Corridor A / IQ-C

Executive Board ERTMS Corridor A and International Group for Improving the Quality of Rail Transport in the North-South Corridor

6th Progress-Report

August 2011

prepared in collaboration with the Dutch Ministry of Infrastructure and the Environment , the German Ministry of Transport, Building and Urban Affairs, the Italian Ministry for Transport, the Federal Public Services Mobility and Transport of Belgium, and the Swiss Federal Office of Transport.

Annexes:

1. Introduction

Corridor A is the rail freight corridor from Rotterdam to Genoa along the River Rhine through the industrial heart of Europe. The corridor is extended to Antwerp and Zeebrugge in the course of 2010. This railway link serves the major industries and the most dynamic and fast growing economic regions as well as deep-sea ports, inland ports and around forty intermodal terminals on 2100 kilometres of lines.

Corridor A goes between the major (sea) ports of Rotterdam and Genoa, right through the heart of the EU along the so-called "Blue Banana". This is the most heavily industrialised North-South route in Central Europe and connects Europe's prime economic regions. The "Blue Banana" includes the economically strong urban centres such as Rotterdam, Amsterdam, Zeebrugge, Antwerp, Duisburg, Cologne, Frankfurt, Mannheim, Basle, Zurich, Milan and Genoa. All these centres are served and connected by Corridor A. This outstanding position together with the resulting fact that Corridor A carries by far the greatest transport volume in Europe, makes the Rotterdam-Genoa route one of the pioneer for international rail freight transport in Europe.

The **I**nternational Group for Improving the **Q**uality of Rail Transport in the North-South**-C**orridor resp. Corridor A (IQ-C) is dealing with the aim to further improve the quality and punctuality in international rail freight transport on the Corridor A. Since 2003, the Ministries of Transport of the Corridor A have intensified the way of cooperation and have thus brought about some remarkable results.

In 2006, The organisation for the deployment of ERTMS/ETCS in the corridor was established. The Infrastructure managers have set up the Management Committee and founded the EEIG Corridor Rotterdam-Genoa EWIV to steer the overall improvement program integrating all ERTMS and other improvement activities of IQ-C, whereas the Ministries have created the Executive Board supervising the ERTMS implementation on the corridor. Since 2008, the IQ-C Working Group of the Ministries of Transport and the ERTMS Executive Board are working together in very close cooperation and coordinate their actions and time schedules. In the discussions between Executive Board and Management Committee the development of a successful implementation of ERTMS was in the focus of work. Between 2008 and 2010 all fields of activities were further developed.

The Infrastructure Managers have further developed their quality improving actions, such as development of harmonised key performance indicators (KPI) concerning traffic volume, modal split, punctuality and commercial speed. Common deadlines for the planning and allocation process for timetabling, the development of customer relationship, the establishing of common and harmonised operations management processes as well as the further development of infrastructure and an international process of coordinated bottleneck elimination have been

initiated. Great efforts have been made to improve punctuality and analysis of the causes for delays.

The most important milestones of the work and progress of the freight corridor Rotterdam – Genoa are:

I. In January *2003* the Memorandum of Understanding (MoU) was signed by the Ministers of the four corridor countries namely Italy, Germany, the Netherlands and Switzerland. This scheme includes a range of quality improving short term measures which focus on actions not only from Infrastructure Managers but also measures that have to be implemented by the Ministries.

II. In July *2004* an agreement was reached for facilitating EU-CH transit customs procedure benefiting all railway undertakings;

III. In *2005* the Netherlands-German agreement was reached between the railway safety inspectorates on mutual recognition of drivers where possible;

IV. In March *2006*, the Ministers signed – as a result of a mandate of the Ministers to the IQ-C Working Group – the “Letter of Intent ERTMS deployment on Rotterdam – Genoa corridor” (LoI) with the aim to complete the ERTMS/ETCS infrastructure on the corridor until 2015.

V. In June *2007*, the Ministers agreed on and signed a Memorandum of Understanding on the implementation of approval procedures for rolling stock and cross acceptance of approval procedures of the competent supervisory authorities.

VI. In May *2009*, the Ministers signed a common declaration in Genoa on the ERTMS corridor A and re-emphasised to implement ERTMS on the corridor by 2015. Also the Minister declaration included decisions on procurement and authorisation of ERTMS equipment and on the necessary European development of ERTMS baseline 3.

VII. In June *2010*, Ministers of three European rail freight corridors signed a common declaration (see appendix I). The Ministerial meeting showed the clear political backing behind the development on rail freight corridors throughout Europe. For the first time several corridors were discussed and so also the connections between corridors as as step towards the European network approach was recognised. The Mini*ster*s asked the Infrastructure Manager of the Corridor A to enable long trains on the entire corridor by providing at least 750m tracks, to continue with common procurement of ERTMS, and to seek for a common testing and authorisation concept for Corridor A under the lead of the NSAs and in cooperation with ERA.

Within the Ministerial meeting, the Ministries agreed upon a new “IQ-C Action plan 2006-2014 for rail freight corridor Rotterdam-Genoa” to focus and amend the actions of the MoU of January 2003.

The Ministers invited Belgium to participate in the ERTMS Executive Board and the IQ-C Working Group as an observer, and as full member after the entry into force of the Regulation (EU) No. 913/2010 which was in discussion as a proposal at the time of the Ministerial meeting.

VIII. On November 9th, 2010 the Regulation (EU) No. 913/2010 of 20 October 2010 concerning a European rail network for competitive freight entered into force. This Regulation brings an extension of the existing IQ-C/Corridor A to the Belgium harbours of Zeebrugge and Antwerp and a renaming of the Corridor A as ‘Corridor 1’.

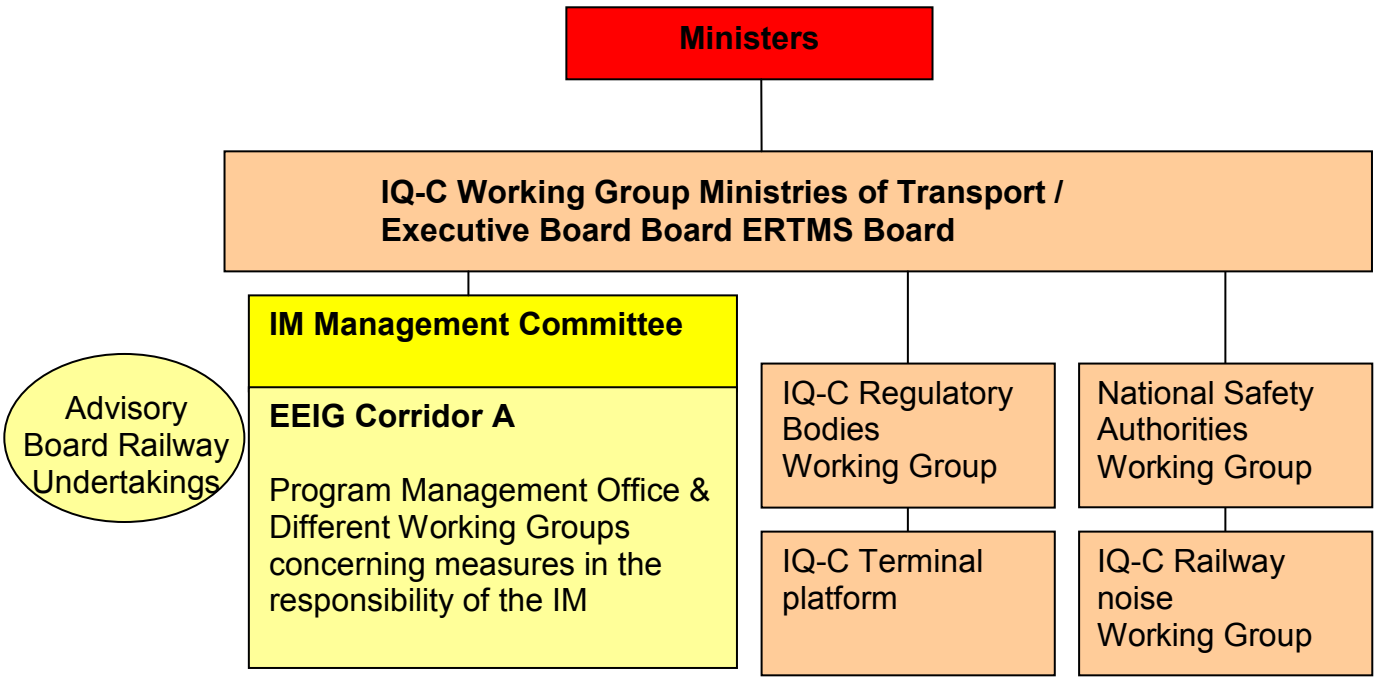
It aims mainly to strengthen the previous corridors, from either the Intergovernmental field (e.g. ERTMS), or from Infrastructure Managers, by institutionalizing their business objectives and methods in a legal community framework, to reinforce cooperation at all levels along some rail freight corridors, to provide rail freight services of good quality to become more competitive with other transport modes. This legal framework imposes among others: similar governance to the existing-ones of Corridor A (with an Executive Board and a Management Board, with advisory groups), an implementation plan which enhances and completes the ambitions of the action plans of the corridor A, and specific deadlines to implement these obligations on the nine initial freight corridors.

2. Corridor organisation

On 9 January 2003 the transport ministers of Germany, Italy, the Netherlands and Switzerland signed a joint “Memorandum of Understanding” in Lugano aimed at enhancing the quality of cross-border freight transport by rail on the North-South-Corridor. The Ministers entrusted an international working group with the task of implementing a package of specific measures that were defined following a prior analysis of the main problems relating to freight transport by rail in the North-South-Corridor.

Herewith the working group is submitting the 6th report to the Ministers. This report reflects on the issues of the IQ-C Action plan (see appendix II), the status of the activities, and the progress that has been achieved in specific areas to date.

The corridor organisation including ERTMS and the different Working Groups of Infrastructure Manager, National Safety Authorities and regulatory Bodies can be pictured as follows:



Following the decisions of the Rotterdam declaration, the Belgian Ministry of Transport was invited to participate in the Executive Board and the IQ-C working group. The Belgian Ministry followed the invitation and is fully involved in the activities of the corridor organisation.

Since the year 2009, the corridor organisation includes a 'Terminal platform' and a Working Group on Railway noise as additional parts of the organisation from ministerial side with respect to the aims of the Action plan (especially concerning Railway noise and Terminal issues, see chapter 3).

On the side of Infrastructure Manager, the Programme Management Office is implemented and works as one common corridor management board, which develops, steers, monitors and reports all the corridor activities as integrated action and like one company. In 2008, the EEIG Corridor Rotterdam – Genoa EWIV was found. The Infrastructure Manager of the corridor can now act as a legal entity, financially borne by its members and associates.

Regarding the institutional requirements of the Regulation (EU) No. 913/2010, the Executive Board worked a new mission statement to ensure the establishment of a corridor framework according to the new Regulation, especially the extension of the Corridor to the Belgium ports of Antwerp and Zeebrugge. The Executive Board appointed a special task force as a working group with the objectives to deliver a strategic approach for the implementation Regulation (EU) No. 913/2010 for the corridor 1, and to propose a new mission statement for the executive board and the IM management board. The new mission statement for the executive board of Corridor 1 was approved in June 2011.

3. IQ-C Action plan 2006-2014 for rail freight corridor Rotterdam-Genoa

The Working Group IQ-C (in close cooperation with the Executive Board ERTMS) works on the Action Plan since the start of the working group in 2002. The actual Action plan was updated, concretised and prolonged until 2014 by the Ministers in June 2010. The focus was and is on the following actions:

1. *Digital coordination:* The aim is that infrastructure managers will optimize their IT support of business processes in such a way that virtual coordination of infrastructure management on the corridor is possible with one face towards the customers, especially for the RUs focused on international rail freight traffic. Therefore, corridor wide application of Europtirails shall be ensured, also the access to applications (e.g. Europtirails) for terminal operators and other involved parties (e.g., intermodal operators). The implementation of TAF TSI in the EU and among the corridor partners shall be ensured and monitored.

2. *Services:* The aim is the regular check-up of essential service quality and performance indicators on the corridor and the development of additional value-added services for the clients. The focus is on measuring service quality (e.g., response time of the One Stop Shop, number and speed of train paths, punctuality of freight services, corridor coordinated customer satisfaction survey). Value added services are also investigated by infrastructure managers.

3. *Improving punctuality:* to improve punctuality on the corridor by setting the right commitment and incentives by infrastructure managers and railway undertakings. Measures are a study about the feasibility of the European Performance Regime in the corridor (as a pilot) with decision about implementation and production supervision with monitoring and improvement using EPR on Rotterdam – Genoa for important traffic flows.

4. *International capacity allocation:* with the goal of improving transparency and efficiency of the capacity allocation process for the annual time-table and the short-term requests for train paths, and introducing corridor wide catalogue paths where feasible (corridor wide catalogue with harmonised international freight train paths or development of customer oriented overviews of harmonised international freight train paths).

5. *Capacity / bottlenecks:* includes a broad package of measures to improve international traffic by analysing the existing infrastructure bottlenecks on an integrated (corridor) basis. Action points concern the infrastructure inventory (all client relevant infrastructure

parameters, e.g. train length, clearance gauge), the assessment of essential developments on basis of the results of corridor-wide cost-benefit-analysis, the check of the client needs for the infrastructure parameters and the definition of the future development for those values, the identification of infrastructure bottleneck by combining traffic demand forecasts with capacity (actual and planned, per five year planning steps, e.g. 2015 and 2020), proposals to eliminate infrastructure bottlenecks, and making transparent the financing of bottleneck removal projects at national and EU levels.

6. *Cross acceptance:* to make the country-specific acceptance processes for production resources (locomotives, wagons, locomotive drivers) easier, faster and less expensive than today for the applying bodies (RUs, wagon keepers and leasing companies), while maintaining the same safety level. This includes the mutual recognition of engine drivers with a corridor wide implementation in line with the new EU directive 2007/ 59 for engine drivers respectively the continuation and extension of an intermediate approach of bilateral agreements on acceptance of train drivers until full implementation and application of driver license directive. The mutual recognition of locomotives is also part of this actions by implementing cross acceptance (international requirements list) of certification of locomotives in conformity with the EU directive 2008/57.

7. *Market regulation:* to continue the cooperation of the Regulatory Bodies for issues of common interest on the corridor. This includes the reporting on recommendations for improvements of the allocation process of capacity (assessment of allocation for international freight train paths on the corridor), the analysis and relief of congested infrastructure with focus on legal application of priority rules, the access of the clients to terminals and other service facilities in line with EU-legislation and the non-discriminatory application of priority rules by the IM's in case of disturbance of traffic.

8. *ETCS / ERTMS:* to install seamless ETCS operations on the corridor by 2015 to enable safe and interoperable international rail freight traffic to enhance modal shift from road to rail and support the future market demands and development of the European market. The infrastructure managers prepare the corridor implementation plan and will propose this to the executive board for adoption. The realization of the corridor implementation plan includes border transition procedures and installations. An implementation plan for ETCS authorization process based on an application of IM (with annual update) has to be developed and realised by infrastructure managers and national safety authorities.

9. *Terminal facilities:* to improve the interface between terminal operators and IMs. Ministries and infrastructure platform update within the Corridor terminal platform (in close collaboration with terminal operators) the corridor terminal inventory (capacity, equipment, etc.), - monitor the traffic development including bottlenecks to and from

terminals, ensure the coordinated national planning for long term development of terminals, develop solutions for regulatory problems of the last mile (in cooperation with the regulatory bodies) and assess the access lines regarding equipment with ETCS.

10. *Harmonisation of operational rules:* to aim for an harmonisation of essential operational rules in the corridor and presentation of an interim result to NSA and ERA, and to make an inventory as input for ERA

11. *Railway noise:* The countries on the corridor cooperate with regard to combat railway noise on the corridor caused by freight trains and aim at reducing rail noise at source considerably by retrofitting of freight wagons.

12. *Customs:* to facilitate smooth customs procedures for goods transiting by rail EU-CH.

With the Ministries decision to adopt the Action Plan for the period 2010 – 2014, one additional new task is part of the Action Plan.

13. *Rail freight regulation:* To facilitate the implementation of the Regulation (EU) No. 913/2010 on Corridor A, an analysis of the impacts of the regulation is necessary, concerning development of business plan, implementation plan, extension with Belgium, involvement Switzerland as non-EU member, impact on existing actions.

4. Implementation of ERTMS/ETCS in the North-South-Corridor

A. ERTMS development on Corridor level

The work on ERTMS implementation is a core activity on the development of the corridor Rotterdam – Genoa.

Infrastructure Managers continued to work following the Genoa declaration on preparing the deployment of ERTMS on the corridor per 2015. Once negotiations at all national levels are at advanced / conclusive state the ERTMS corridor implementation plan will be published. By the end of 2010 the implementation plan for the corridor was not finished, mainly because of open points on the decision making procedures for the German section of the corridor.

In the framework of the national economic recovery program Germany still settled a financial agreement on about 126 Mio € for the investment of electronic interlockings on parts of the corridor in preparation of ETCS level 2.

Switzerland has published call for tender ERTMS by end of 2010 for installation along the entire network with priority for the installation along the corridor.

In Italy, RFI came to the conclusion that the deployment of Level 1 Radio Infill is more costly than a Level 2 installation. As a result, RFI decided to change to Level 2 which will ease implementation and operation considerably because Level 1 Radio Infill had been considered by no one else in Europe.

The corridor continued in workshops to define common concepts for consideration in the supply contracts of ERTMS. Various meetings were held with expert consultancies on the need for system integration and to define the scope for a cross impact risk analysis.

For ERTMS the NSA's have increased their cooperation to prepare the authorization process both for infrastructure and for vehicles running on the corridor. This activity is done in close cooperation with Infrastructure Managers, EC and ERA. The objective is to ensure coordinated authorization at less costs to the railway sector in a timely way.

The NSA working group, in coordination with the ERTMS working group of the corridor, is advancing in the preparation of a test- and authorisation guideline, which shall substitute the former ETCS test- and implementation platform proposed by UNISIG and the sector. Meanwhile ERA has adopted the test concept using a common data base and started with the definition of a common format and test scenarios.

At European level development in ERTMS baseline 3 was progressing as planned (to be finished by end of 2012).

5. Status of implementation of measures in the responsibility of Infrastructure Managers

In 2010, the infrastructure manager had to handle challenges from the development of the ERTMS implementation plan and strategies, system integration issues on implementing an international ERTMS corridor, as well as additional works regarding the analysis of longer trains and the extension to Antwerp. Work has been progressing along the full scale of the action plan and is described more in detail in annex.

Regarding adoption of the EU regulation 913/2010 concerning a European rail network for competitive freight in November 2010, the infrastructure manager set up a new corridor working group for the development of common corridor core requirements and the coordination of

principles and processes for the implementation, although Corridor A had already considered most of the topics defined in the regulation, serving as a kind of blueprint for this regulation. The corridor organisation of the infrastructure managers already anticipates the regulation in its daily practical work. A cooperation agreement was negotiated and agreed to by the IMs of Corridor A and Infrabel. The first integration meeting was held. Since autumn 2010, Infrabel is fully participating in the work of the corridor and the actions needed for extension to Antwerp and Zeebrugge are agreed upon.

Based on a decision of the Management Committee of the infrastructure managers in 2009, the corridor organisation implemented a range of communication measures. A central component of the concept is a website www.corridora.eu, which went online in February 2010. The website offers a wide scope of information, describing the corridor motivation, organisation as well as details of the corridor programme. The information offered is complemented regularly by current events and information. The website also provides an internal area containing documents which are of interest for any person involved in the corridor works. An online collaboration tool is also integrated in the internal area of the website.

6. Status of implementation of measures in the responsibility of the National Safety Authorities

In 2010, the working groups of the National Safety Authorities were mainly engaged in the following topics (see appendix IX for details):

I. The task to develop a common understanding of the ERTMS technical issues (errors, interpretations, open points) in order to achieve one common ERTMS standard on corridor A. As the focus of the ministries is set on the development of a harmonised authorisation process for putting into service as stated in the Common Declaration of 26 May 2009, it was decided to give special attention to the process-related tasks.

II. The authorisation process: In 2010 the focus of the work has been continued on the comprehensive evaluation on the differences in roles and responsibilities between the National Safety Authorities. The intensive dialogue was necessary in order to get a common and deeper understanding of each other's approach of authorising the putting into service of ERTMS. The Infrastructure Managers have stated in 2010, that due to the different preconditions given by the existing national infrastructure and rules, the harmonisation of CRSes is basically impossible. The ERTMS trackside installation will be implemented and authorised by following the national processes and according to the rules in the TSI. Due to technical status of ERTMS today, the NSAs are developing a Corridor 1 guideline to support the economical implementation on Corridor 1 as the frontrunner. The

working group will continue to work on the definition of a harmonised process for the authorisation of putting into service rolling stock. The starting point remains that anyhow locomotives equipped with ERTMS baseline 3 will be able to run on the whole corridor by 2015.

III. Task Force Interoperability: as a working group aiming facilitating the authorisation for putting into service vehicles for the networks of Austria, Germany, Netherlands, Switzerland and Italy. The NSA and infrastructure manager of these countries are permanent members of the group. TFI was established in 2001. In 2007, TFI was incorporated into the IQ-C Group/Executive Board of corridor A. In order to facilitate cross acceptance of vehicle authorisations, TFI have set up a database (IRL) containing all national technical requirements for locomotives, train-sets and coaches. The technical requirements are discussed project based in order to maximise the benefit. Meanwhile progress has been made in the cooperation with EC and ERA concerning the implementation of the interoperability directive 2008/57/EC which includes the cross-acceptance approach.

IV. Driver Licenses: Until the Directive 2007/59/EC (Driver Licence) has been implemented nationally, driver licences are subject to bilateral agreements between the relevant national safety authorities/ ministries of transport. So far, agreements between Germany – Netherlands (2005), Switzerland - Germany (2010) and Austria-Germany exist. In 2010, the dialogue between Switzerland and Italy has been continued. For the time being, the qualifications for driving trains in Italy have been issued to about 60 Swiss drivers.

7. Enhanced cooperation of the Regulatory Bodies: Monitoring of market regulations

Regulatory bodies decided to work on the following priority issues (full text from Regulatory Bodies in Annex):

- Regulation (EU) No 913/2010 and its consequences
- Monitoring competition and market developments on the corridor (art 10 (7) Directive 91/440/EEC and art 20 (1) Regulation No. 913/2010. Collecting corridor statistical data (annual report management board); identifying data omissions; analyse data; preparing a monitor report)
- Concepts for a noise related access charge system and related regulatory questions
- Analysis of the capacity allocation process and of relief of congested infrastructure with focus on legal application of priority rules; market consultation of operation and remaining capacity in shunting yards

8. Status of implementation of measures in the responsibility of the Ministries

Terminal platform

Based on a study on terminals of combined transport in 2008[1] a corridor terminal platform was set up in 2009 to assess the interface between terminal operators, infrastructure managers and railway undertakings. By increasing overall quality, efficiency and capacity of intermodal terminals, the competitiveness of the international rail freight transport on the corridor can increase considerably.

The present work of the terminal platform group is focussing on:

- examinations of the regulatory situation of the 'last mile' in the corridor countries and about possible regulatory needs,
- possibilities of opening of tracking and tracing applications for international trains for the needs of terminal operators
- the access and use of IT applications which allow a real-time view on any circulating train (e.g. Europtirails) for terminal operators
- development of additional measures concerning the monitoring of terminal capacity on the corridor as well as the capacity of the connecting lines to terminals on the corridor. 44 terminals are actually in the IM database. Further terminals can be included. The investigation is also relevant for decision making for connecting lines to be equipped with ERTMS.

Customs transit procedure

In February 2004, a simplified procedure for customs transit was laid down between the customs authorities of the participating countries on the basis of a Memorandum of Understanding („Swiss Corridor T 2"). This procedure grants considerable facilitations especially to railway enterprises which carry out transit operations not on the basis of the traditional cooperation procedure ("CIM consignment note"), but – as provided for as the regular case in EU Law – on their own behalf. As a matter of fact these transit transport operations already make up about 9 % of the rail transit transport through Switzerland, according to statements of the Swiss customs authorities.

In connection with the modernisation of EU customs code, it is planned to abolish the Swiss Corridor-procedure. There are still ongoing discussions between EC, railway undertakings and the Swiss customs authorities concerning the future procedure. NCTS (New Computerised Transit System) is foreseen as the only future international customs transit procedure for rail

[1] Published on website www.bav.admin.ch/verlagerung/01510/02367/index.html?lang=de

transport. From the point of view of the Executive Board, it is in the interest of the EU and its member states to asses an alternative procedure to NCTS in order to facilitate the transit of community goods on railways through Switzerland which considers both the special characteristics of rail freight transport and the need for an efficient and secure transport of community goods on the North-South corridor transiting Switzerland. A letter to the European Commission was sent on this issue in August 2011.

Noise

The Ministers recognised in their Genoa declaration of May 2009 to coordinate their efforts with regard to creating incentives for retrofitting freight wagons for noise. The acceptance of growing freight traffic on corridor depends on acceptance by the public on the level of rail noise. On all parts of the corridor public awareness has been rising in this respect. It was recognised that retrofitting existing freight wagons is an essential part of an overall policy to reduce noise from the increasing amount of freight trains in an economic way. Developing noise barriers at the infrastructure is necessary in cases but the need for additional noise barriers may be reduced by effective measures at source.

The Executive Board had decided to carry out a common study developing scenario's to stimulate retrofitting of existing freight wagons. A consortium carried out the study in the period January - June 2010. The study showed different models of incentivizing and financing (by government or by sector) of retrofitting and its possible effect on the rail freight market. Administrative costs were also studied. EC has been involved in the study. The study showed that international cooperation at sufficient geographical scope makes sense to stimulate retrofitting (full text of study can be found on: http://www.corridora.eu/downloads/Noise_study_Rotterdam-Genoa.pdf).

Overview table 4 scenario's.

<table>
<tr><th>Scenario 1
nation-wide (LL)</th><th>Scenario 2
nation-wide (K)</th><th>Scenario 3
corridor (K/LL)</th><th>Scenario 4
CI-prohibition (LL)</th></tr>
<tr><td colspan="4">full harmonisation</td></tr>
<tr><td colspan="4">direct aid for initial retrofitting cost of wagon (nation-wide)</td></tr>
<tr><td colspan="3">bonus per axle-km</td><td rowspan="2">No bonus</td></tr>
<tr><td colspan="2">addressing only retrofitted wagons,
Nation-wide</td><td>addressing all silent wagons,
Limited to corridor</td></tr>
<tr><td>LL Technology (starting from the full authorisation of LL)</td><td>K Technology (LL does not achieve full authorisation)</td><td>K and LL Technology combined (LL achieves authorisation some years before starting the program)</td><td>LL Technology (starting from the full authorisation of LL)</td></tr>
<tr><td>3 years Funding period[23]</td><td>6 years Funding period</td><td>6 Years Funding period</td><td>5 Years Funding period</td></tr>
</table>

The Executive Board has decided to continue exchanging information and experience on the issue. Once a German study regarding retrofitting is at sufficient advanced level the Executive Board will reconsider cooperation possibilities. In parallel, the EC is starting up a task force to study the differentiation of the charges for noise and the issue is discussed in the framework of the recast of the first EU rail package.

Authorisation of silent technology is a matter of EU, with important role for UIC in conformity with TSI Noise and TSI Wagons. The Executive Board decided to write UIC to emphasize its interest in a timely finalization of the authorization of the LL-blocks (potentially relative economically viable way of retrofitting).

9. General Development of the rail freight transport on the North-South-Corridor, impact of implementation actions on the corridor

Infrastructure improvements, two new line sections of paramount importance had been taken into service, the Loetschberg base tunnel in Switzerland and the Betuwe line in the Netherlands. With a volume of about 9 bn € of investment, both projects implied a tremendous political and financial effort, and the very high technical standards a real challenge for the project teams in charge, which have timely completed the projects. Both openings had been celebrated in outstanding inauguration ceremonies and represented real highlights. The 140 km of new

corridor lines sum up to additional capacities of about 100 train paths between Rotterdam and Zevenaar, as well as from Frutigen to Raron. However, this additional capacity does not yet fully contribute to the corridor capacity due to the limited connecting line capacities. Further projects on the corridor advanced, respectively started or even completed initial plan studies, approvals of building licences etc.

The following table gives an updated overview from the Infrastructure Managers point of view of the planned infrastructure investments on corridor A, with the aim to make the corridor more competitive:

Investment Plan - Corridor A

Project list with funding status, elaboreted by WG Capacity

State: 30.11.2010

checked by: ProRail (13.5.2011), DB Netz (16.5.2011), SBB, BLS, RFI

Period	Year	Country	Line section (from North to South)	Project	Cost (M €)	Funding Status	Remarks
2007 - 2014	2007	NL	Kijfhoek - Zevenaar	Betuwe Line	4.580	Realised	
	2007	CH	Frutigen - Brig	Base Tunnel	2.800	Realised	
	2009	NL	Maasvlakte I - Kijfhoek	25 kV + ERTMS	-	Realised	
	2009	NL	Meteren	improving links Betuwe Line	6	Realised	
	2010	CH	Castione	upgrade	18	Realised	
	2011	CH	Bern (Rütti - Zollikofen)	3rd track	40	Realised	
	2011	IT	Domodossola - Novara	Gozzano bypass	31	Realised	
	2011	IT	Novara-Alessandria	upgrade line	13	Realised	
	2011	IT	Luino-Laveno	upgrading for 600 m	21	Realised	
	2012	CH	Bern - Thun	Block distance	25	Secured	
	2013	NL	Maasvlakte II - Maasvlakte I	New line + Marshalling Yard	30	Secured	
	2013	NL	ZvO Zevenaar - Border	ERTMS, 3rd track, 25kV	96	Secured	3rd track together with DB Netz
	2014	IT	Bergamo-Treviglio	2nd track	95	Secured	
	2014	IT	Novara	Node upgrade	471	Planned	
2015 - 2019	2015	IT	Brig - Domodossola	RoLa 4m (P/C 80)	tbd	D / R	to be planned
	2015	IT	Domodossola - Novara	upgrade 4 stations for 4m	15	D / R	to be planned
	>2015*	DE	Border - Emmerich	3rd track	200	Planned	construction rights still open
	2017	CH	Basel - Bellinzona - Chiasso	Block distance 3' freigth trains	230	Secured	incl. 750m Belllinzona+Chiasso
	2017	CH	Erstfeld - Biasca	Base tunnel	6.000	Secured	
	2017	CH	Bellinzona-Luino	line upgrade	50	Secured	
	>2017*	DE	Emmerich - Oberhausen	3rd track	1.500	Planned	construction rights still open
	2018	IT	Gallarate - Rho	upgrade	500	Planned	
	2018	IT	Tortona - Voghera	4 tracks	600	Planned	
	2019	CH	Bellinzona - Lugano	Ceneri Basetunnel	1.400	Secured	
	2019	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
2020 - 2024	2020	NL	Maasvlakte I - Kijfhoek	tbd	tbd	D / R	study harbourline
	2020	NL	Breda - Boxtel	tbd	tbd	D / R	programme high frequencies
	2020	NL	Kijfhoek - Zevenaar	additional links Betuwe	tbd	D / R	programme high frequencies
	2020	IT	Seregno - Bergamo (-Treviglio)	Gronda est	1.000	Planned	
	2021	IT	Chiasso - Seregno - Monza	4 tracks	1412	Planned	
	>2020*	DE	Karlsruhe - Offenburg	3rd + 4th track	2.100	Planned	no finanzation for Rastatt-Rastatt Süd
	>2020*	DE	Offenburg - Basel	3rd + 4th track	3.700	Planned / secured	Section 9.1, 9.2 + 9.3 are secured, others construction rights still open
2025 + later	2025	CH	Liestal	fly-over	120	Secured	
	2025	CH	Basel - Chiasso / Luino	Profile upgrade to 4 m	400	D / R	start-up in 2020 in study
	2025	CH	Bern - Thun	3rd track Gümligen–Münsingen	200	D / R	
	2025	CH + IT	Laveno - Luino - CH	Gronda ovest	1.270	Planned	
	>2025	CH	Schwyz/Flüelen/Melide/Basel	Sidings 740m	tbd	D / R	study to be started
	2026	IT	Arquata - Genova	Terzo valico, Giovi pass	5.060	Planned	
	2030	CH	Frutigen - Brig	Base tunnel, 2 track, part 2	500	D / R	
	open *	DE	Mainz/Wiesb. - Mannheim	HS line	2.700	Planned	
			Total Investments for bottleneck elimination (M €)		35.018		

Quick wins

Legend

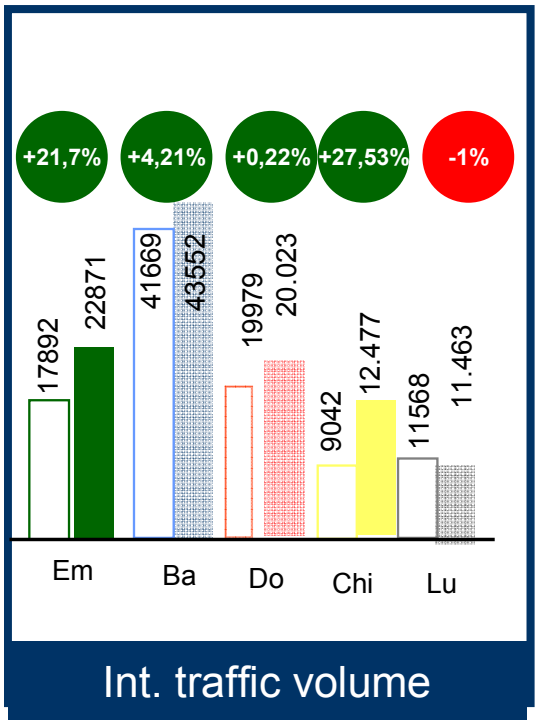
- Secured = Financed and approved projects
- Planned = not yet financed or approved projects
- D / R = (Development and Review) Studies or projects to be shifted in time
- * = the time schedule for ERTMS at Corridor A in Germany is in revision at present

updated in November 2010

The increase of transport volume in the corridor is a result of the efforts in the different fields of work of the working group IQ-C, but as well a challenge for future actions of the working group.

International transport volume

In 2010 the beginning recovery from the economic recession was noticeable in the corridors' adjoining countries and the traffic volume increased considerably. The biggest rise is displayed on the German-Dutch border as well as in Chiasso. Traffic in Chiasso benefited from the end of the construction works at Monte Olimpino II.



Definition: number of international freight trains crossing one (or more) of the border stations of Corridor A in both directions, regardless from origin or destination, per year. Border stations of Corridor A are: Zevenaar/ Emmerich (NL – DE); Basel (DE – CH); Domodossola (CH – IT); Chiasso (CH – IT) and Luino (CH – IT).

