2016

Annual Report



Dear Corridor users, dear Corridor partners,

What a year!... Set-up of the Corridor One Stop Shop, marketing of the first Corridor paths, definition of our Strategy, launch of a regular dialogue with customers including end users, first steps towards a Corridor-wide approach for punctuality monitoring and cross border contingency management, and the launch, together with other Corridors, of the Customer Information Platform... These are visible results which make us happy, but give us no reason for self-satisfaction - yet. This, in fact, can be no more than just a start.

We aim for more.

Rail Freight Corridors, in their early developments, produce papers and processes. That, we have done until entry into operation as required by Regulation (EU) N° 913/2010 on 10th November 2015. In this respect, 2016 has been a year of change, during which the Corridor prepared the next step: create new rail traffic and be a growth-driver for rail freight between Scandinavia and Central as well as South-European markets.

In pursuing such purpose, we are not competing with our Member organisations - we rely on them. We understand ourselves as a vector of opportunities and a facilitator on a specific market. We have one aim: try, re-try and eventually succeed in finding user-friendly solutions that make rail a reliable and simple alternative to competing transport modes, a product that the customer will want to use.

We thank you for your trust and support in these first steps – and we are very much looking forward to continuing the journey with you,

Best regards,

Bjørn Kristiansen

Chair of the Management Board

1. Executive Summary

The Scandinavian-Mediterranean Rail Freight Corridor (ScanMed RFC) met the legal deadline and entered into operation on 10th November 2015 with the publication of the first Corridor Information Document. the publication of the first catalogue of Corridor paths ("Pre-arranged paths" or "PaPs) for the Timetable 2017followed on 11th January 2016.

Beyond Regulation requirements, the Management Board of ScanMed RFC cooperated with its customers to develop a medium-term Strategy, which it adopted in September 2016 just as it completed the set-up of a permanent organisation consisting in a permanent, full-time team of three and of an Association of Austrian law.

In 2016, ScanMed RFC was used mainly through its yearly offer on the section Malmö to Hamburg-Maschen, whereas customers favoured the existing path offer and booking processes south of the Hamburg area. Reserve Capacity, published two months before timetable change for the following year, was not applied for.

Particular efforts were put to improve the Corridor capacity offer, both in quality and scope. In particular, a pilot was started with Terminals and Ports to improve the coordination between network paths and "last-mile" slots. In supporting fields of action such as the coordination of works, traffic performance management and operations, Corridor activities aimed at improving the coordination and quality of information exchange - including traffic data – as well as operational processes among Infrastructure Managers.

In these fields, ScanMed RFC mainly sets action frameworks and templates: responding to the diversity of the operational and market environments along the Corridor, results are sought for and achieved to a large extent at regional level: in the North, between the Scandinavia and the Hamburg area, and in the South for the Brenner stretch between the Munich and the Verona area.

Although only in the first year of operation, ScanMed RFC measured first average values, which build up the Corridor's starting point, notwithstanding significant regional variations. In volumes, ScanMed RFC "weighted" in 2016 3,3 million PaP-kms out of 17 offered PaP-kms. Punctuality reached 70% at origin and 59% at destination. Approximately 34.100 trains crossed Corridor borders southward and 35.270 northward.

Similarly, customer satisfaction was investigated for the first time and reached 60% of the survey respondents for a responding rate of 50%. The service of the Corridor One-Stop-Shop scored best, while the Corridor path booking tool PCS scored worst. Further improvements fields were named, such as a better coordination of works, a more flexible yearly path offer and a more short term reserve capacity, improved punctuality and enhanced communication with railways. Taking these learnings into account, follow-up actions have been included into the work plan 2017.

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2. Establishment of the Scandinavian-Mediterranean Rail Freight Corridor (ScanMed RFC)

2.1. A successful operational start

The most visible activity of the RFCs is the coordination of international freight train paths at cross-border points, following Regulation (EU) No 913/2010 of 22nd September 2010. The first trains to run on such paths for ScanMed RFC operated in January 2017, thereby closing a process of frame-setting, capacity building and allocation which unfolded as follows:

- 10th November 2015: publication of the Corridor Information Document (CID) 2016 and of the Reserve Capacity Offer for the Timetable 2016
- 11th January 2016: publication of the CID 2017 of the Catalogue of Pre-Arranged Paths (PaPs) for the Timetable 2017
- 11th April 2016: deadline for requesting PaPs for the Timetable 2017
- 27th June: submission of the Draft Offer for the Timetable 2017
- 22nd August: submission of Final Offer for the Timetable 2017
- 10th October 2016: publication of Reserve Capacity Offer for the Timetable 2017

2.2. A stable governance and a dedicated team

On 10th November 2015, Bjørn Kristiansen, from the Norwegian Infrastructure Manager Jernbaneverket (now BaneNor) took over from Tommy Jonsson from the Swedish Infrastructure Manager Trafikverket, as Chair of the Management Board of ScanMed RFC. His term will end in December 2018.

