Progress-Report 2011
Executive Board
Rail Freight Corridor 1:
Zeebrugge-Antwerp/Rotterdam-Duisburg-Basel-Milan-Genoa

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

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 Service Mobility and Transport of Belgium, and the Swiss Federal Office of Transport.

Annexes:

I Rotterdam declaration of Ministers, 14 June 2010
II Mission statement executive board corridor 1, June 2011
III Annual Progress Report Corridor A/1 2011 (Infrastructure Manager), 2012

1. Introduction

Corridor 1/A is the rail freight corridor from Rotterdam to Genoa along the River Rhine through the industrial heart of Europe. The corridor was extended to Antwerp and Zeebrugge in the course of 2010. The “Zeebrugge-Antwerp/Rotterdam-Duisburg-Basel-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.

Corridor 1 goes between the major (sea) ports of Rotterdam/Antwerp 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, Basel, Zurich, Milan and Genoa. All these centres are served and connected by Corridor 1. 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.

Since 2003, the Ministries of Transport of the Corridor 1 have intensified the way of cooperation and have thus brought about some remarkable results.

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. With the MoU, the **I**nternational Group for Improving the **Q**uality of Rail Transport in the North-South**-C**orridor Rotterdam - Genoa (IQ-C) started its work dealing with the aim to further improve the quality and punctuality in international rail freight transport on the Corridor. The Ministers entrusted the 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. 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.

As output of this work:

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

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

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. As result, the organisation for the deployment of ERTMS/ETCS in the corridor was established in 2006. 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 the yearly 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.

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 (ERTMS) rail freight corridors signed a common declaration (see appendix I). The Ministerial meeting showed the clear political backing behind the development of rail freight corridors throughout Europe. For the first time the cooperation of several corridors was discussed and so also the connections between corridors 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

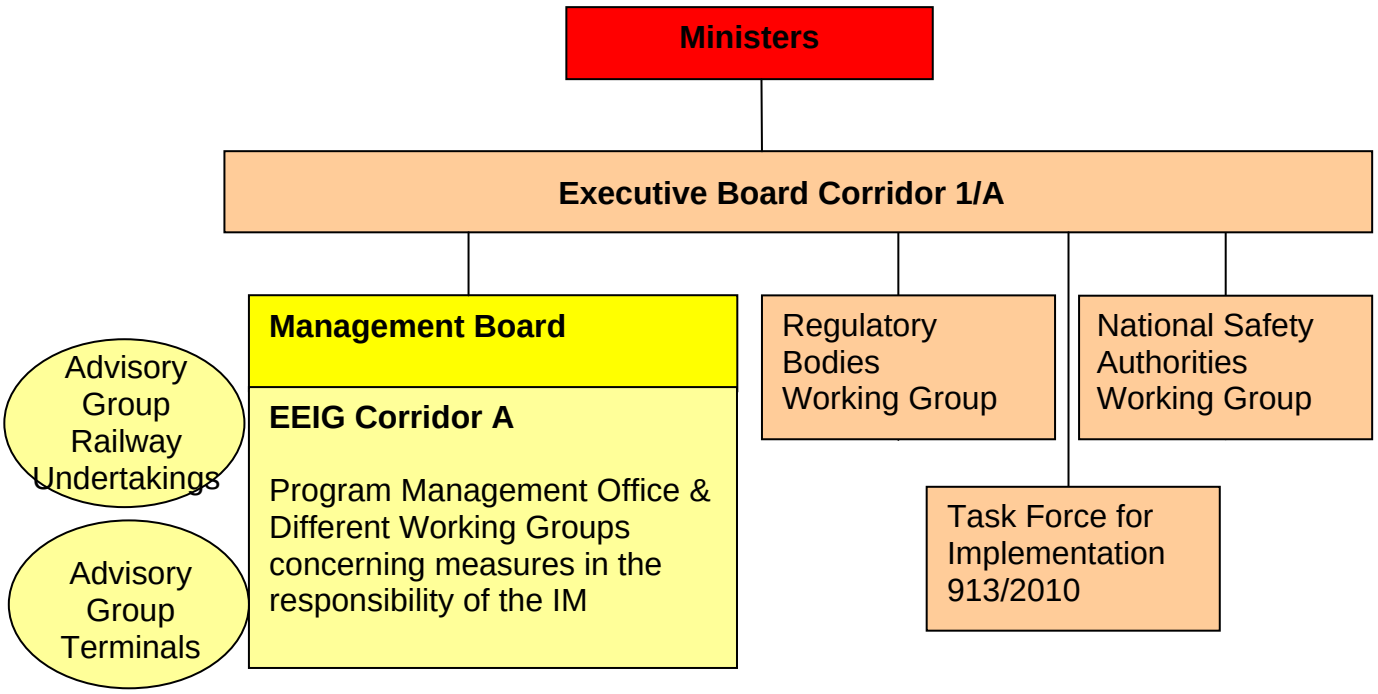
ERTMS, and to seek for a common testing and authorisation concept for Corridor A under the lead of the NSAs and in cooperation with ERA. The Ministers also invited Belgium to participate in the ERTMS Executive Board and the IQ-C Working Group as an observer, and as full member after the entry into force of the Regulation (EU) No. 913/2010 which was in discussion as a proposal at the time of the Ministerial meeting.