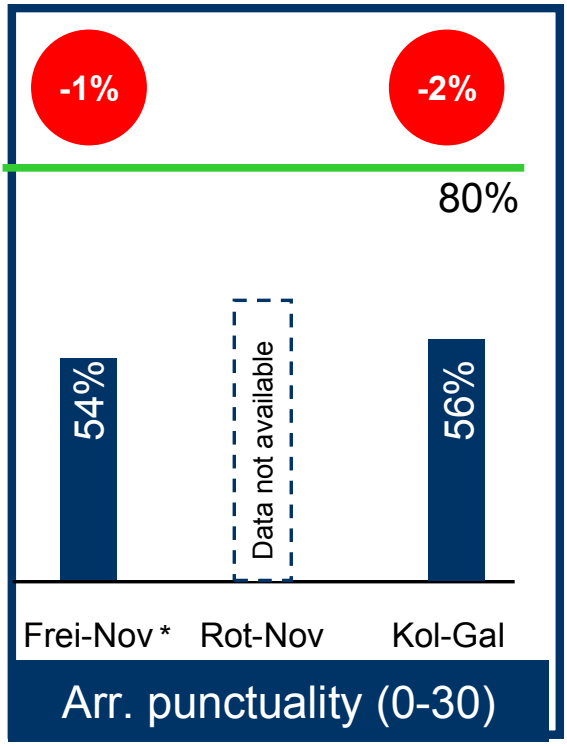
Intramodal competition

Intramodal competition is well established on the whole corridor Rotterdam – Genoa. The activities of a rising number of railway undertakings and intermodal operators in the rail freight market are a good sign for an open market access and functioning competition between railway services. The existing intramodal competition enhances the productivity of the freight rail market and stimulates new market activities. In 2010, e.g. there were 7 railway undertakings active on the Swiss part of the corridor.

Arrival punctuality

The punctuality figures 2010 are shown in the figure below. The KPI from Rotterdam to Melzo is not available due to validity problems on the Dutch side. It was agreed to replace this relation with the relation from Rotterdam to Novara. However, the new data could not be retrieved yet.

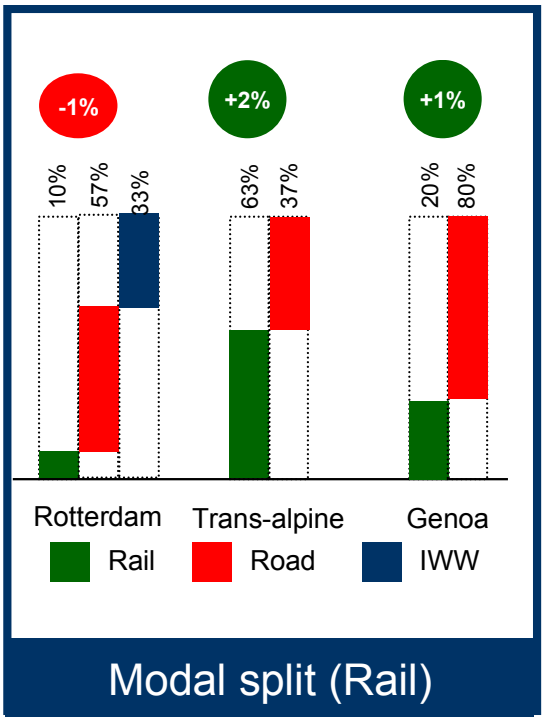
It can be observed that punctuality dropped slightly over the previous year. This is due to the high number of construction works (e.g. spiral tunnel Varzo), including those announced at short term, along the corridor and an increased traffic volume. The likewise growing number of passenger services also affects freight traffic negatively.



Definition: average punctuality level (arrival at destination within a 30 minutes time span) for selected relations of: Freiburg – Novara; Rotterdam – Novara (new) and Köln – Gallarate (all start/ end points of these transport relations are directly located on Corridor A). A level of 80% is targeted.

Modal split

The modal split for Corridor A is illustrated in the figure below. Last year's shift of 1% from rail to road in Genoa could be recovered. Very remarkable is the strong increase of the trans-alpine modal split by 2%, accompanied by a number of traffic records which could be noted on the Lötschberg trans-alpine axis. Even thought the modal split in Rotterdam harbour appears to have lost about 1% it still represents an increase in total numbers when compared to the increase of total transport volume.



Definition: modal split [%] of freight traffic at sea port of Rotterdam, sea port of Genoa and trans-alpine. For Rotterdam and Genoa the modal split is calculated based on TEUs (containers) for the Hinterland traffic. For the trans-alpine freight traffic the basis is net tons. It is separated by rail, road and inland waterways (if applicable). Measured on an annual basis.

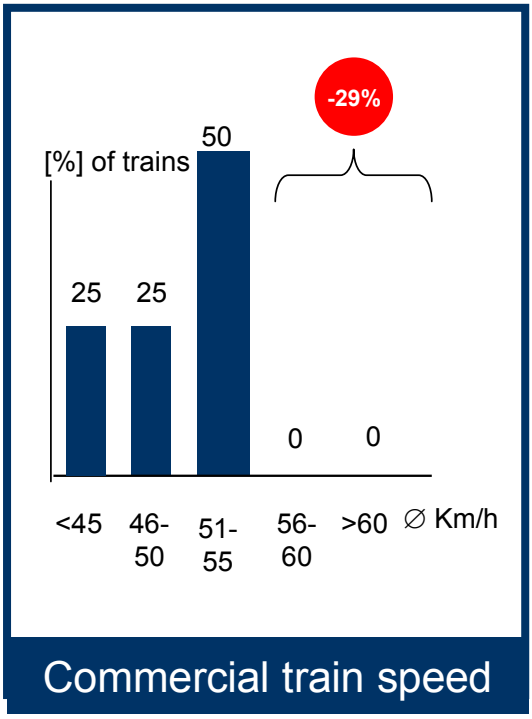
Commercial train speed

The figure below shows the distribution of commercial train speed for three selected traffic relations on Corridor A. 24 pairs of trains were analysed. The result of the analysis shows a more homogenous distribution of the average speed compared to the previous years. The minimum average speed is 39,8 km/h whereas the fastest connection offers 54,4 km/h according to the time table. In comparison to previous year a tendency towards slower train paths is visible. The reason for the decrease in the average speed is motivated by two facts:

a) Increased construction activity along the defined path

b) Compression of passengers transport, extra trains during peak hours.

This all leads to a slowdown in freight transport, due to waiting time for threading or overhauls.



Definition: average speed [km/ h] of trains according to valid time table for selected relations: Freiburg – Novara; Rotterdam – Melzo and Köln – Gallarate (all start/ end points of these transport relations are directly located on Corridor A) in both directions. Measured based on annual time table and classified in five different categories. Basis: 24 freight train services on 3 different relations

10. Conclusions and recommendations

Conclusion 1

The year 2010 was decisive for Corridor A, justifying even more the great need for swift establishing competitive means for European rail transport in future. In the shadow of the recovering economy the traffic volumes of rail freight have risen considerably, and the figures are now nearly back to the high volume we had before the crisis in 2008. Under this condition, very remarkable is the strong increase of the trans-alpine modal split by 2 % and at harbour Genoa by 1%. This is also underlined by a number of traffic records which could be noted on the Lötschberg trans-alpine axis. The modal split in Rotterdam harbour appears to have lost about 1%. However, set in relation to the strong transport volume increase, it still represents an increase in total numbers. All this indicates an improving competitiveness of rail freight.

Taking into account the challenges from strongly increased traffic, the Corridor was able to maintain performance and quality almost on the level of last year. The construction works e.g. between Karlsruhe and Basel, the reconditioning of the Galleria elicoidale at Varzo, the amount of low speed sections and the postponement of infrastructure work finally led to a slight reduction of punctuality by about 2%. Same applied to the commercial train speed, which showed the tendency to mainly accumulate around a maximum speed of 50 km/h, while no more trains reached above 55 km/h anymore. Nevertheless and despite of all efforts, there still remains a lot to improve in order to meet the target of 80% punctuality.

Recommendation 1

Challenged by increasing freight volumes as result of the actual economical recovery the Corridor hat to be prepared and able to gain additional volumes and enhance his competitiveness. Due to this challenges, the Executive Board of Corridor A and the working group IQ-C recommend continuing with the quality improving scheme of the Action Plan. The established platform between the Ministries of the corridor countries is deemed valuable and necessary by all the participants and stakeholders as it contributes significantly to further improvement of the quality of the rail freight transport in the North-South-corridor.

Conclusion 2

The Corridor approach is also fully in line with the European transport policy which sees corridors as an important mean to enhance international rail freight. This is fully reflected in the adoption of the EU Regulation No. 913/2010 concerning a European rail network for competitive freight in November 2010. The regulation underlines that a strong commitment of all parties

involved to improve the quality of rail freight services and to make it competitive. The implementation of the EU regulation binds a lot of capacities and resources of the existing corridor organisation. The short time remaining for the implementation of the regulation makes it more difficult to concentrate on the different existing measures concerning the realisation of interoperability and the increase of quality.

Recommendation 2

The Executive Board and the working group IQ-C recommend making all efforts for a complete and effective implementation of EU Regulation No. 913/2010. The definition of an improved governance structure and transparent processes between all stakeholders will result in an improved performance of the corridor. Nevertheless, the Executive Board and the working group IQ-C need therefore the strong support of the Ministers and the disposability of the required resources.

Conclusion 3

There will be an intensive discussion needed on the strategy concerning the realization and financing of ETCS . The discussion of the Executive Board together with the infrastructure managers management committee need to address this situation . …

Recommendation 3

Therefore, the Ministries ask the Ministers of Transport in the Corridor for their approval of the 6th Progress Report 2011 and its recommendations.

Annex I: Ministers declaration Genoa, 26 May 2009

COMMON DECLARATION
of the Ministers of Transport
of The Netherlands, Germany, Switzerland and Italy

on the ERTMS corridor A between Rotterdam and Genoa,

Background

The co-operation on the development of the rail freight corridor Rotterdam-Genoa has matured. Based on the MoU, signed in Lugano on the 9th of January 2003 to improve the framework conditions for the rail freight corridor, progress has been made in several areas such as: customs, cross-acceptance of drivers and rolling stock, co-operation for capacity allocation and traffic management and co-ordination in solving infrastructure bottlenecks. This co-operation was working under the condition of considerable market growth in the past with a valuable long-term potential. The ongoing competition between railway undertakings has further supported this positive development trend.
Considering the deployment of the ERTMS system as a base for the future development of the corridor, the Ministers signed a Letter of Intent on the 3rd of March 2006. ERTMS, which is already in operation in new infrastructure links like the Betuweroute, Mattstetten- Rothrist and the Lötschberg Base Tunnel since 2007, will be deployed over the whole corridor by 2015.

The Letter of Intent has been followed by the structured cooperation of the infrastructure managers, who set up an IM management committee (December 2006) to steer the co-ordination, developed an Infrastructure Manager corridor business plan 2007-2025 for the corridor (April 2007), appointed dedicated staff for the corridor's development starting in 2007 and set up a Program Management Office in Frankfurt, supported by the foundation of an Economical legal entity (EEIG) among themselves to support the co-ordination activities of the Infrastructure Managers (August 2008). Based on these activities applications for TEN-T funding for the corridor in 2007 were granted during the course of 2008, for ERTMS deployment and infrastructure bottlenecks. The Infrastructure Managers have developed the ERTMS implementation plan for the corridor, also based on the agreement initiated by the European Commission from 4 July 2008 with European Railway Associations and the industry on the development of the new ERTMS baseline 3. These developments were carried out in a successful cooperation with the EU Coordinator for ERTMS, Mr. Karel Vinck.

The Ministers, in the presence of the Vice-president of the European Commission Mr Antonio Tajani

Considering that:

- Having regard for the Letter of Intent signed on the 3rd of March 2006 in Bregenz by the Dutch, German, Swiss and Italian Ministers of Transport on the deployment of ERTMS along rail freight Corridor A Rotterdam – Genoa.

- Having regard for the draft Commission Decision amending Decision 2006/679/EC as regards the implementation of the technical specification for interoperability relating to the control-command and signaling subsystem of the trans-European conventional rail

1

system (TSI CCS) with a new Chapter 7 and the European Deployment Plan (hereafter called ERTMS-EDP) which is expected to be published soon by the European Commission providing the obligation for implementation of ERTMS, with priority on European rail freight corridors as well as ports and major terminals by 2015 / 2020, thus paving the way for a European rail freight ERTMS network. Part of the present TSI CCS is the provision that Member States shall make every effort for the availability of an external Specific Transmission Module (hereinafter referred to as "the STM"), as defined in Chapter 7 of the Annex, for their legacy Class B command-and-control systems enumerated in Annex B of the TSI by 31 December 2007.

- Having regard for the Memorandum of Understanding, signed by the European Commission and the European Railway Associations on the 4th of July 2008 in Rome concerning the strengthening of cooperation for speeding up the deployment of ERTMS including the needed development of baseline 3.

- Taking note of the aim of the European Commission to create a European rail network for competitive freight, setting out rules for the selection, organisation and management of freight corridors, through a legislative Regulation proposal that Member States are actually discussing (COM (2008) 852 final).

- Having regard for the green paper (COM (2009) 44 final) on the revision of the Trans-European Networks for the 2014 2020 period;

- Recalling the efforts already undertaken in the corridor sector through:

  - the setting up of the Executive Board of Ministry representatives;
  - the setting up of the Management Committee representing the Infrastructure managers;
  - the foundation by 2008 of the EEIG of Infrastructure Managers of Corridor A Rotterdam–Genoa;
  - the preparations for the deployment of ERTMS supported by the Member States concerned and the European Union;
  - the co-ordinated planning in the form of a business plan from the Infrastructure Managers 2007 2025;
  - addressing capacity, quality and interoperability issues;
  - updating the overall corridor 2006 2008 2012 action plan in 2008 by the Ministries;
  - and having set up the railway undertakings advisory board and the terminal platform in the 1st quarter of 2009.

- The negotiations between the European Community and the Swiss Confederation on the simplification of inspections and formalities in respect of the carriage of goods and on customs security measures are in progress with the aim of finalising an agreement by 1 July 2009.

- Having regard for the sections already realised along the corridor:
  - In the Netherlands, the Betuweroute which was put into service in June 2007
  - In Germany, the additional high-speed tracks between Rastatt and Offenburg – in service since 2004 – increasing capacity on the existing tracks

- In Switzerland, the new line Mattstetten Rothrist, which was put into service in December 2004 and the Lötschberg Base Tunnel, which was put into service in June 2007.

Recognising:

- Important and continued growth of rail freight traffic on the Rotterdam-Genoa corridor in previous years and the urgent need to accommodate this existing market demand.
- Despite current economic recession the prognosis of continued growth of corridor traffic over medium to long term is maintained, at least doubling of freight traffic is expected in the period 2006-2020.
- The important progress reached by the infrastructure managers in their cooperation to improve the quality of the corridor, notably with capacity allocation including one-stop-shop, monitoring of traffic, punctuality and co-operation with terminals.
- The impact of continued traffic increases on railway noise for the citizens living close by the railways and the need to co-operate among the corridor countries on reducing railway noise particularly from rail freight wagons.
- The importance of common analyses of the Infrastructure Managers of infrastructure bottlenecks like such as the solutions elaborated and proposed to optimise the use of the existing railway capacity along the corridor and in this way make the impact of infrastructure decisions for the whole corridor transparent to all parties.

- Recalling the deadlines and activities for infrastructure development that were agreed upon or made public:

  - In Switzerland, the completion of the Gotthard Base Tunnel by 2017 and the Ceneri Base Tunnel by 2019.
  - In Germany, the aim to upgrade the entire line Emmerich Oberhausen to three tracks by 2013 (MoU between Ministers from 2007).

- Working on the planning and financing of further infrastructure capacity improvements on the corridor:
  - Border section Netherlands – Germany: upgrade of the border section Zevenaar – Emmerich to three tracks (MOU between Ministers 2007);
  - In Germany, upgrade of the entire line Karlsruhe – Basel to four tracks
  - Supporting the working in a coordinated manner on a programme for further alleviating infrastructure bottlenecks, based on a structured corridor analysis of transport needs and infrastructure capacities for the period 2008 2015 2020 from the Infrastructure Managers.

Ask the European Commission for that purpose to

- Take into account the need for co-ordinated development of the freight corridors in the ongoing TEN-T revision process, giving due attention to improvements in the utilization of capacity, assessment of the infrastructure needs in the framework of corridor / networks with the effects of alleviating bottlenecks, improving cost-benefit analyses and ratios at EU level;

- Arrange communitarian co-funding, as enabled through the above-mentioned financial regulation Nr. 680/2007, taking into account the priorities set in the present declaration.

- Have the European Co-ordinator will support the full realisation of this railway axis according to the corridor programme proposed by the Infrastructure Managers as early as possible, taking into account the deadlines referred to therein.

Decide for the Rotterdam - Genoa corridor A to

1. Adopt the ERTMS implementation plan for the corridor by 2015 as proposed by the Infrastructure Management Committee to the executive board which is according to the ERTMS-EDP, in this way amending the previous deadlines contained in the Letter of Intent signed on the 3rd of March 2006 in Bregenz. The implementation of ERTMS on the corridor will be based on ERTMS baseline 3 for implementations in Germany, Switzerland and Italy. The Infrastructure Managers are requested to make public the ERTMS implementation plan on the corridor.
2. Support the solid implementation of decisions regarding the financial commitments from the national governments as stated in the ERTMS implementation plan with regard to the measures to eliminate infrastructure bottleneck while already the allocated TEN-T funding continues to be secured for the 2007 2013 period.
3. Continue to work in close co-operation towards the alleviation of bottlenecks on the corridor based on the periodic monitoring report by the Infrastructure Management Committee concerning the corridor project programme. Special focus will be given to further improving the utilisation of the capacity of existing infrastructure e.g. by harmonising infrastructure parameters for gauge, axle load, and train length to enable better production.
4. Cooperate closely with all parties concerned to ensure time planning of the development of the ERTMS baseline 3 agreed at the MOU of the 4th of July 2008 and signed in Rome between the European Commission and the railway sector, including appropriate risk management.
5. No longer require in the implementation strategy, to the benefit of railway undertakings, the development of intermediary interoperable solutions on the corridor for the rolling stock (STM) as was foreseen in the Letter of Intent signed on the 3rd of March 2006 in Bregenz. Rolling stock equipped with solely ERTMS (baseline 3) will be able to run over the whole corridor by 2015.
6. Have the Infrastructure Managers prepare for common procurement of ERTMS equipment where possible, based where applicable on the baseline 3 of ERTMS, and to make a proposal for this to the Executive Board by the end of 2009;
7. Ask National Safety Authorities together with EC/ERA, notified bodies, IM'-s and industry to develop by 2010 a common certification process for authorising the putting into service of ERTMS equipment on the corridor infrastructure and on rolling stock with the aim of aim of making this efficient and transparent to all parties involved.
8. Ensure maximum support to the recommendations included in the annual report for the Corridor Rotterdam – Genoa (annexed to this declaration), which contain improvement actions concerning quality, capacity, interoperability aspects of infrastructure management, access to the market and safety procedures.
9. Reinforce the efforts to improve the quality of rail freight on the corridor by all parties concerned, which is even more necessary in the light of the ongoing economic

situation. An agreement on this should be envisaged between the Management Committee of the corridor and its railway undertakings advisory board by mid 2010.

10. Arrange a proposal before the end of 2009 in order to share in the development of a common approach to the incentives, which does not produce high costs for implementation and administration, and for retrofitting freight wagons to obtain lower noise emissions.
11. Steer and supervise the implementation of this declaration by the Executive Board constituted by delegates of the Transport Ministries on the Corridor.

5

Drafted in Genoa, 26 May 2009

Republic of Italy
Sen. Roberto Castelli,
Il Viceministro delle Infrastrutture e dei Trasporti,

Swiss Confederation
Bundesrat Moritz Leuenberger, Vorsteher des Eidgenössischen Departements für Umwelt, Verkehr, Energie und Kommunikation

Federal Republic of Germany
Achim Grossmann, Parlamentarischer Staatssekretär im Bundesministerium für Verkehr, Bau und Stadtentwicklung

Kingdom of the Netherlands
Camiel Eurlings, Minister van Verkeer en Waterstaat

Annex II: Rotterdam declaration of Ministers, 14 June 2010

ROTTERDAM DECLARATION OF MINISTERS ON RAIL FREIGHT CORRIDORS

COMMON DECLARATION
of the Ministers of Transport
of Belgium, the Czech Republic, France, Germany, Italy, Lithuania, Luxembourg, the Netherlands, Poland and Switzerland
In presence of the European Commission and Spanish EU presidency
In presence of the EU Coordinator for ERTMS, Mr. Karel Vinck

on the conference of Ministers regarding 'Rail infrastructure for freight services: from corridors to network"

CHAPTER A – General objectives

Introduction

The development of rail freight corridors, with a view to improving the competitiveness of rail freight, is occupying an increasingly prominent place on the EU agenda. To start with, rail freight corridors were developed as multilateral initiatives by the countries involved. Their aim was to improve access and quality conditions for rail freight. These initiatives were followed by the development of ERTMS corridors, supported by Letters of Intent and included in the ERTMS deployment plan, which entered into force on 1 September 2009. The development of rail freight corridors is also reflected in the TEN-T guidelines and priority projects, which are currently under review for the 2013-2020 period.

Rail freight corridors are being developed in a context of economic crisis, in which several governments face budgetary constraint on their investment plans. This situation underlines for all parties concerned the need to coordinate investments to create seamless rail freight transport along international corridors, combined with a targeted approach for quality improvements.

In December 2008 the European Commission delivered regulation proposal for improving the competitiveness of rail freight. The Council of Ministers for Transport reached a common position on February 22nd, 2010.

The proposed regulation provides for the implementation of corridors allowing freight trains to benefit from high quality routes, offering better services (in terms of punctuality and journey time) than at present. Additional capacities will have to be identified for rail freight, which has been growing in volume for several years now. The principal guidelines specified by the proposed regulation focus on:

1

- closer cooperation and harmonisation between infrastructure managers and member states both for the operational management of the infrastructures and for investments, in particular by putting in place a governance structure for each corridor;

- increased coordination between the network and terminals (maritime and inland ports and marshalling yards etc.);

- the reliability of the infrastructure capacities allocated to freight on these corridors.

The Ministers

1. **recognise** the contribution of rail freight to Europe's socioeconomic development and to the environment (and in particular its potential contribution to combating climate change);
2. **stress** the high potential of the rail freight corridors to link more effectively the existing TEN-T priority projects and thus to contribute to the formation of a coherent TEN-T network;
3. **share** the ambition to work together to develop a network of rail freight corridors throughout Europe in order to achieve seamless transport by interoperability, the removal of bottlenecks, the harmonisation of operational rules, and capacity management;
4. **while pursuing that common goal, aim at optimal implementation** of all relevant EU policies (TEN-T, ERTMS, proposed EU regulation concerning a European rail network for competitive freight etc.);
5. **will** involve the business community in developing the rail freight corridors;
6. **stress** that the development of rail freight corridors should be properly funded although this declaration does not imply additional financing by the States unless expressly stated;
7. **consider** that this declaration is without prejudice to the competence of the Member States regarding planning and funding of rail infrastructure.

CHAPTER B - Common governance aspects for the EU rail freight corridors <1 / A-2, 2 / C-5, 8 / F-3>

1. The European Union member states involved in this declaration welcome the first reading of the proposed EU regulation towards a European network for competitive freight and will adopt a common approach to its implementation once the Council, the European Parliament and the European Commission have enacted the legislation. Within the process of the EU-Swiss dialogue on transport, Switzerland will consider adoption of the EU regulation by examining which provisions of its laws should be amended accordingly. Until such time, Switzerland will work as far as legally possible with the EU Member States concerned within the framework of this regulation, in advance of adoption.
2. The rail freight corridors nos. 1, 2 and 8, referred to in Annex I of the proposed regulation, overlap partly or completely other initiatives, such as the ERTMS corridors A, C and F, the RailNetEurope (RNE) corridors nos. C02, C05 and C03,

the Rotterdam-Lyon (Ro-Ly) railway link etc. The Member States, infrastructure managers and governance bodies involved in these initiatives will aim to harmonise approaches and rationalise governance in order to facilitate the functioning of the corridors.

3. Each of the proposed regulation's freight corridors will be provided with the governance structure and planning that matches its particular situation.
4. The proposed objective is to connect the regulation's individual freight corridors in terms of interoperability and capacity management, with governance primarily geared to each individual corridor.

CHAPTER C1 – Axis n° 1 / ERTMS corridor A / TEN-T Priority project n° 24 / RNE-2 (Zeebrugge - Antwerp/Rotterdam-Duisburg-[*Basel*]-Milan-Genova)

Chapter C1 is only the responsibility of the Ministers of Belgium, the Netherlands, Germany, Switzerland and Italy.

Given:

- TEN-T Priority Project no. 24: railway axis Lyon/Genoa-Basel-Duisburg-Rotterdam/Antwerp (Decision no 1692/96/EC);
- that the Ministers signed the Genoa declaration concerning the Rotterdam-Genoa corridor on 26 May 2009;
- that the Ministers signed the Letter Of Intent regarding the deployment of ERTMS on 3 March 2006;
- that the Rotterdam-Genoa executive board adopted its mission statement on 30 November 2006, identifying its objectives, roles and decision-making procedures on the basis of consensus;
- RNE corridor C02 - Rotterdam/Antwerp-Ruhr Area-Milan-Genoa;
- that an advisory board and terminal platform were to be set up by 2009;
- that a corridor noise study is finished in June 2010;
- that an ERTMS corridor authorisation group has been set up under the leadership of the corridor NSAs.

The Dutch, German, Swiss and Italian Ministers decide to:

1. continue to support the needed solid implementation of financial decisions regarding the implementation of ERTMS on the corridor per 2015 and after completion of the financial framework to request the Infrastructure Managers to make the ERTMS corridor implementation plan public;
2. adopt the annexed Annual report 2009 of the Rotterdam – Genoa Corridor;
3. amend the annexed corridor updated action plan Rotterdam – Genoa 2008– 2012 for the 2010 – 2014 period with strong focus on achieving tangible benefits for railway undertakings at short term combined with medium / long term development of infrastructure capacity and interoperability;

4. adopt the annexed framework for testing and authorising deployment of ERTMS on both infrastructure and rolling stock in the 2010-2015 period, led by the NSA authorisation group. Cooperation with ERA is crucial for its success;
5. request the Infrastructure Managers to continue to cooperate on procurement aspects of ERTMS with the objective of mitigating joint risks of ERTMS implementation;
6. endeavour to enable to run long trains at the corridor by providing at least 750 meters long tracks according to the UN ECE AGC recommended standard on train length. To achieve this it will be crucial that Infrastructure Managers shall come with an implementation plan, based on a corridor cost-benefit analysis also useful to define a possible common target date;
7. invite Belgium to participate as an observer, and as full member after the entry into force of the proposed regulation, in the executive board of corridor Rotterdam - Genoa and therefore ask the Infrastructure Managers, in cooperation with Infrabel, to propose to the executive board by the end of 2010 a plan for the extension of the corridor to Antwerp / Zeebrugge to be established via the Belgian – German border. The plan should include definition of routes, participation in corridor organisation structure and take into account the action plan 2010 – 2014 for the corridor.

The Belgian Minister accepts the invitation and endorses the above-mentioned decisions.

CHAPTER C.2 – Axis n° 2 / ERTMS corridor C / Ro-Ly / TEN-T Priority project n° 28 / RNE-5
(Rotterdam-Antwerpen-Luxemburg-Metz-Dijon-Lyon/*Basel*)

Chapter C2 is only the responsibility of the Ministers of Belgium, The Netherlands, Luxembourg, Switzerland and France.

Given

- Letter Of Intent ERTMS 9th June 2006;
- considering the RNE-5 initiative supporting the development of rail freight in the area Rotterdam – Antwerpen – Luxembourg – Metz – Dijon – Lyon and further to Spain and Italy, whereas ERTMS corridor C, in its present configuration, aims at supporting a similar development in the area Antwerpen - Luxembourg/Paris - Lyon/Basel;
- considering the objectives of the Rotterdam-Lyon rail freight corridor (Ro-Ly) on the improvement of quality and access conditions of the corridor based on the objectives as set by the memorandum of understanding between Ministers signed 10th December 2004 as well as the progress reports 2005-2006 and 2007-2008 ;

4

- TEN-T Priority Project no. 28, the Eurocap-Rail passenger rail axis on the Brussels-Luxembourg-Strasbourg railway axis (Decision no 1692/96/EC), part of which can be used as an alternative route for corridor C;
- considering the decision of the French government in the framework of his national commitment for the rail freight of 16th September 2009 to promote the rail connection of his sea-ports;
- taking into consideration the Strategic Policy Paper of the Belgian Secretary of State for Mobility, in particular its part on the development of the rail freight corridors and their importance for the Belgian sea-ports.

The Belgian, Luxemburg, Swiss and French Ministers decide to:

1. reconfirm their commitment to deploying ERTMS on the corridor as planned in the European deployment plan (except for the branch to Lyon, where ERTMS will not be deployed until 2018);
2. adopt the annexed Annual Report 2009 of Corridor C;
3. take into consideration the annexed integrated corridor action plan including both ERTMS (2010-2018) / infrastructure development actions and quality improvement actions (2010-2013);
4. charge the executive board and the management board of Corridor C, composed of representatives of the Infrastructure Managers involved in the corridor, to take over the monitoring activities of the Ro-Ly initiative and cooperate with the national safety authorities and regulatory bodies;
5. endeavour to enable to run long trains at the corridor by providing at least 750 meters long tracks according to the UN ECE AGC recommended standard on train length by the target date of 2016;
6. invite the Netherlands to participate as an observer, and as full member after the entry into force of the proposed regulation, in the executive board of corridor Antwerp - Lyon / Basel and therefore ask the Infrastructure Managers, in cooperation with ProRail, to propose to the executive board by the end of 2010 a plan for the extension of the corridor to Rotterdam to be established via the Belgian - Netherlands border. The plan should include definition of routes, participation in corridor organisation structure and take into account the action plans ERTMS 2010-2018 and Q&I 2010 - 2013 for the corridor;
7. at the initiative of France a study will be launched to assess the connection between the ports of Dunkerque and Le Havre and the freight corridor mentioned in this chapter C.2. The study will include an analysis of the rail freight market and bottlenecks, an economic assessment, a proposal of extension of the route of the corridor including a cooperation proposal with RNE about this new alternative route in the framework of the RNE-5 corridor. On this basis, France will make a proposal for an extension of ERTMS corridor C to its executive board. Once this extension has been adopted by the executive board, it will be submitted as an extension of the corridor mentioned in the proposed

regulation, using the decision making procedure of this legislative act once it is adopted.

The Dutch Minister accepts the invitation and endorses the above-mentioned decisions.

CHAPTER C.3 – Axis n° 8 / ERTMS corridor F / RNE-3
Bremerhaven/Rotterdam/Antwerp - Aachen/Berlin – Warsaw - Terespol (Poland-Belarus border)/Kaunas

Chapter C3 is only the responsibility of the Ministers of Belgium, the Netherlands, France, Germany, Poland, the Czech Republic and Lithuania.

Given :

- that the LOI on ERTMS corridor F Aachen-(Ruhr area)-Warsaw-Terespol was signed on 5 November 2007;
- the initiative of RNE-3 corridor Rotterdam/ Antwerp – Duisburg – [Ruhr Area] – Berlin – Warszawa which aims at the development of a very similar link as under the initiative of corridor F what could lead to integration of both initiatives into one integrated corridor organisation reinforcing the effectiveness of both initiatives ;
- the invitation by Belgium in 2008 addressed to Germany, The Netherlands and Poland to consider together the extension of corridor F to Antwerp and Zeebrugge;
- the 2008 initiative of the Dutch and Czech governments to set up an action plan for a rail freight corridor focusing on short-term measures;
- that following the decision of the Netherlands and Poland of 6 November 2008 to study the potential of a rail freight corridor between their countries and the fact that an NL PL action plan was set up in April 2010;
- the Belgian initiative launched in April 2010, to perform a similar study on the potential of rail freight corridors between Belgium and Poland and Belgium and the Czech Republic;
- the bilateral agreement between Germany and Poland on border crossings due to be signed in the course of 2010;
- the 2007 bilateral agreement between Lithuania and Poland on identification of rail border crossing points, as well as projects under implementation in Lithuania and Poland on the Warsaw-Kaunas rail section of Rail Baltica;
- that all these initiatives aim to facilitate East-West rail freight flows throughout Europe, have considerable market potential, given the integration of the European economy, and will benefit from mutual cooperation;
- that the preparatory work covers those parts of European corridors reflected in the proposed regulation.

The Polish, Lithuanian, German, Dutch and Belgian Ministers decide to:

1. take stock of current initiatives and build upon them;
2. set up a Ministerial working group with the participation of Belgium, Germany, Lithuania, the Netherlands and Poland with the aim of developing East-West and West-East rail freight flows on their territories;
3. present progress achieved in the aforementioned Ministerial working group;
4. invite the Czech Republic and France as an observer in this Ministerial working group;
5. concentrate on measures with tangible benefits for railway undertakings at short term without substantial infrastructure investments;
6. continue to work on ERTMS corridor F Aachen – Warsaw as well as on the reconstruction of the section Warsaw - Kaunas (Lithuania/Poland) and present progress in the aforementioned working group;
7. establish required operational standards on the section Warsaw - Kaunas within the reconstruction of the Rail Baltica;
8. request the Infrastructure Managers involved to report to the Ministers on the progress achieved by 2011, to evaluate cooperation regarding the freight corridor(s) to be developed, including specification of its/their main route / governance structure / work plan;
9. at the initiative of France a study will be launched to assess the connection between the ports of Dunkerque and Le Havre and the freight corridor mentioned in this chapter C.3. The study will include an analysis of the rail freight market and bottlenecks, an economic assessment, a proposal of extension of the route of the corridor including a cooperation proposal with RNE about this new alternative route in the framework of the RNE-3 corridor.

The Minister of the Czech Republic and France accept the invitation and support the above-mentioned decisions.