A permanent Corridor Team was set up to conduct the day-to-day Corridor activities as well as to plan its development. It is composed of a Managing Director, a Corridor One-Stop-Shop Manager, and a Project Manager & Deputy Managing Director¹.

Additionally, each Infrastructure Manager appoints a Program Implementation Manager (PIM), representing its organisation on a day-to-day basis, ensuring both the required input for Corridor activities and acting as screening gate of Corridor deliveries upfront Management Board decision-making.

Corridor activities are prepared and, whenever relevant, conducted by six working groups: Capacity Management, Temporary Capacity Restrictions, Traffic and Performance Management, Operations, Infrastructure and Interoperability, composed each of a representative per Infrastructure Manager.

Last but not least, the Scandinavian-Mediterranean Rail Freight Corridor Association was set up to facilitate day-to-day financing of the Corridor activities. It was established in September with a seat in Vienna (Austria).

¹ <u>http://scanmedfreight.eu/contact-temp/</u>

2.3. A Strategy co-developed with customers

In May 2016, the Corridor Management invited Railway Undertakings, Terminals and End Users from the industry and the logistic sector for a one-day workshop in Wiesbaden (Germany). Its aim was to collect input from customers for the medium-term strategy of the Corridor.

The discussion, which gathered 26 representatives from the market almost evenly split among Railway Undertakings, Terminals and End Users, resulted in adopting a two-pillar strategy establishing reliability and simplicity of Corridor services as the goals of ScanMed RFC. In more general terms, the Corridor is expected to take responsibility for developing a smooth logistic chain, ultimately establishing itself as integrator of international rail freight services².

The writing process of the Strategy, based on a close cooperation with Users, Terminals and Ports proved successful. It was consolidated in the form of "Principles for co-development", defining a predictable involvement of all stakeholders and managing mutual expectations³.

2.4. The Management Board Mandate and the Action Plan for 2017

The Corridor Strategy is implemented through the Mandate of the Management Board and the Action Plan, adopted in their new form by the Management Board respectively in September and in December 2016.

The mandate covers:

- Operational activities fulfilling the requirements Regulation (EU) No. 913/2010
- Operational activities, so far mainly in form of pilots, fulfilling the strategic goals
- Transversal tasks, which are non-operational but necessary to run and develop the Corridor

In principle, operational tasks are carried out by individual Working groups, while transversal tasks are carried out by the PIMs or by more than one working group.

3. The Corridor as a Product: Capacity Offer on ScanMed RFC

3.1. Establishment of the Corridor One-Stop-Shop (C-OSS)

The Infrastructure Managers involved in ScanMed RFC established the C-OSS on 21st December 2015. The C-OSS officially started operations on 1st January 2016.

When fulfilling the C-OSS function, the C-OSS Manager acts and decides within a Framework for Capacity Allocation (FCA) adopted on 24th November 2015 by the Ministries in charge of Transport. The FCA sets general principles, such as non-discrimination and confidentiality, as well as

² http://scanmedfreight.eu/wp-content/uploads/2016/09/160929 Strategy-Paper Final.pdf

³ http://scanmed.adonidesign.dk/wp-content/uploads/2016/10/160929 Principles-for-Business-Development Final.pdf

transparent priority rules for allocating Corridor paths to customers in case of conflicting path requests⁴.

The C-OSS acts as unique point of contact for Corridor customers and presents three main advantages for international rail freight services: acceleration, simplification and quality improvement.

