation and coordination between IMs and terminals, both in terms of added-value and feasibility.

³² OJ L 343, 14.12.2012, p. 32.

5. MARKET ORIENTATION OF THE RFCs: INFORMATION TO USERS AND PERFORMANCE MONITORING

5.1. Information to potential RFC users

Corridor information document

In order to promote the use of the RFCs among their potential users and to foster transparency, Article 18 of the Regulation requires the publication of an information document relating to the conditions of use of the RFCs, which the MaBo has to draw up and regularly update.³³ RNE has developed a common structure for this document named Corridor Information Document (CID). All RFCs in operation have published CIDs on their website and these are regularly updated.

The CID provides information on the RFC terminals but the level of detail varies from one RFC to another. IMs have some difficulty to provide this information, because not all terminals cooperate.³⁴

The added-value of the CID for the customers is questioned as it is often not perceived as a very user-friendly document. It is, however, an important document for regulatory supervision, given that it gives the main information on the processes and rules of the RFCs.

Other communication tools

Several other communication tools are in place to communicate on services and activities of RFCs:

- Each RFC has a website. It contains the main documents (e.g. Implementation plan, CID, annual reports, applicable legislation, customer satisfaction surveys, etc.) and operational information (e.g. capacity offer, organisation of the corridor, geographical map, organisation of the RAG/TAG meetings, track possessions/coordination of works, etc.).
- The RNE Customer information platform³⁵ - an interactive internet-based information tool providing to RUs and other applicants information e.g. on the RFC lines, terminals and track properties, but also displaying the CID - is used by 6 RFCs and the others plan to use it soon.³⁶
- Each RFC publishes an annual report presenting their main activities and achievements.

Marketing approach

In addition to the above, in order to promote their activities and attract new customers, RFCs needed to put in place proactive marketing approaches to convince their existing and potential new clients about the added-value of the services they offer. Such marketing actions have been organised from the start (conferences and events, presentation stands, etc.) and,

³³ The document shall contain: all the information contained in the network statement for national networks regarding the freight corridor; the list and characteristics of terminals, including the conditions and methods of accessing the terminals; the information concerning the procedures referred to in Articles 13 to 17 of the Regulation concerning the C-OSS, capacity, authorised applicants and traffic management; the implementation plan.

³⁴ Some terminals have been reluctant to be classified as "RFC terminals" given the associated obligations on information provision. However, in accordance with Article 27 and point 4 of Annex IV to Directive 2012/34/EU, which all Member States had to transpose by 16 June 2015, freight terminals have the obligation to publish charges for gaining access to terminals and services provided in terminals as well as information on technical access conditions. Thus being a RFC terminal or not does not make any more difference in terms of information obligations.

³⁵ For more information: http://info-cip.rne.eu/what_is_cip; https://cip.rne.eu/apex/f?p=cip:65:::::P65_CORRIDOR:8

³⁶ It should be noted that RNE is planning to link all its IT-tools (Customer information platform, Train Information System, Path Coordination System, Charging Information System, etc.) with a view to create a single interface for freight.

importantly, the C-OSS representatives regularly meet the (potential) users to better understand their needs, get feedback and present the RFC offer.

To further involve the users and end-customers (e.g. shippers, forwarders), to better address their needs and to increase transparency and accountability, the RFCs agreed to convene regular strategy meetings gathering RFC representatives, RAG/TAG members and end-customers. The aim is to discuss strategic developments, performance expectations and options for enhancing the operational efficiency of the logistics chain. This commitment has been made mainly in the framework of the Rotterdam Sector Statement. The kick-off of such a strategy session was held during the Rail Freight Day 2016 organised by DG MOVE in cooperation with RNE, while a cross-RFC meeting was organised in February 2017. In addition such strategy meetings have also been organised at RFC level.

5.2. Monitoring

Article 19 of the Regulation entitled "Quality of service on the freight corridor" notably requires the MaBo to monitor the performance of rail freight services on the freight corridor and to organise a satisfaction survey of the users of the corridor. The results of the performance monitoring and satisfaction survey have to be published once a year.