Drafted in Rotterdam, 14 June 2010

Belgium
Johan Decuyper, for Mr Etienne Schouppe, Staatssecretaris voor Mobiliteit

Czech Republic
Gustáv Slamečka, Ministr dopravy

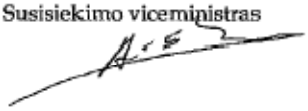
France
Pour le Secrétaire d'Etat chargé des transports, M. Daniel Bursaux, Directeur général des infrastructures, des transports et de la mer, Ministère de l'Ecologie, de l'Energie, du Développement durable et de la Mer en charge des Technologies vertes et des Négociations sur le Climat

Federal Republic of Germany
Michael Harting, Abteilungsleiter Landverkehr, Bundesministerium für Verkehr, Bau und Stadtentwicklung

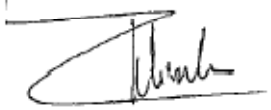
Republic of Italy
Sen. Roberto Castelli, Viceministro delle Infrastrutture e dei Trasporti

8

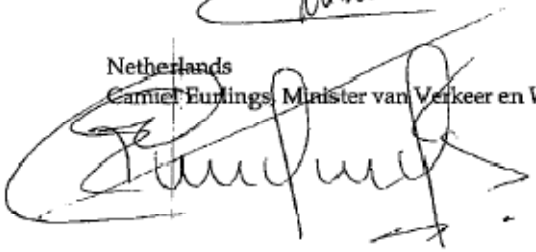
Republic of Lithuania
Arūnas Štaras, Susisiekimo viceministras



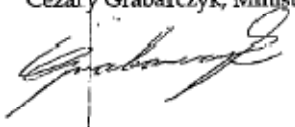
Grand Duchy of Luxembourg
Claude Wiseler, Ministre du Développement durable et des Infrastructures



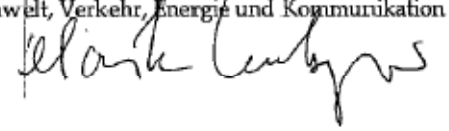
Netherlands
Camiel Eurlings, Minister van Verkeer en Waterstaat



Poland
Cezary Grabarczyk, Minister Infrastruktury



Switzerland
Bundesrat Moritz Leuenberger, Vorsteher des Eidgenössischen Departementes für Umwelt, Verkehr, Energie und Kommunikation



In presence of :

European Commission
Siim Kallas, Vice-president

p.o.

Spain
José Luis Cachafeiro Vila, Secretario General de Transportes, Ministerio de Fomento

EU Coordinator for ERTMS
Karel Vinck

Annex III Annual Progress Report Corridor A 2010 (Infrastructure Manager), May 2011

Corridor A
Rotterdam – Genoa

Programme Management Office

CORRIDOR
ROTTERDAM ‹› GENOA

www.corridora.eu

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Annual Progress Report
2010
(First edition for ExB meeting in May 2011)

Table of Content

II. Executive Summary

The year 2010 was decisive for Corridor A, justifying even more the great need for swift establishing competitive means for European rail transport in future. In the shadow of the recovering economy the traffic volumes of rail freight have risen considerably, and the figures are now nearly back to the high volume before the crisis in 2008. Under this condition, the strong increase of the trans-alpine modal split by 2 % and at the harbour of Genoa by 1% is very remarkable. This is also underlined by a number of traffic records which could be noted on the Lötschberg trans-alpine axis. The modal split in Rotterdam harbour appears to have lost about 1%. However, set in relation to the strong transport volume increase, it still represents an increase in total numbers. All this indicates an improving competitiveness of rail freight.

Taking into account the challenges of a strongly increased traffic, the infrastructure managers have been very successful in maintaining performance and quality almost on the same level as last year. The construction works e.g. between Karlsruhe and Basel, the reconditioning of the Varzo tunnel, the amount of low speed sections and the postponement of infrastructure refurbishment in Northern Italy finally led to a slight reduction of punctuality by about 2%. The same applied to the commercial train speed, which showed the tendency to mainly accumulate around a maximum speed of 50 km/h, while no more trains reached above 55 km/h. Nevertheless and despite all efforts, there still remains a lot to improve in order to meet the target of 80% punctuality.

The corridor working groups suffered from changing conditions which resulted in an increase of scope especially concerning the ERTMS implementation plan and strategies, system integration issues on implementing an international ERTMS corridor, as well as additional works regarding the analysis of longer trains and the extension to Antwerp and Zeebrugge.
Infrastructure projects progressed very positively on the Swiss sections. The Gotthard tunnel project broke through the first tube well on schedule. In Italy, the impact of allowing longer trains is still under investigation. Although the German projects are basically progressing, the influence of the public seems to get stronger and stronger. For the construction of the third and forth track between Karlsruhe and Basel as well as the third track from Emmerich to Oberhausen, the approval of the requested construction permits is seriously hindered by public interventions thus delaying the implementation. In Italy, projects suffer from the shift and postponement of financing. Independently of this, bilateral expert working groups of ProRail and DB Netz, as well as DB Netz together with SBB, made good progress in the design and engineering of complex border section projects.
Altogether, and to take into account the extension to Antwerp and Zeebrugge, the baseline of the entire corridor programme has to be updated in 2011.

In May, the corridor was presented at the Corridor Conference of CODE 24 project in Mannheim. The Managing Director of EEIG Corridor A became a member of the political advisory board of CODE 24 thus supporting common enhancement initiatives. Regular communication with RUs (advisory board), adjoining cities, communities and with terminals (terminal platform meetings, hosted by the Ministries)

was maintained as well as the participation of the corridor in the Noise Platform meetings of the Ministries. This led to a fruitful and constructive dialogue.
The major highlight was the minister's corridor conference in The Hague/Rotterdam in June, giving an enormous impulse regarding new goals and perspectives on the corridor development. In a ministers declaration the extension of Corridor A to Antwerp and Zeebrugge via Cologne was decided. Consequently the corridor organisation was adapted, integrating the Belgium Ministry of Transport in the Executive Board and inviting Infrabel to become a member of the Management Committee of the IMs. The new connection of Corridor A and Corridor C in Antwerp is an important step towards the European rail freight network.
Another highlight was the adoption of the EU regulation 913/2010 concerning a European rail network for competitive freight in September. Although Corridor A had already considered most of the topics defined in the regulation, serving as a kind of blueprint for this regulation, the full implementation until the end of 2013 required to set-up a new corridor working group for the development of common corridor core requirements and the coordination of principles and processes for the implementation.

The ETCS implementation in Germany is still jeopardising the targeted completion of the corridor in 2015. The German Ministry of Transport has decided to implement Level 2 on the entire section in Germany by deploying the system requirement specification 2.3.0d, and not to support a mixed deployment concept of Level 2 and Level 1 Limited Supervision. Due to this, DB Netz has to first upgrade all affected interlockings with modern electronic technology for connecting the RBCs. This is much more costly and delays ERTMS implementation by about 5 years. Based on this decision, DB Netz will now start to negotiate the financing agreement with the Ministry. This critical topic is constantly in discussion at the highest level within the ministries and the EC. Although the contents of the intended corridor MoU referring to the Baseline 3 implementation was finally agreed, it could not be finalised for above reasons and regrettably had to be dropped for the time being.
In Italy, RFI came to the conclusion that the deployment of Level 1 Radio Infill is more costly than a Level 2 installation. As a result, RFI decided to change to Level 2 which will ease implementation and operation considerably because Level 1 Radio Infill had been considered by no one else in Europe.
The NSA working group, in coordination with the ERTMS working group of the corridor, is advancing in the preparation of a test and authorisation guideline, which shall substitute the former ETCS test and implementation platform proposed by UNISIG and the sector. Meanwhile ERA has adopted the test concept using a common database and started with the definition of a common format and test scenarios.
The corridor continued in workshops to define common concepts for consideration in the supply contracts of ERTMS. Various meetings were held with expert consultancies on the need for system integration and to define the scope for a cross impact risk analysis.

The corridor organisation works complied with the requirements for European subsidies and the decision taken by the EC for the call 2007 to 2009. The final financial report was audited by PwC and accepted by the TEN-T Agency.
The final decision of the EC regarding the subsequent request for European co-financing from 2010 to 2013 was received and a pre-payment of 50% transferred to the account of the EEIG.

A. Management Dashboard

Figure 1 displays the progress of the implementation of the corridor programme (input KPIs) for 2010.[2]

The total work progress of all WGs is 55.3%; this is an increase of 13.8% compared to the previous year. Some remarkable results by the WG Operations were noted.

Altogether, the majority of IM projects are in line with the planned work progress, stating a total of 34.6 % actual work progress.

Regarding ETCS deployment, progress was noted regarding tendering and contracting. In Switzerland, more than 1.400 track km (34.14%) of Corridor A are currently in the tendering process.

The overall budget situation improved and the open amounts could be reduced significantly. In total, only 1.5 million Euros are still open.

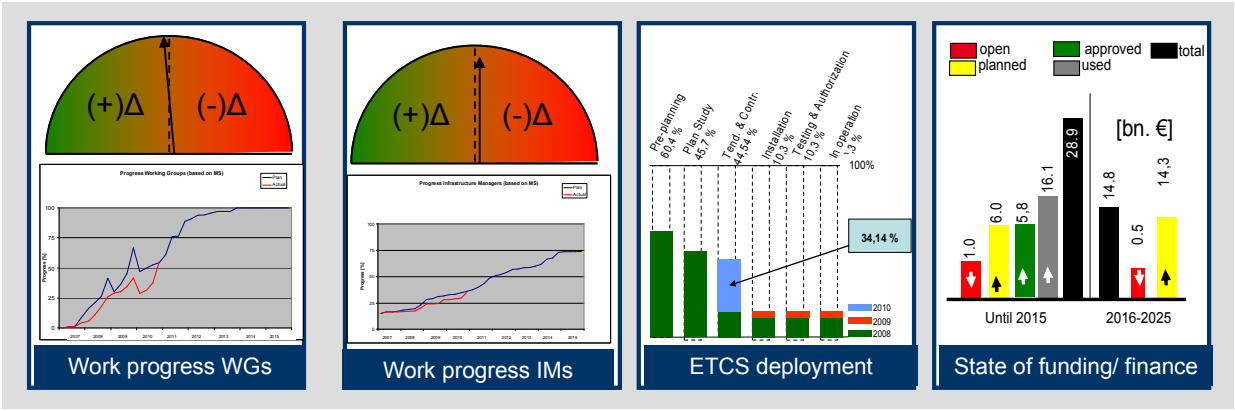


Figure 1: Management Dashboard 2010 (part 1)

The progress of the corridor performance can be seen in figure 2. While recovering from the economic recession, the traffic volume increased more than expected by experts which contributed to the positive development along the corridor.

The increased traffic along the corridor can also be noticed in the development of the modal split by the growth of the rail share. On the other hand, construction works along the corridor as well as an increased number of passenger trains during peak periods had a negative impact on the average speed and punctuality of the investigated relations.

[2] For more detailed information regarding KPIs and dashboard, definitions and legend please see chapter 1.1.

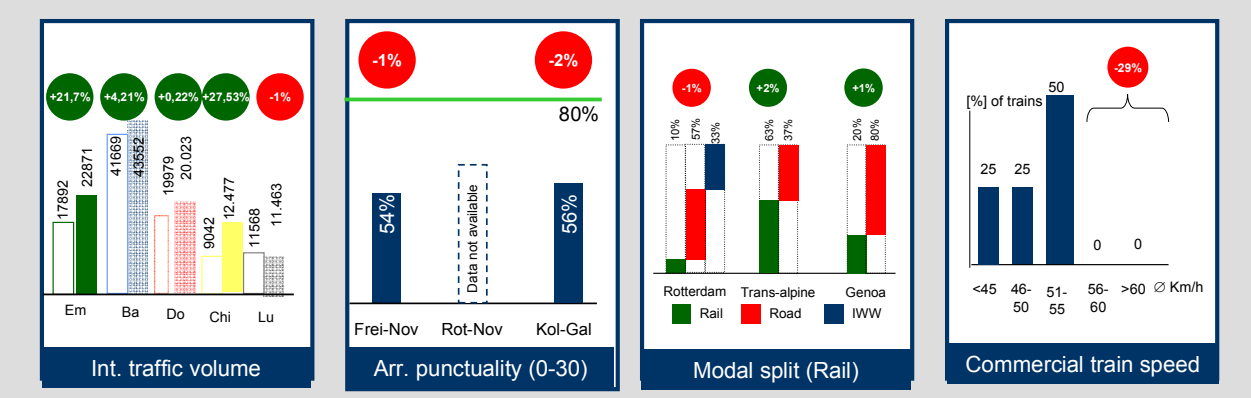


Figure 2: Management Dashboard 2010 (part 2)

B. Management Summary

The European rail freight regulation 913/2010 came into force in November 2010. The EC drafted an implementation guideline for the regulation and all concerned IMs were asked to comment on this document. Based on this work, the IMs of Corridor A will analyse the requirements of the regulation. On 14 June 2010 ten European Transport Ministers reinforced and confirmed their intention to cooperate in the development of European rail freight corridors. The Declaration of Rotterdam refers also to the content of the rail freight regulation.
The corridor organisation already anticipates the legislation in its daily practical work. A cooperation agreement was negotiated and agreed to by the IMs of Corridor A and Infrabel. The first integration meeting was held. Since autumn 2010, Infrabel is fully participating in the work of the corridor (e.g. WG ERTMS, PMO, MC).

The cooperation in the framework of the CODE 24 project with various communities, regions and cities close to the corridor continued in 2010. The corridor was present at the European corridor conference in May 2010 in Mannheim. Moreover, the corridor contributed with know-how to the regional workshops. It became clear that the corridor, its IMs and the Ministries need to explain and communicate the project openly. The communities and regions assess the corridor development as a source of chances, but see also the threats and potential problems from growing rail freight.

The German MoT came to a decision regarding the funding of ETCS equipment on Corridor A in late 2010. The funding will come out of the “Bedarfsplan” (federal budget for new rail infrastructure projects), without raising the budget. The underlying deployment concept foresees a stringent installation of ETCS Level 2. However, a funding agreement between the state of Germany and DB Netz AG is indispensable to start the works. Until the end of 2010 such an agreement could not be achieved.
Switzerland has published its tender for the Swiss ETCS lines of Corridor A in November 2010. Italy announced that it will revise its ETCS deployment strategy, focusing more on Level 2.
ETCS is a new technology which also requires innovative thinking and processes, especially for testing. Under the lead of the NSAs a testing and authorisation concept is currently being drafted. The group shall develop and submit a guideline for cross-acceptance, testing and authorisation for Corridor A. Due to different national procedures of the past and the specific situation of Corridor A in pioneering

international installations, as well as the closing of the ETIP initiative of UNISIG and the EEIG ERTMS Users Group, consensus among the NSAs needed considerable and careful works to assess all implications. The corridor IMs could participate in this work and it appears that first tangible results can be expected by mid 2011.

The European co-financing of the work of the EEIG from 2010 to 2013 had been officially approved. The total volume granted sums up to 2.7 Mio. €. The EEIG sees this as a strong recommendation to continue the work of developing the corridor.

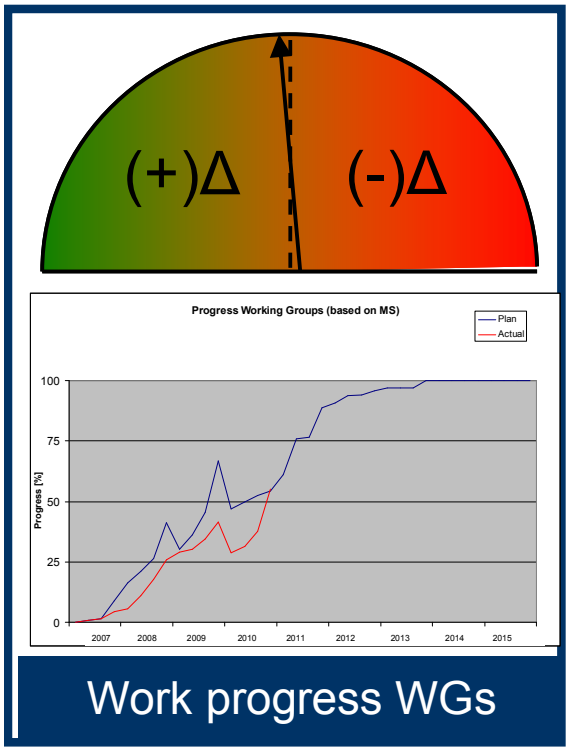
III. Activities on the corridor level

A. Work results in 2010

Work progress of WGs activities

Figure 3 indicates the work progress of the corridor WGs which sums up to 55,3% compared to 54,2% planned work progress. The work is bit faster than planned

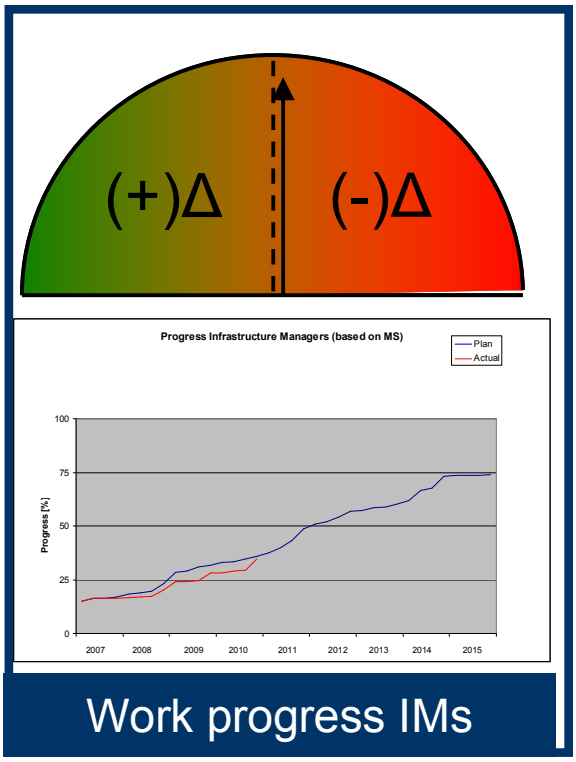
The WG Operations had interrupted its work for almost one year (May 2009 – May 2010). In the beginning of 2010 the MC re-appointed a new WG manager and the group finally resumed its work in May 2010, performing very well until the end of 2010. The WG Traffic Quality, especially when carrying out activities together with RNE, also faced a number of risks which led to delays. ETCS issues, especially on the European level, are behind the planned progress due to major scope changes which have to be taken up in the baseline in 2011. The WG Capacity has set up a new work plan for the next two years.
The figures do not include the extension from Cologne to Antwerp and Zeebrugge as the baseline will be adjusted for the report 2011.



Definition: percentage [%] of the total work amount completed, based on completed project phases (IMs) or activities (WGs) of the baseline (earned value). The blue line displays the planned work progress whereas the red line shows the actual work progress. The speedometer indicates the trend of the delta between plan and actual.

Figure 3: KPI Work progress WGs

Work progress of IMs project implementation
The actual progress of the projects of the IMs sums up to 34.6 % vs. 35.9 % of planned work progress, see figure 4. Most of the infrastructure projects are ongoing and well on schedule. Major works for studying and preparing the ETCS projects in Germany cannot be carried out due to the non-solved funding situation. This current situation induces a risk rated A1, escalated to the ExB since March 2009.
The figures do not include the extension from Cologne to Antwerp and Zeebrugge as the baseline will be adjusted for the report 2011.

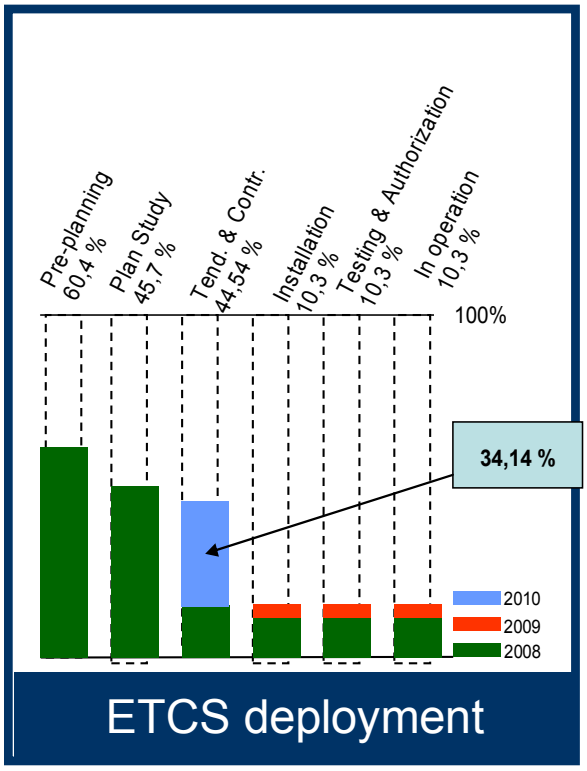


Definition: percentage [%] of the total work amount completed, based on completed project phases (IMs) or activities (WGs) of the baseline (earned value). The blue line displays the planned work progress whereas the red line shows the actual work progress. The speedometer indicates the trend of the delta between plan and actual.

Figure 4: KPI Work progress IMs

ETCS deployment

In November 2010, SBB issued tenders for ETCS Level 1 LS on the Corridor A lines in Switzerland. Subsequently, 1.423 track km (34,14%) are now in the tendering & contracting phase (figure 5). Italy intents to issue tenders in 2011. The tendering of DB is postponed due to the decision of the German Ministry for Level 2 which requires the upgrade of interlockings first. In NL we want to prepare the tendering for the construction of ERTMS-Level 1 in Q1-2012.In Q3-2012 we want to start the construction of it on the current 2 tracks Zevenaar - border. In Q1-2014 ERTMS Level 1 will be taken in exploitation. Implementation of 25KV will be finished in Q4-2014 according the current planning.



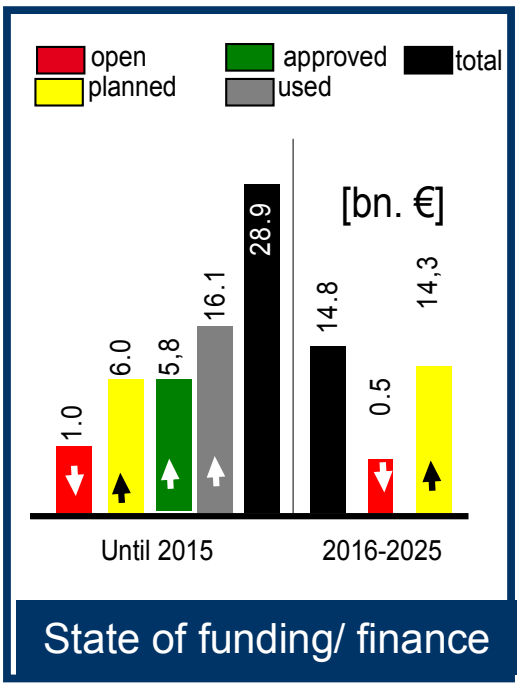
Definition: Yearly progress in [%] of ETCS corridor single track length [Basis 4171 km] which passed through the phases of pre-planning / plan study / tendering & contracting / installation / testing & authorisation or in operation.

Figure 5: KPI ETCS deployment

State of funding/ finance
The state of funding as shown in figure 6 displays the situation of the overall corridor programme (all IMs, all project types) as per end of 2010. Regarding the short / mid-term period (until 2015) the budgets became firm and more binding. Total investments increased by 19% to 43.6 billion Euros. This is partly due to an increase in costs of individual projects as well as new projects.

Budgets used correspond to the work progress; however, partial price increases are expected.

Planned and approved budgets in the short and mid-term period (until 2015) have developed positively, while the open budget was significantly reduced.

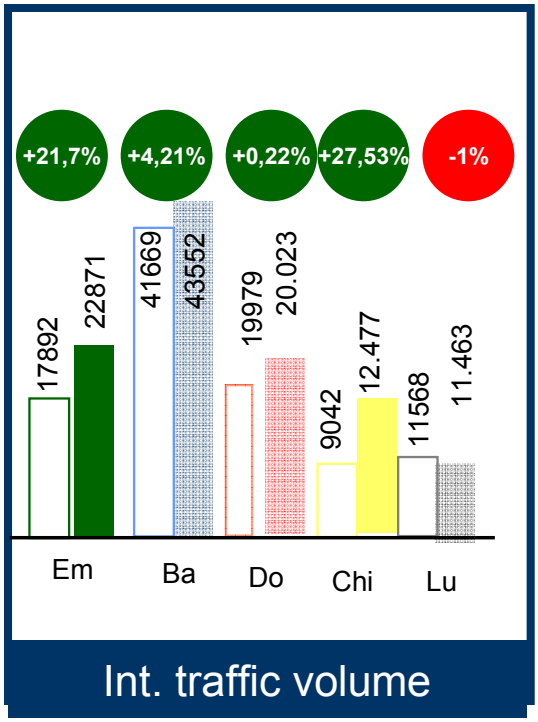


Definition: amount of planned/ approved/ open/ used budget [bn. €] for all kinds of Corridor A projects (interoperability, bottlenecks, total service concept) as per 31.12.10 related to the total budget planned until 2015 (open, planned, approved, used, total) respectively from 2016 to 2025 (total, open, planned). The arrows indicate the delta to the 2009 figures.

Figure 6: KPI funding

International traffic volume

In 2010 the beginning recovery from the economic recession was noticeable in the corridors' neighbouring countries and the traffic volume increased considerably. The biggest rise is displayed on the German-Dutch border as well as in Chiasso. Traffic in Chiasso benefited from the end of the construction works at Monte Olimpino II. This rise is partly due to economic recovery and partly due to increasing use of the Betuweroute compared to the other border crossings.



Definition: number of international freight trains crossing one (or more) of the border stations of Corridor A in both directions, regardless from origin or destination, per year. Border stations of Corridor A are: Zevenaar/ Emmerich (NL – DE); Basel (DE – CH); Domodossola (CH – IT); Chiasso (CH – IT) and Luino (CH – IT).

Figure 7: KPI international traffic volume

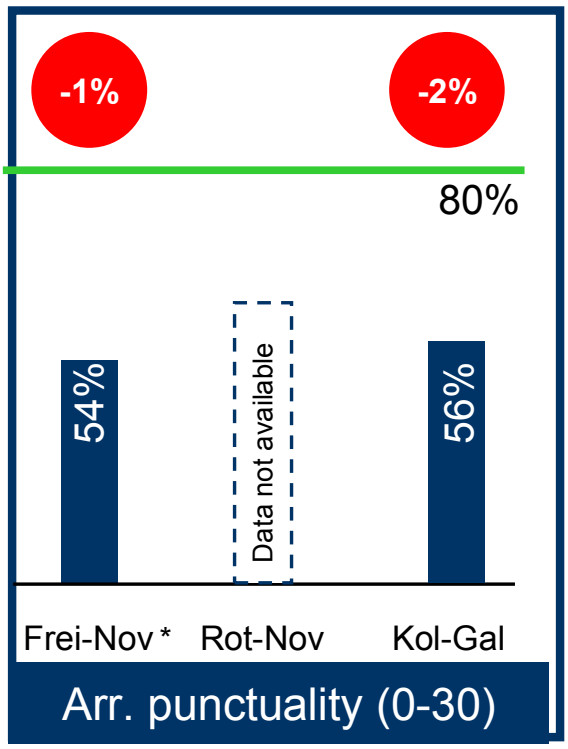
2006	Emmerich	Basel	Domodossola	Chiasso	Luino
2007 (year)		48.250	20.158	18.848	11.738
2007	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2007 (year)	14.031	49.877	21.494	18.922	11.416
per day*	47	73	50	49	25
2008	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2008 (year)	18.592	48.947	21.908	18.196	11.073
2009	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2009 (year)	17.892	41.669	19.979	9.042	11.568
Delta to 2008	- 700	- 7.278	- 1.929	- 9.154	495
Delta in %	- 3,77	- 14,87	- 8,81	- 50,31	4,47
2010	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2010 (year)	22.871	43.552	20.023	12.477	11.463
Delta to 2009	4.979	1.883	44	3.435	- 105
Delta in %	21,77	4,32	0,22	27,53	- 0,92

Figure 8: KPI international traffic volume - Absolute data

Arrival punctuality (0 – 30 min)

The punctuality figures 2010 are shown in figure 9. The KPI from Rotterdam to Melzo is not available due to validity problems on the Dutch side. It was agreed to replace this relation with the relation from Rotterdam to Novara. However, the new data could not be retrieved yet.

It can be observed that punctuality dropped slightly over the previous year. This is due to the high number of short term construction works (e.g. spiral tunnel Varzo) along the corridor and the strong increase of capacity demand, which lowered the possibility of travel time recovery. The growing number of passenger services too also affects freight traffic negatively.



Definition: average punctuality level (arrival at destination within a 30 minutes time span) for selected relations of: Freiburg – Novara; Rotterdam – Novara (new) and Köln – Gallarate (all start/ end points of these transport relations are directly located on Corridor A). A level of 80% is targeted.

Figure 9: KPI punctuality

* Freiburg – Novara: due to system failures results may not be 100 % valid.

Modal split

The modal split for Corridor A is illustrated in figure 10. Last year's shift of 1% from rail to road in Genoa could be recovered. Very remarkable is the strong increase of the trans-alpine modal split by 2%, accompanied by a number of traffic records which could be noted on the Lötschberg trans-alpine axis. Even though the modal split in Rotterdam harbour appears to have lost about 1% it still represents an increase in total numbers when compared to the increase of total transport volume.

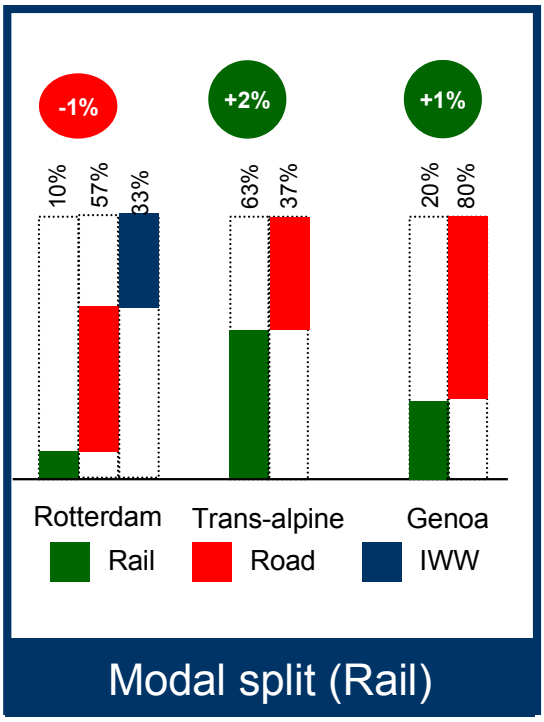


Figure 10: KPI Modal split (Rail)

Definition: modal split [%] of freight traffic at sea port of Rotterdam, sea port of Genoa and trans-alpine. For Rotterdam and Genoa the modal split is calculated based on TEUs (containers) for the Hinterland traffic. For the trans-alpine freight traffic the basis is net tons. It is separated by rail, road and inland waterways (if applicable). Measured on an annual basis.

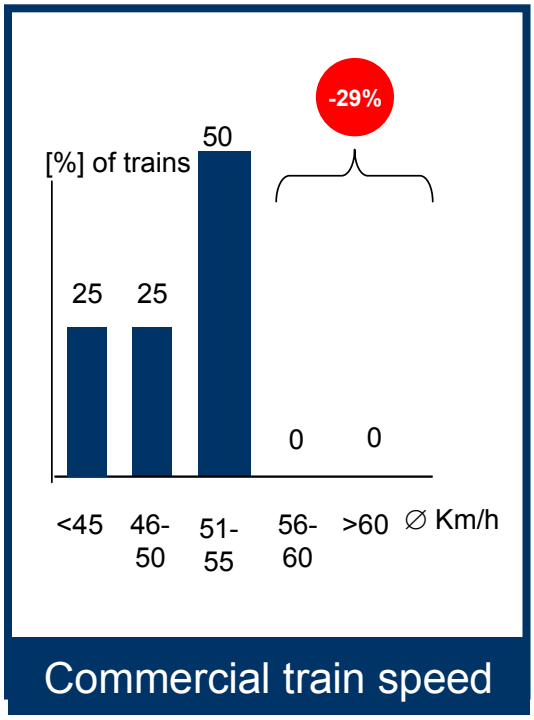
Commercial train speed

Figure 11 shows the distribution of commercial train speed for three selected traffic relations on Corridor A. 24 pairs of trains were analysed. The result of the analysis shows a more homogenous distribution of the average speed compared to the previous years. The minimum average speed is 39,8 km/h whereas the fastest connection offers 54,4 km/h according to the timetable. In comparison to last year a tendency towards slower train paths is visible. The reason for the decrease in the average speed is motivated by two facts:

a) Increased construction activity along the defined path

b) Compression of passengers transport, extra trains during peak hours.

This all leads to a slowdown in freight transport, due to waiting time for threading or overhauls.



Definition: average speed [km/ h] of trains according to valid time table for selected relations: Freiburg – Novara; Rotterdam – Melzo and Köln – Gallarate (all start / end points of these transport relations are directly located on Corridor A) in both directions. Measured based on annual timetable and classified in five different categories. Basis: 24 freight train services on 3 different relations

Figure 11: KPI Commercial train speed

Summary
Figure 12 sets the 2010 values in the context of the previous year and the target 2015. In addition, it shows the delta in absolute or relative figures. Besides the planned progress in project realisation, the increase of funds used in 2010 by about 4 bln € is also due to the cost increase of the Gotthard Base tunnel and other construction projects.

KPI	2009 (Actual)	2010 (Actual)	Delta	2015 (Target)
Work progress WGs [%]	41.4	55.3	13.9	100
Work progress IMs [%]	28.0	34.6	6.6	81
ETCS deployment [%]				
Pre-planning	60.4	60,.	±0	-
Plan Study	45.7	45.7	±0	-
Tendering and Contracting	10.4	44.5	+34.1	-
Installation	10.4	10.4	±0	-
Testing and homologation	10.4	10.4	±0	-
In operation	10.4	10.4	±0	100
State of funding [bn. €]				
Open	4.0	1,0	-3,0	-
Planned	2.5	6,0	+3.5	-
Approved	4.3	5,8	+1,5	-
Used	11.9	16,1	+4.2	28.9
Int. traffic volume [trains]				---
Emmerich	17.892	22.871	+21.77	
Basel	41.669	43.552	+4.21	
Domodossola	19.979	20.023	+0.22	
Chiasso	9.042	12.477	+27.53	
Luino	11.568	11.463	-0.92	
Arrival punctuality [%]				
Freiburg – Novara	55	54	-1	80
Rotterdam – Novara	N/A	N/A	-2	80
Köln – Gallarate	58	56	-2	80
Modal split rail [%]				
Rotterdam port	11	10	-1	
Trans alpine	61	63	+2	
Genoa port	19	20	+1	
Commercial train speed [%] of trains above average 50 km/h	67	50	-17	

Figure 12: Development of KPIs

Terminal platform meetings
The Ministries organized two terminal platform meetings in 2010, in March (Basel) and October (Rotterdam). The EEIG participated in both events. One of the most interesting topics was the enlargement of the EOPT tool for terminal managers. Opening the system for terminal managers should lead to simplified tracking & tracing processes of international trains. Today it is predominantly a manual process (phone, fax, email) for most terminal managers. More and reliable information about the estimated time of arrival (ETA) in a specific terminal facility would help the terminals to smoothen and optimize their operational processes.