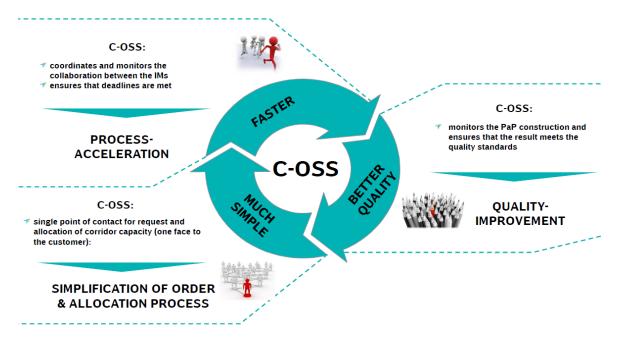


Figure 1 - Roles of the C-OSS

3.2. The Capacity Offer on the Corridor

In its first operational year, ScanMed RFC offered two products:

- Pre-arranged paths (PaPs) for the timetable 2017
- Reserve Capacity (RC) for the timetable 2016

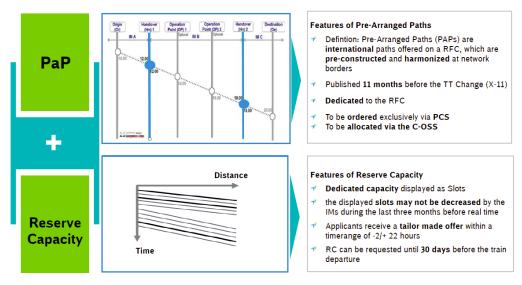


Figure 2 - Main features of ScanMed products

⁴ https://cip.rne.eu/apex/f?p=212:170:17435083563502::::P170_BOOKS_LIST:342111

The **Pre-arranged paths (PaPs)** were published by the C-OSS in the Corridor booking tool Path Coordination System (PCS)⁵ on 11th January 2016, for a total amount of 17 million PaP-kilometers.

The PaP-Offer consisted of Flex-PaPs in Norway, Sweden – with the exception of the section Malmö-Peberholm - Germany and Italy, and of Fix-PaPs in Denmark, Austria and on the section Malmö-Peberholm in Sweden.

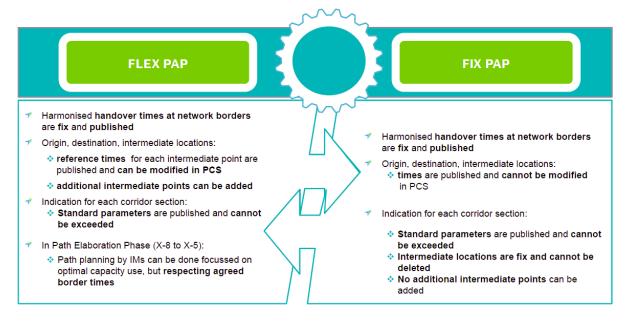


Figure 3 - Main features of the Fix and Flex PaP

In the first allocation year, the demand for PaPs exceeded the offer by 50% on the section Malmö-Maschen, but stayed well below expectations in the southern part.

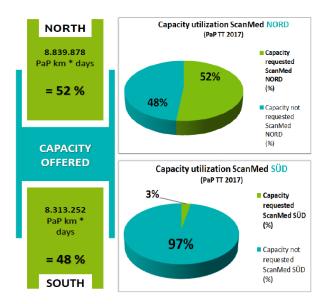


Figure 4 - Corridor Capacity utilization for PaPs TT 2017

⁵ http://pcs.rne.eu/

Customer feedback highlights two main reasons for deciding against Corridor products from Munich southward:

- the very good cooperation already existing between the Infrastructure Managers on the Brenner stretch, resulting in a low added value of Corridor products;
- the customers not feeling confident with PCS

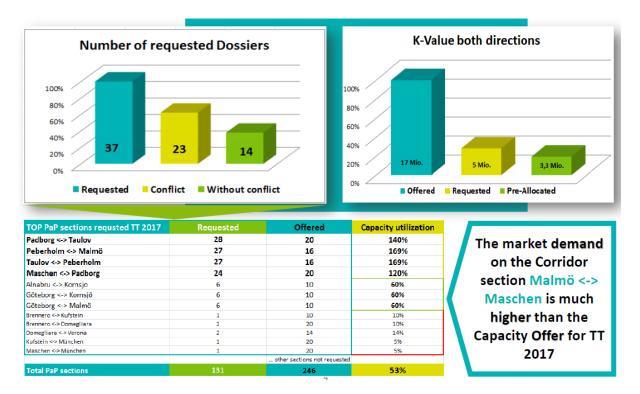


Figure 5 - Overview results of the pre-allocation PaPs Timetable 2017

Conflicting customer requests on the northern part of the Corridor, i.e. the submission of at least two requests for the same PaP-segment, led the C-OSS to allocate 3,3 million PaP-kilometers out of the requested 5 million. However, all remaining requests, accounting for 1,7 million PaP-kilometers, could be accommodated with tailor-made solutions.