Monitoring the performance of the RFC services and user satisfaction is essential and serves several purposes. In addition to providing the information necessary for potential users and end-customers when selecting their transport solution/mode, it is also an essential tool to progress towards a more competitive rail freight sector. It allows for an assessment of the market situation on the corridor, identification of bottlenecks (e.g. administrative, operational, infrastructure), assessment of the results of the activities undertaken and monitoring of the appreciation of the users. Last but not least, it enhances the transparency and accountability of the RFCs and gives them more visibility.

Performance monitoring

Key performance indicators (KPIs) are measured by all RFCs, which publish the results of the performance monitoring in their annual reports. However, the link between the results of the performance monitoring and the objectives defined in the Implementation plan³⁷ as well as the general objectives of the RFCs has not been very clear so far.

A need for harmonising the KPIs across the RFCs has rapidly been identified. It makes comparisons possible³⁸ and permits to develop a full picture of the RFC network. RNE, which runs the IT systems being an important source of data, has developed guidelines defining a core set of harmonised KPIs for the RFCs.³⁹ RNE provides also a platform for cooperation and coordination related to train performance management (TPM). The network of "RFC Train Performance Managers" defines the processes to measure and improve train performance along the RFCs (e.g. data management, validation of delay causes, reporting).⁴⁰

KPIs have been developed and regularly reviewed since the start of the RFCs, mainly negotiated among IMs, and discussed with the ECCO group. The participation of RUs and end-customers in their elaboration is now being strengthened. Their input to define how the performance of the RFCs should be measured is indeed important as they are the parties who the RFCs aim to benefit. A step forward has been made in this respect with the Rotterdam

³⁷ Article 9(1) of the Regulation specifies that the implementation plan shall include objectives "in particular in terms of performance expressed as the quality of the service and the capacity of the freight corridor".

³⁸ While comparisons are useful in certain cases, it is obvious that specific situations applicable to individual RFCs (features of the freight market, design of the network, economic performance of relevant Member States etc.) have to be taken into account when comparing.

³⁹ http://www.rne.eu/meinhalt/uploads/RNE_Guidelines_KPIs_of_RFCs.pdf

⁴⁰ <http://www.rne.eu/tm-tpm/train-performance-management-general-information/>

Sector Statement: a process is now ongoing to adopt a new more ambitious harmonised set of KPIs.⁴¹ These positive developments are actively supported by the Commission services.

An important challenge for an effective monitoring is calculability (e.g. availability of data). There are objective technical challenges but willingness to provide the resources necessary to overcome these is also needed. There is also a more political/business related component to KPI definition as the expectations of the different types of stakeholders vary. In any case, the elaboration of KPIs has to be seen in the broader context of the discussions on designing better capacity products and a more flexible timetabling process, as well as on traffic management processes.

User satisfaction survey

In the framework of the satisfaction survey, the users are asked to give their feedback on the RFCs and their services. RNE has been mandated by the RFCs to centrally conduct a harmonised survey. There is a tailored set of questions for the different stakeholders (RU, non-RU applicants and terminals) and both current and potential users can be addressed. The results are summarised in nine RFC-specific reports, available on each RFC website, and one overall report.⁴² The satisfaction survey provides useful feedback about the relevance of the RFC services and can also be used as a marketing tool.

In addition, the RAGs and platforms like the ECCO group complement the results of the user satisfaction survey as additional channels for detailed feedback from RFC users. In addition, as already indicated, a few RFCs are actively seeking feedback from their direct and end-users via strategy meetings.

6. IN OPERATION

Coordination of traffic management

Through requiring coordination of traffic management for cross-border rail freight traffic the Regulation has aimed to improve the quality of the services, especially in terms of punctuality and reliability.

The MaBos are required to put in place procedures for coordinating traffic management along their RFC and between connected RFCs (Article 16(1) of the Regulation). Also in this matter, RNE has taken over an important role as service provider. Its "Traffic Management Working Group" aims to develop and improve operational processes to facilitate cooperation between IMs/RFCs as regards traffic management and strives to improve cooperation between IMs and RUs.⁴³ In addition, RNE has developed a "Framework for Setting up a Freight Corridor Traffic Management System".⁴⁴ After having analysed to what extent already-existing traffic management rules and procedures could be aligned, RNE came to the conclusion that the main field of action to implement Article 16(1) of the Regulation should be to standardise communication procedures, given that accurate knowledge about the state of traffic is the basis for taking corrective management decisions, both for RUs and IMs, and for assessing the possible development of the situation in case of disturbances.