A first technical analysis concluded that an enlargement of the application would be possible. A workshop with terminal managers (Bertschi, DUSS, Hupac) was held in April 2010 to collect ideas and expectations from the side of the potential users. The terminal managers fully supported this idea, whereas the feedback from the RUs was more heterogeneous.

RU advisory board
Out of the three scheduled meetings in 2010 (February, June and September), one was cancelled in advance due to important commitments of some participants. The level of attendance remained at a moderate level. Usually 4 – 5 RUs took part in the meeting. The second German seat in the RU advisory board is vacant since the end of 2008. The EEIG urged the German MoT to take its responsibility to nominate an appropriate candidate for the board.

Despite the low attendance or because of it, discussions in the meeting gained quality and became more open. Selected topics which were discussed with the RU advisory board:

- Extension of Corridor A to Antwerp
- Noise study by ministries
- EOPT for terminals
- RNE/ Quality issues.

The RUs showed great interest in learning more about a trackside ERTMS deployment strategy for Corridor A. Due to the given uncertain funding situation of ERTMS in Germany, the EEIG was not in a position to present a migration plan to the RUs. Though the RUs understood the background, they stated that this insecure situation is questioning and jeopardizing further investments in on-board equipment for ERTMS. The EEIG promised to present the trackside migration strategy as soon as it is funded and stable.

Communication concept Corridor A
Based on a decision of the MC in 2009, the corridor organisation implemented a range of communication measures. A central component of the concept is a website[3], which went online in February 2010 and is seen in figure 13.

The website offers a wide scope of information, describing the corridor motivation, organisation as well as details of the corridor programme. The information offered is complemented regularly with current events and information. The website also provides an internal area containing documents which are of interest for any person involved in the corridor work. An online collaboration tool is also integrated in the internal area of the website.

In cooperation with a communication agency a corridor brochure was developed and printed in English. It was first used and distributed at the business conference in Rotterdam in June 2010. The brochures are further used for fairs and other business events. The website served as the main source for the content of the brochure (text, pictures and graphics).

[3] URL: www.corridora.eu

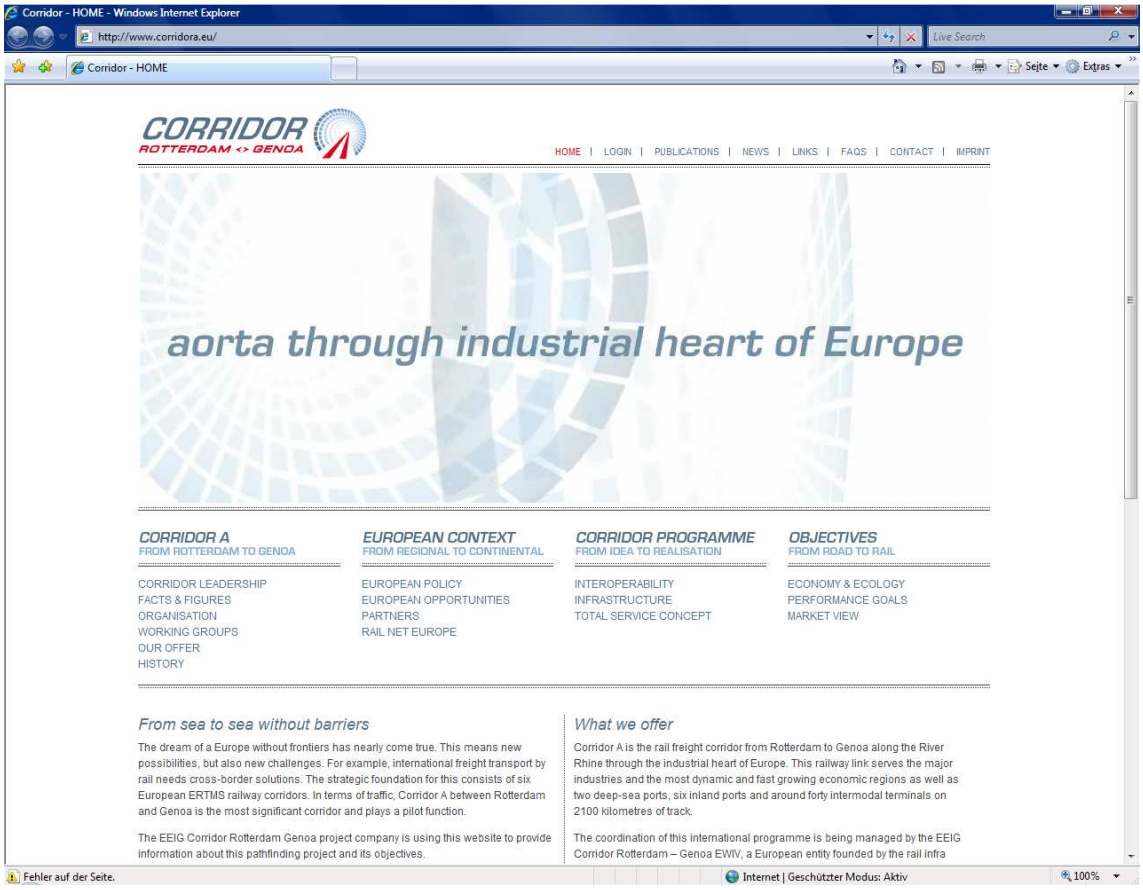


Figure 13: Website of Corridor A (homepage)

Mannheim conference – CODE 24 project

The cooperation with regions and cities along the corridor peaked in an opening conference on 7 May 2010 in Mannheim. The event attracted participants from politics and science as well as from the entire sector: end customers, RUs, IMs, terminals, intermodal operators and ports. The EEIG presented its programme and the expectations regarding the cooperation in this project.

CEO meeting Corridor A

The CEOs of Corridor A met in Coventry (UK) on 6 June 2010. They were informed about the current status of the corridor programme and discussed vital corridor related questions. From the discussions of the meeting, the CEOs assigned three tasks to the corridor organisation:

- Comparison of the models for track access charges used on Corridor A
- Update analysis and long–term traffic forecast
- Follow up/ intensify the work on ERTMS system integration, a common testing & authorisation concept and common/ coordinated procurement of ERTMS

All CEOs jointly agreed to meet annually in future concerning Corridor A. Results on the assigned topics will be presented at the next CEO meeting.

Declaration of Rotterdam
Following an invitation from the Dutch Minister of Transport, Transport Ministers (or substitutes) of France, Belgium, Luxemburg, Czech Republic, Germany, Switzerland, Italy, Poland and Lithuania met in The Hague/Rotterdam. All the Ministers shared the idea of turning the corridors into a network. To endorse this idea, the "Declaration of Rotterdam" was signed. Some ideas of the forthcoming EU regulation for a European rail network for competitive freight (see next clause) were already visible in the text of the declaration. Apart from the freight regulation aspects, the corridor IMs were asked:

- To enable long trains on the entire corridor by providing at least 750m tracks. A CBA shall be a good basis for further decisions.
- To continue with common procurement of ERTMS. Joint task should be the mitigation of risks.
- To seek for a common testing and authorisation concept for Corridor A under the lead of the NSAs and in cooperation with ERA.

The corridor organisation worked intensively on these tasks. Led by the WG Capacity, an intense analysis on longer tracks and free (available) capacity was worked out and presented to the ExB in the September meeting (for more details see clause 0). The works on common procurement and a joint testing & authorisation concept for ERTMS will be emphasized in clause 0.

In the frame of the meeting, the updated IQ-C action plan (2010 edition) was amended and the annual report 2009 of Corridor A adopted.

Regulation (EU) 913/2010 for a "European rail network for competitive freight" / extension of the corridor to Antwerp / Zeebrugge/ cooperation with Infrabel
After developing the content of the regulation and consulting MS, IMs and RUs the majority of the European Parliament voted for the EU regulation for a "rail network competitive for freight" in June 2010. The regulation was officially published in the European Journal on 20 October 2010 and came into force on 9 November 2010. For Corridor A (corresponding to corridor 1 of the regulation) a transition period of 3 years applies. By end of 2013, the content of the regulation shall be implemented.

The IMs of Corridor A (including Infrabel) started analysing the text of the regulation. The corridor organisation will compile and compare the various strategic approaches to find appropriate common positions.

The IMs worked out several scenarios and made a recommendation to the ExB regarding routing and organisational impacts:

1. Dual governance structures on one destination might create additional coordination effort, increase costs and reduce clear responsibilities. If this can not be avoided solutions have to be developed.
2. Regarding changes in the definition of Corridor A the IMs assume that federal funds for the corridor programme will be updated and confirmed by the Ministries.
3. The preferred itinerary to connect Corridor A from Cologne to Antwerp/ Zeebrugge is the Montzen route. This choice will not imply the implementation of ERTMS until 2015.

4. In general alternative routes are not yet belonging to Corridor A thus not being part of its investment programme.

Infrabel joined the MC of Corridor A with immediate effect at the MC meeting in September 2010. Activities started to fully integrate Infrabel in the works of the corridor organisation. Due to administrative reasons, it was agreed not to integrate Infrabel in the EEIG for the duration of the current TEN-T funding action 2009-EU-60146-S, lasting until end of 2013.

B. Outlook for 2011

In 2011 corridor works will continue as planned, whereas some important landmarks can be highlighted:

- Full integration of Infrabel into the working organisation of Corridor A, including MC, PMO and all WGs
- Re-calculation of corridor business plan (baseline, investments, benefits) considering the figures from Infrabel for the branch to Antwerp/ Zeebrugge
- First ERTMS/ ETCS tenders to be launched
- Restructuring of PMO organization and implementation of the WG Rail freight regulation.

C. Organisation

The corridor IMs succeeded in 2008 in founding and registering the *"European Economic Interest Group Corridor Rotterdam – Genoa EWIV* (EEIG)" as the common legal entity for the successful implementation of the corridor programme. ProRail B.V., DB Netz AG and RFI S.p.A. are members of the EEIG. SBB Infrastruktur and BLS Netz AG have joined the EEIG as associated partners, because it is impossible for companies from non-EU member states – such as Switzerland – to join an EEIG as an official member.

The EEIG is managed by Mrs. Claudia Cruciani from RFI as Deputy Managing Director and Mr. Stefan Wendel from DB Netz as acting Managing Director. The members of the General Assembly were Mr. Klaus Junker (DB Netz) and Mr. Umberto Foschi (RFI), Mr. Michel Ruesen until 20th April 2010 and Mr. Hugo Thomassen from 20th April 2010 onwards (both ProRail). The function of the chairman was handed over from Michel Ruesen (ProRail) to Klaus Junker (DB Netz). The associated partners are represented by Mr. Hansruedi Kaeser (SBB Infrastruktur) and Mr. Felix Loeffel (BLS Netz AG). The seat of the EEIG is Frankfurt/ Main (Germany). The overall corridor organisation including the EEIG is shown in figure 14.

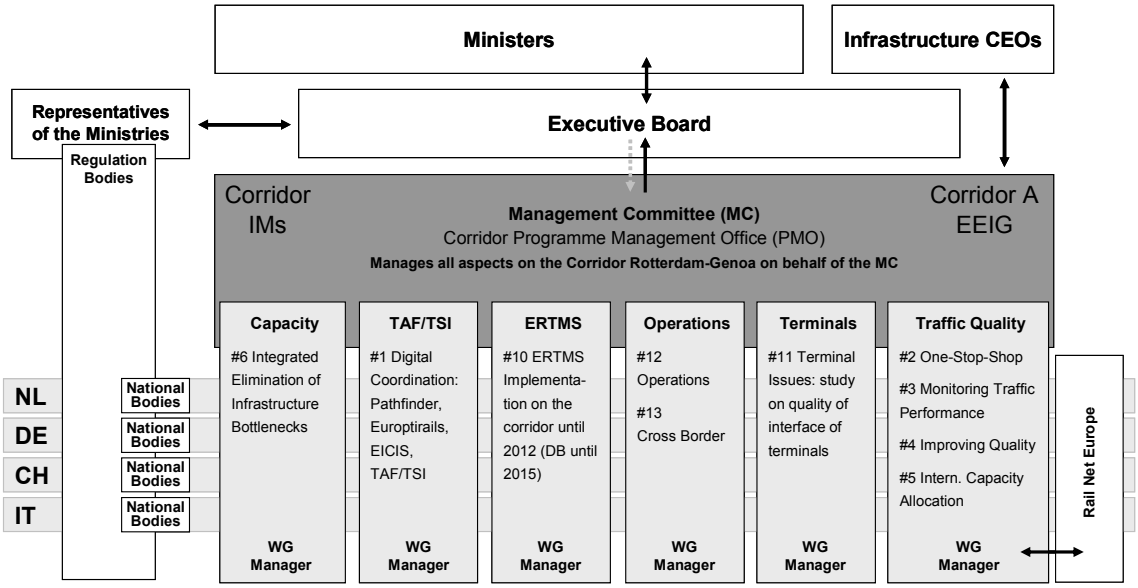


Figure 14: Corridor Organisation

The Programme Management Office (PMO) of the corridor including the EEIG consists of three full-time employees located in the corridor offices in Frankfurt. Five Programme Infrastructure Managers (PIMs) and five Working Group Managers (WGMs) in joint responsibility for the corridor activities on national and on PMO level complete the working organisation. They establish the interface contact between national IMs, WGs and the PMO. Furthermore, several experts from the corridor IMs add their knowledge and their expertise to the WGs and expert WGs managed by the corridor, as well as to WGs established on European level at the ERA, UIC, ERTMS Users Group etc. In total, about 50 persons work at least part-time on tasks which are assigned to the corridor programme.

D. Monitoring & Reporting Methodology

The working methodology of the corridor organisation remained basically unchanged in 2010 except for minor adjustments based on experience gained. For interested or new readers, detailed explanations can be found in annex C.

E. Release Notes & Contact Details

This report has been set up, reviewed and finalised between November 2010 and April 2011 by the working organisation of the Management Committee of Corridor A, the Programme Management Office (PMO). The legal body for the working organisation is the EEIG Corridor Rotterdam – Genoa EWIV. The general content was elaborated and integrated by the PMO management, whereas the detailed information in this report had been contributed respectively elaborated by the programme infrastructure managers (PIMs) of ProRail (NL), DB Netz (DE), SBB & BLS (CH) and RFI (IT), thus being under the responsibility of the related IMs. For any questions or further details concerning the Corridor A programme please contact:

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IV. Activities of the Working Groups

Until stated otherwise, e.g. by references or footnotes, the content of this chapter stems from the corresponding Working Group Managers who are leading these groups. For further information, please see Annex C.

- TAF TSI (IQ-C Action Item #1): Laurens Berger
- ERTMS (IQ-C Action Item #10): Stefan Wendel
- Operations (IQ-C Action Item #12, #13): Sebald Stumm from 01.06.10
- Capacity (IQ-C Action Item #6): Heinz Pulfer/ Daniel Gerhard
- Traffic Quality (IQ-C Action Items #2, #3, #4, #5): Hansruedi Kaeser
- Terminals (IQ-C Action Item #11): Thomas Schneider

A cross reference table mapping the IQ-C action items with the structure of the annual report can be found in figure 37 (see annex D).

A. TAF TSI (IQ-C Action Item #1)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	45	**WG Result [%] Actual**	15
Work Packages Total	3	**Work Packages Finished**	0	**Work Packages Pending**	3
Start	01.01.07				
End	31.12.15				

PSP	WP	Results and Milestones achieved
1.1	Analysis/ design of TSI TAF by corridor IMs	Work package started in 2010
1.2	Monitoring of European activities	UIC CCG established Re-issue of tender/ contract necessary IM cluster (RNE) completed its works
1.3	Development of value added services (Total Service Concept)	Work package has started in 2009

Work Progress

1.1. Achievements

The following representatives are members of the WG TAF TSI: Laurens Berger (ProRail), Frits van der Meer (ProRail), Stephan Breu (DB Netz), Hans-Peter Pfister (SBB) and Andreas Exter (PMO). During 2010 no plenary meeting of this working group took place; via small meetings with some of the WG Members the general progress in the field of TAF TSI was monitored and discussed. By the end of 2010, the total actual work progress of the group sums up to 15% versus 45% of planned work progress.

Analysis/ design of TAF TSI by corridor IMs (PSP 1.1)
All corridor IMs are part of the early implementers. For the time being, most IMs focus their TSI TAF related activities and resources on the European level. The basis for a national implementation is a stable specification, to be used by any stakeholder in the railway sector. A stable and precise specification (implementation handbook) has not been available. For that reason, the actual implementation of TSI TAF has not yet started by the IMs and all projects are on hold. However, all IMs have already analysed TAF TSI internally.

Monitoring of European activities (PSP 1.2)
On European level, the main activities are driven by the common components group (CCG), hosted by UIC. The common components will serve as the centre piece of any communication according to the TAF TSI specification. The common components will be used on a common basis and are therefore designed and implemented jointly. The work of the CCG group started in 2009 but faced a serious setback in 2010. The IT service provider which had won the tender went bankrupt. Consequently, the CCG was forced to reissue the European tender and reset works. The contract has now been awarded to a new supplier. In total, the delay sums up to approximately two years. The common component shall be ready at the end of 2011.

From the IMs perspective, the main activities take place at RNE which is hosting the IM cluster. In recent months, five work groups have clarified and solved the indistinctness (missing definitions, unclear definitions, ambiguous and / or non-complete business processes) in the TSI specification:

- Common components
- Train running forecast
- Train preparation
- Train restriction database
- Short term path request.

This work could be completed in 2010, representing a major milestone. The outcome is a revised specification (implementation handbook) of the TAF TSI. The results will be exchanged and discussed with the UIC IT study group (RU cluster) which reviews the specification for the RU – RU processes. The entire revised documentation should serve as a blueprint for the implementation of TAF TSI in Europe.

Development of value added services (Total Service Concept) (PSP 1.3)
A discussion with the RUs showed that the companies are not yet aware of the opportunities that TAF TSI offers. The RUs assess TSI TAF predominantly as a burden. Any benefits are supposed to be already cashed with the introduction of their current systems. Moreover, the RUs fear the transition / migration period. The initiative for the development of value added services has to come from the IMs and the RUs must be offered a clear advantage.

The implementation handbook is now available, and the implementation path is made clearer for the IMs. This enables to discuss and to develop added value services for our clients.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

PMO, MC and WGM will intensively discuss the future role of the corridor WG TAF TSI. As a matter of fact, TAF TSI is a European topic related to IMs and RUs, which is under development by the UIC IT study group and the UIC common components group. The activities are driven on the European level. For IMs, RNE is the institution hosting the IM-cluster and providing the tools. Subsequently, TAF TSI will not be subject of a pilot on Corridor A, but implemented in the frame of the European roll out on the level of the European network. Thus, the implementation of TAF TSI will be performed in a number of IT projects which have to be monitored in the frame of all projects by the PIMs for Corridor A. Possible impact respectively changes to the corridor organisation will be discussed in the forthcoming weeks.

B. ERTMS (IQ-C Action Item #10)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	79	**WG Result [%] Actual**	42
Work Packages Total	3	**Work Packages Finished**	0	**Work Packages Pending**	3
Start	01.02.07				
End	30.06.12				

PSP	WP	Results and Milestones achieved
2.1	Common strategy Corridor A	Workshops on common procurement held, further proceeding agreed Common contractual content developed
2.2	Specification and product	Standard ERTMS test cases drafted (ERA)
2.3	Common processes and responsibilities	Testing & authorisation concept drafted/ proposed

Work Progress

1.1. Achievements

According to the above KPI with an actual work progress of 42% versus 79% planned, the ERTMS working group seems to be far behind the plan. Besides their own work packages the working group also monitors the work results of non-corridor national and European working groups such as of the Users Group ERTMS, NSAs, ETIP, UIC, ERA and bilateral working groups etc. whose inputs are needed for the ERTMS implementation on the corridor. Subsequently, this KPI shows the entire progress on ERTMS which is needed to assess and mitigate the risks for the corridor implementation.

In 2010, the working group ERTMS consisted of the regular members Adri Verbraak (ProRail), Martin Zürcher (SBB/ BLS), Giovanni Zanelli (RFI), Frank-Bernhard Ptok (DB), Dr. Didier Léautey and Patrick Steinebach (both DB Netz) and since October 2009 Stefan Bode (DB Netz). Stefan Wendel from the EEIG is the working group manager. For specific topics the WG was further supported by additional experts from the corridor IMs, the Users Group ERTMS or other bodies. The WG met on a monthly basis and also prepared/ attended specific workshops (e.g. common contractual clauses).

Common strategy Corridor A (PSP 2.1)

The WG ERTMS organized two special workshops on common contractual content in 2010. The major outcome of the first workshop on common procurement was the conclusion that joint ETCS procurement or even a common tender will not be possible[4] on Corridor A. Nevertheless, the group concluded that it would be beneficial to coordinate and harmonize the content of the contracts (as far as possible). By doing so, the costly testing, acceptance, cross-acceptance and homologation procedures of ETCS installations could be simplified and accelerated. Today's

[4] For more details, please see Corridor A annual report 2009, p. 29

starting point for the trackside ETCS deployment on Corridor A is marked by diversity:

- 5 Infrastructure Managers: ProRail, DB Netz, SBB Infrastruktur, BLS Netz AG, RFI
- 4 countries: Netherlands, Germany, Switzerland, Italy
- 5 border sections: Zevenaar/ Emmerich, Basel, Domodossola, Luino, Chiasso
- 4 National Safety Authorities: IVW, EBA, BAV, ANSF
- 3 languages: Dutch, German, Italian
- 6 – 8 different suppliers of trackside ETCS equipment and services in different project lots
- Dozens of clients (RUs) potentially affected by ETCS migration.

It is of utmost importance to provide one seamless integrated ETCS corridor installation to our clients in the end. Today's mostly nationally oriented testing & authorisation processes do not cope with this situation. The common contractual content should further strengthen the liabilities and duties of the contractors and regulate cross-impact liabilities. In a workshop, those general principles were outlined in a functional way. The translation of those principles into the applicable national laws is up to the IMs.

Specification and product (PSP 2.2)
ERA started drafting standard ERTMS test cases. The core of this work is to design and draft a database which should serve as a European reference for all forthcoming ETCS testing and authorisation processes. The ERA database contains app. 100 test cases, from which the national test cases (sequence of activities and expected results) and operational test scenarios (national test cases + track description) will be derived. A unique number (identifier) will be assigned to each test case.

KMC and KMS are still subject to ongoing discussions among experts. It is still unclear whether safety or security requires the information between RBC and loco to be encrypted. On the other hand e, a European key management system for ERTMS is an enormous administrative task; difficult to organise and costly to maintain. A decision in the European context can be expected in the forthcoming months. Corridor A will certainly follow this decision.

Common processes and responsibilities (PSP 2.3)
The WG ERTMS prepared a joint testing and authorisation concept for Corridor A. It was closely coordinated with ERA and with the NSAs. The group worked out 6 different scenarios (see figure 15) setting the major framework for the authorisation of placing into service (APS).

Process/Situation	Description	Impact
1) New Baseline	First APS of ETCS train and ETCS line (in parallel) (Customer requirement specification, risk analysis, adaptation of interlocking)	▪ Validation with onboard and trackside products ▪ Validation of technical integration ▪ Validation of operational integration ▪ Track train integration ▪ National condition for trackside integration ▪ One time for each baseline
2) Next Train (a)	First APS of ETCS train on a given ETCS line (authorization of the line is available)	▪ Track train integration for each combination of onboard and trackside subsystem required
3) Next Train (b)	APS of ETCS train on a given ETCS line (authorization of the line is available; first authorization of the train on differing ETCS line is available)	▪ See process 2(a)
4) Next Line	APS of ETCS trackside subsystem if several locos with ETCS operate already on the network or corridor	▪ Track train integration for each combination of onboard and trackside subsystem required are procedures to prevent of using ETCS on this line until track train integration was performed
5) Train Upgrade	Re-authorization for APS of ETCS train after ETCS patch or upgrade	▪ Focus: RUs
6) Line Upgrade	Re-authorization for APS of ETCS line after ETCS patch or upgrade	▪ Without disrupting the service, also for Class B upgrades that affect the APS

Figure 15: Scenarios for APS of ERTMS/ ETCS

The group also concluded to focus on scenarios 2 – 5 with priority 1. Processes for APS for scenario 1 will be followed up with priority 2, as the parallel placing into service of trackside and on-board equipment was assessed to be a special (scarce) case. Based on these scenarios additional sub-processes were drafted, guided by the following principles:

- To define a pragmatic process for Corridor A as a pilot for the international ETCS installations. The described process should be applicable to all (future) ETCS installations in Europe. It shall not be a special Corridor A process.
- To perform as many testing activities as possible in labs. On-site testing is costly and directly affects the operational business (daily timetable services)
- To define clear competences (responsible, accountable, to be informed)[5] for the roles identified

The entire concept was presented and discussed with the NSAs at the end of November 2010. It will also be presented to the ExB at the beginning of 2011.

[5] Known as the RACI matrix.

1.2. Risk management and chances

The funding of ETCS installations on the corridor (in particular: German section) still remains the major challenge. The German recovery programme was signed in spring 2010, enabling the funding of several electronic interlockings along the German section of Corridor A. However, the funding of ETCS in Germany remains open. Throughout 2010, this A1 rated risk has been reported in every ExB meeting. As a direct consequence, the WG ERTMS could neither complete the ERTMS implementation plan nor do the ERTMS roll out plan.

1.3. Change request management

No changes to report.

Outlook

After having finalised the testing and authorisation concept, the group will refocus on a common contractual content. Solving the funding situation is of utmost importance, and the WG ERTMS will provide anything which might be required to contribute to a swift solution. Assuming that this question will be solved soon, the WG will update the implementation plan and complete the roll-out concept. Most likely, the work plan of the WG will have to be amended in 2011.

C. Traffic Quality (IQ-C Action Items #2, #3, #4, #5)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	53	**WG Result [%] Actual**	72
Work Packages Total	4	**Work Packages Finished**	0	**Work Packages Pending**	4
Start	01.01.10				
End	31.12.11				

PSP	WP	Results and Milestones achieved
3.1	OSS optimization	The international request of the RUs can be placed at one OSS of their choice. An increasing number of requests has been placed.
3.2	Monitoring Traffic Performance	The reporting of the EC traffic from Zurich to Milan has been built up. First steps to implement a reporting from Antwerp to Northern Italy have been taken.
3.3	Implementation of EPR	Successful start of the EPR pilot application in October 2010. More than 180 trains have been recorded.
3.4	International capacity allocation	The timetable planning has been successful. The preparation of the path catalogues has been on schedule. For the first time DB Netz planned a number of through going paths for the 2012 timetable.

Work Progress

1.1. Achievements

The WG Traffic Quality works in cooperation with RNE. Hansruedi Kaeser (SBB) functions as the manager of this group as well as a link between the activities of Corridor A and essential services performed by RNE. Within RNE, Hansruedi Kaeser has the position of the corridor manager at RNE for this essential North-South freight axis[6]. He works together with a team of experts:

- OSS: Esther Romijn (Keyrail), Marlies de Groot (Keyrail), Jan Deeleman (ProRail), Claude Gotfroi (Infrabel), Steffi Klughardt (DB Netz), Christoph Rüegg (trasse.ch), Rudolf Achermann (SBB/ BLS) and Simona Garbuglia (RFI)
- Time Table: Erik Schut (ProRail), Claude Gotfroi (Infrabel) Klaus Kaiser (DB Netz), Beat Affolter (BLS), Erich Grau/Christoph Lüthi (SBB) and Gian-Piero Gagliardi (RFI)
- Quality and Operations: Marlies de Groot (Keyrail) Frits van der Meer (ProRail), Ann Verstraelen (Infrabel) Siegfried Nierichlo (DB Netz), Daniel Gerhard (BLS), Rudolf Achermann (SBB), Roberta Torella/Roberto Caruso (RFI)

A new work plan was been set up, as the existing one became outdated.

TSI TAF is the EU Regulation for the Railway Freight Sector. The aim is to improve the performance of the freight traffic by an improved exchange of standardised messages between Infrastructure Managers (IM's) and Railway Undertakings (RU's). Most of the Working Groups have already finished their guidelines and the documents are now in a "Company Endorsement" phase. The key issue of unique identifiers, like the TTID, is currently in a "Railway Experts Consultation" phase and needs further investigation before going into the "Company Endorsement" at the beginning of March. After the approval by the project management in April 2011 all the IMs and RUs will start their national implementation plan until the end of 2011. The full TSI TAF implementation, originally planned for 2013, will depend on the development of the Common Components, especially the Common Interface (CI). Actually, the project plan is delayed about two years due to financial problems of the IT company that builds these components.

OSS optimisation (PSP 3.1)

Usually, for path requests the RUs are using the national electronic tools of the IMs. Due to a number of workshops as well as enhanced pathfinder and information, the usage of the OSS has been improved. With the EU regulation for competitive freight the OSS process will be in the focus not only for requests but also for allocation.

Monitoring Traffic Performance (PSP 3.2)

With the extension to Antwerp first steps for a new reporting have been done. Traffic from Antwerp to Northern Italy will be reported in order to improve punctuality. An Infrabel representative has joined the group of performance managers.

Implementing EPR (PSP 3.3)

The European Performance Regime (EPR) is a joint project from UIC and RNE with the aim to introduce a bonus/malus system for punctuality of international trains in

[6] The corridor definition from RNE differs slightly from the ERTMS related geographical definition of Corridor A. RNE defines this corridor from Antwerp and Rotterdam to Milan and Genoa.

Europe. In order to test the proposed functions of the IT-Tools and the data quality a so called „Pilot Application“ was started on 1 October 2010. Currently 186 passenger and freight trains are recorded with the planned and real time delays are coded and validated by the respective IM’s and RU’s. The EPR calculation functions shall be ready by the end of April. The finalisation of all EPR components is planned by end of 2011. After the formal approval of EPR the commercial application of the model is planned for 2014 earliest on the first selected corridors.

International Capacity Allocation (PSP 3.4)
After the delayed publication of the 2011 path catalogues the process of planning and preparation has been tuned and the publication of the 2012 path catalogues is on time. For the first time the 2012 catalogue will show paths from Antwerp/Rotterdam to Novara. The new timetable 2011 was implemented successfully in December 2010.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

2011 will start with a Performance Management Kickoff meeting with about 15 participants of freight and passenger RUs. The aim will be a close and efficient cooperation concerning punctuality. From February on a strong focus is set on the Rolling Highway traffic with a “punctuality offence”. The 2012 path catalogue shows, for the first time, non-stop paths from Antwerp/Rotterdam to Italy.

D. Operations (IQ-C Action Items #12, #13)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	3	**WG Result [%] Actual**	56
Work Packages Total	2	**Work Packages Finished**	1	**Work Packages Pending**	2
Start	01.01.10				
End	28.09.12				

PSP	WP	Results and Milestones achieved
4.1	Operational Rules ERTMS and non-ERTMS	Review of operational scenarios ongoing
4.2	Analysis of reasons for trains to stop at borders	Problem of train tail signals analysed and transmitted to RFI and ANSF

Work Progress

1.1. Achievements

The WG Operations focuses on operational rules for normal and degraded modes and for emergencies plus the harmonisation of non-ERTMS rules and GSM-R operational rules. From May 2010, this WG consisted of the following members: Herman Tijsma and / or Laurens Berger (both ProRail), Sebald Stumm following Rainer Meffert (both DB Netz), Sven Rodel (SBB) and Emmanuele Vaghi (RFI). The group is managed by Sebald Stumm.

After a period of standstill due to fluctuations of personnel, the MC re-appointed experts for the WG. This enabled a re-start of the groups' activities in May 2010. There was consensus among the group members, that corridor specific solutions (operational rules) shall be avoided as this would even worsen today's heterogeneous situation. That is why the integration of the WG in the European context is of such importance. Therefore, the discussion focused on two major questions:

- Work scope
- Bringing the work results to the European level.

The group revised the workplan and also discussed the mission of the WG. Among others, ProRail claimed a more pragmatic approach to harmonize the operational rules of the IMs. As a consequence, a WP "analysis of reasons for trains to stop at borders" (PSP 4.2) was defined. It was agreed to transmit the proposals of the group to ERA to assure the European context.

Operational Rules (PSP 4.1)

In general, it was agreed that the new/ modified work scope should cover ETCS as well as train operations (regardless from ATP system used). The 42 operational scenarios, which had been the scope of the group's work so far will be reviewed. In order to show the operational impact of the solutions proposed, a qualification and/ or quantification of the benefits is now part of the groups work scope. Furthermore, the group will work out a change control process for operational rules.

For the time being, this work is ongoing. No major milestones could be completed by the end of 2010.

Analysis of reasons for trains to stop at borders (PSP 4.2)

Interoperability refers to train operations in general, not only to the ATP system used (e.g. ERTMS). The group will among other things continuously analyse the various reasons for trains to stop at borders, such as:

- Train tail signals
- Front end signals
- Train composition
- Brake checks
- …

The group already dealt with a practical example. Initiated by SBB, the WG analysed the train tail situation at the Swiss-Italian border. Trains need to carry a signal (plate

or a light) to indicate the end and to prove train integrity. Most countries (IMs) accept a reflecting plate – it does not have to be a light. In Italy, a light at the end of a train is still mandatory. The item was addressed to RFI and ANSF.

Arguing with safety reasons, RFI respectively ANSF do not accept a reflecting plate and insist on a light for the time being. Consequently, the train tail signals have to be changed at the border, which means a stop for an international freight train travelling from Switzerland to Italy. RFI does not accept reflecting train tail signals on pre-defined (e.g. Corridor A) lines. A test run was not possible. ERA is about to launch a pilot with two types of train tail signals (light and reflecting plate) next year. The WG will attempt that one pilot is the track from Switzerland to Italy via Luino.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

The analysis and review of the 42 operational scenarios will go on as planned. First evaluations of the effects of harmonised rules can be expected. The group will contribute to the planned test run of ERA, if necessary.