The **Reserve Capacity (RC) offer** for timetable 2016 was published in PCS at X-2, i.e 10th November 2016 and for timetable 2017 on 10th October 2016. It took the form of capacity slots offered per day and direction. Reserve Capacity was however not applied for.

Feedback from customers highlighted that the deadline of 30 days before train run for placing a request met neither market dynamics nor operational schemes of Railway Undertakings. Following this, ScanMed RFC will work in 2017 on a short term RC-concept, enabling placement of orders at a shorter notice.

3.3. Including Terminal Slots to the Corridor's offer

With the aim of gaining experience before considering a general offer integrating PaPs and terminal slots, ScanMed RFC started a pilot with Interporto Bologna (Italy), the Port of La Spezia (Italy), the Deutsche Umschlaggesellschaft Schiene-Straße GmbH ("DUSS", Germany) and Rail Freight Terminal Alnabru (Norway).

The pilot gives Applicants the opportunity to request PaPs and terminal slots in a single step via the C-OSS. It consists of several levels, corresponding to different levels of commitment:

Level 1: The C-OSS as common post-box:

Applicants can place requests for terminal capacity in one step together with PaP-requests. The C-OSS acts therefore as a common post-box and collects the requests for both PaPs and terminal capacity. The requests for the terminal capacity will then be forwarded to the terminals, which can accept as valid requests those applications that were placed on time. This level is applied for Timetable 2018 with the ScanMed relevant DUSS Terminals.

Level 2: Offer of free terminal slots

The C-OSS publishes free terminal slots (no preliminary coordination with the PaP-times). Once an Applicant has applied for a published slot, his request is binding for the terminal. This level is applied for the Timetable 2018 with Interporto Bologna and the Port of La Spezia. More details are available in CID Book 4^6

Level 3: Offer of coordinated terminal slots

The C-OSS publishes terminal slots which have already been coordinated with the PaP-times. Once an Applicant has applied for a published slot his request is binding for the terminal. This level is applied for the Timetable 2018 with freight terminal Alnabru. More details are available in CID Book 4.

4. Supporting measures to a Corridor Capacity offer

4.1. Temporary Capacity Restrictions (TCRs)

4.1.1. General approach for coordination

In accordance with the "Guidelines for Coordination / Publication of Planned Temporary Capacity Restrictions" of RailNetEurope⁷, the coordination of TCRs on ScanMed RFC was carried out by the dedicated TCR-Working Group. The Guidelines recommend coordinating TCRs in three stages:

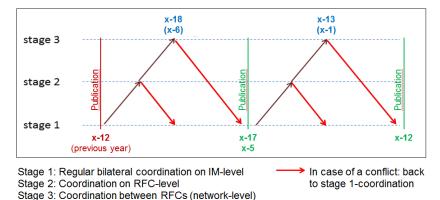


Figure 6 - TCR-coordination in three stages

These three stages are expected to unfold in coordination with the Corridor timetabling process.

⁶ https://cip.rne.eu/apex/f?p=212:170:17435083563502::::P170_BOOKS_LIST:342111

⁷ http://www.rne.eu/rneinhalt/uploads/2017/03/2015-12-03-Guidelines-CoTCR-V2.0.pdf

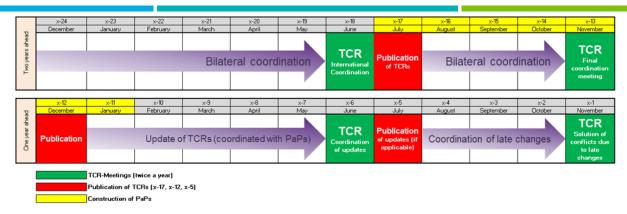


Figure 7 - TCR-coordination schedule

Whereas stage 3-coordination is performed on a general basis via e-mail or telephone by the dedicated Corridor TCR-Coordinators (CTCs), stages 1 and 2 require the experts of the Infrastructure Managers involved collaborating more closely. The length of ScanMed RFC and the diversity of the operational environments led to split TCR-coordination (Stage 1) in two subgroups — TCR ScanMed North and TCR ScanMed South (Fig. 3).