⁴¹ Based on the work done by the ECCO group and after involving the end-users, the RU Dialogue Subgroup Freight has consolidated a proposal, currently being negotiated with RNE/RFCs.

⁴² Overall results of the CSS 2016:
http://www.rne.eu/rneinhalt/uploads/2017/03/RFC_User_Satisfaction_Survey_2016_Overall_Results_RNE_website.pdf

⁴³ <http://www.rne.eu/tm-tpm/traffic-management-general-information/>

⁴⁴ <http://www.rne.eu/rail-freight-corridors/downloads-documents/>

Despite concrete steps forward and developments,⁴⁵ feedback provided in the public consultation shows that traffic management across borders has not really improved since the entry into force of the Regulation. This is one of the key areas where progress has to be urgently made for rail freight services to become more attractive. The Rastatt incident in August 2017 gives the opportunity to exchange further on this matter.

Article 17 of the Regulation defines measures to be taken with respect to traffic management in the event of disturbance. So far, the RFCs have in practice adopted common targets for punctuality and/or guidelines for traffic management in the event of disturbance but most of the IMs have kept their own national priority rules.

The provisions of Article 17 elicited discussions on the effectiveness of the priority rules concept. Some IMs consider it is of utmost importance to minimise the overall network recovery time and fixed priority rules could even extend the time needed for the return to normal operation. Others argue that new concepts of dynamic regulation and resolution, based on real-time simulations, are starting to emerge and should be considered.

Another discussion surrounding the implementation of Article 17 is that some consider the key added-value of RFC dedicated capacity to be a prioritisation of such trains in the event of disturbance, not so much an early-on safeguarding of capacity for international rail freight. This argument is common in regions where infrastructure capacity is generally abundant. The argument implies that trains running on RFC dedicated capacity would get priority over other international freight trains during disturbances which has not been implemented on a larger scale so far.

Coordination between rail and terminal operation

According to Article 16(2) of the Regulation, the IMs and the TAGs shall put in place procedures to ensure optimal coordination between the operation of the railway infrastructure and the terminals. This coordination is generally complex, e.g. due to different planning processes and multiplicity of players and contractual arrangements.

The sector, including end-users, is aware of the need to improve operational coordination and efficiency along the whole logistics chain and in the Rotterdam Ministerial Declaration and Sector Statement a commitment was taken "to make information on train estimated time of arrival (ETA) available to contract partners, including terminals and intermodal operators, [...], and to provide freight forwarders and shippers with up-to-date information about the status of their freight and an estimated time of arrival".

To this end, a dedicated task force involving a few Member States, the sector and Commission services was set up in the autumn 2016. This resulted in a pilot project co-funded by the Connecting Europe Facility ("Electronic Exchange of ETA information" or "ELETA"), which has been put in place in 2017 with the aim of developing the processes for exchanging the information among the different parties and of demonstrating in practise the benefits of the ETA for the transport chain. In addition, RNE is working on the question. The RFCs are not in a leading role in these initiatives (except for the approach outlined in chapter 4.5), but they are involved and informed.

⁴⁵ Examples are TCCCom (Traffic Control Centres Communication), a tool to overcome language barriers between traffic control centres, or the tool 'Park or Run' to manage the dispatching of trains in case of disturbance through facilitating communication (today made through phone calls, excel sheets, etc.).

7. COORDINATION OF WORKS AND INVESTMENTS

7.1. Coordination of works

Infrastructure works limit infrastructure availability, thereby affecting the operation of international rail freight services. A good coordination of so-called 'planned temporary capacity restrictions' (TCRs) is therefore essential for raising the quality of services. Such coordination aims at rationalising and minimising the impacts and duration of the capacity restrictions. Moreover, the publication of the works schedule in advance allows the RU to better organise their traffic.

To implement the provision on coordination and publication of the works along the RFC infrastructure (Article 12 of the Regulation), RNE has developed guidelines, adopted in 2013, and reviewed in 2015⁴⁶. They provide common procedures for the coordination and publication.

Despite this, coordination of infrastructure works and predictability could be significantly improved.