E. Capacity (IQ-C Action Item #6)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	100	**WG Result [%] Actual**	92
Work Packages Total	5	**Work Packages Finished**	4	**Work Packages Pending**	1
Start	01.10.07				
End	31.12.10				

PSP	WP	Results and Milestones achieved
5.1	Common bases	Existing bases confirmed Refinements agreed Work package completed
5.2	Capacity analysis 2008	Work package completed
5.3	Capacity analysis 2009	Work package completed
5.4	Capacity analysis 2010	Work package completed
5.5	Capacity analysis 2011	Work package to be started in 10/2010

Work Progress

1.1. Achievements

The members of the group are: Roland Bärlocher (SBB), Hugo van den Berg (ProRail), Dr. Albrecht Hinzen (DB Netz), Dr. Gabrio Caimi (BLS Netz AG) and Patrizia Cicini (RFI). Dr. Gabrio Caimi took the lead of the group to continue the activities after Heinz Pulfer (SBB) left the company. By the end of 2010 the overall work progress sums up to 92% which is slightly behind the planned progress of 100%. The delta can be explained with the capacity analysis 2011 (WP 5.5) which has not yet been completed. Out of 5 work packages, 4 are completed for the time being.

Capacity analysis 2010 (PSP 5.4)

One activity of the working group was the harmonisation of the definition of train length, as it was identified that each country had a different interpretation when talking about train length. It was decided to use the physical length over buffers of the train as common definition on the corridor. Each IM will then be responsible to build sidings according to its country specific parameters for accepting trains of the specified length. This means that the already agreed international standard will not be changed but only newly described as 740 m train length (and 700 m wagon length).

The group managed and updated the corridor inventory, i.e. the extensive data collection for the entire corridor established in 2009. By means of reasonable geographical sections this data table contains relevant corridor characteristics and attributes of the railway infrastructure. Compared to last year's list it was decided to make a difference between systematic and maximal train length. The systematic train length is the length that every train travelling on the line can have and is associated basically to the length of the shorter used siding. On the other hand, the maximal train length is defined as the maximal length that a part of the trains can have on the line on a regular basis. The corridor inventory was then adjusted according to this distinction. However, although all members agree on this distinction, at the moment there are differences between systematic and maximal length on the Lötschberg line Basel-Domodossola. Furthermore, the column describing train weight was removed as it is not directly an infrastructure property.

This list is completed by an investment plan for the corridor (see Figure 16), including the funding status of the specific project. Both documents are significant achievements, as they provide valuable information also for the work of other WGs and for the steering of the entire corridor programme.

It is part of the regular activities of the WG Capacity to monitor current and future traffic demand and to compare it with the capacity supply. The group works with time slices of 5 years. This year the time horizon of 2030 was also introduced. However, traffic forecasts for 2030 are not yet available from all countries but are in preparation.
The general conclusion which can be drawn remains the same. Given the expected increase in traffic volume, the corridor will face severe capacity problems without further investments. Depending on the considered section, this can happen even

earlier than 2020. In particular, this will be the case in the corridor sections south of Basel.

Investment Plan - Corridor A

Project list with funding status, elaboreted by WG Capacity

State: 30.11.2010

checked by: ProRail (13.5.2011), DB Netz (16.5.2011), SBB, BLS, RFI

Period	Year	Country	Line section (from North to South)	Project	Cost (M €)	Funding Status	Remarks
2007 - 2014	2007	NL	Kijfhoek - Zevenaar	Betuwe Line	4.580	Realised	
	2007	CH	Frutigen - Brig	Base Tunnel	2.800	Realised	
	2009	NL	Maasvlakte I - Kijfhoek	25 kV + ERTMS	-	Realised	
	2009	NL	Meteren	improving links Betuwe Line	6	Realised	
	2010	CH	Castione	upgrade	18	Realised	
	2011	CH	Bern (Rütti - Zollikofen)	3rd track	40	Realised	
	2011	IT	Domodossola - Novara	Gozzano bypass	31	Realised	
	2011	IT	Novara-Alessandria	upgrade line	13	Realised	
	2011	IT	Luino-Laveno	upgrading for 600 m	21	Realised	
	2012	CH	Bern - Thun	Block distance	25	Secured	
	2013	NL	Maasvlakte II - Maasvlakte I	New line + Marshalling Yard	30	Secured	
	2013	NL	ZvO Zevenaar - Border	ERTMS, 3rd track, 25kV	96	Secured	3rd track together with DB Netz
	2014	IT	Bergamo-Treviglio	2nd track	95	Secured	
	2014	IT	Novara	Node upgrade	471	Planned	
2015 - 2019	2015	IT	Brig - Domodossola	RoLa 4m (P/C 80)	tbd	D / R	to be planned
	2015	IT	Domodossola - Novara	upgrade 4 stations for 4m	15	D / R	to be planned
	>2015*	DE	Border - Emmerich	3rd track	200	Planned	construction rights still open
	2017	CH	Basel - Bellinzona - Chiasso	Block distance 3' freigth trains	230	Secured	incl. 750m Belllinzona+Chiasso
	2017	CH	Erstfeld - Biasca	Base tunnel	6.000	Secured	
	2017	CH	Bellinzona-Luino	line upgrade	50	Secured	
	>2017*	DE	Emmerich - Oberhausen	3rd track	1.500	Planned	construction rights still open
	2018	IT	Gallarate - Rho	upgrade	500	Planned	
	2018	IT	Tortona - Voghera	4 tracks	600	Planned	
	2019	CH	Bellinzona - Lugano	Ceneri Basetunnel	1.400	Secured	
	2019	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
2020 - 2024	2020	NL	Maasvlakte I - Kijfhoek	tbd	tbd	D / R	study harbourline
	2020	NL	Breda - Boxtel	tbd	tbd	D / R	programme high frequencies
	2020	NL	Kijfhoek - Zevenaar	additional links Betuwe	tbd	D / R	programme high frequencies
	2020	IT	Seregno - Bergamo (-Treviglio)	Gronda est	1.000	Planned	
	2021	IT	Chiasso - Seregno - Monza	4 tracks	1412	Planned	
	>2020*	DE	Karlsruhe - Offenburg	3rd + 4th track	2.100	Planned	no finanzation for Rastatt-Rastatt Süd
	>2020*	DE	Offenburg - Basel	3rd + 4th track	3.700	Planned / secured	Section 9.1, 9.2 + 9.3 are secured, others construction rights still open
2025 + later	2025	CH	Liestal	fly-over	120	Secured	
	2025	CH	Basel - Chiasso / Luino	Profile upgrade to 4 m	400	D / R	start-up in 2020 in study
	2025	CH	Bern - Thun	3rd track Gümligen–Münsingen	200	D / R	
	2025	CH + IT	Laveno - Luino - CH	Gronda ovest	1.270	Planned	
	>2025	CH	Schwyz/Flüelen/Melide/Basel	Sidings 740m	tbd	D / R	study to be started
	2026	IT	Arquata - Genova	Terzo valico, Giovi pass	5.060	Planned	
	2030	CH	Frutigen - Brig	Base tunnel, 2 track, part 2	500	D / R	
	open *	DE	Mainz/Wiesb. - Mannheim	HS line	2.700	Planned	
			Total Investments for bottleneck elimination (M €)		35.018		

Quick wins

Legend	
	Secured = Financed and approved projects
	Planned = not yet financed or approved projects
	D / R = (Development and Review) Studies or projects to be shifted in time
	* = the time schedule for ERTMS at Corridor A in Germany is in revision at present

Figure 16: Investment plan of Corridor A updated in November 2010

Another activity of the WG was to analyse the infrastructure parameters on Corridor A in detail and to search for quick wins. In the last years it became clear that the focus should be on longer trains and higher profile, and in second priority also heavier trains.

RUs have a clear demand for longer trains with a relatively low total weight. A clear quick win is the extension of the infrastructure to cope with longer trains[7]. In particular, on behalf of the PMO a potential analysis about the implementation of

[7] This is especially true for the Italian section of the corridor; see also Annual Report 2008 (PMO), p. 36

infrastructure for the standard of 740m long trains was conducted in 2010. For this task, it emerged clearly that collaboration with the WG Terminals would be crucial for having a complete view on the transportation chain, which is decisive for an RU for determining the train length of each train. Based on this analysis, an investment plan for the implementation of the train length standard has to be derived. It is, in particular, still unclear which time horizons are realistic for the already defined milestones in the implementation plan. This needs further discussions between PMO, WG Capacity, and IMs. The implementation plan consists basically of two steps: at first, data about the infrastructure are collected, i.e. length of each relevant siding on the corridor. In a second step this data can be interpreted on the basis of hypothesis about the traffic because it also depends on the strategy of the different countries and can lead to conflicts between capacity and train length.
Furthermore, there is a clear demand from the RUs for a train profile enabling 4m high cube containers. In the last years, the market segment of unaccompanied combined traffic increased strongly, as well as the use of semi-trailers, which already reached 62% of the alpine freight traffic on the street, in upward trend. The majority of these semi-trailers have a profile greater or equal than 3.9m. For passing the Alps only limited and insufficient capacity is currently available on the Lötschberg line continuing to Novara, whereas the Gotthard line as well as the access to the important terminals in Gallarate-Busto do not enable this profile. In order to transfer this significant market sector on the rail, significant improvement of capacity for the high profile through the Alps is a mandatory requirement.
Nevertheless, extending the profile requires heavy investments and its implementation will be studied carefully from line to line.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

A new work plan for the period 2011-2013 has to be set up.

The WG Capacity will revise at the beginning of 2011 the development of demand in traffic volume on the entire Corridor A, especially regarding the drop in transport volume due to the economic crises and extend the methodology to the year 2030. As a consequence, the WG Capacity sees a good chance to plan and realise the urgent projects just in time within the foreseen timeframe of the economic recovery. In the meantime the WG will report about the actual status and the developments by country of the most critical train parameters length (740m) and profile (4m) in every ExB Meeting. A cost benefit analysis depends on commitment of RUs and ministries.

F. Terminal Studies (IQ-C Action Item #11)

Key Performance Indicators

Due Date of Reporting	31.12.10	**WG Result [%] Plan**	82	**WG Result [%] Actual**	70
Work Packages Total	3	**Work Packages Finished**	1	**Work Packages Pending**	2
Start	01.10.07				
End	31.01.13				

PSP	WP	Results and Milestones achieved
6.1	Information collection	Identification of relevant terminals completed Master data sheet (data collection) completed Review 2010 of national/ international studies completed Review 2010 of harbours/ port selection completed
6.2	Active study with partners	Data collection started Analysis of logistical chain ongoing Task force quality completed (2009)
6.3	Active studies of WG	Track capacity terminals – corridor completed Interoperability parameters completed Work package completed

Work Progress

1.1. Achievements

Thomas Schneider (DB Netz) is leading and coordinating the activities of this working group. Peter Andersson (ProRail), Viktor Janz, Dirk Bartsch (DB Netz) and Vincenzo Prisco (RFI) are representatives of the other IMs in this WG. SBB has not yet nominated a new team member. The group conducted 5 regular meetings throughout 2010.

By the end of 2010, 70% of the work progress has been completed whereas the group planned to complete 82%. The delay of the WG was caused by several reasons:

- Additional time needed to collect the required data for the analysis of the terminals
- Scope of WP 6.3.2 (Interoperability, in particular connection to corridor main line) more complex than planned

Information collection (PSP 6.1)

The review of studies and relevant information 2010 is almost complete. The different stakeholders came to similar assessments for future development of rail freight and intermodal transport in particular.

Major investments in terminals are done (and will continue) to meet the demands of the growing market. Figure 17 lists selected investments, enlargements and upgrades of relevant Corridor A terminals.

Stakeholder	Expected development/ assessment	Notes
Port of Rotterdam	7.7 Mio. TEU (2008) 20 Mio. TEU (2035)	6x rail freight transport to/ from port of Rotterdam (3x volume; 2x rail share)
Duisport	2009: only -6% 2010 (January to June): +29%	
Germany	Intermodal transport + 129% until 2025	Intermodal: 25% of transport volume [tkm], 33% of net capacity
Switzerland	2008: 720.000 TEU 2020: 1.500.000 TEU	Transit volume
Italy	2008: 1.5 Mio. TEU 2025: 2.8 – 3.0 Mio. TEU	Port of Genoa

Figure 17: Market assessments of intermodal transport

Summarizing these investments, the intermodal handling capacity will double within the next 10 years. Maasvlakte 2 is the main driver of this development. Recent traffic development underlines the necessity of the above mentioned investments. The actual freight traffic volumes on Corridor A recovered very quickly from the crisis in 2009. The traffic volumes in 2010 are even above the volumes in 2008.

Figure 18: Maasvlakte 2

Extension of Rotterdam port line

The construction of the Maasvlakte 2 is well on schedule; half of all the sand needed for the first phase of Maasvlakte 2 up to 2013 has now been applied (see figure 18; October 2010).

Location	Project	Status (2010) Capacity	1st step (2015) Capacity	2nd step (2020) Capacity
Rotterdam	Maasvlakte 2			
Duisburg	New hub	220.000	320.000	520.000
Köln-Eifeltor	Re-building 3rd module	270.000	370.000	470.000
Frankfurt-Ost	Upgrade 3rd crane	80.000	120.000	160.000
Kornwestheim	Re-building 2nd module	200.000	250.000	300.000
Mannheim	Mega-Hub Rhein-Neckar	100.000	100.000 Extension KTL and Wincanton	100.000 Mega Hub (DB Netz)
Basel	New 2nd module	150.000	250.000	300.000
Limmattal	Gateway Limmatal		5 tracks > 700m	
Genoa	Voltri Mare		2 new tracks electrification	
Genoa	Voltri Mare		New module, operative track length > 1.000m	
Total [TEU]		**1.020.000**	**1.410.000**	**2.000.000**

Figure 19: Capacity of terminals

The construction of the extension of the port railway line to the new terminals is integrated in the tender of Maasvlakte 2, which is the responsibility of the Port of Rotterdam. The expected date of realisation is 2012. ProRail is part of the Maasvlakte 2 Project Organisation and responsible for project quality control and the construction of the safety system of this extension.
The 'plan study' into the additional changes to the tracks within de scope of the Maasvlakte 2 project was finished in 2010. The realisation of these changes by ProRail as an assignment of the Port of Rotterdam is planned for the end of 2011. Further study on the development of the Maasvlakte Zuid railway yard which is also within de scope of the Maasvlakte 2 will start at a future date. Realisation will take place when there is sufficient demand for this capacity.

With regard to the follow-up of the Integral Reconnaissance Study of the harbour railway line:

- A Study into process improvement on terminals and railway yards was started by Keyrail with cooperation of ProRail.
- The Ministry has approved a budget for the first phase of the extension of Maasvlakte West railway yard and has given an assignment to ProRail for the next 'Plan Study' phase.
- A masterplan for the redesign of the lay-out of Waalhaven Zuid railway yard was finished, including phasing and prioritization.
- A study into process improvement of the "communication" between shipping traffic and railway traffic with regard to the opening of Caland Bridge still has to be implemented.
- A study on the logistic process of Kijfhoek shunting yard has been finished. This is a pre-study for the implementation of 25 kV and ERTMS which will be

combined with the re-evaluation of the function and a redesign of the lay-out of Kijfhoek shunting yard.

The following terminals (see figure 20) are assessed as being relevant and will be monitored in the forthcoming years:

#	Name	Country
1	Zeeland Seaports	Netherlands
2	Moerdijk	Netherlands
3	Amsterdam Ceres	Netherlands
4	Rotterdam RSC	Netherlands
5	Rotterdam Delta (ECT)	Netherlands
6	Rotterdam Euromax	Netherlands
7	Europoort	Netherlands
8	Botlek	Netherlands
9	Pernis	Netherlands
10	Emmerich	Germany
11	Duisburg DIT Rheinhausen	Germany
12	Duisburg Hafen DeCeTe	Germany
13	Duisburg Ruhrort Hafen PKV	Germany
14	Duisburg Ruhrort Hafen (planned Rhein-Ruhr)	Germany
15	Neuss-Hessentor	Germany
16	Gremberg Rbf	Germany
17	Köln Eifeltor	Germany
18	Köln Godorf (planned)	Germany
19	Köln Nord	Germany
20	Köln Niehl	Germany
21	Ludwigshafen BASF	Germany
22	Ludwigshafen Triport	Germany
23	Mannheim Handelshafen	Germany
24	Mannheim Wincanton	Germany
25	Mannheim Rbf	Germany
26	Karlsruhe	Germany
27	Karlsruhe Gbf	Germany
28	Kehl	Germany
29	Offenburg Gbf	Germany
30	Freiburg	Germany
31	Basel – Weil am Rhein	Germany
32	Basel GB	Switzerland
33	Aarau	Switzerland
34	Rekingen	Switzerland
35	Niederglatt	Switzerland
36	Chiasso	Switzerland
37	Gallarate/ Busto (Hupac)	Italy
38	Novara Boschetto	Italy
39	Novara Boschetto CIM	Italy
40	Milano Segrate – Terminali Italia	Italy
41	Brescia Scalo	Italy
42	Voltri Terminal Europe (VTE)	Italy
43	Southern European Container Hub (SECH)	Italy
44	San Giorgio Terminal	Italy
45	Messina Terminal	Italy

Figure 20: Terminals Corridor A

Nevertheless the focus of the terminals according the connection to the corridor will lie in the areas which are mentioned in the TSI CCS (see figure 21).

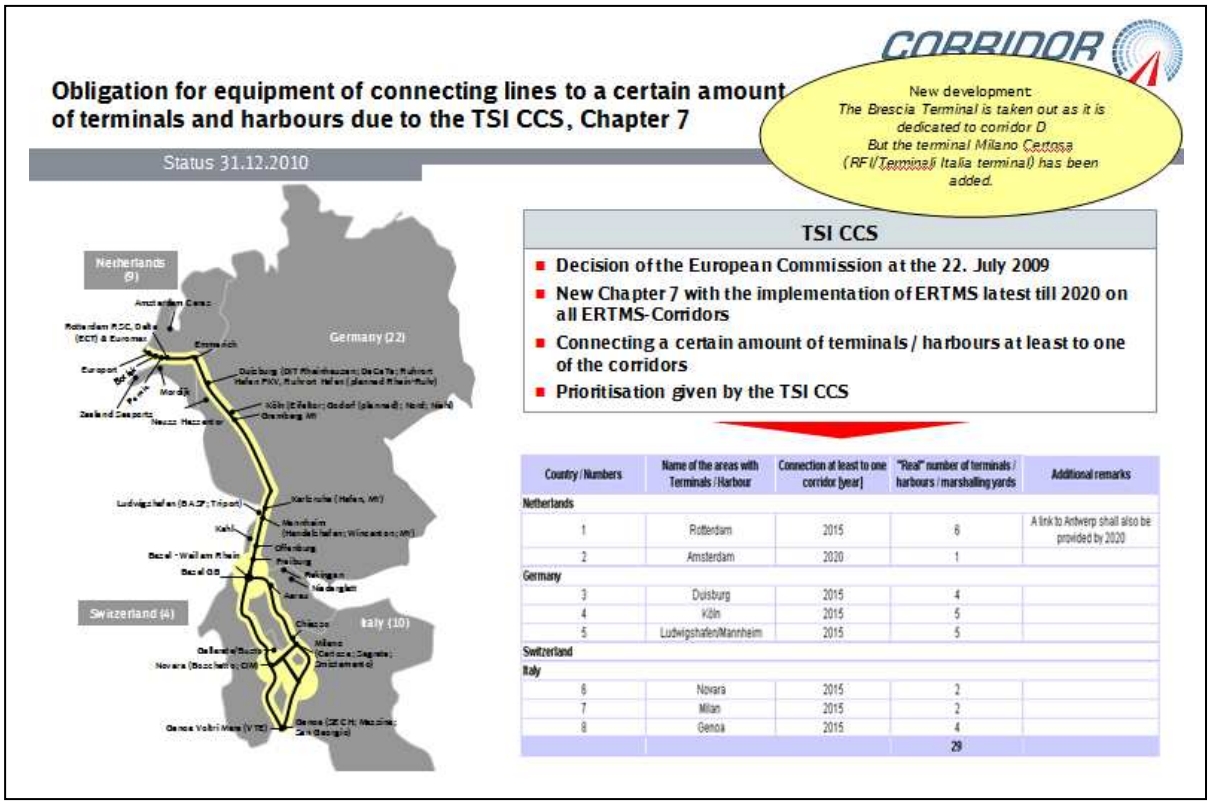


Figure 21: Terminals Corridor A

The group also analysed the average opening hours of 19 terminals along Corridor A. This small analysis revealed a tremendous discrepancy: some terminal facilities open only 50 hours per week, whereas the biggest terminal facility offers its service 24/7 (= 168 hours per week). Two conclusions can be drawn so far:

- The opening hours of the terminal correlate directly with the handling capacity [TEU]
- 11 (=57%) of the terminals open 84 hours per week (50%) or even longer. Transferred to a daily basis, an opening time of 16 hours (5 work days/week), 14 hours (6 work days/week) or 12 hours (7 work days/week) is offered to the clients.

Active study with partners (PSP 6.2)
The analysis of the logistical chain is still ongoing. All other activities of this WP were already completed in 2009.

Active study within WG (PSP 6.3)
WP completed.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

Cooperation with WG TSC / Quality is planned to analyse departure quality.
Moreover, the group will seek a stronger cooperation with the WG Capacity to follow up important topics:

- Coordination of traffic forecasts, extension of traffic forecasts to the year 2025/ 2030

- Assessment of capacity on feeder lines of Corridor A terminals

- Analyse infrastructure's status on 740m trains: main corridor – feeder lines – transfer station – last mile – terminals

- Steps for connecting the Port of Amsterdam to Corridor 1: ORCAEU

  ORCAEU is a joint initiative of the Municipality of Amsterdam - Port of Amsterdam and the Ministry of Environment and Infrastructure. The Ministry and the Regional Administration of Amsterdam have appointed ProRail for the execution of this programme.
  The ORCAEU programme focuses on optimising the rail connection of the Port of Amsterdam to the main railway line and therefore to the European hinterland and the Trans-European Transport Network in order to accommodate the expected growth in transport.
  - Activities 6 Afrikahaven railway and 3 Aziëhavenweg safety measures are already ongoing. No problems are encountered.
  - Contracts on Activities 1 Aziëhaven railway yard and 4 Westhaven railway yard were signed in 2010. No delays are expected with Aziëhaven railway yard. There is some delay with Westhaven; expected to be ready at November 2012
  - Activity 2 Aziëhaven electrification depends on the completion of activity 1 and still has to be started.
  - Activity 5 Transformatorweg rail crossing is undergoing a re-evaluation and consultation with stakeholders. Alternative, cheaper solutions are investigated. Further decisions will follow in 2011.

- Follow up of the Plan Studies of High Frequency Railway Transport Programme:

  The first phase of the initial plan studies of the High-Frequency Railway Transport Programme was finished on schedule by ProRail. This national railway investment programme with a budget of 4,5 billion Euros has a double aim:
  a) Increasing the frequency of Intercity passenger trains and where possible regional passenger trains to six trains per hour on the main corridors of the Randstad area of the Netherlands.
  b) Facilitating the expected future growth of rail cargo transport. Rail freight transport in The Netherlands is expected to grow from approx. 40 million tons at this moment to 60 – 100 million tons in 2020.
  There will be 6 intercity trains and 6 Sprinters (all station regional train) per hour on the busiest rail routes of the country. Furthermore there will be additional rail capacity for freight transport. This is the crux of the decision made by the Dutch Government on 4 June 2010 regarding the development of the High-Frequency Rail Transport Programme (abbreviated to PHS in Dutch). As a result, rail travel

will become more attractive to both passengers and freight undertakings. The decision represents a choice for sustainable mobility.
This is also relevant for the corridor Rotterdam - Genoa, especially with regard to the future usage and capacity of the Betuwe route, the connection between the Amsterdam harbour and the Betuwe route, and the route via the Brabant line (southern parallel route of the Betuwe route) to Germany. The next phase of the 'plan studies' will start at the beginning of 2011.

- Follow up the development in the Duisburg area with a concept to increase capacity handling and line capacity within 2011.

- Update of the working plan due to the rail freight regulation and the decisions to be made concerning the impact of the TSI CCS.

V. Activities of the Infrastructure Managers

Until stated otherwise, e.g. by references or footnotes, the content of this chapter stems from the corresponding PIM who is in charge of the national project coordination. For further information, please see also annex C.

- ProRail (IQ-C action items #6, #10): Jan Deeleman / Laurens Berger
- Infrabel (IQ-C action items #6, #10): Gerda Van Den Heede (since November 2010)
- DB Netz (IQ-C action items #6, #10): Thomas Schneider
- SBB Infrastruktur (IQ-C action items #6, #10): Hansruedi Kaeser
- BLS Netz (IQ-C action items #6, #10): Alexander Paulus
- RFI (IQ-C action items #6, #10): Silvia Carloni.

The projects primarily refer to the IQ-C action items #6 (integrated elimination of infrastructure bottlenecks) and #10 (ETCS) as the major outcome will be additional capacity and ETCS trackside installations. This will also have a positive effect on punctuality and reliability of the traffic.

A. ProRail (IQ-C Action Items #6, #10)

Key Performance Indicators

Due Date of Reporting	31.12.10	**IM Result [%] Plan**	35	**IM Result [%] Actual**	28
Projects Total	9	**Projects Finished**	1	**Projects Pending**	8
Start	03.01.00 (earliest project)				
End	31.12.15 (last project)				

PSP	Project	Results and Milestones achieved
1.1.1.1.1	Zevenaar to border electrification 15 kV	Initial plan study has been started Strategic technical study completed Revision of technical study has been started
1.1.1.1.2	3rd track (Zevenaar – border)	Assignment for plan study not yet received
1.1.1.2	Betuwe line	Go live (2007)
1.1.2.1	Maasvlakte 2: Extension harbour	Initial plan study (construction) completed (2007) Tendering process (construction) completed (2009) Construction work has been started
1.1.3.1	Electrification of Marshalling yard of Kijfhoek	Initial plan study has been started Strategic technical study completed Revision of technical study has been started
1.2.1.1	ETCS Barendrecht – Kijfhoek	Initial plan study has been started Strategic technical study completed Revision of technical study has been started
1.2.1.2	ETCS Zevenaar to border	Initial plan study has been started Strategic technical study completed Revision of technical study has been started
1.2.3	Upgrade ERTMS Betuweline from 2.2.2.C to 2.3.0d	TEN-T funding approved. Optimal project planning (incl. funding) still under discussion with Ministry.
1.3	TAF TSI	Awaiting fundamental work from WG TAF TSI
1.4	Harbour line	Go-live (2009)

Work Progress

1.1. Achievements

By the end of 2010, the overall actual work progress sums up to 28% versus 35% planned. This delay is mainly caused by the technical complexity regarding the major infrastructure projects.

ETCS/ traction power in Kijfhoek and Zevenaar border (PSP 1.1.1.1.1; 1.1.3.1; 1.2.1.1; 1.2.1.2)

For ETCS in both Kijfhoek and Zevenaar the technical choices were made, decisions were taken and agreed by (for Zevenaar) DB Netz and thereupon approved by the German (for Zevenaar) and the Dutch Ministry of Transport.
In connection with ERTMS, the solutions for the 15/25 kV on the border section Zevenaar – Emmerich was developed and approved, too.

3rd track Zevenaar border – Emmerich (PSP 1.1.1.1.2)

As stated in the previous paragraph, the necessary choices have been made in connection with the 15/25 kV project study. As this project is of a cross-border nature, ProRail and DB Netz work closely together for the planning and the layout. DB Netz will build the 3rd track in phases from Oberhausen in the direction of Emmerich border. The ProRail part will fit in this planning in a seamless way.
An important step was taken by the execution and submission of the Formal Study about the Preferred Layout based on formal environment impact analysis. This has led to the formal approval of the layout of the third track.

Betuwe line (PSP 1.1.1.2)

The growth of the number of trains started after the economic crisis in the last quarter of 2009 and continued in 2010, resulting in a weekly number of trains above 400.
For the existing ERTMS installations a project was started to upgrade them to SRS 2.3.0d. A request for TEN-funding was submitted and the EU finally granted € 1 million for this project.
Consultation with the Ministry of Transport about planning, upgrade specifications and, hence, financing is still ongoing.

Extension of port line (PSP 1.1.2.1)

The formal start of construction works for Maasvlakte 2 began in October 2009. As part of these works, which include the reclamation of 2000 ha of land from the sea for harbours, terminals and industrial activities, the Corridor will be extended by a 12 km railway line. The construction of the extension of the port line equipped with ERTMS is integrated in the tender of Maasvlakte 2.
In 2010 the new land slowly ascended from the water, which means that the construction works for the railway extension can be started. A firm project organisation for the railway construction works including the realisation of the ERTMS wayside systems was established.
All these works are well on schedule.

1.2. Risk management and chances

With the acceptance of the technical solutions at Zevenaar-border section some important risks could be eliminated.
Although the ERTMS- and 25 kV and third track projects are still complex, specific risks are not reported yet. However, the ERTMS installation in this section as well as the 25 kV at Kijfhoek are still lack some financing. The use of level 1 instead of level 2 at Zevenaar-border section has been proposed which may result in operational and safety risks due to the short distance for the level changes from level 2 to level 1 and back to level 2. Whereas the problem identification and solution finding study for 25 kV even has to be undertaken yet. The ERTMS upgrade 230d of the Betuwe line in service is already financed and does not present a financial risk.

1.3. Change request management

No changes to report.

Outlook

Looking at the actual progress of all projects, the prospect is that ERTMS will be installed and in operation along the whole Corridor between Rotterdam Harbour and Zevenaar border by 2015. Also the projects to expand capacity are running successfully.
One item, the realization of a through going 25 kV from the border to the starting point is still insure due to the complexity and, hence, high costs at Kijfhoek.
Possibly more important than the progress of these projects is the successful recovery of volume in the port of Rotterdam. During 2010 the Port of Rotterdam reported a growth of 11%; further growth is expected. This implies that the Maasvlakte 2 project should be continued, with good prospects to further increase volume and, subsequently, further growth of transport volume on the corridor.

B. Dutch-German bilateral working group

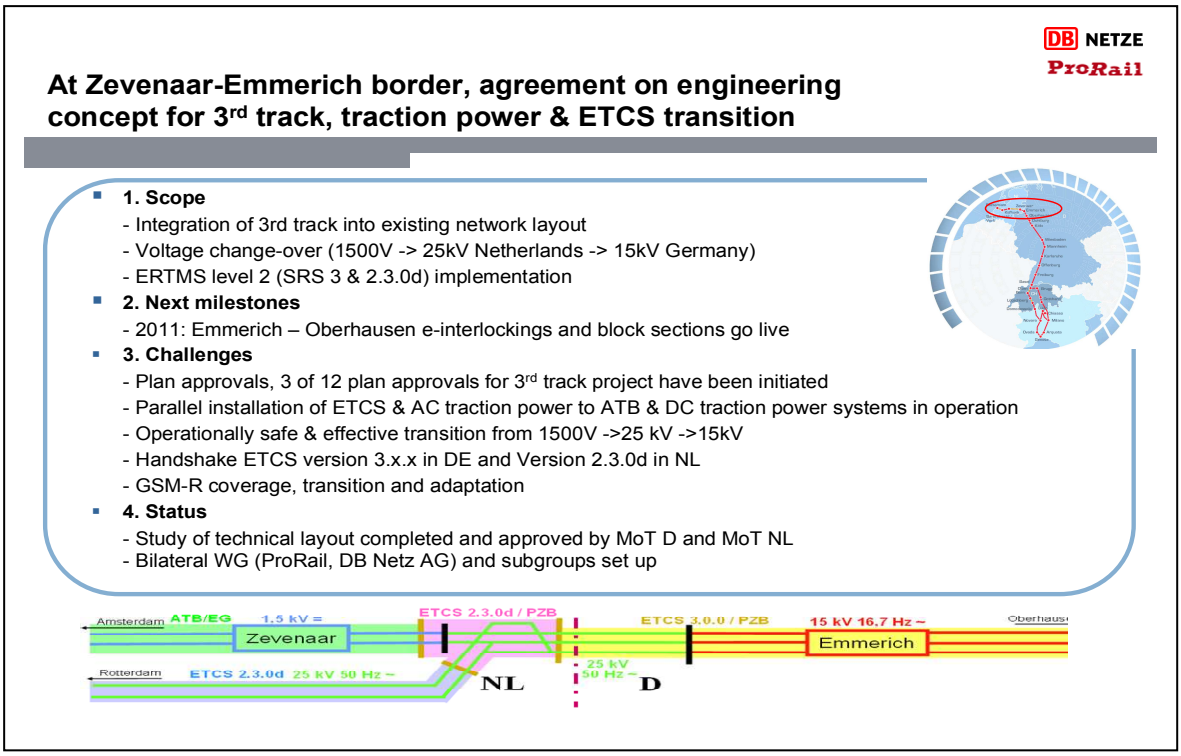


Figure 22: Zevenaar – Emmerich

Cross-border activities between Zevenaar and Emmerich are not just ERTMS-driven. The realisation of a third track, change and location of the catenary system and the right decision concerning e-interlockings also need to be discussed (see figure 22).

Emmerich – Zevenaar border section - Progress in bilateral activities in 2010

- 14.01.2010:
  Decision on and confirmation of technical solutions prepared by the technical working group within the IM organisation

- 16.02.2010:
  Common proposal by ProRail and DB Netz AG sent to both Ministries of Transport

- 22.03.2010:
  IM proposal confirmed by German Ministry of Transport

- 25.05.2010:
  IM proposal confirmed by Dutch Ministry of Transport

- June 2010:
  Preparations began for the Environmental Impact Assessment (EIA) in the Netherlands. Official papers will be available to the public at the local government of Zevenaar in September 2011. The building regulation process is to be finalised at the end of 2012.

- 11.11.2010:
  Zevenaar-Emmerich bilateral WG established: subgroups for ERTMS, GSM-R, operations, 3rd track & S-curve were set up; environmental impact study; VCO 15kV 25kV; e-interlocking & additional block sections.

In January 2010, DB Netz AG und ProRail reached consensus on technical solutions for the border section; this was confirmed by the German Ministry of Transport in March and by the Dutch Ministry of Transport in May (see figure 22).

As a result of the mutually agreed solution between the Dutch and German Ministries of Transport at the end of May 2010, planning was resumed immediately.

The position of the third track will be finally confirmed pending on the outcome of the Dutch Environmental Impact Assessment study. If the axis of the existing track needs to be shifted in order to realise the third track, this will be done at the German side.

The subgroups of ProRail and DB Netz AG dealing with the EIA are working closely together. They have initiated contact with the German authorities (Eisenbahnbundesamt), the local government, public agencies and third parties on the German side.

In addition to timetabling the planning activities, documents, e.g. noise/vibration reports, were exchanged. Initial planning for activities to adapt the power supply has begun.