4.1.2. Main TCR-events and challenges in 2016

On the southern part (Brenner corridor), one major task in 2016 was to plan two total closures (5 days around Kiefersfelden and 5 days around Bolzano) for 2018, together with a closure of the southern Brenner access (Innsbruck – Brenner), which causes passenger trains to and from Innsbruck to be replaced. This issue was finally solved in February 2017 by including railway undertakings into the consulting process.

Another challenge has been to include diversionary lines which are not official lines of the Corridor (e. g. Norway to Sweden via Charlottenberg, Ferry line from Trelleborg via Rostock to Hamburg, Munich via Salzburg, Villach and Udine to Verona). TCRs on these lines have to be taken into account as well, since they might interfere with closures on the main line and thus lead to capacity bottlenecks.

4.2. Train Performance Management (TPM) and Operations

4.2.1. The Corridor approach

TPM and Operations on ScanMed RFC consist of two levels:

- Two Corridor working groups one for TPM, one for Operations
- Two regional groups, ScanMed North and ScanMed South, acting in both fields above

In 2016, the TPM Working Group has been working on setting the frame for further, close-to-the field performance monitoring at regional level. In particular, it ensures consistency of punctuality reports (E.g.: reporting format, harmonized data consistency check and delay thresholds) along the Corridor.

The Operation Working Group updated information sources on:

- Cross-border sections,
- Cross border operational agreements,
- Cross-border communication procedures in case of disturbances and operational scenarios

Rules on exceptional transport and dangerous goods.

The gathered information is available in CID Book IV⁸ and its related attachments.

The Working Group Operations has further been updating description of priority rules in case of disturbance in the RNE related database/webpage.

The diversity of operational environments and market profiles otherwise make a strong regional focus of TPM necessary. Diversity is tackled by two regional groups, ScanMed North, covering international freight traffic from Malmö to Maschen, and ScanMed South, covering the Brenner stretch from Munich to Verona.

4.2.2. The Regional Groups

4.2.2.1. General approach

Both Regional Groups bring together representatives from the relevant Infrastructure Managers and Railway Undertakings. From time to time, ScanMed North has also included Representatives from End users. In doing so, the Regional groups, the participation into which is open, represent the regular, continuous dialogue platform for improving the quality of international rail freight. Agendas are set in a joint manner by the Infrastructure Managers and the customers.

In particular, the Regional groups discuss mitigation measures for delays. On an ad hoc basis, they further act as cooperation frame for local, operational challenges to be solved on a cross-border basis.

4.2.2.2. Particular achievements in 2016

- Regional Group North
 - ✓ Punctuality reporting

In 2016, the Group focused on promoting topics brought up by customers within the involved Infrastructure Managers. These topics were in particular harmonized operational rules and improved communication in case of disturbances.

Furthermore, the Group worked on improving data quality for punctuality reports and on identifying quality-improvement measures. Train numbers not yet harmonised led to use both the RNE-Tool Train Information System (TIS)⁹ and national systems to support punctuality reporting.

Cross-border operations

Traffic control teams from Trafikverket, Banedanmark and DB Netz AG continued in 2016 to hold their Monday conference calls started in June 2015. After DB Netz in 2015, the calls were coordinated in 2016 by Trafikverket.

In particular, these calls handled the consequences on cross-border traffic of

- strikes in Germany,
- o construction works on the Corridor's principal route,
- and of the incident regarding delays in construction works in Fyn (Denmark).

⁸ https://cip.rne.eu/apex/f?p=212:170:17435083563502::::P170 BOOKS LIST:342111

http://tis.rne.eu/index.php/what is tis.html

Communication channels are now established and could be developed. This effort will be continued in 2017.

✓ TCRs

Information sharing on TCRs works satisfactorily, but further improvements can be achieved. The Group drafted in this purpose, in 2016, fall-back scenarios, which it plans to improve and finalise in 2017.

Regional Group South

Through the years, the Group has gathered valuable cross-border experience:

- ✓ Short and integrated cross-border communication chains, as exemplified during the total closure of the Brenner line in 2012
- ✓ An operational step forward with the start, in 2015, of a pilot on a uniform rear end signal along the Brenner stretch
- ✓ The raise of efficiency with the increase of train load.

In 2016, the Group pursued the following objectives:

- ✓ Solve shunting restrictions at the Brenner Station impacting the operational scheme of Railway Undertakings
- Develop Information on TCRs
- ✓ Coordinate a total line closure planned in 2018
- ✓ Jointly tackling the issue of refugees using freight trains to pursue their journey

In addition, the Group works closely with the Capacity Management, the TPM and the TCR-Working Group.