Even if IMs usually try to find tailor-made solutions in case of uncoordinated planning, RUs have to spend resources to monitor the published TCR schedules and alert concerned IMs/RFCs. Moreover, in case of a lately announced TCR or late re-planning of a TCR, RUs may have to cancel their path and place a new path request, which has consequences both in terms of resources and efficiency. RUs may be also charged in the neighbouring networks, e.g. for new path requests, cancellation fees, more kilometres run. In addition, if no alternative path of comparable quality is proposed, the concerned traffic may be put at risk. Sometimes the reasons behind the late announced TCRs are beyond the control of IMs as in many Member States the funding of works is secured only on a short-term basis and budgetary restrictions can lead to last minute investment planning modifications. In addition, high concentration of big projects for the take-up of EU funds makes coordination across borders difficult.

RNE is currently working on a tool designed to optimise the international alignment of TCRs. Besides, the TCR part of the TTR Project adopts a holistic approach to the planning of works and capacity, which may improve the situation. However, its implementation will take some years.

In the meantime, the Commission adopted in September 2017 a Delegated Decision revising Annex VII of Directive 2012/34/EU⁴⁷. It sets a clear timeline for the consultation, coordination and publication of TCRs on all network lines. It aims at bringing reassurance to the RUs that their needs are taken into account and that remaining capacity is made available on a transparent basis.

7.2. Investment planning & infrastructure development, interoperability and ERTMS

Coordination of investments along the corridors is crucial (e.g. some investments on a line section can only deliver their benefits if other sections, notably across the borders, are also upgraded). The MaBo has to draw up and periodically review an investment plan (Article 11(1) of the Regulation), which includes details of indicative medium and long-term investment for infrastructure in the RFC.

⁴⁶ <http://www.rne.eu/rneinhalt/uploads/2015-12-03-Guidelines-CoTCR-V2.0.pdf>

⁴⁷ Commission Delegated Decision (EU) 2017/2075 of 4 September 2017 replacing Annex VII to Directive 2012/34/EU of the European Parliament and of the Council establishing a single European railway area, OJ L 295, 14.11.2017, p. 69.

The investment plans have been duly established by the RFCs in operation. However they often seem to be an aggregation of national plans rather than the result of coordination between IMs. Yet, several RFCs have launched studies on specific infrastructure enhancements for their corridor, also with the aim of promoting coordination of the investments needed.

When used as centres of expertise, the RFCs – with their governance structure comprehensively involving the relevant stakeholders – can bring a real added-value to investment planning. The international approach and "on-the-ground" expert knowledge of RFC stakeholders can help to identify priorities for infrastructure development to the benefit of cross-border rail freight. There is a close link between operational bottlenecks and infrastructure development, between capacity, quality, the state of the infrastructure and the question of coordination of works. In practice, some of the priorities identified by the RFCs have been advocated by the ExBos representatives within their national ministries.

As regards the indicative investment plan, the Commission services promote the development of synergies between the RFCs and the CNCs/TEN-T framework, which form two complementary pillars of EU transport policy.

Interoperability and ERTMS deployment

The achievement of interoperability was an important component of corridor concepts already before the adoption of the Regulation (see ERTMS corridors). Although the RFC structure has not explicit competences in this field, focus on interoperability can be derived from Article 11(1)(b), from the corridor approach and Regulation's objective. More generally, the objectives of the RFCs cannot be achieved without it.

In practice, so far the identification and handling of technical interoperability issues within the governance bodies or via dedicated working groups varies among the RFCs.

The RFCs, as centres of expertise and in particular thanks to the on-the-ground input from RUs via the RAGs, can contribute to identifying and potentially solving interoperability issues and can easily make the link with the competent instances (e.g. ERA, NSAs, Ministries, Commission services). In 2016, the Commission services and ERA launched a project aiming at creating efficient processes to exchange information between the RFCs and ERA, with a view to accelerate the solving of interoperability issues. As a result, an "Issues Log" fed by the RFCs, ERA and the Commission services is currently under development.

ERTMS deployment

As part of the investment plan (Article 11 of the Regulation), the management board shall draw up a deployment plan for interoperable systems. This includes notably ERTMS deployment which is an essential element to achieve interoperability. This is of particular importance for the RFCs which have absorbed the so-called former ERTMS Corridors.