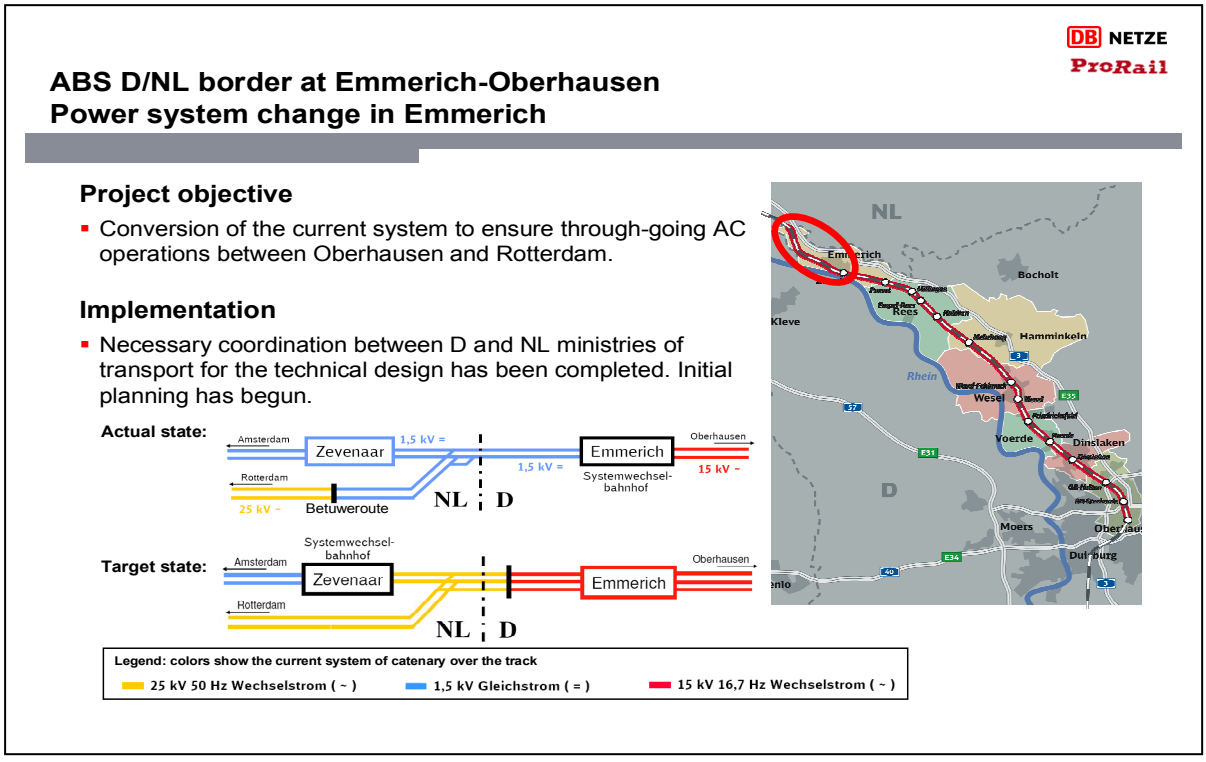


Figure 23: Power system change Emmerich

To limit project risk and solve technical questions, subgroups including IM experts will continue their work along with the bilateral infrastructure group assigned to handle more general questions concerning state contracts, agreements and traffic figures.

Expectations for 2011 include:

- A final decision on the location of the third track from the Dutch side
- The planning approval procedure for the last section in Elten (planning approval section 3.5) to be re-launched after the location of the third track is confirmed by the Dutch party
- E-interlocking to go live in Germany (Emmerich)

C. DB Netz (IQ-C Action Items #6, #10)

Key Performance Indicators

Due Date of Reporting	31.12.10	**IM Result [%] Plan**	43	**IM Result [%] Actual**	35
Projects Total	83	**Projects Finished**	13	**Projects Pending**	70
Start	02.01.84 (earliest project)				
End	15.12.2021 (last project)				

PSP	Project	Results and Milestones achieved
2.1.1.1.1	Emmerich – Oberhausen/ 1. stage: Node Oberhausen	Go-live (2004)
2.1.1.1.2	Emmerich – Oberhausen/ 2. stage: Electr. Interlocking	Initial plan study completed (2003) Budget approved (2003) Building licence granted (2008) Start of construction (2008) Start of acceptance and certification (2010)
2.1.1.1.3	Emmerich – Oberhausen/ 3. stage: 3rd track	Initial plan study completed (2008) Preparation for the planning approval procedure finalised, except Zevenaar – Emmerich (2009) Start update of planning approval procedure due to BVWP-Prognosis 2025 (2010)
2.1.1.2.1	Karlsruhe – Basel/ 2. stage ABS/ NBS Karlsruhe – Rastatt Süd (StA 1)	Initial plan study completed (1994) Budget approved (1994) Building licence granted (1998)
2.1.1.2.2	Karlsruhe – Basel/ 1. stage: Rastatt Süd – Offenburg (StA 2-6)	Go-live (2004)
2.1.1.2.3	Karlsruhe – Basel/ 2. stage: ABS/ NBS Offenburg – Kenzingen (StA 7)	Initial plan study completed (1998) Budget approved (1999) Preparation and process planning approval procedure ongoing (2010)
2.1.1.2.4	Karlsruhe – Basel/ 2. stage: ABS/ NBS Kenzingen –	Initial plan study completed (1998) Budget approved (1999)

PSP	Project	Results and Milestones achieved
	Buggingen (StA 8 NBS)	
2.1.1.2.5	Karlsruhe – Basel ABS/ NBS Kenzingen – Freiburg – Buggingen (StA 8 ABS)	Initial plan study completed Preparation and process planning approval procedure ongoing (2010)
2.1.1.2.6	Karlsruhe – Basel ABS/ NBS Buggingen – Basel (PfA 9.0, 9.2, 9,3)	Initial plan study completed Budget approved Planning approval PfA 9.2 (2010) Financing for PfA 9.2 and 9.3 (2010) Start of construction PfA 9.2 (2010) Preparation planning approval procedure PfA 9.3 ongoing
2.1.1.2.7	Katzenbergtunnel (PfA 9.1)	Initial plan study completed (2002) Budget approved (2002) Building licence granted (2002) Construction works ongoing
2.1.2.1	Terminal KV Drehscheibe Westliche Ruhr (Duisburg)	Initial plan study completed Budget approved Building licence granted Start of construction (2010)
2.1.2.2	Terminal Köln Eifeltor	Initial plan study completed Budget approved Building licence granted Start of construction (2009)
2.1.2.3	Terminal Basel	Go-live (1999) Continuously extended afterwards
2.1.2.4	Terminal Basel (Southern access)	Initial plan study completed Budget approved Building licence granted
2.1.3.1.1	Marshalling yard Oberhausen Osterfeld 1. stage	Go live (2008)
2.1.1.3.2	Marshalling yard Oberhausen Osterfeld 2. stage	Initial plan study completed
2.1.3.2	Marshalling yard Duisburg-Ruhrort Hafen	See 2.1.2.1
2.1.3.3	Marshalling Yard Köln Gremberg (North-South system)	Go-live (2009)
2.1.3.4	Marshalling Yard Köln Gremberg (South-Nord system)	Initial plan study (2007) Approval of budget (2007) Building licence (2007) Start of construction (2008)
2.1.3.5	Marshalling Yard Mannheim (West-East system)	Go live (2004)
2.2.1.1 –	ETCS projects	Emmerich – Oberhausen: plan study started (2008)

PSP	Project	Results and Milestones achieved
2.2.1.16	(16 projects)	Emmerich – Oberhausen: plan study completed (2009) Opladen (Solingen 1. BS): plan study completed (2009) Sections between Darmstadt (2.2.1.8) and Basel (2.2.1.16): plan studies completed (2009) Basel: Initial plan Study completed (2010)
2.2.2.1 – 2.2.2.35	Electronic interlocking projects (35 projects)	Troisdorf: go-live (2001) Osterspai: go-live (2007) Duisburg Wedau: go-live (2006) Opladen (Solingen 1. BS): initial plan study completed (2009) Opladen (Solingen 1.BS): Approval of budget; building licence; approval for realisation (all 2010) Gremberg: initial plan study completed; approval of budget; start of construction works (all 2010) Rechter Rhein (2. BS): construction works ongoing Bensheim: initial plan study completed; approval of budget; start of construction works (all 2010) Karlsruhe: Initial plan study completed (2009); approval of budget; start of construction works (all 2010) Rastatt: Initial plan study completed (2009); approval of budget; start of construction works (all 2010) Achern: go-live (1996) Appenweier: Initial plan study completed (2009); approval of budget; building licence (all 2010) Offenburg: go-live (1997) Orschweiler: go-live (1999) Denzlingen and Leutersberg: Initial plan study completed (2009); approval of budget; start of construction works (all 2010) Buggingen: go-live (2009)
2.2.3.1 – 2.2.3.11	GSM-R projects (11 projects)	Technical installations completed, adaptation on ETCS Level 2 areas are expected
2.3	TAF TSI	Awaiting fundamental work from WG TAF TSI

Work Progress

1.1. Achievements

By the end of 2010, the actual work progress of the German projects (infrastructure, ETCS) is 35% which is slightly behind the planned progress of 43%. Out of 83 national projects along the corridor, 13 could be completed so far. 70 remain open or pending.

In 2010 the project structure for ETCS and electronic interlockings was updated due to the decision of the German MoT in August 2010 to equip the corridor with ETCS L2 only. The strategy to implement ETCS L1 LS or L2 in Germany leads to a reduced need to renew electronic interlockings along the corridor but has actually no legal basis for decisions.

Major milestones achieved in 2010 are:

a. The financing of the German part of the corridor is now part of the national funding system
b. The decision was taken by the German MoT to finance corridor A primarily
c. The investment volume for ETCS and e-interlocking is evaluated with an amount of 870 Mio. € on the basis of Level 2 equipment
d. On the basis of a financial agreement between the German MoT and DB Netz, 126 Mio. € can be spent for new e-interlockings with the help of the German Economic Recovery Programme
e. The financing agreement between German MoT and DB Netz was signed for two planning approval sections in the south of the corridor (Karlsruhe – Basel) with a volume of about 400 Mio. €
f. In December 2010 the common decision between German MoT and DB Netz was taken to start negotiations for financing of ERTMS equipment on the German corridor section.

Except for the section from Emmerich to Oberhausen, the projects related to ETCS and electronic interlockings have to be defined as soon as negotiations on the financing agreements between the German MoT and DB Netz have finished. For the time being neither a final deployment strategy nor the German implementation plan including the information on ETCS L1 LS and L2 sections can be prepared or published due to these circumstances.

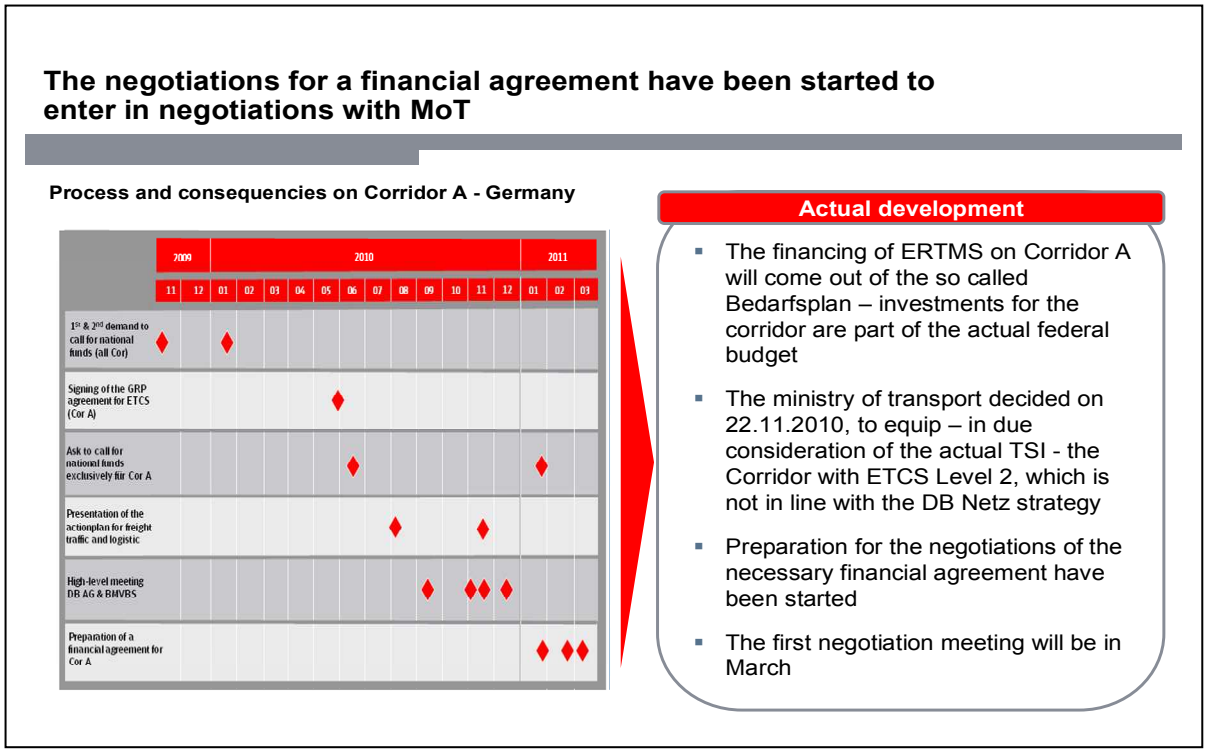


Figure 24: Financial agreement

Emmerich – Oberhausen (PSP 2.1.1.1.1 - 2.1.1.1.3)
In January 2010 DB Netz AG and ProRail decided upon the technical layout of the border section between Zevenaar and Emmerich. The decision was confirmed by the ministries of The Netherlands and Germany (see Chapter 3.2).

Karlsruhe – Basel (PSP 2.1.1.2.1 – 2.1.1.2.2.6)
A bilateral WG SBB – DB Netz is active since March 2010. The aim of the WG is to develop a common planning for all infrastructure projects and the ETCS concept in the node of Basel. This concept was finalised at the end of 2010 and presented to the Eisenbahnbundesamt. The decision for this concept is currently pending.

The ABS/NBS Karlsruhe – Basel is divided into 9 line sections (StA), as illustrated in figure 25. All sections of the new 3rd and 4th-track Karlsruhe – Basel are in the stage of planning permission procedure or in preparation.

In StA 1 (Karlsruhe - Rastatt-South) works have been in progress since 2001 in the course of the construction of the parallel motorway 36. The preparations for the start of construction works at the NBS/Rastatter tunnel are underway. The completion of a financing agreement with the federal government and the start of construction are envisaged in the medium term.

The Katzenbergtunnel (PSP 2.1.1.2.3) is currently under construction in planning section PfA 9.1 (Schliengen - Eimeldingen), including connections to the existing line in the north and south of Schliengen and Eimeldingen. Commissioning of the section is scheduled for December 2012.

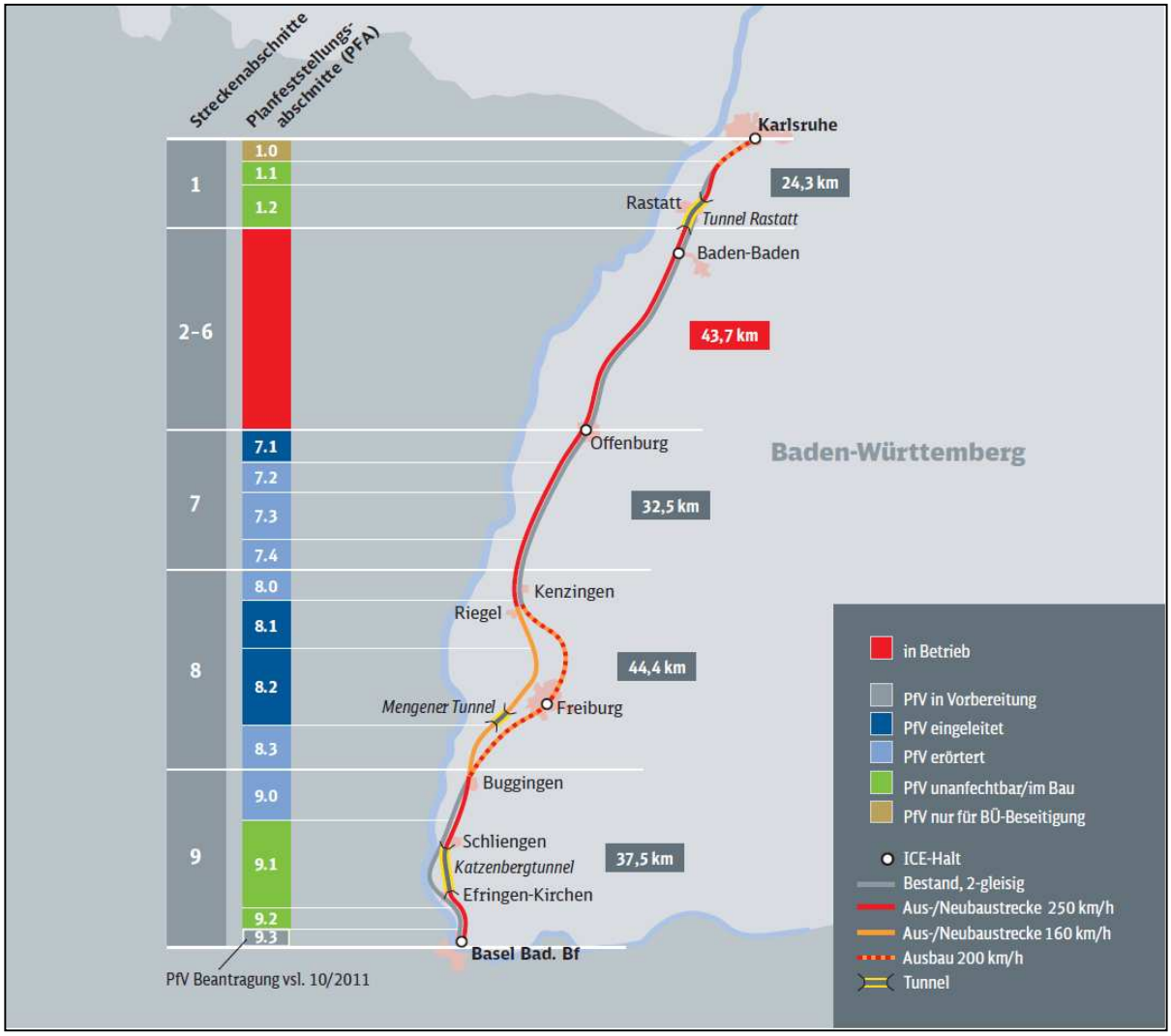


Figure 25: Karlsruhe – Basel planning

The planning approval decision for PfA Section 9.2 (Haltingen - Weil am Rhein) is legally binding since 19.04.2010.

The financial agreement for sections 9.2 and 9.3 was signed on 13.09.2010. Timely procurement and start of construction in close coordination with the municipalities in section 9.2 began in the 4th quarter of 2010.

The planning procedure is underway in the remaining sections until the completion of the construction law exists:

StA 7 (Offenburg – Herbolzheim)
StA 8 (Herbolzheim – Buggingen)
PfA 9.0 (Buggingen – Schliengen)
PfA 9.3 (Basel Rheinbrücke).

All planning approval sections are in progress.

PfA 9.3 is on Swiss territory; beginning for the planning approval procedure is planned in 2011, initial construction rates in 2014 and commissioning approximately 2017.

Terminal Duisburg (PSP 2.1.2.1)
Construction works for the 1st building stage of the so called KLV-Drehscheibe Rhein/Ruhr began in December 2010: 4 cover tracks with a cranable length of 700m each, two sound barriers, peak surge in the east and usage of the surface for sorting as charge tracks (5 pcs). Two cranes will be built during a 2nd building stage.

ETCS projects – 16 projects (PSP 2.2.1.1 – 2.2.1.16)
The decision to finance ETCS out of the "Bedarfsplan" funds was taken in 2010. The focus and clear priority lies on Corridor A. Nevertheless, the financing will be a part of a separate financing agreement between the German MoT and DB Netz.

Electronic interlocking projects – 35 projects (PSP 2.2.3.1 – 2.2.3.35)
A big step forward was made by the financing of different e-interlockings out of the German Recovery Programme (GRP). The necessary financial agreement was signed in May 2010.

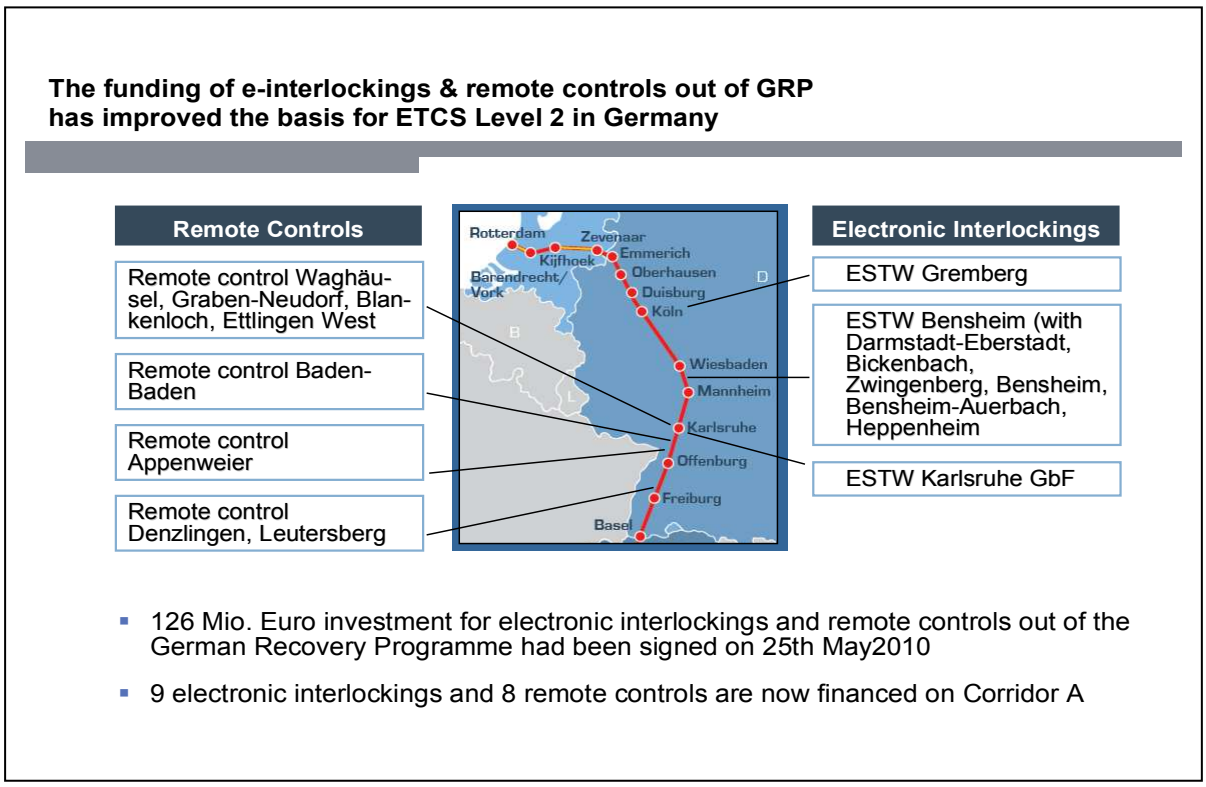


Figure 26: Overview Remote Controls / Electronic Interlockings

GSM-R – 11 projects (PSP 2.2.3.1 – 2.2.3.11)
Activities concerning GSM-R are depending on the activities of the trackside implementation of ETCS Level 2. Parallel to the planning of the ETCS projects it has to be clarified if the existing GSM-R network has to be adapted.

1.2. Risk management and chances

With regard to the implementation of ETCS on the German corridor sections two severe risks have been continuously reported and escalated to the Executive Board and the EC. This situation has changed fundamentally at the end of 2010. The

preparations for negotiations for financing electronic interlockings (which is the precondition for specific line sections where ETCS L2 is required) and ETCS trackside equipment have started and the decision for financing the corridor has been taken by the MoT before; Corridor A has priority.

The risks to be mentioned are now the timeline for the realisation of ETCS which cannot be evaluated seriously until the end of the negotiations on the financial agreement.

Due to the necessity to update the planning documents for the 3rd track of Emmerich - Oberhausen and to restart planning approval procedures in 2011, the actual commissioning date cannot be determined.

In general, procedures in the construction law proceedings are delayed by political influence, studies of new versions (including key demands of the region) as well as legislative and policy changes. Therefore, a specification of the timing of the planning approval (building law) is currently not possible. This development has an impact on all infrastructure projects and leads to unpredictable timelines.

1.3. Change request management

Due to the financial framework for ETCS, the baseline containing all corridor projects of DB Netz will be adopted in 2011 without changing the overall scope.

The timeline for projects concerning the realisation of Karlsruhe-Basel by political influence, studies of new versions (including key demands of the region) as well as legislative and policy changes leads to uncertainties. The commissioning of the infrastructure projects cannot be predicted before the planning approval procedure has been finalised.

Outlook

The main emphasis in 2011 will be the final technical clarification for new electronic interlockings and the ETCS track equipment within the negotiations on the financing agreement. It is expected to finalise the negotiations in 2011.
The amount of ETCS and electronic interlocking projects will be adapted and optimised due to the new development. The business plan will also be revised.

For the section of Karlsruhe-Basel the decision of the ETCS concept in the node of Basel has to be taken.

The connecting line sections to the terminals along the corridor and the extension activities to Antwerp and Zeebrugge will be added to Corridor A and have to be part of the development.
Focus will lie on EU regulation 913/2010 for freight corridors. Topics will include the transport market study, the preparation for the investment and implementation planning and the solutions for the one-stop-shop issue.

D. Swiss – German bilateral working group

The cross border activities between Haltingen and Basel SBB have a complex structure due to the realisation of several infrastructure projects in Germany and Switzerland – e.g. the ABS / NBS Karlsruhe – Basel and a new bridge over the river Rhine. Within this framework ETCS installation has to be integrated into many different building steps.

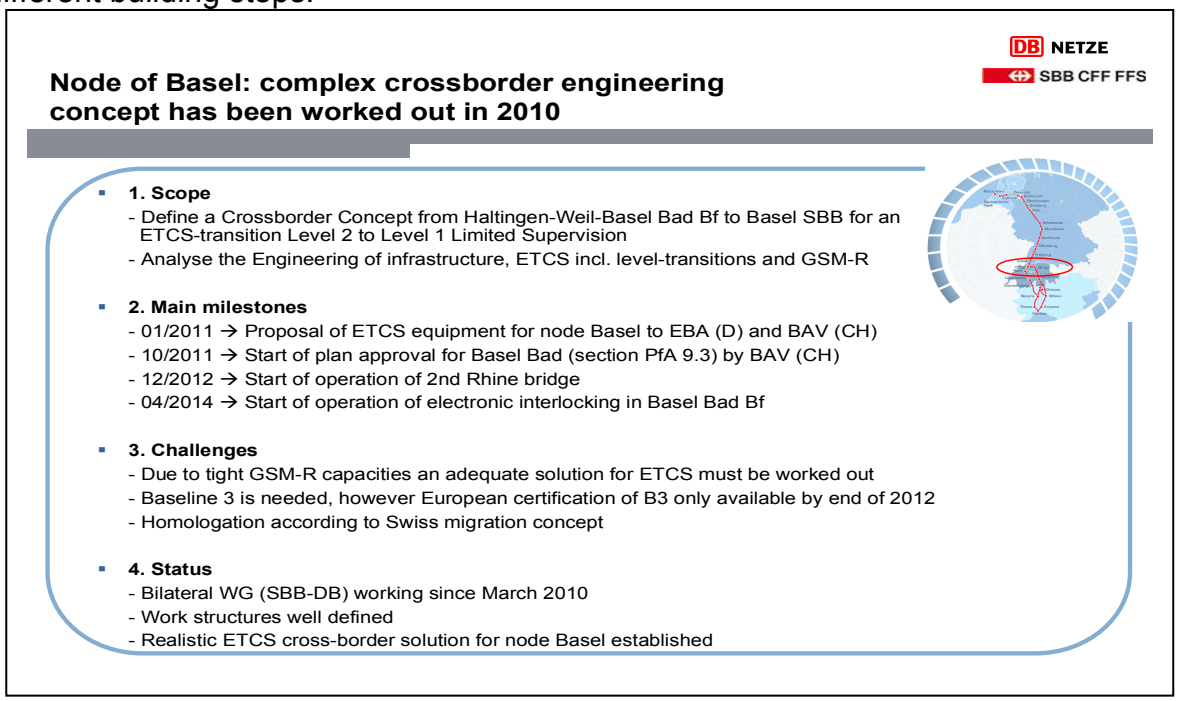


Figure 27: Node of Basel cross-border engineering concept

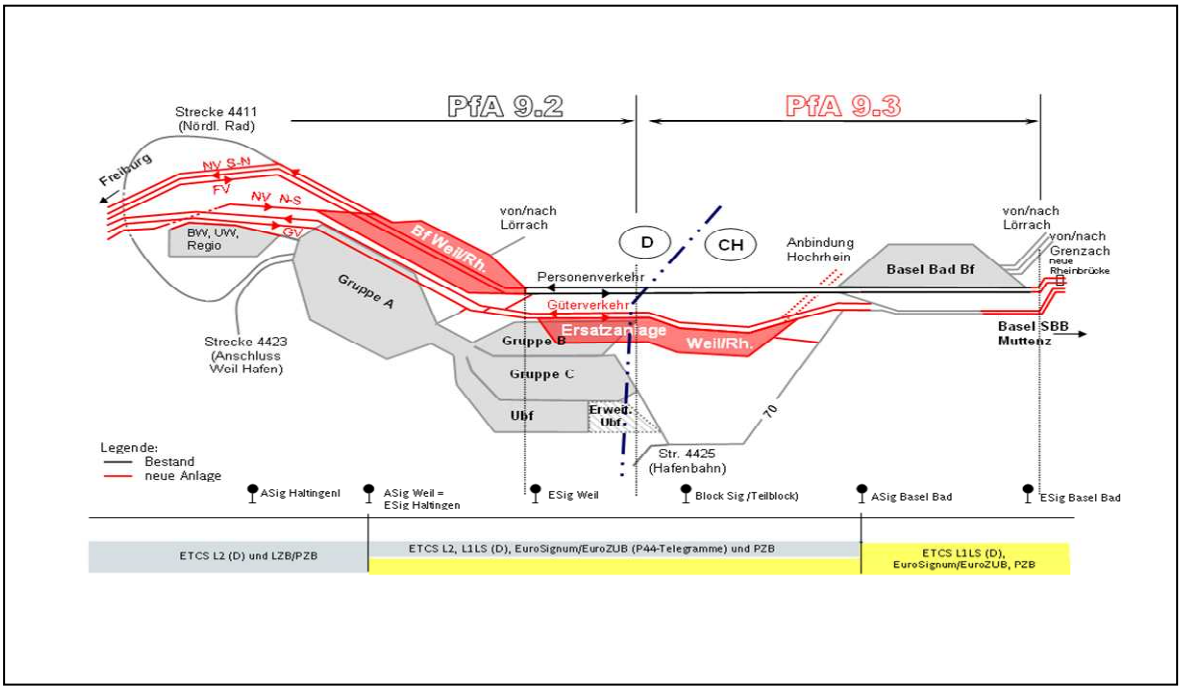


Figure 28: Actual intended concept of ETCS equipment Node of Basel

Border section node of Basel - Progress in 2010

- 22.03.2010: Kick-off cross-border activities node Basel SBB/DB Netz.
- 18.08.2010: Meeting at MoT Switzerland and Germany, BEV, national regulatory and authorising authorities to exchange their points of view concerning an ERTMS-solution in the node of Basel.
- 05.11.2010: First presentation of an ERTMS-concept of the node Basel to the German regulatory authority.
- Since 8.11.2010: Both regulatory authorities (BAV and EBA) are attending the cross-border WG to achieve a common solution for the node of Basel
- November / December 2010: Finalisation of the concept for an adequate ERTMS solution in the node of Basel.

In March 2010, DB Netz and SBB have set up cross-border activities in a common working group in order to achieve a common solution for a signalling system based on ETCS in the node of Basel. The support by both regulatory authorities BAV and EBA since November 2010 has been very important and supportive.

Expectations for 2011 include:

- Final decision concerning the ERTMS-concept for the node of Basel by the national authorities
- Preparation and finalisation of plan approval documents for Basel Bad Bf
- Start of plan approval process for Basel Bad Bf

E. SBB Infrastruktur (IQ-C Action Items #6, #10)

Key Performance Indicators

Due Date of Reporting	30.12.10	**IM Result [%] Plan**	33	**IM Result [%] Actual**	33
Projects Total	9	**Projects Finished**	0	**Projects Pending**	9
Start	01.01.90 (earliest project)				
End	31.12.25 (last project)				

PSP	Project	Results and Milestones achieved
3.1.1.1.1	Gotthard base tunnel	Initial plan study completed (1997) Budget approved (1996) Building licence granted (1996) Breakthrough at GBT in 10/ 2010 east tunnel Breakthrough west tunnel in 2011
3.1.1.1.2	Ceneri base tunnel	Initial plan study completed (1997) Budget approved (1996) Building licence granted (2006) Drilling works ongoing (20% completed)
3.1.1.1.3	Basel – Chiasso headway reduction	Initial plan studies started or to be started Construction ongoing (1st project Axentunnel) Construction (2nd project Castione) started in 2009
3.1.1.2.1	Cadenazzo – Pino (Capacity)	Initial plan study started (2009)
3.1.1.3.1	Bern – Thun headway reduction	Initial plan study for final project started in 2009

PSP	Project	Results and Milestones achieved
3.2.1.1	ETCS Basel – Gotthard – Chiasso	Initial plan study completed (2006) Budget approved (2006)
3.2.1.2	ETCS Basel – Gotthard – Belinzona – Pino	Initial plan study completed (2006) Budget approved (2006)
3.2.1.3	ETCS Basel – Lötschberg – Simplon – Domo	Initial plan study completed (2006) Budget approved (2006)
3.3	TAF TSI	Awaiting fundamental work from WG TAF TSI

Work Progress

1.1. Achievements

By the end of 2010, the overall actual work progress sums up to 33% versus 33% of planned work progress.

Gotthard and Ceneri base tunnels (PSP 3.1.1.1.1 and 3.1.1.1.2)

Works at the Gotthard base tunnel broke through on 15 October 2010. As a result of the excellent progress of the construction works, Alp Transit Gotthard AG revised their time schedule. Subsequently, the commissioning and handover of the tunnel to its future operator SBB Infrastructure is now scheduled for the end of May 2016. In spite of the early commissioning date the process of testing, trial operation and authorization will not be affected and the starting date of the commercial operation by SSB remains unchanged.