Looking forward, the Group in 2017 will work primarily on finding a long term solution for shunting services at the Brenner Station and for improving information on TCRs, including within the running timetable.

5. Measuring Success and Challenges: the Assessment of Quality on ScanMed RFC

Beyond punctuality, ScanMed RFC assesses quality in two ways:

- Looking "inside" with a range of capacity, market and operational Key Performance Indicators (KPIs)
- Triggering feedback from the "outside" with a yearly, cross-corridor User Satisfaction Survey (USS)

5.1. KPIs

ScanMed RFC uses KPIs partly shared with other RFCs under the umbrella of RNE and partly of its own. The list is reviewed and, if appropriate, updated on a yearly basis. The present section delivers results for 2016.

5.1.1. Capacity Management

VD I		Value 2016				
KPI	Definition	Calculation features	Reference TT year	Source and processing	Value 2016	
Offered Capacity	Volume of offered corridor capacity at X-11				17 million PaP km	
Requested Capacity	Volume of requested corridor capacity at X-8	According to RNE Guidelines: "Key Performance Indicators of Rail Freight Corridors" – pages 9 and 10			5 million PaP km	
Requests	Number of requests in PCS		of Rail Freight Corridors" –	2017	PCS and manual processing	37
Pre-allocated Capacity	Volume of pre-allocated corridor capacity at X-7,5				3,3 million PaP km	
Conflicts	Number of conflicting requests				23	

Table 1 – Capacity management KPIs

For comments, see Chapter 3 of the present report

5.1.2. Operations

КРІ	Explanation					Values 204.5	
KPI	Definition	Calculation features	Reference TT year	Source and processing	Values 2016		
Punctuality at origin	Percentage of on-time trains at origin with a threshold of 30'	According to RNE Guidelines: "Key				70%	
Punctuality at destination	Percentage of on-time trains at destination with a threshold of 30'			59%			
Delay causes	Share of delay minutes according to groups of causes	Sum of delay minutes attributed to each delay code (clustered IM/RU/External)/sum of total delays per IM (predefined sample of trains)	2016	TIS and RNE Processing tool (OBI)	IM: RU: External: Secondary:	Northbound 21% 55% 3% 21%	Southbound 16% 57% 2% 25%

Table 2 – Operations KPIs

For calculating these KPIs, the first and/or the last Contracted Timetables were used where data on origin or destination of the train was not available. In 2016, the above KPIs were measured taking into account a list of trains operated by several Railway Undertakings. Secondary delay causes cover Track Occupation.

5.1.3. Market KPIs

KPI	Definition	Calculation features	Reference TT year	Source and processing	Values 2016
Traffic Volumes	Number of running trains monitored in national systems	Number of freight trains crossing defined pairs of border points	2016	National systems, manual processing	See table below

Table 3 – Market KPIs

BORDERS		TRAINS (n)		
IMs/Countries	IMs/Countries Points		Northbound	
iivis/ Courtiries	Foilits	NS	NS	
Banenor/Norway, Trafikverket/Sweden	Kornsjø-Gränsen – Göteborg Marieholm	423	423	
Trafikverket/Sweden, Banedanmark/Denmark	Peberholm (BDK) - Peberholm	4.152	4.302	
Banedanmark/Denmark, DBNetz/Germany	Padborg - Flensburg Friedensweg	5.356	5.257	
DBNetz/Germany, ÖBB Infra/Austria	Kufstein - Kiefersfelden	14.515	15.234	
ÖBB Infra/Austria, RFI/Italy	Abzw Sti 4 - BRENNERO	9.657	10.051	

Table 4 – Traffic volumes *per* border

The main share of the traffic on the corridor runs between München Ost and Verona, the second largest share runs between Malmö and Maschen.

5.2. The User Satisfaction Survey (USS)

5.2.1. General approach

The USS has been carried out under the umbrella of RNE since 2014. ScanMed RFC participated for the first time in 2016.

The USS consists of a web-based multiple choice questionnaire covering all action fields of the RFCs. Applicants, i.e. railway undertakings and non-railway undertakings, as well as terminals and ports answered the questionnaire in September 2016.

5.2.2. Participation and results

Half of the invitees answered the questionnaire, which represents a satisfactory response rate. Not all questions were answered and "Do not know"-answers were given several times.

ScanMed RFC scored a 4 for a possible maximum of 6 on the overall satisfaction scale and satisfied customers represented 60% of the respondents.