All RFCs have duly prepared such deployment plans. In addition, RFC Rhine-Alpine and RFC North Sea-Mediterranean have a long tradition of contributing to ERTMS deployment, both as regards technical issues and promoting politically coordinated deployment. Working groups with involvement of ministries, IMs, RUs, NSAs and ERA have been set up. Other RFCs also have an ERTMS working group, gathering ERTMS experts.

Commission services, in close cooperation with the European coordinator for ERTMS and ERA, have launched a reflection with the RFCs with a view to clarify their role in ERTMS deployment. The implementation of the European Deployment Plan for ERTMS⁴⁸ requires

⁴⁸ Commission Implementing Regulation (EU) 2017/6 of 5 January 2017 on the European Rail Traffic Management System European deployment plan, OJ L 3, 6.1.2017, p. 6.

close cooperation and coordination between ministries, IM and RU experts: when needed, the RFCs can provide a good platform for this. The Commission adopted in November 2017 the ERTMS Deployment Action Plan⁴⁹ which identifies the RFCs as facilitators for ERTMS deployment.

8. REGULATORY SUPERVISION

Adequate regulatory control is a key element of the Regulation. Article 20 states that the Regulatory Bodies (RBs), either in the event of a complaint or within the framework of an own-initiative investigation, shall cooperate in monitoring the competition in the RFCs, ensure a non-discriminatory access to the corridor and act as appeal bodies for applicants claiming that they have been unfairly treated. In addition, Directive 2012/34/EU has extended the powers of RBs and its scope of application covers the entire railway market, thus including the RFCs (unless specified otherwise). As a result, for the purposes of regulatory supervision of RFCs, the provisions on RBs both under Directive 2012/34/EU and under the Regulation are important and the RB can monitor all aspects that cause discrimination and market distortion.

The Regulation has fostered the cooperation between the RBs and cooperation agreements have been signed for all the RFCs⁵⁰. These agreements provide for the arrangements concerning the handling of complaints.

No complaint has been filed so far. Until now the RBs have intervened more as monitoring bodies than as appeal bodies.

IRG-Rail⁵¹ has taken the lead in strengthening cooperation among RBs as regards supervision of RFCs. A Statement on the RFCs has also been published during the 2016 TEN-T Days, where the Rotterdam Ministerial Declaration and Sector Statement were endorsed. In this statement IRG-Rail members stress the need to strengthen their cooperation and envisage actions such as the development of guidelines, the development of a cooperation agreement common to all RFCs, the participation in the development of the KPIs and the organisation of an annual forum on RFCs (the first one took place in September 2017).

9. OTHER AREAS

In practice, the RFCs are forums which are suitable for identifying and discussing various issues hampering rail freight in Europe and, eventually, to contribute to their resolution. As a matter of fact, they are regularly used in this way.

Many topics not directly mentioned in the Regulation have been discussed in meetings of the RFC governance structures, including railway noise, customs issues, cooperation with OSJD corridors⁵² and digitalisation.

The Commission services have always supported such practice while noting that overlaps with the work of other relevant or competent working groups or entities should be strictly avoided.

⁴⁹ <https://ec.europa.eu/transport/sites/transport/files/2017-ertms-deployment-action-plan.pdf>

⁵⁰ Except for RFC 9 (CZ and SK), but both regulators have signed such agreements on RFC7 and RFC 5 and thereby have expressed their willingness to cooperate.