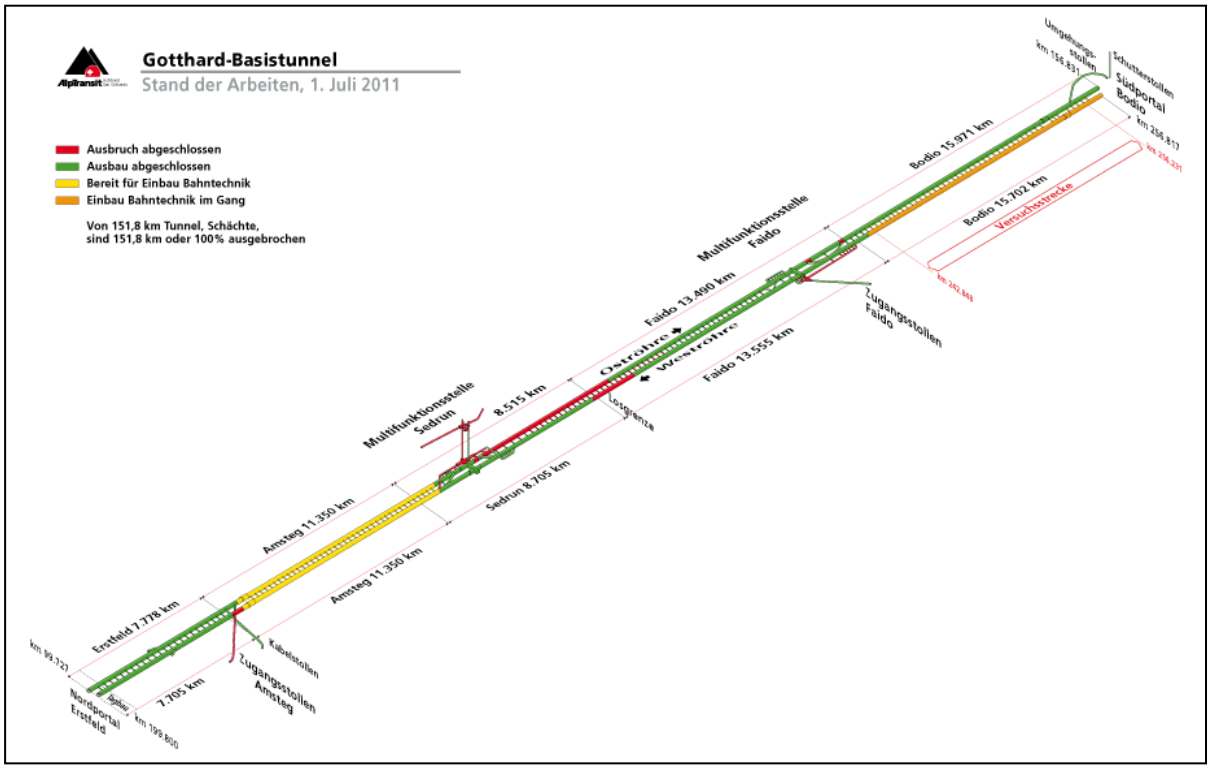


Figure 29: Drilling works at Gotthard base tunnel (31.12.10)

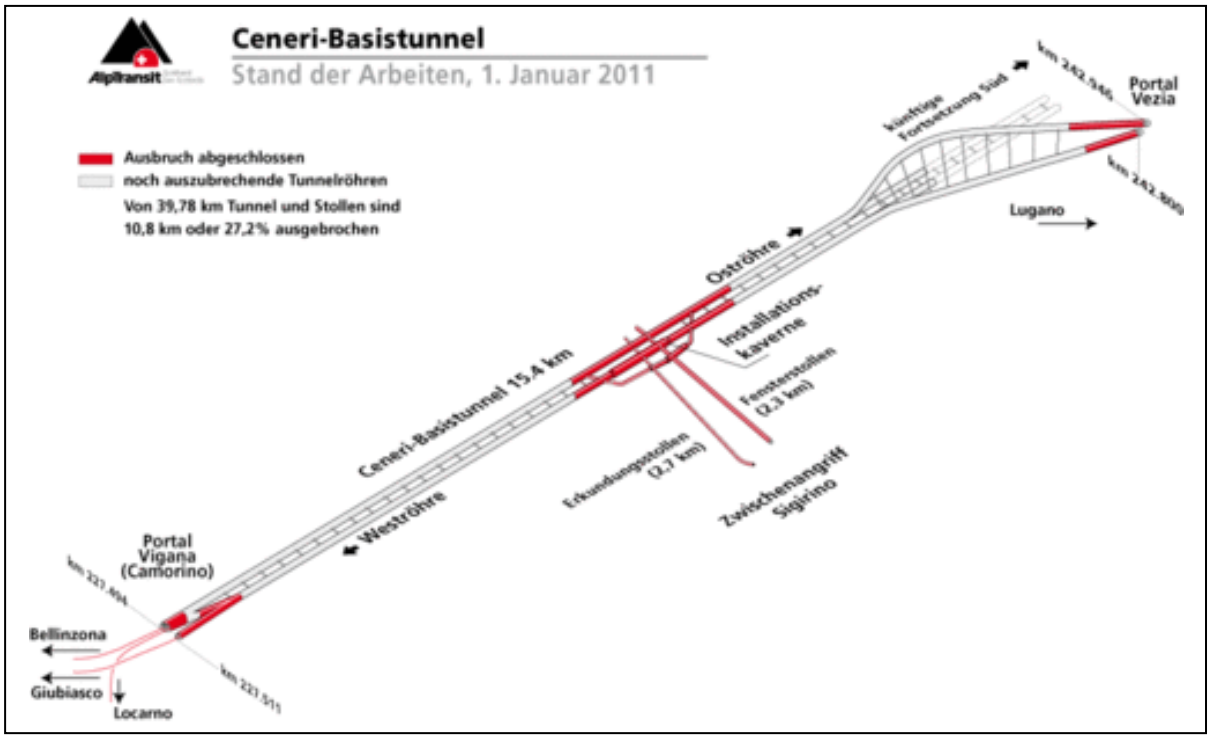


Figure 30: Drilling works at Ceneri Tunnel (01.01.2011)

1.2. Risk management and chances

The major risk rated A1 regarding braking curves / ETCS L1 LS which jeopardized the performance of trains / lines operated in ETCS L1 LS mode could be mitigated in 2009.

1.3. Change request management

No changes to report.

Outlook

In 2011 several important topics are on the agenda. The financing of the railway infrastructure will be a major discussion. The preparation of the 4 meter gauge for the Gotthard and Ceneri base tunnel branch line has to be done. Noise protection on the Luino line as well as the project of a new access charging system continues.

F. BLS Netz AG (IQ-C Action Items #6, #10)

Key Performance Indicators

Due Date of Reporting	31.12.10	**IM Result [%] Plan**	80	**IM Result [%] Actual**	80
Projects Total	3	**Projects Finished**	1	**Projects Pending**	2
Start	01.01.90 (earliest project)				
End	31.12.25 (last project)				

PSP	Project	Results and Milestones achieved
3.1.1.3.2	1st stage of Lötschberg	Go-live (2007)
3.1.1.3.3	Completion of Lötschberg	Project start scheduled for 2020 Variants and conditions for further expansion of LBT are identified
3.3	TAF TSI	Awaiting fundamental work from WG TAF TSI

Work Progress

1.1. Achievements

Lötschberg Base Tunnel (PSP 3.1.1.3.2)

With the successful opening of the Lötschberg base tunnel the Swiss government decided that the infrastructure concession on the line Thun – Brig will be prolonged to BLS AG until 2020. This confirmation was linked to the precondition that BLS AG would transfer the whole infrastructure into a new subsidy in which the government can influence and secure their large investments. The responsibility of BLS Netz AG is to take care of operations, maintenance and development of the railway infrastructure. The business management is observed by BLS AG and the collaboration is fixed with service level agreements.

Performance Management and Data Quality

One of the main topics in 2010 was the data quality in the cross-border section of Domodossola and the support for the development of the performance management for the Lötschberg axis. BLS started the CCL project together with our colleagues from RFI and SBB for the line section between Domodossola and Iselle. With the realisation of the project BLS will gain automatic real time data for the dispatching and can share data by using Europtirails with SBB and RFI for analysing the performance management.

1.2. Risk management and chances

No risks to report.

1.3. Change request management

No changes to report.

Outlook

Completion of Lötschberg (PSP 3.1.1.3.3)

The project start is scheduled for 2020. Variants and conditions for further expansion of LBT are being identified.

G. Italian – Swiss bilateral working group

In November 1999 a bilateral agreement was signed by the Italian Ministry of Transport and the Swiss Ministry for environment, transport, energy and communication to guarantee a competitive connection between the Italian rail network and the new rail transit through the Alps (NEAT - NEue AlpenTransversale or NFTA - Nuova Ferrovia TransAlpina).

Within this agreement, measures have been identified to enhance infrastructure characteristics and traffic quality. The infrastructure projects involve actions to enlarge the transport gauge, enable longer trains and upgrade technologies used for traffic control. The set of investments on the Italian infrastructure are part of the corridor baseline and are called: Piattaforma Sempione and Piattaforma Luino.

The agreement's validity ends in 2020. In order to monitor the progress of the approved actions and the quality of the traffic in general a steering committee was appointed by representative of the Ministries. The steering committee organised itself in four working groups:

- WG1 Infrastructure and Monitoring
- WG2 Rolling stock, Capacity, Interoperability
- WG3 Simplon Operational Agreement
- WG4 Transport Policy, Road, Statistics

WG1 follows up the progress of rail infrastructure together with representative of RFI, SBB and BLS. The last meeting was on 11/12 May 2010.

The following main topics have been investigated:

1. Traffic with large gauge: the capacity for this kind of transport up to 2020 appears to be enough for the expected demand although more information about the demand forecast is expected from the study contracted by the Swiss Federal Office of Transport
2. Train length: the original agreement foresees a train length of up to 650 meter in crucial points of the line. A study is ongoing within the corridor WG Capacity to evaluate the possibility and opportunity to enhance this length up to 750 meter
3. Demand forecast: Demand forecast for freight were presented for the time scenarios 2015-2020-2025 and they are coordinated with the forecast of the WG Capacity.

H. RFI (IQ-C Action Items #6, #10)

Key Performance Indicators

Due Date of Reporting	31.12.10	**IM Result [%] Plan**	30	**IM Result [%] Actual**	32
Projects Total	19	**Projects Finished**	2	**Projects Pending**	17
Start	02.07.01 (earliest project)				
End	30.04.26 (last project)				

PSP	Project	Results and Milestones achieved
4.1.1.1.1	Upgr. Southern access Simplon/ Doubling Vignale – Arona (0264.PO)	Initial plan study completed (2004) Project start scheduled for 2012
4.1.1.1.2	Simplon platform (several small projects)	Project start scheduled for 2012

PSP	Project	Results and Milestones achieved
4.1.1.1.3	Novara Node (0223.PO)	Initial plan study started (2008)
4.1.1.1.4	Linking of Novara-Domodossola track near Gozzano (0239.AM)	Initial plan study completed (2001) Budget approved (2005) Building licence granted (2007) Construction started (2007)
4.1.1.1.5	Upgrading of Novara-Alessandria line (1178.PO)	Go live (2007)
4.1.1.2.1	Luino platform (1282)	Construction works completed (2009)
4.1.1.2.2	Doubling of Laveno-Luino (0265.PO)	Project start scheduled for 2013
4.1.1.3.1	Chiasso-Monza section (0266.PO)	Initial plan study completed (2003) Project start scheduled for 2012
4.1.1.3.2	Bergamo-Seregno section upgrading (0277.PO)	Initial plan study completed (2005) Project start scheduled for 2012
4.1.1.3.3	3rd track Gallarate- Rho (0294.PO)	Initial plan study completed (?) Budget approved (?) Building licence granted (?)
4.1.1.3.4	Giovi pass and double track Genoa –Milan (AV 20)	Project start scheduled for 2010
4.1.1.3.5	Doubling of Bergamo – Treviglio (0222.PO)	Go-live (2007)
4.1.1.3.6	Doubling of Bergamo – Treviglio (0222.PO)	Extra measures for noise mitigation ongoing (until 2014)
4.1.1.3.7	Quadrupling of Tortona-Voghera section (0286.PO)	Initial plan study completed (2006) Project start scheduled for 2012
4.2.1.1	ETCS Domodossola-Genoa	Initial plan study completed (2008) Approval of budget (2008)
4.2.1.2	ETCS Luino-Genoa	Initial plan study completed (2008) Approval of budget (2008)
4.2.1.3	ETCS Chiasso-Milan	Initial plan study completed (2008) Approval of budget (2008)
4.2.1.4	ETCS Milan-Genoa	Initial plan study completed (2008) Approval of budget (2008)
4.3	TAF TSI	Awaiting fundamental work from WG TAF TSI

Work Progress

1.1. Achievements

In 2010 a general re-prioritisation of budget was negotiated between RFI and the Transport Ministry. Following the new agreement some works were postponed. By end of 2010, the actual work progress of the Italian projects (infrastructure, ETCS) is 30% which is fully in line with the planning. To mitigate the effect of the postponed infrastructure projects, smaller investments are being evaluated in order to mitigate future criticalities.

Upgrading of southern access Simplon pass/ Doubling Vignale – Arona (PSP 4.1.1.1.1/ PSP 4.1.1.2.1)
The start of the project is scheduled for 2014.

Simplon platform (PSP 4.1.1.1.2)
This project comprises several smaller infrastructure measures, from technical renewal, improving of module length to capacity improvements in future.

Novara node (PSP 4.1.1.1.3)
The scope of this project emerged out of the two former projects Novara node overpass and upgrade of Novara node. The initial plan study which started in 2008, is still ongoing.

Linking of Novara-Domodossola track near Gozzano (PSP 4.1.1.1.4)
The works are ongoing, but delayed. The final works are expected in the first half of 2011. The scope of the project includes the track link itself, a new station near Gozzano and the removal of six level crossings.

Novara – Alessandria line (PSP 4.1.1.1.5)
The project includes actions of different nature along the line such as the upgrading of train control systems and the realisation of subways in several stations. Most installations are already in place. Last go-live is foreseen for the first half of 2011.

Luino platform (PSP 4.1.1.2.1)
Main scope of the works are shorter block sections and modernized ATC/ ATP trackside devices. These works are almost completed with the exception of the ATC/ ATP in Sesto Calende that will end in 2010.

Doubling of Laveno – Luino section (PSP 4.1.1.2.2)
The start of the project is scheduled for 2013.

Chiasso – Monza (PSP 4.1.1.3.1) / (PSP 4.1.1.3.6)
The start of the project is scheduled for 2013.

Bergamo – Seregno (PSP 4.1.1.3.2)
The project is ongoing. A building licence is expected for the first half of 2012. The works will start in 2015.

3rd track Gallarate – Rho (PSP 4.1.1.3.3)
The project is ongoing. Project phases such us initial plan study, approval of budget and building licence could already be completed. The go-live of the priority phase is currently scheduled for 2015.

Giovi pass and double track line Genoa – Milan/ Alessandria (PSP 4.1.1.3.4)
A first funding of 500 m. Euro for the Giovi Pass was approved by the CIPE, the Italian Governmental Body for the Economic Programming.
A relevant part of the new 53 km long line consists of tunnels and the technical requirements meet those of a HS/HC line: mixed traffic, max. speed 250 km/h, max. gradient 12‰, max. axle load 25 tons, 3 kVdc / 25 kVac, ERTMS / ETCS Level 2.

The realisation of the new pass will allow a re-planning of the rail traffic of the area which will be favourable to the freight flow from Genoa Port to European hubs and main destinations in Italy.
The cost of the whole project was reviewed and is now estimated at 6.200 Mio Euro.
Beneficial activities of this first funding are preliminary activities linked with the northern and southern accesses of the tunnel.
The go-live of the project is planned for the second half of 2019.

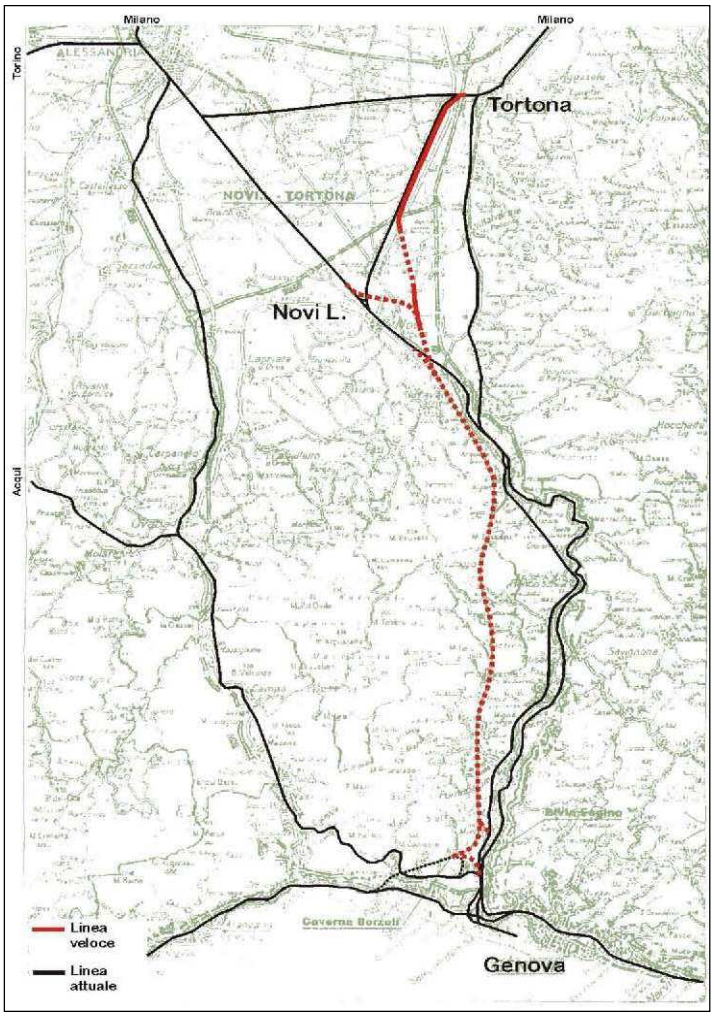


Figure 31: Genoa – Milan/ Alessandria

Doubling of the Bergamo – Treviglio line (PSP 4.1.1.3.5)

The project was completed in 2007, but during the completion of the project, some additional scope arose regarding noise mitigation (see below).

Doubling of the Bergamo – Treviglio line – noise mitigation (PSP 4.1.1.3.6)
The doubling of the capacity of this section led to additional environmental requirements. In order to mitigate the noise emissions and to protect the affected residents, noise screens became necessary. These works are still ongoing and will be finished approximately in 2014.

Quadrupling of Tortona – Voghera section (PSP 4.1.1.3.7)
The building licence has been submitted. The start of works is planned in 2015.

ETCS projects (PSP 4.2.1.1 to 4.2.1.4)
During 2010, with the consolidation of the ERTMS/ETCS specifications and the definition and development of tender documentation, new technical and economical evaluation concerning the better level of ERTMS to implement on lines in Italy were specified in more detail. In particular, because of very recent new assessments, the Level 2 solution has been considered as the best choice for the Italian part of the corridor as alternative to the Level 1 with radio infill, to overpose on the national system SCMT. ETCS level 2 will ensure higher performances without a significant increase in total costs of installation.
This caused the necessity to elaborate a new call for tender that will start with delay but because RFI decided that the pilot installations will be part of a wider call for tenders. Comprehensive of the realization of the Italian corridors, the scheduled time for the project should minimize delays related to the planned time target.
The new call for tender will start in the second half of 2011.

1.2. Risk management and chances

The risk for the Italian investments on infrastructure continues to be the funding.
In 2010, a reviewed contractual agreement was signed between RFI and the government.
In this new frame contract the infrastructure projects have been classified in a) on-going projects and b) program projects, the second type of project not having yet an assured financing programme.
For projects including relevant works the “financing life cycle” was split in two phases: financing up to the Building Licence and financing of the works.
For all the main projects on the corridor financing is assured until the building licence. Works do not have currently secured financing.
The project Passo de’ Giovi follows a different approach, a financing scheme by constructing lots and not functional lots.
Due to a change of ECTS level there will be an increase in project costs for the ERTMS project. It is expected that the financial support continues.

1.3. Change request management

No changes to report.

Outlook

Analyses of smaller “alternative” projects have started because the financial crises which started in 2009 has not been completely overcome yet. Some of these alternative investments regard the shortening of train protection sections that would lead to an increasing capacity.

VI. Other IQ-C Action Items

A. WG Noise

A study was contracted in December 2009 which was completed in summer 2010. The main conclusions are:

- Harmonized solution for all four corridor countries
- The incentives for retrofitting should cover the four countries as a whole and not only the sharp corridor
- The incentives should aim only at noisy wagons to be retrofitted
- LL blocks are preferred compared to K blocks
- The funding period is calculated between 3 and 8 years depending on the funds available and the desired retrofitting speed
- The introduction of a malus scheme for noisy wagons should be considered after a certain period, e.g. iron block ban, noise tax, legal ban on noisy wagons etc.
- Lean administrative procedures. Bonus should be claimed by the operators whereas only random checks are recommended.

The German MoT launched another noise study with focus on the traffic in the Rhine valley. The results of the NDTAC (noise differentiated track access charges) study from the BMVBS have not been available in 2010. The ministries of Corridor A seek an agreed solution for pricing noise and setting incentives by end of 2011.

B. Other IQ-C action items

Other IQ-C action items are solely under the responsibility of the MoT, the regulatory bodies or the national safety authorities:

- Mutual recognition of engine drivers (IQ-C action item #7)
- Mutual recognition of locomotives (IQ-C action item #8)
- Monitoring of market regulations (IQ-C action item #9)
- Customs directive 1875/ 2006/EC (IQ-C action item #14)

They will not be highlighted any further in the present annual report 2010 of the IMs.

VII. Conclusions

Sumarising the results of 2010 like e.g.

- Significant improvement of performance figures due to the recovery of the economy reflected in a strong increase of business and transport volumes
- Decision of German MoT to implement Level 2 with the system version SRS 2.3.0d on the entire German section and thus no longer following the agreed baseline 3 deployment strategy
- Analysis of needs and possibilities for harmonisation of train lengths on Corridor A, especially in the Italian section
- Extension of the corridor to Antwerp and Zeebrugge and integration of Infrabel in the Management Committee of the infrastructure managers
- Initiating decisive steps regarding the implementation of the new EU regulation 913/2010 for establishing a rail network for competitive freight, which was adopted by the EC on 22 September 2010
- Significant progress in defining common test and authorisation requirements among IMs and NSAs
- Start of corridor internet presence with webpage and internal log in communication platform.

The corridor was confronted with major changes regarding market perspectives, corridor structure and scope of the entire programme thus progressing considerably. For 2011, all this will result in further reviewing and adjusting corridor definitions, objectives and strategies taking into account a wider European context and network.

Thanks to the European Commission, the request for EU TEN-T co-financing from 2010 until 2013 was fully approved hence establishing the basic monetary support for the effective continuation of corridor activities by the infrastructure managers.

Regarding ERTMS implementation, the start of the roll out of Level 1 Limited Supervison in the Swiss sections in 2011 will mean a significant progress in the European migration process and manifest the strong requirement for completion of Baseline 3 as part of the TSI in 2012. ETCS Baseline 3 is urgently needed by Corridor A as well as by the entire sector as it provides enhanced and additional functionalities paramount for high efficient train operations and tremendous cost saving potential for RUs and IMs in the migration process.
The current investigations of RFI to possibly change from Level 1 Radio Infill technology to Level 2 supports a more homogeneous and economical ERTMS deployment on the corridor. In 2011, the major challenge remains to integrate the deployment strategy of the German MoT with Level 2 as this implies the need for interlocking upgrades along the entire German sections upfront and a considerable delay in the completion date. Common purchasing, commissioning and test and authorisation works will no longer be possible, risks increase and dim expected synergies. The industry cannot expect Baseline 3 orders from Germany thus hampering their business cases, which leads to lower motivation and support. Therefore the joint support from all involved stakeholders to come back to a coordinated and efficient implementation concept for the corridor must be achieved. In this context the aim of concluding an MoU with UNIFE and the NSAs, which was negotiated in 2009 and could not be signed in 2010, should also be further pursued.

Up till now ETCS installation has been implemented as individual national projects. However, even these installations have not been interoperable within the same country. The corridor implementation as a first joint international implementation bears even many more risks, which are mainly hidden and need to be assessed in advance. In this context trackside and train borne installations have to be seen as one integrated system. Subsequently, such cross impact risk analysis has to be carried out in order to avoid later reworks in updates of installation and costly testing and authorisation works, especially in the locomotives of the RUs which could arise during commercial operation. Based on the results of the study, the IMs have to decide upon mitigating measures to assure smooth operation for competitive rail freight from the start of ERTMS operations. Regarding the trackside installations, this will imply the definition and coordination of common technical and organisational requirements in all track side supply contracts.
Corridor A as the front runner in international ERTMS implementation has to pave the way for economical testing and authorisation prior to the application of the target processes. Subsequently, the IMs widely cooperate with the corridor NSA working group responsible for preparing a common guideline for Corridor A. The limited resources of the NSA working group should urgently receive support by an experienced project manager as soon as possible.

In many aspects the organisation and the work scope of Corridor A had already anticipated the requirements of the EU regulation 913/2010 concerning a European rail network for competitive freight. Following the important initial steps already taken the corridor activities in 2011 shall focus on establishing common corridor concepts for the implementation of this new regulation by analysing the requirements and defining in detail open topics, specifications and objectives which shall apply. The final integration of all activities in one corridor programme and implementation plan will mark the framework for the most economical and effective materialisation of the “new” corridor from Rotterdam and Antwerp / Zeebrugge to Genoa.
The enhancement of performance, quality and punctuality of the entire transport chain shall remain the key activity and also lead to closer relations to our costumers, as well as to all other involved actors in our corridor.

This and the steady increase of the market demand are the most important and stimulating perspective for the continuation of the activities and successful implementation of our corridor.

List of Figures

List of Abbreviations

ABS	Ausbaustrecke (enhancing and upgrading an existing track)
AC	Alternating Current
ACEI	interlockings (Italy)
AG	Aktiengesellschaft (German public limited company)
ANSF	Agenzia Nazionale per la Sicurezza delle Ferrovie (Safety authority)
APS	Authorisation for placing into service
arr.	Arrival
art.	Article (21)
ATC	Automatic Train Control (System)
ATB	Automatische treinbeinvloeding (Dutch ATP System)
ATP	Automatic Train Protection (System)
BAV	Bundesamt für Verkehr (Switzerland)
BLS	Bern Lötschberg Simplon (Swiss railway)
BMVBS	German Ministry of Transport
bn	billion
BP	Bauprojekt (construction project)
BS	Baustufe (construction stage)
B.V.	Besloten Vernootschap (Dutch private limited company)
B3	ETCS baseline 3 (SRS version 3.x.x
CBT	Ceneri base tunnel
CCG	Common components group (TAF TSI, at UIC)
CCL	
CCS	Command and control systems (TSI)
CEO	Chief Executive Officer
CER	Community of European Railways
CHF	Swiss Franks
COBRA	Corridor border adjustments (workflow system)
CR	Change Request
cw	calendar week
DB	Deutsche Bahn (German railway)
DC	Direct Current
Dep	departure
DIOMIS	Developing Infrastructure Use and Operating Models for Intermodal shift (UIC study)
DMI	Driver-machine-interface
EBA	Eisenbahnbundesamt (Germany)
EC	European Commission
EEIG	European Economic Interest Grouping
EIA	Environmental impact assessment
EIM	(association of) European Rail Infrastructure Managers
EOPT	Europtirails
EPR	European Performance Regime
ERA	European Railway Agency
ERFA	European Rail Freight Association
ERIM	European Rail Infrastructure Master Plan (UIC study)
ERTMS	European Rail Traffic Management System
ESTW	Elektronisches Stellwerk (electronic interlocking)
ETCS	European Train Control System

ETIP	ETCS testing and implementation platform
EU	European Union
EWIV	Europäische wirtschaftliche Interessenvereinigung (EEIG)
ExB	Executive Board
FRS	Functional Requirement Specification
GA	General Assembly
Gbf/ GB	Güterbahnhof (cargo station)
GBT	Gotthard base tunnel
GSM-R	Global System for Mobile Communication, subset Rail
h	hour
ha	hectares
Hz	Hertz ($^1/_s$)
IBN	Inbetriebnahme (putting into operation)
IM	Infrastructure Manager
IT	Information Technology
IQ-C	International Group for improving the quality of rail freight traffic on the North – South corridor
IWW	inland waterways
K	plastic material (Kunststoff) brake blocks
km/h	kilometres per hour
KLV	Combined freight transport
KMC	Key management centre
KMS	Key management system
KPI	Key Performance Indicators
kV	kilo Volt
L	Level (ETCS), in combination with a number
LBT	Lötschberg base tunnel
LL	composite brake blocks
LoI	Letter of Intent
LS	Limited Supervision (ETCS)
m	meter
m	million (€)
MAP	Multi Annual Programme
MIS	Management Information Systems
MoT	Ministry of Transport
MoU	Memorandum of Understanding
MS	Member state
NBS	Neubaustrecke (new track – high speed line)
NEAT	Neue Eisenbahn Alpen Transversale (new railway Alp transversals)
NETS	Netzweites Trassensystem (Swiss IT system)
NMG	Network Management Group (UIC)
NDTAC	Noise differentiated track access charges
NSA	National Safety Authority
OPE	(TSI) Operations
OSS	One Stop Shop
p.	page
PfA	Planfeststellungsabschnitt (planning sections)
PGV	Plangenehmigungsverfahren (acceptance process of a construction plan)
PR	public relations
PIM	Programme Infrastructure Manager
P.M.	Posto Movimento (evasion tracks)

PMO	Programme Management Office
PP	Priority project
PSP	Project Structure Plan (Number)
RACI	responsible, accountable, to be informed
RBC	Radio Block Centre
RFI	Rete Ferroviaria Italia
RI	Radio Infill (ETCS)
RNE	Rail Net Europe
RU	Railway Undertaking
SBB	Schweizerische Bundesbahn (Swiss railway)
SEDP	Strategic European Deployment Plan (TAF TSI)
SNCF	Societé nationale de chemin de fer (French railway)
StA	Streckenabschnitte (line sections)
S.p.A.	Società per azioni (Italian public limited company)
SRS	System Requirement Specification (ETCS)
t	metric ton(s)
TAF	Telematic Applications (for) Freight
TEMA	Terminal Management (UIC study)
TEN-T	Trans European Network (for) Transport
TEN-T EA	TEN-T Executive Agency
TEU	Twenty foot equivalent unit (standard container)
TSI	Technical Specification (for) Interoperability
UG	Users Group (ERTMS)
UIC	International Union of Railways
URL	Uniform Resource Locator (internet address)
V	velocity (speed)
VP	Vorprojekt (pre-project)
vs	versus
v.v.	vice versa
WG	Working Group
WGM	Working Group Manager
WP	Work Packages
ZEB	Zukünftige Entwicklung der Bahninfrastruktur (Switzerland) Future development of rail infrastructure

Annex

Annex A: Terminology of Milestones and Planning Phases

Imple-mentation Plan	Netherlands ProRail	Germany DB Netz	Switzerland SBB/ BLS Netz	Italy RFI
Initial Plan Study	Variantenstudie (Fase 2A)	Grundlagen-ermittlung und Vorplanung	Studie	Progettazione preliminare
Approval of Budget	Projectuitwerking (Fase 2B)	Vorplanung bis Entwurfsplanung Freigabe	Vorprojekt (VP)	Progettazione
Building Licence	Tracébesluit	Baugenehmigung	Plan-genehmigung (PGV)	Definitiva
Financing, Approval for Realisation and Start of Construction	Projectrealisatie (Fase 3)	Freigabe Ausführung	Bauprojekt (BP) Ausführung	Progettazione esecutivo
Acceptance of Construction	Testfase	Herstellen der Funktionsfähigkeit (HDF) und Abnahme	Abnahme	Collaudo
Go-Live	Indienststelling	Inbetriebnahme (IBN)	Inbetriebnahme (IBN)	Messa in esercizio

Figure 32: Terminology of Milestones and Planning Phases

Annex B: Risk scoring matrix

Probability / Impact	**High [1]** Equal/ Above 80%	**Medium [2]** Equal/ above 30%, below 80%	**Low [3]** Below 30%
High [A] Consequences for the total corridor programme	A1	A2	A3
Medium [B] Consequences for more than one working group/ project	B1	B2	B3
Low [C] Consequences for only one working group/ project	C1	C2	C3

Figure 33: Risk scoring matrix

Annex C: Work methodology and organisation (text from annual report 2007)

The programme for the corridor from Rotterdam to Genoa consists of a number of domains which should all lead to significant enhancements in reliability, capacity, transportation/ travel time and costs[8]. These domains must be worked and followed up systematically. In addition to that it must be assured that the range of projects, tasks and measures among each IM fit together from the perspective of a pan-European corridor, because only a sound integrated programme of all improvement measures will result in the aimed corridor success.

Until beginning of 2007, the major improvement options on Corridor A were analysed and monitored by two IQ-C ministerial groups and their related working groups of the IMs according to the set Corridor IQ-C action plan. In beginning of 2007, the IMs decided to consolidate all corridor works in one integrated programme, which will be performed under the responsibility of only one overall responsible Management Committee. This Management Committee is supported by the Programme Management Office, which now takes care of the organisation and monitoring of both former IQ-C working group activities as well as all further activities, which contribute to the corridor enhancement.

Under the roof of the PMO, the above considerations have now led to the establishment of six WGs to which the former activities of the IQ-C action plan are still related, and which are now chaired by Working Group Managers.