ScanMed RFC scores better than the cross-corridor average in 28 out of 40 questions, the availability of the C-OSS and the handling of Corridor Capacity allocation scoring the highest. Down the list, the use of PCS, as well as Communication and Information sharing score the lowest.



Figure 8 - ScanMed "Top Ten" aspects - Source: RFCs USS 2016 - Results provided by Marketmind

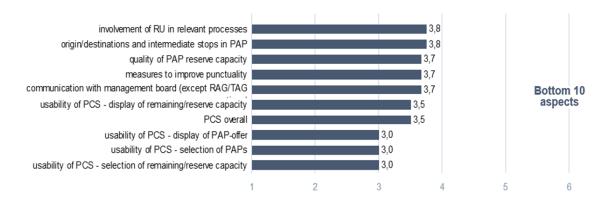


Figure 9 - ScanMed "Bottom Ten" aspects - Source: RFCs USS 2016 - Results provided by Marketmind

5.2.3. Follow-up actions

ScanMed RFC included the learnings from the USS when designing its work plan for 2017. As regards the USS itself, particular attention will be paid to reach a bigger participation into the survey.

Area of dissatisfaction (see Bottom Ten)	Action	Source	
Involvement of Railway Undertakings s in TCR processes	"Close-the-gap" ApproachAlternative scenarios/contingency plans in case of re-routing	WorkPlan 2017 (TCR and OPE WG)	
Origin, Destinations and intermediate stops in PaPs	▼ Implement Flex-PaPs in Austria and Denmark Shorten the maximal deviation between the requested and the guaranteed offer from - 2/+22 hours (state of play TT 2016) to +/-3 hours	Achieved for TT 2017	
Quality of Reserve Capacity	Implement Flex PaP corridor wideDesign a short-term RC-product for ad-hoc requests	WorkPlan 2017 (CAP WG & C-OSS)	
Measures to improve punctuality	Design of a "quality circle" approach within TPM groups	WorkPlan 2017 (TPM WG)	
Usability of PCS	Promotion of the use of PCS and intensification of customer training	WorkPlan 2017 (CAP WG & C-OSS)	
Communication with the Corridor Management between meetings of the Advisory Groups	 Overview of infrastructure developments in CIP Newsletter: important news from IMs and RFC MB Main KPIs displayed in the Annual Report on line 	Workplan 2017	

Table 5 - Corrective actions by ScanMed based on the results of the USS

6. Making ScanMed RFC visible: Communication supports and activities

6.1. http://www.scandmedfreight.eu

After working two years with a webpage hosted by Banedanmark, the permanent website of ScanMed RFC was launched in September 2016.

6.2. Customer Information Platform (CIP)

CIP is a web-based platform which provides users and any interested party with information on the Corridor. It encloses in particular:

- an interactive Corridor map displaying line properties such as infrastructure parameters and information on terminals on the Corridor routing,
- Corridor documents, such as the Corridor Information Document,
- Capacity offer

CIP is an open platform, which stakeholders can access via a login page. It went live in November 2015 and aims at being an "Information One-Stop-Shop" for Corridor users.

The main line of actions in 2017 will be:

- Implementation of a multi-corridor map view with one single login,
- Harmonise documents across the RFCs,
- Advertise CIP towards stakeholders, and organise user's feedback for further improvement

6.3. Events

6.3.1. Conferences

✓ Launching Event – 23rd February 2016 in Vienna

Around a hundred participants met in the prestigious Hofburg around the motto "Deepening the dialogue" to celebrate the operational launch of ScanMed, Baltic-Adriatic and North Sea-Baltic RFCs, as well as the extension of Atlantic RFC into Germany. Among the participants were the Transport Ministers of Norway and Slovenia.

✓ TEN-T Days – 20th to 22nd June 2016 in Rotterdam

The 2006 TEN-T days were held in the Van Nelle-factory in The Hague in The Netherlands. ScanMed was present with the entire Corridor Team, as well as by MB-Chairman Bjørn Kristiansen. Kristiansen also gave a speech and attended a panel on behalf of Jernbaneverket (now BaneNor) and EIM, highlighting both the importance of the Sector Statement for the Rail Freight Corridors and the Strategy process launched by ScanMed RFC in May 2016.

✓ Oslo Trade Fair – 17th to 18th October in Oslo

Parts of the Corridor Team attended the traditionally most visited trade fair in Norway to present the Corridor concept as well as its main products, as part of the then Jernbaneverket information stand. The event was an opportunity to reach out beyond the rail world to the industry and potential RFC-end users.