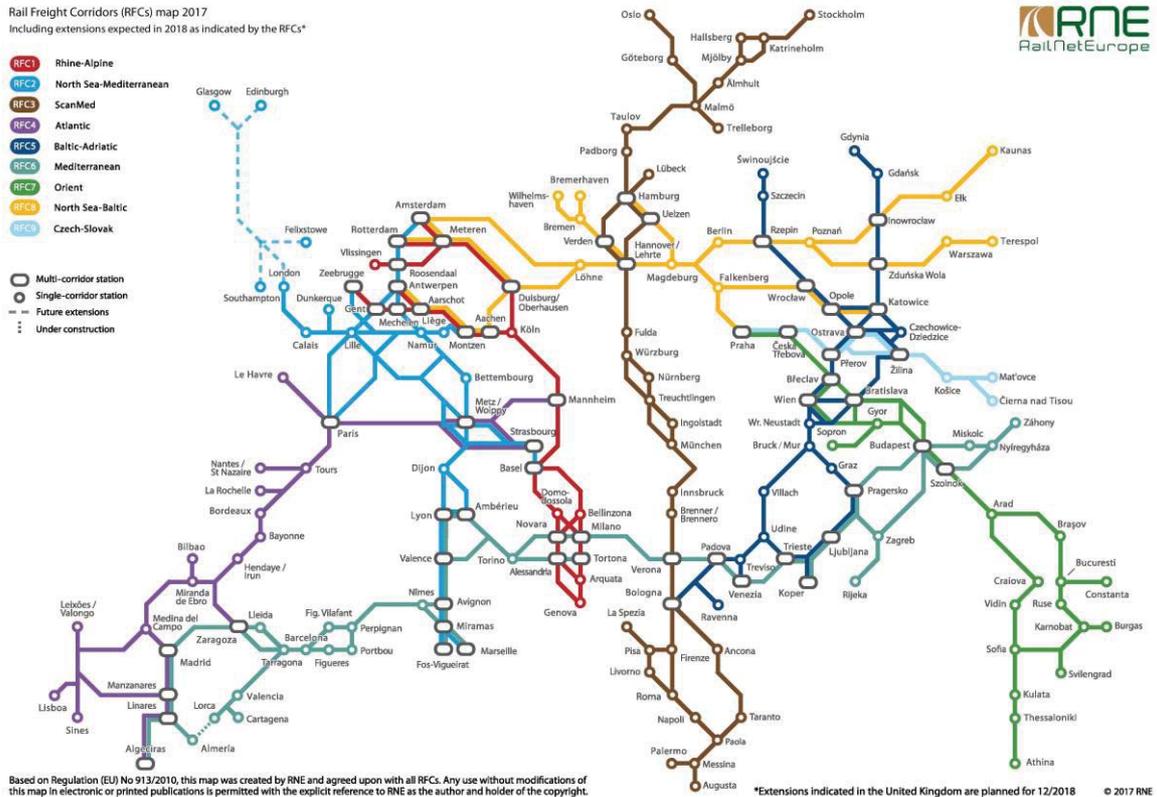
⁵¹ IRG-Rail is the "Independent Regulators' Group – Rail", a forum currently comprising independent rail Regulatory Bodies from twenty-nine European countries. <http://www.irg-rail.eu/about-the-irg-rail/> All the RBs of countries involved in the RFC are members of IRG-Rail, including the third countries Norway and Switzerland.

⁵² Two seminars gathering OSJD (Organisation for Co-Operation between Railways) and RFC representatives with the objective of launching cooperation towards improving the quality of freight services between Europe and Asia were organised by DG MOVE. Moreover RFC NSB and RFC MED have established closer contacts with the OSJD corridors.

Appendix I

Maps of the Rail Freight Corridors

(1) Indicative map of the current RFC network



(Map reproduced with the permission of RailNetEurope)