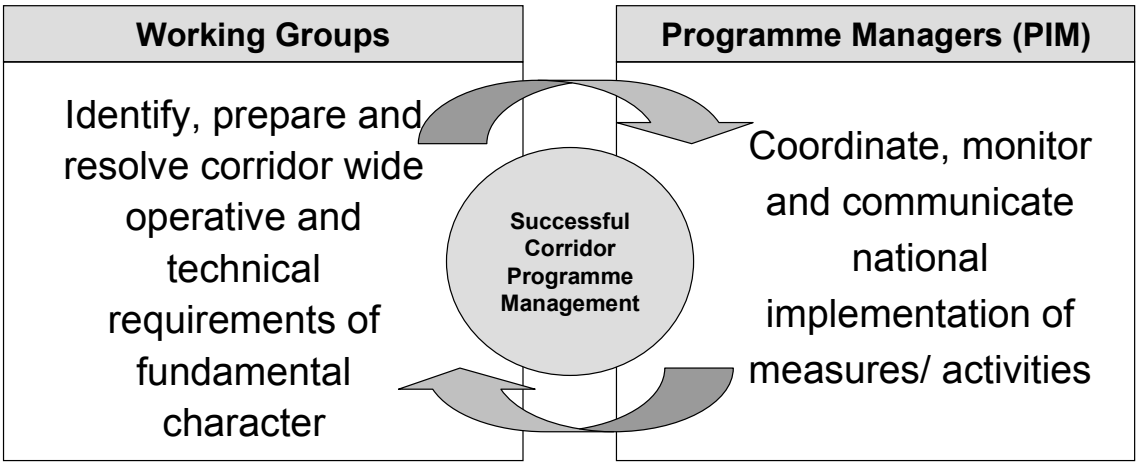


Figure 34: Roles of WGs and PIMs

The task of each WG is to develop answers and solutions for fundamental issues which are of great importance to the corridor programme as well as to support the general development of interoperability and European standards. The WGMs provide their results to the PIM of each IM. The PIMs are responsible to coordinate all their national implementation projects (see figure 34). Structuring the work this way leads to a synchronised step-by-step implementation of the entire corridor and avoids national solutions which do not meet the integrated improvement of the freight transport on the Corridor.

[8] See Business Plan documents for more details.

All activities of the WGMs and the PIMs are coordinated and consolidated by the PMO. A two level monitoring system on a quarterly basis has been established to track the progress of the work on the corridor. The reporting of the WGMs and the PIMs is corresponding to the underlying baseline.

The term *"baseline"* refers to a structured schedule of measures and activities which are necessary to progress in the corridor programme and comprises the timespan from the planned start to the planned end. Each WGM and each PIM was asked to set up such a structured schedule containing all relevant actions with start and end dates according to the currently known scope in the forthcoming years. These plans of the WGs, containing work packages and activities had been prepared and linked with the implementation plans of each IM[9], which contain key milestones of projects and project phases of all measures relevant to materialise the corridor. All the baselines are finally consolidated in one overall corridor implementation plan.

The monitoring process now compares each baseline planning and the actually achieved progress of the works. The baselines are frozen as the target and shall be kept. Of course, by implementing the plan during the forthcoming years, unpredictable risks such as budget cuts, delays or new requirements might occur and require the adaptation of the baseline in order to become a realistic plan again. In this case a change request management process will first check the impact to the partners respectively to the corridor. Afterwards, the change may be approved and the baseline adapted accordingly.

Thus, the baseline is the list of planned actions whereas the quarterly reports inform about the work progress really made. In addition to that the reports contain elements of risk management (for the rating of risks please see annex B of this document) and change control management. All information from the reports of the WGs and the PIMs are used to control and steer the corridor implementation as one integrated undertaking. Derived from this information, the PMO as the corridor management board generates quarterly reports to be submitted to the MC, ExB, IQ-C ExB and to the CEOs (see figure 35).

[9] SBB and BLS subsumed

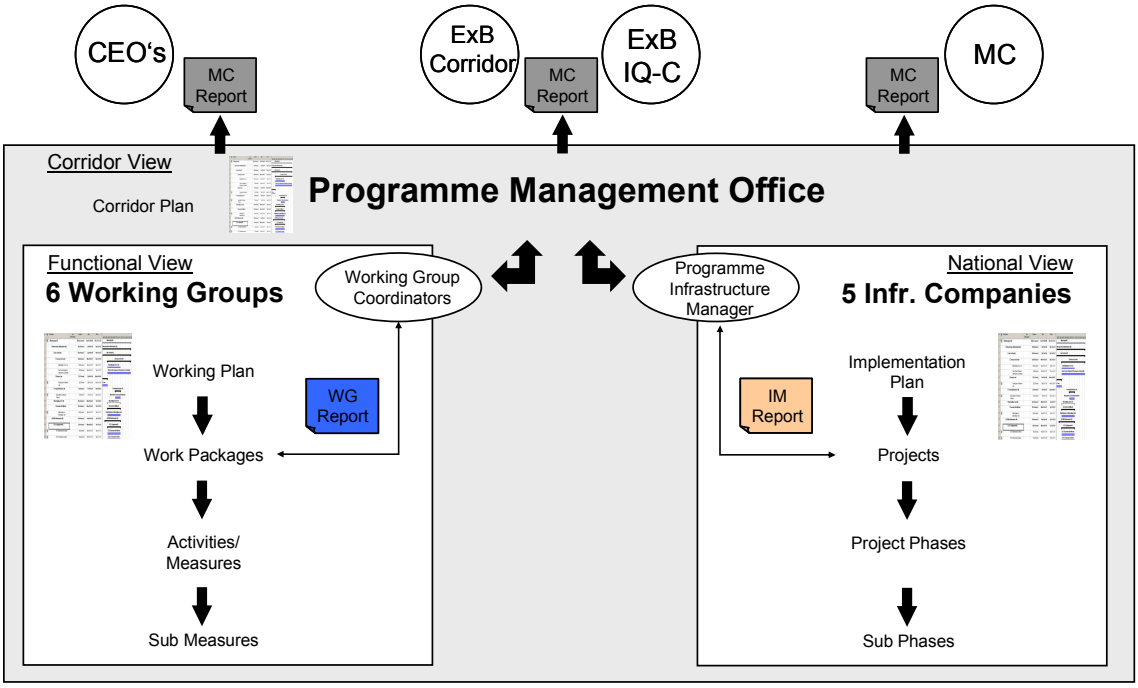


Figure 35: Reporting of the PMO

The monitoring process is completed by a yearly report, presented in the present document, summarizing the results and the work progress of the year elapsed. The annual report 2010 was published in May 2011 and had been finally approved by the ExB of Corridor A in June 2011.

A final remark about the work progress, which is measured in [%] based on the "earned value": the figures always refer to the baseline (a working plan for the WGs; an implementation plan for the IMs) which is currently valid. It is an accumulated statement of the work progress made since the beginning of the programme in January 2007. Earned value means that only tangible results providing an (intermediate) outcome are counted. In other words: the work progress sticks to the milestones which have been passed up to certain date. Each milestone marks an earned value and a certain result: a completed plan study, an approved budget, a go live of a project or a draft or final concept. Activities or project phases which have been begun but not fully completed do not count for the overall work progress.

The following information given in this report is based on the above mentioned principles. In total the current corridor implementation plan is comprised of about 160 infrastructure measures with 960 milestones plus 24 work packages performed by the WGs. It is our objective to report the most realistic and tangible facts about the corridor improvement development and progress of measures and traffic quality. However, the work progress, measured in [%], is partly still subject to an individual estimation by each PIM respectively WGM. Big infrastructure measures are performed over many years and thus not easily providing measurable progress every month. Wrong estimations will be identified by plausibility checks of a sequence of reported data in future. Thus the data quoted in this report is meant to provide a good orientation of the corridor progress and serve the awareness of possible risks and corrective measures to be required in future.

At the beginning of each chapter, some key performance indicators display the status of the WG or the projects of the IMs. Figure 36 displays such a header as an example.

Due Date of Reporting	07.12.07	**WG Result [%] Plan**	10	**WG Result [%] Actual**	10
Work Packages Total	4	**Work Packages Finished**	1	**Work Packages Pending**	3
Start	01.11.07				
End	31.12.15				

PSP	WP	Results and Milestones achieved
1.1	Work Package 1	Final report and documentation presented. Work package closed.
1.2	Work Package 2	First analysis phase completed
1.3	Work Package 3	Work package to be started in 10/ 2008
1.4	Work Package 4	Work package to be started in 06/ 2009

Figure 36: Example Header and KPIs of a WG/ an IM

The *due date of reporting* is the day, up to which all progress, risk, changes and events are reflected in the present report. Usually, the due date is the end of a quarter. The next figure displays the *planned work progress* of the WG (or IM projects), according to the latest baseline. This figure is given in [%], as explained above. The *actual work progress* made is given in the top right box. The second line of the header contains the number of work packages (projects for IMs) dealt with by a WG respectively projects of an IM in total, the ones finished and the ones still pending. The *work packages finished* plus the *work packages pending* shall sum up to the *total number of work packages*. The *start* and *end* dates mark the total time span of planned work of the WG (or the IM). The second table of the header lists all *work packages* (projects for IMs), together with their *PSP* number of the baseline and *the results and milestones* recently achieved.

Annex D: Cross reference IQ-C action items

This table is to identify the IQ-C action items and to enable a quick and convenient reference.

IQ-C #	Action	Chapter	Page
1	Digital coordination	IV.A	61
2	One stop shop optimisation: shortening response times	IV.C	67
3	Monitoring traffic performance	IV.C	67
4	Improving punctuality	IV.C	67
5	Improvement international capacity allocation process	IV.C	67
6	Integrated elimination of bottlenecks	IV.E; 3.1-3.5	71; 82f.
7	Mutual recognition of engine drivers	VI	105
8	Mutual recognition of locomotives	VI	105
9	Monitoring of market regulations	VI	105
10	ETCS	IV.B; 3.1-3.5	64; 82f.
11	Terminals	IV.F	75
12	Operational Rules	IV.D	69
13	Railway noise	VI	105
14	Customs	VI	105

Figure 37: IQ-C cross reference

Annex E: Development and history of document

Delivery and Approval of the Working Group chapters

Chapter	Working Group	Responsible WGM	Delivery	Approval
2.1	TAF TSI	Laurens Berger	17.12.2010	20.05.2011
2.2	ERTMS	Stefan Wendel	05.11.2010	20.05.2011
2.3	Operations	Sebald Stumm	10.11.2010	20.05.2011
2.4	Capacity	Gabrio Caimi	27.01.2011	20.05.2011
2.5	Traffic Quality	Hansruedi Kaeser	26.01.2011	20.05.2011
2.6	Terminal Studies	Thomas Schneider	27.04.2011	20.05.2011

Delivery and Approval of the Infrastructure Manager chapters

Chapter	Infrastructure Manager	Responsible PIM	Delivery	Approval
3.1	ProRail	Laurens Berger / Jan Deeleman	20.04.2011	20.05.2011
3.2	DB Netz	Thomas Schneider	27.04.2011	20.05.2011
3.3	SBB Infrastruktur	Hansruedi Kaeser	05.02.2011	20.05.2011
3.4	BLS Netz	Alexander Paulus	05.02.2011	20.05.2011
3.5	RFI	Silvia Carloni	16.03.2011	20.05.2011
	Infrabel	Gerda Van De Heede	n.a.	20.05.2011

The remaining chapters 0, 1, 4 and 5 have been created and written by the PMO.

Delivery of any other comments

Chapter			Delivery	Approval
all	Ministry of Infrastructure and Environment NL	Hinne Groot	from PMO to H. Groot 09.05.2011	05.06.2011
all	Federal Public services Mobility and Transport of Belgium	Julie Buy	from PMO to J. Buy 09.05.2011	06.06.2011

Annex IV: Progress Report of the Regulatory Bodies Group 2010, May 2011

Progress report of the IQ-C Working Group Regulatory Bodies 2010/ 2011

General

On June 9th, a number of independent European Regulators will establish the Group "IRG-Rail" in order to promote best regulatory standards and practice throughout Europe. Parallely, the IQ-C Working Group of Rail Regulatory Bodies, mandated by the relevant Transport Ministries, will continue to especially deal with particular corridor A-related issues. Partial overlap of activities (e.g according to Regulation (EU) No 913/2010) will support the activities of the IQ-C- Group and promote corridor-related solutions together with the Italian Regulator not yet participating in IRG-Rail. "New entrant" Belgium has been invited and as a representative of the Belgian regulator Mr Luc De Ryck joined the IQC meeting in March 2011 in Zürich. The participation of the Italian RB is irregular and less frequent.

Progress achieved in 2010/2011

In the last three meetings of the IQ-C-Group: in June 2010 in Zurich, in September 2010 in Tübingen and in March 2011 in Zurich the future corridor-related regulation and other important corridor-related topics were identified as main activities and dealt with:

- Regulation (EU) No 913/2010 and its consequences:
  - Problem: Preventing the discrimination in connection with the pre-arranged and fixed train paths for international freight trains. Handbook released by commission fails to clarify vital points. Interpretation needs to be done in a coordinated manner lest different RBs interpret the regulation differently and different regulatory regimes are established in different member states
  - Problem: Regulation of the One-Stop-Shop: Principle of territoriality?
  - Problem: Handling of complaints: Scope of RBs authority. Sharing of Information: Handling of business secrets?
- Monitoring competition and market developments on the corridor (art 10 (7) 91/440/EEC) and Regulation art 20 (1) (Collecting corridor statistical data (annual report management board); identifying data omissions; analyse data; preparing a monitor report)
- Concepts for a noise related access charge system and related regulatory questions need to be scrutinized. They will have impact on the RUs
- Analysis of the capacity allocation process and of relief of congested infrastructure with focus on legal application of priority rules; assessment of allocation for international freight train paths on the corridor; preparing a case studies as to capacity; closer bottlenecks identification; collect cases about the disfunctioning of national performance regimes for international paths, material about case study; impact of Framework Agreements within Germany
- Market consultation of operation and remaining capacity in shunting yards:

The RBs have agreed in the following next steps:

- Bilateral Discussions between RBs and the respective IM about the question, how the IM want to apply the Regulation (EU) No 913 (2010) in practice;
- Legal analysis of the Regulation (EU) No 913/2010 (Germany will prepare a proposal of interpretation the statutory provisions concerning the rail-regulation and send it to all RBs)
- Find a solution how to deal with complaints of applicants in case that more than one RB is concerned, especially for the case of discrimination in particular with regard to the construction, lack of clarity in the network statements, train path allocation and terminal allocation; presentation of the results in the next IQ-C-meeting
- Recommendations for probable improvements of the allocation process of capacity.
- Terminal Platform Workshop: Along a list of corridor terminals the market shall be consulted in order to identify bottlenecks; the German evaluation will be distributed
- IRG-Rail working groups related to corridor A (market monitoring; Regulation (EU) No 913/2010) will share their results with the IQ-C group of regulators
- Design a uniform internet presence of the RBs to ease the accessibility of the RBs for the applicants

Next meeting will be in autumn 2011, details to be planned later.

Annex V Progress report of the National Safety Authorities Group 2010, May 2011

Annual report 2010 of the Activities of the NSA Corridor Group of Corridor A

I. Members

The members of the group are the representatives of the National Safety Authorities of the four bordering states of corridor A and Austria:

- Netherlands: IVW (Dutch Transport and Water Management Inspectorate)
- Germany: EBA (Federal Railway Authority)
- Switzerland: BAV (Swiss Federal Office of Transport)
- Italy: ANSF (Italian Railway Safety Authority)
- Austria: BMVIT (Federal Ministry of Transport, Innovation and Technology)
- Guests: Representatives from ERA, Corridor A Programme Management Office, ERTMS Users Group and Infrastructure managers.

II. Aim of the Group

As stated in the Letter of Intent signed 3 March 2006, the NSA shall present to the Ministries and to the European Coordinator a cooperation agreement with practical measures to streamline the processes for authorising the putting into service of ERTMS equipment on the corridor infrastructure and rolling stock.

The aim has been clarified further in the Common Declaration of the Ministers of Transport of 26 May 2009. The National Safety Authorities are asked to develop by 2010 a common process for authorising the putting into service of ERTMS equipment on the corridor infrastructure and rolling stock. All relevant partners (EC/ERA, notified bodies, IMs and industry) are to be involved.

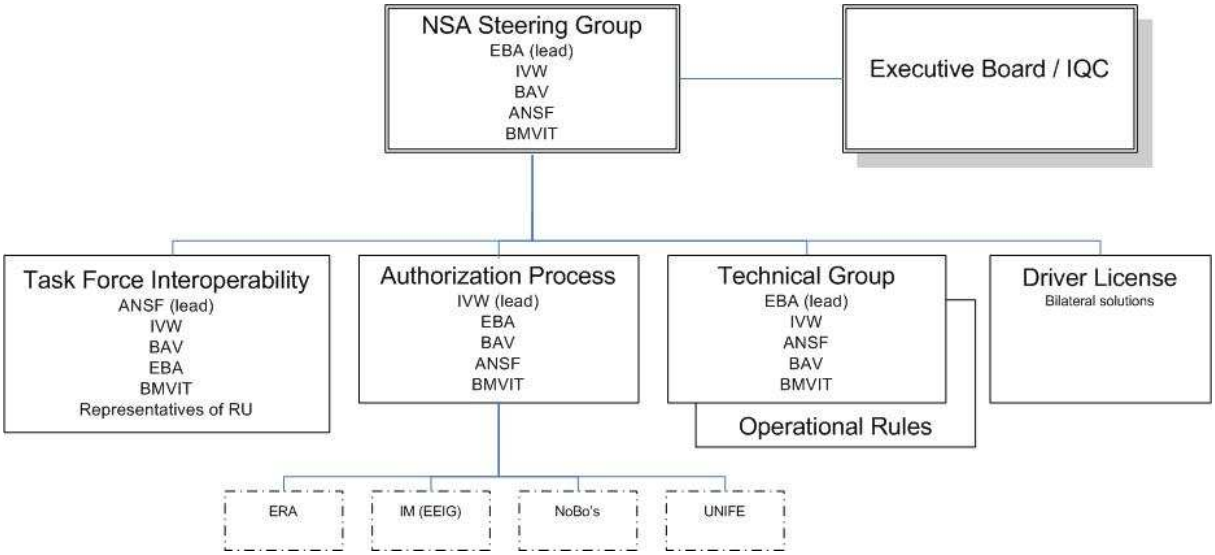
In order to achieve the target, a common and sound understanding about the technical, operational and safety related aspects of ERTMS has to be gained. Further, as a precondition, the different national requirements for authorising the putting into service have to be understood before a common approach can be agreed on in order achieve transparency and to streamline the authorisation process in order to gain the much desired synergetic effects.

The experiences made with ERTMS pilot projects underline the above mentioned prerequisites. Therefore, the group has decided to take a multitude of measures to cover the identified two mayor work fields including the existing interfaces to other groups and to the European Railway Agency.

III. Organisation

The project is coordinated by a steering committee consisting of representatives of the participating national safety authorities. Two working groups have been established which are concerned with ERTMS. The working group “Technical Issues” is focused on the technical issues of the authorisation of putting into service of ERTMS equipment whereas the working group “Approval Process” has the aim to develop a harmonised process for the authorisation of putting into service of ERTMS equipment. The results of both working groups are the crucial preconditions for a streamlined, effective and transparent authorisation process for putting into service of ERTMS. Further in order to cover all important questions regarding the efficient operation on corridor A, the already existing and well established working group Task Force Interoperablility and the issues on driver licences have been put under the umbrella of the NSA project.

Chart 1: Organisation NSA Project Corridor A



IV. Working Groups

(1) Technical Group

The working group “Technical Issues” has the task to develop a common understanding of the ERTMS technical issues (errors, interpretations, open points) in order to achieve one common ERTMS standard on corridor A. As the focus of the ministries is set on the development of a harmonised authorisation process for putting into service as stated in the Common Declaration of 26 May 2009, it was decided to give special attention to the process-related tasks. The work of the working group for technical issues will be resumed as soon as the practical matters regarding interpretation of the system requirement specification (SRS), practical questions regarding the putting into service of vehicles and testing procedures arise.

(2) Authorisation Process

In 2010 the focus of the work has been continued on the comprehensive evaluation on the differences in roles and responsibilities between the National Safety Authorities. The

intensive dialogue was necessary in order to get a common and deeper understanding of each others approach of authorising the putting into service of ERTMS. In order to compare the national processes more easily and to achieve most transparency between the different national processes, a template based on CENELEC has been developed. As a result, the five national processes were transferred into a harmonised format allowing now the comparison easily. The NSAs have interpreted the CENELEC process in order to achieve the overall safety approval.

The infrastructure managers of corridor A have stated in 2010 that they are not able to deliver a harmonised customer requirement specification for the ETCS-infrastructure on corridor A. The track-side ERTMS deployment will be specified by each infrastructure manager separately. Therefore the benefit for one harmonised processes for the putting into service of the infrastructure on corridor A is not given any more. This fact leads to the change of the focus of the working group towards the definition of a harmonised process for the authorisation of putting into service rolling stock.

During 2010, several meetings discussing important adjoining issues like national requirements for ERTMS, DV29, testing and key-management-systems have taken place.

(3) Task Force Interoperability

The Task Force Interoperability (TFI) is a working group aiming facilitating the authorisation for putting into service vehicles for the networks of Austria, Germany, Netherlands, Switzerland and Italy. The NSA and infrastructure manager of these countries are permanent members of the group. TFI was established in 2001. In 2007 TFI was incorporated into the IQ-C Group being the predecessor of today's Executive Board of corridor A.

In order to facilitate cross acceptance of vehicle authorisations, TFI have set up a database (IRL) containing all national technical requirements for locomotives, train-sets and coaches. The technical requirements are discussed project based in order to maximise the benefit.

In 2010, the focus of the work was set on the following projects:

i. Bombardier TRAXX Locomotives
ii. SIEMENS Vectron Locomotives
iii. Several train sets from manufacturers e.g. Stadler or Bombardier took profit of the MoU and the work done in TFI as for instance one TFI meeting in 2010 was hosted by Stadler Altenrhein.

Another major point of discussion was the contribution of ERA to the TFI working group as ERA's aim to coordinate TFI within the Cross Acceptance Working Party of ERA was not accepted. Further discussions have taken place regarding the existing IRL database and the evolving reference document database of ERA. As the latter neither does provide the specific requirements of the infrastructure managers nor does it offer the information in the different languages, further discussions are to be expected in 2011.

(4) Driver Licences

Until the Directive 2007/59/EC (Driver Licence) has been implemented nationally, driver licences are subject to bilateral agreements between the relevant national safety authorities/ ministries of transport. So far, agreements between Germany – Netherlands, Switzerland - Germany and Austria-Germany exist. In 2010, the dialogue between Switzerland and Italy has been continued. For the time being, the qualifications for driving trains in Italy have been issued to about 60 Swiss drivers.

V. Further work done in 2010

(1) Contribution to Minister Declaration in June 2010

The NSAs have contributed to the minister declaration in June 2010 by developing annex 7. There the state of play and the targets of the group have been described.

(2) Contribution to ERA Control Group

Since 2008 the NSA Corridor Group does participate in the ERA Control Group, which is in charge in steering the development and improvement of the SRS (system requirement specification) of ERTMS. The involvement was initiated by the NSA Corridor Group as the NSAs were so far not represented in the Control Group. However the NSA Corridor Group was convinced that an effective contribution of the NSAs to the development of the ERTMS specification could help to consider safety related aspects adequately in order to prevent that a not fully interoperable system might require national solutions to ensure safety. The contribution of the NSAs also reflects the responsibilities borne by the safety authorities. Furthermore, the early participation of the NSAs does progress the overall implementation of ERTMS on the corridor A and will accelerate the authorisation process.

The participation rotates annually between the members of the NSA Corridor Group. In 2010, the Netherlands NSA has represented the NSA position. The information gained is transferred and discussed thoroughly in the NSA Corridor Group.

(3) Work on the national requirements for ERTMS

The working group has collected the national requirements for ERTMS from the infrastructure managers of the Corridor A and the Austrian part of Corridor B. They will be incorporated into the European reference document database. The national requirements are mostly derived from the first ERTMS projects within the respective countries. The information collected is being discussed within the NSA Corridor Group together with ERA.

(4) Discussion with European Railway Agency (ERA) on DV 29

In 2010, ERA took the opportunity to discuss intensely their interpretation of the Interoperability and Safety Directives which has led to the issued document DV 29 together with the NSA working group “Authorisation Process”.

(5) Discussion with European Commission (DG MOVE) on the issues testing and key-management-systems

Following the discussions within the Executive Board in 2010, the NSA have discussed the issues on key-management-systems and testing with DG Move on 02 December 2010.

While the proposed measures to improve the situation on testing have been acknowledged widely by the European Commission and the European Railway Agency, the difficulties and obstacles for interoperability arising because of incomplete European specifications regarding key-management-systems remain unsolved. DG MOVE does not see the possibility to launch an independent analysis in order to clarify the issues for a European wide solution. Therefore the NSAs have declared this issue as top priority.

VI. Outlook 2011

The focus of the work programme for 2011 is put on the development of the authorisation guideline which shall be available as an advanced draft by the end of 2011.

Further in 2011, the Working Group Technical Issues will resume their work focussing on these key topics: key-management-systems, rolling stock projects, reliability and safety targets, national requirements on ERTMS and testing.

The contribution of the NSA working group by presenting the gained experiences at the ERA certification conference in March 2011 is planned.

Annex VI: Mission statement executive board corridor 1 Rotterdam /Antwerp – Genoa, June 2011

MISSION STATEMENT
EXECUTIVE BOARD OF FREIGHT CORRIDOR No. 1
"ZEEBRUGGE-ANTWERP/ROTTERDAM-DUISBURG-BASEL-MILAN- GENOA"

1. CONTEXT

The "Zeebrugge-Antwerp/Rotterdam-Duisburg-Basle-Milan-Genoa" rail freight corridor No. 1 is continuing to develop rapidly and is one of the main rail freight axes in Europe. Its position is strategic because it connects some of Europe's biggest ports, industrial centres and major market areas. It is part of a group of European rail freight corridors, which have gradually been identified in order to develop technical and commercial interoperability.

Introduced by the European commission in its White Paper "A strategy for revitalising the Community's railways" in July 1996, the concept of European rail freight corridor has been the subject of various initiatives consisting of different phases on organization and development level, in particular by :

- the creation of the Trans-European Network of Transport in July 1996;
- the signature of a Memorandum of Understanding regarding ERTMS in March 2005 between the European Commission and the rail freight sector for a coordinated migration;
- the definition of six ERTMS corridors in May 2006 under the European Coordinator Mr. Karel Vinck;
- the Memorandum of Understanding concerning the strengthening of cooperation for speeding up the deploiement of ERTMS signed on 4th of July 2008 in Rome between the European Commission and the European Railway Associations (CER-UIC-UNIFE-EIM-GSM-R Industry Group-ERFA);
- the Regulation (EU) No 913/2010 of September 22nd, 2010 concerning a European rail network for competitive freight.

1.1. "IQ-C"/ ERTMS-CORRIDOR A

The Ministers from Italy, Switzerland, Germany and the Netherlands signed a Memorandum of Understanding on January 9th, 2003 to improve framework conditions for the quality development of rail freight services (the 'IQ-C project'). Following the Letter of Intent signed by the Ministers in March 2006 in Bregenz on the deployment of ERTMS on the corridor A by the signature of a Letter of Intent. Two governance structures were created:

- an *Executive board* bringing together the Ministries in charge of steering the implementation of the project;
- a *Management board* bringing together the infrastructure managers responsible for the ongoing management and operational activities of the project. This Management board created a European Economic Interest Grouping (EEIG).

Quality and interoperability of the corridor improves its performance. In 2008 a Quality and Interoperability action plan 2008-2012 has been established, this plan was updated in 2009 to cover the 2010-2014 period. From 2013 the plan will be replaced by an implementation plan in accordance with Article 9 of Regulation (EU) No. 913/2010.
Mr. Karel Vinck, appointed in 2005 as European Coordinator, is working on the freight corridor No. 1 regarding his mission on the development strategy of ERTMS.

1.2. ROTTERDAM DECLARATION

Considering together interest of European rail freight corridors for the economy and environment of the European Union, the ten Signatory States[1] of the Rotterdam Declaration of June 14th, 2010 have notified their common desire to enhance the efficiency of corridors:

- noting that various kind of corridors, developed with different objectives and modes of operation, overlap largely with common routes, constituting principal axes with variants;
- aiming a harmonization of approaches by rationalizing their governance in order to improve the overall capabilities and interoperability.

The Declaration applies this principle to three corridors around three axes converging to North-western Europe, among others in Chapter C.1, the ERTMS Corridor A is associated TEN-T priority project No. 24 and the proposed new rail freight corridor No. 1. Besides the overall objective of common governance, Chapter C.1 foresees also the extension of the corridor A to Antwerp and Zeebrugge.

1.3. REGULATION (EU) No. 913/2010 & RAIL FREIGHT CORRIDOR No. 1

On November 9th, 2010 the Regulation (EU) No. 913/2010 of 22sd September 2010 concerning a European rail network for competitive freight came into force. This Regulation brings an extension of the existing IQ-C/A-Corridor to the Belgium harbours of Zeebrugge and Antwerp.

It aims mainly to strengthen the previous corridors, from either the Intergovernmental field (e.g. ERTMS), or from Infrastructure Managers, by institutionalizing their business objectives and methods in a legal community framework. This legal framework imposes among others:

- similar governance to the existing-ones of Corridor A (with an Executive board and a Management board, with advisory groups);
- an implementation plan which enhances and completes the ambitions of the action plans of the corridor A;
- specific deadlines to implement these obligations on the nine initial freight corridors.

It is in this legal framework that the rail freight corridor No. 1 is created. It is linked with other corridors, namely:

- in Antwerp, Rotterdam and Basel with freight corridors No. 2 "Rotterdam-Antwerp-Luxembourg-Metz-Dijon-Lyon/Basel"
- in Duisburg with corridor No. 8 "Bremerhaven / Rotterdam / Antwerp - Aachen / Berlin-Warsaw-Terespol (border between Poland and Belarus) / Kaunas;
- and in Milano with the rail freight corridor No. 6 "Almeria-Valencia / Madrid-Zaragoza-Barcelona-Marseille-Lyon Turin-Milan-Verona-Padua-Venice-Trieste / Koper-Ljubljana-Budapest-Zahony".

[1] The Netherlands, Belgium, Luxembourg, France, Switzerland, Italy, Germany, Poland, Czech Republic and Lithuania.

2. OBJECTIVES OF CORRIDOR

The regulation describes a new framework for the objectives which are to a large extend similar to the already existing initiatives and policies.

The objectives of the Corridor No. 1 are generally:

- improving the quality of rail services through short-and medium term measures;
- developing the attractiveness of the corridor in terms of performance, traffic management, quality and marketing promotion, all backed by a "market oriented" approach;
- coordinating the investment projects.
- deploying ERTMS.

These objectives will be set in the implementation plan of the corridor, as defined by Art. 9 of Regulation (EU) No. 913/2010.

The above mentioned implementation plan will follow the route of the freight corridor No. 1, as determined by Annex of Regulation (EU) No. 913/2010.

3. MISSION AND TASKS OF THE EXECUTIVE BOARD

The Executive board orientates the deployment of all actions foreseen by the implementation plan of the Management board in order to complete the corridor's technical and economic interoperability. It is responsible for the definition of the freight corridor's general objectives, the supervision and the taking of the measures explicitly mentioned in paragraph 7, article 8 to article 9 and 11, in article 14, paragraph 1 to article 22 of the Regulation (EU) No. 913/2010. In order to be complete, some of the following dispositions are taken over from the regulation, which remains the only legal basis.

- To prepare and implement the decisions from Ministers to develop the corridor. The implementation includes in particular the Lugano MoU (2003), the Bregenz LoI (2006), Genoa declaration (2009) and the Rotterdam declaration (2010).
- to ensure that the rail freight corridor No. 1 will be established according to the article 3 of the Regulation, at least three years after the entry into force of the Regulation, namely no later than the 10th of November 2013, in line with the fact that the draft implementation plan needs to be submitted by the Management board for approval at least the 10th of May 2013;
- to define a framework for the allocation of infrastructure capacity in the rail freight corridor in accordance with article 14, paragraph 1 of the directive 2001/14/CE (Art. 14 § 1 of Regulation), and this prior to the approval of the implementation plan.
- to ensure that the Management board will submit an investment plan for approval, in May 2013 at the latest (Art. 11 of Regulation). The Executive board will encourage the Management board in view that the plan gets updated regularly and consistent on the corridor's needs.
- to support the need of infrastructure managers to have sufficient resources for the development and the deployment of the ERTMS, but also for all the other measures of the corridor's coming investment plan intended to improve the corridor's quality, by respecting the national and community budgetary procedures.

- to assess on all matters of common interest of the corridor whereas the mandate of the Executive board is without prejudice to the competence of Member States regarding planning and funding of rail infrastructure;
- to supervise the realized progress with regard to the implementation plan's measures on the basis of the reporting performed by the Management board. This monitoring will be carried out during the meeting of the Executive board.
- to ask, if applicable, the Management board on any matter relating to smooth functioning of the corridor (works and studies), which undertakes to respond transparency;
- to support the Management board's work, in particular, if the latter encounters difficulties to succeed in its actions;
- to support the establishment of the Advisory boards of terminals owners/operators and railway undertaking in according with the requirements of the Regulation (Art 8) ;
- to support the request of the Management board for European subsidies within the framework of TEN-T;
- to cooperate, in case this is required, with the European institutions and organizations
- to cooperate, in case this is required, with their national railway safety authorities;
- to cooperate, in case this is required, with the regulatory bodies.
- to transmit reports to the Ministers to keep them informed of the corridor's progress with regard to the implementation plan.
- to inform the European Commission every two years on the development of the freight corridor due to Art 22.

4. ORGANISATION OF THE EXECUTIVE BOARD

4.1 COMPOSITION

The Executive board has the following members:

- the representatives from the ministries;

Also attend the meetings of the Executive board, without voting rights and according to the items on the agenda:

- the representatives of the Management board, Infrastructure Managers and where relevant Allocation Bodies;
- the European EU TEN-T ERTMS coordinator, as well as his team;
- the NSA concerned;
- the Regulatory bodies concerned.

4.2 DECISION MAKING PROCEDURES

The Executive board pronounces on any matter of common concern aiming to improve the quality of the corridor, as well as on any matter in connection with the application of the corridor's implementation plan prescribed in article 9 of the Regulation.

- to assess on all matters of common interest of the corridor whereas the mandate of the Executive board is without prejudice to the competence of Member States regarding planning and funding of rail infrastructure;
- to supervise the realized progress with regard to the implementation plan's measures on the basis of the reporting performed by the Management board. This monitoring will be carried out during the meeting of the Executive board.
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- to support the request of the Management board for European subsidies within the framework of TEN-T;
- to cooperate, in case this is required, with the European institutions and organizations
- to cooperate, in case this is required, with their national railway safety authorities;
- to cooperate, in case this is required, with the regulatory bodies.
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The Executive board pronounces on any matter of common concern aiming to improve the quality of the corridor, as well as on any matter in connection with the application of the corridor's implementation plan prescribed in article 9 of the Regulation.

The Executive board takes its decisions on the basis of consensus.

4.3 FREQUENCY OF MEETINGS

The Executive board decides to designate a Member State that is mainly responsible to organize and to chair the meetings of the Executive board, and is responsible for the secretariat. The chairman maintains a close working relationship with the Management board in order to assure an optimal work flow.

The Executive board's meetings take place alternately in every corridor country or anywhere else if the Executive board decides otherwise.

The Executive board shall meet at least 3 times per year.