6.3.1. Customer workshops

Operational Customer Workshop on Capacity Offer

An operational customer workshop took place in June 2016 in Frankfurt am Main with the aim of better understanding market needs and of identifying improvement area for Corridor capacity products. The outcome of the workshop was taken into consideration for the definition of the Capacity Offer TT 2018.

PCS Training

In order to introduce the new features of PCS Next Generation to the customers of ScanMed RFC, the Corridor organised together with the Corridors Rhine Alpine and North-Sea Baltic a common PCS Training in Frankfurt am Main, to which approximately 40 customers attended.

7. ScanMed RFC in the context of European Infrastructure Policy

7.1. ScanMed RFC as part of to the Core Network Corridor (CNC) and the Brenner Corridor Platform (BCP)

7.1.1. ScanMed RFC and the CNC Scandinavian-Mediterranean

ScanMed RFC focuses on the optimisation of the existing infrastructure for international rail freight on selected routes. It will benefit from two major infrastructure projects which are part of the Core Network Corridor Scandinavian-Mediterranean¹⁰.

Regular information exchange take place between EU-Coordinator Pat Cox and ScanMed RFC. However, both structures work on different timelines and remain separated.

The Femern Fixed link

The Femern fixed link, which is expected to enter into operation in 2021, will take the form of a tunnel including two train tracks and a four-lane motorway. Freight trains running between the South of Sweden and Germany will save approximately 170 km. Related investments for upgrading and renewing the infrastructure between Copenhagen and Rødby further mean increased train speed and better punctuality.



Figure 10 – The Femern Fixed link in the South-Scandinavian rail landscape

Will be included in the new Femern routing:

- ✓ On the Danish side:
 - The new line Copenhagen Ringsted (due in 2018)
 - o The upgraded railway Ringsted-Rødby (due in 2021)

¹⁰ https://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/corridors/scan-med_en_

- The Femern Fixed Link (due in 2021)
- o The new bridge over Storstrømmen (due until 2024)
- Through electrification (due until 2024)
- ETCS Level 2

The Femern route will be further certified for 1.000 m-long freight trains.

On the German side:

- A new double track line and an upgraded line between Bad Schwartau and Puttgarden
- Through electrification between Lübeck and Puttgarden
- The removal of existing railway level crossings
- The building of new interlockings and the roll-out of ETCS Level 2
- A new crossing for the Fehmarnsund-connection
- Additional sidings in Lübeck Süd

The German access to the Femern Fixed Link, between Bad Schwartau and Puttgarden is expected to open in 2024

The Brenner Base Tunnel (BBT)

Approximately 110 km of ScanMed RFC runs through Austria through the Alps to Italy, which makes it the key sections of the Corridor. The Brenner Base Tunnel which, with the existing Innsbruck bypass tunnel, will have a length of 64km and be thereby the longest rail tunnel in the world, will connect the South of Innsbruck in Austria to Fortezza in Italy in 25 minutes instead of 80 minutes today. It is constructed approximately 580m below the Brenner pass, at 790m above sea level. It will be equipped with ETCS Level 2

7.1.2. ScanMed RFC and the Brenner Corridor Platform (BCP)

ScanMed RFC and the BCP share, on the Brenner stretch some common topics in the field of Interoperability and Operations, however in different degrees of details and following different timelines and goals. The BCP is all focused on supporting, both for passenger and freight traffic, the future operations of the BBT and works between Munich and Verona.

However, similarly as for the CNC Scandinavian-Mediterranean, ScanMed RFC and the BCP proceed to regular information exchanges, in particular in the shared fields.

7.2. Infrastructure and Interoperability on ScanMed RFC

Unlike the CNC Scandinavian-Mediterranean and the BCP, ScanMed RFC restricts its activities in the fields of Infrastructure and Interoperability investments to information gathering and harmonised display, either through CIP (s. above) or though the Implementation Plan (s. Book V of the Corridor Information Document)

In 2016, the Working Group Infrastructure of ScanMed RFC contributed to deliver data in CIP, in particular on:

- Nodes and segments for the topology
- ✓ Infrastructure properties
- ✓ GIS data

The Working Group Interoperability started updating the implementation plan with respect to investments on the infrastructure relevant Technical Specifications for Interoperability (TSIs), though focusing only on those data which are not or are insufficiently covered by the Register for Infrastructure (RINF).

8. Contacts

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