(2) Development of the RFC network

2a Development of the initial RFCs

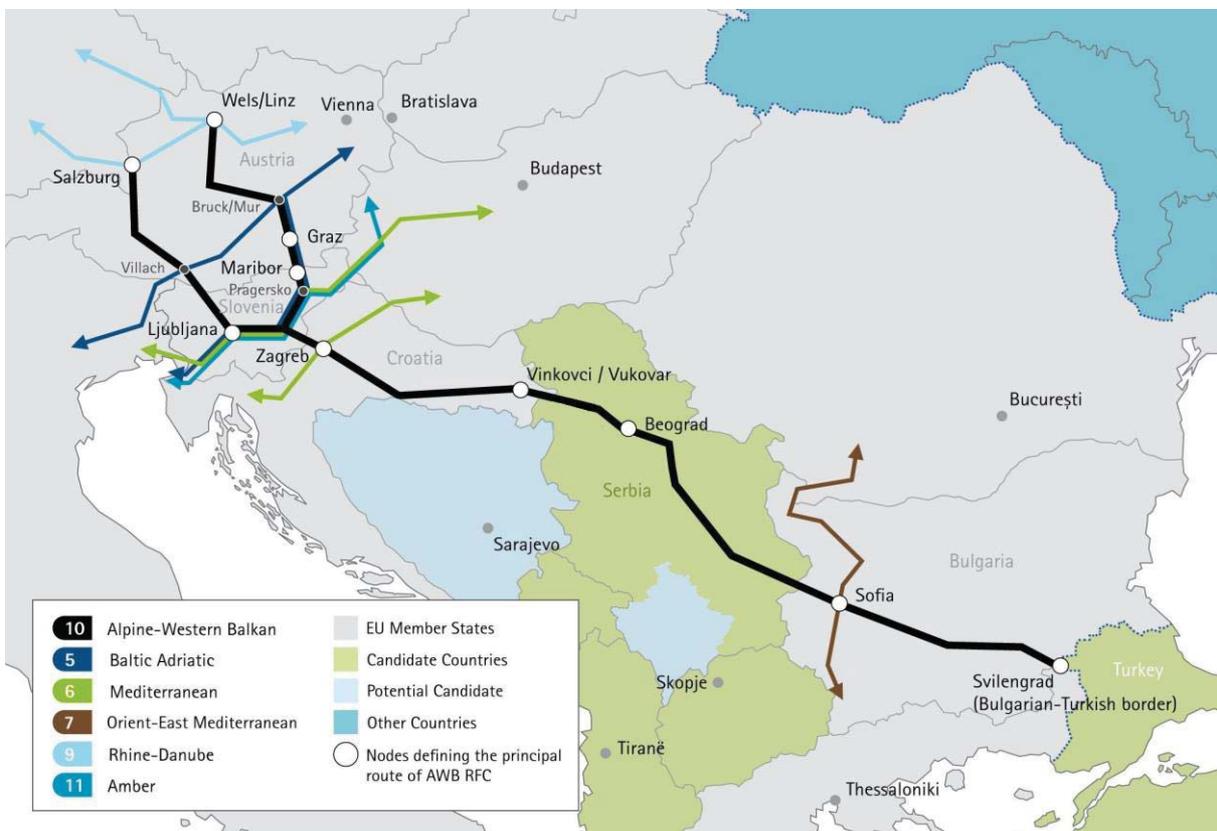
The following (main) developments of the initial RFCs are not included in the map above:

- Orient/East-Med RFC will be extended to Bremerhaven, Wilhelmshaven, Hamburg, Rostock (Germany) and to Patras (Greece) by November 2018.
- North Sea-Baltic RFC will be extended to Riga and Tallinn by November 2020.
- Rhine-Danube RFC is to be established between Strasbourg and Čierna nad Tisou and Constanța by 2020. A part of the RFC in Czechia and Slovakia is operational since 2013, as "Czech-Slovak" corridor.
- North Sea-Mediterranean RFC will be extended to Geneva (Switzerland).

2b New Amber RFC (indicative map)



2c New Alpine-Western Balkan RFC (indicative map)



Appendix II

Table of abbreviations

CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies, represents European infrastructure managers and railway undertakings
CID	Corridor Information Document
CNC	Core Network Corridor
C-OSS	Corridor One-Stop-Shop
DG MOVE	European Commission DG Mobility and Transport
EC	European Commission
ECCO	Railway Advisory Groups cooperation led by Union Internationale des Chemins de Fer (UIC)
EIM	European Rail Infrastructure Managers, represents European independent infrastructure managers
ERFA	European Rail Freight Association, represents railway undertakings who are new entrants in the EU rail market
ExBo	Executive Board
FCA	Framework for Capacity Allocation
FTE	Forum Train Europe
IM	Infrastructure Manager
IRG-Rail	Independent Regulators Group – Rail, represents European rail regulatory bodies
MaBo	Management Board
NSA	National Safety Authority
PaPs	Pre-Arranged train Paths
PCS	Path Coordination System
RAG	Railway Advisory Group
RB	Regulatory Body
RC	Reserve Capacity
RFC	Rail Freight Corridor
RNE	RailNetEurope
RU	Railway Undertaking

TAG	Terminal Advisory Group
TCR	Temporary Capacity Restrictions
TEN-T	Trans-European Transport Network
TTR	Timetable Redesign project
UIC	Union Internationale des Chemins de Fer (International Union of Railways)
UIRR	International Union of Combined Road-Rail Transport Companies, represents combined transport operators and combined transport terminals
X-n°	Date of the timetable change (second Monday of December) - n° of month