VIII. On 9th November 2010 the Regulation (EU) No. 913/2010 of 22 September 2010 concerning a European rail network for competitive freight entered into force. This Regulation brought 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.

IX. On 27th June 2011, a Mission Statement concerning the Corridor 1 was announced in a conference in rail corridors in Antwerp (see annex II). By adoption of the Mission Statement, the Executive Board of Rail freight corridor 1 was established. The Mission Statement gave the Corridor 1 a new governance as the former working group IQ-C and the Executive Board ERTMS Corridor A are fully merged now. Regarding the institutional requirements of the Regulation (EU) No. 913/2010, the new mission statement ensures 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 of the Regulation (EU) No. 913/2010 on 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.

2. Corridor organisation

With the new Mission Statement, the governance structure of the Corridor 1 organization can be illustrated as follows:



The tasks of the Executive Board - following the adoption of the Mission Statement - are:

- 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 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 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 Groups 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 of the Regulation.

On the side of Infrastructure Manager, the Programme Management Office is implemented and works for the 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 founded. The Infrastructure Managers of the corridor can act as a legal entity, financially borne by its members and associates.

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

Until now, the Working Group IQ-C (in close cooperation with the Executive Board ERTMS) worked 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 Train Information System (TIS) shall be ensured, also the access to applications (e.g. TIS) 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 action 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 Managers 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.

With the adoption of the new Mission Statement and the need to set up an implementation plan for Corridor 1, it is necessary to revise the corridor action plan 2010 with view of implementation of the regulation 913/2010/EU and setting priorities.

4. Implementation of EU regulation 913/2010/EU

The Executive Board decided to set up a task force with participants of all Ministries to support the proper implementation of the regulation establishing the rail freight corridors. Terms of reference for the task force were set up.

Modifying the existing governance structure of the corridor to comply with the requirements of the regulation is a pre-condition. The mission statement of the corridor executive board was adopted and sent to European Commission 27th June 2011. Infrastructure Managers have started to modify their existing arrangements for the management board and their legal entity (EEIG) to bring them in line with the regulation and to take full account for Infrabel's participation in the corridor since 2010. Terms of reference for both the Railway Undertakings Advisory Group and Terminal Advisory Group were developed and members were proposed by the Executive board to the Management Board. Further measures may be needed to ensure stable and effective consultation mechanisms.

The task force also signalled the need of setting up a corridor framework for capacity allocation for the Corridor one stop shop according to articles 13 and 14 of the regulation. This has to be done to ensure that pre-arranged train-paths along the corridor will be supplied by the Corridor one stop shop starting January 2014 in full.

The development and adoption of the corridor implementation plan, foreseen for May 2013 is an important milestone for the corridor. Preparations from Infrastructure Managers are underway.

5. Implementation of ERTMS/ETCS on the Corridor A

In the Rotterdam declaration 14th June 2010, it was mentioned that work was ongoing on the implementation of ERTMS on the ERTMS corridor A Rotterdam – Genoa, as it was confirmed by Ministers May 2009 (Genoa) and reflected in the EU ERTMS deployment plan 2009/561/EC (meanwhile replaced by Decision 2012/88/EU). In November 2010, German Ministry decided to develop a full level 2 approach for the German section of the corridor (Emmerich – Basel) and the Infrastructure Manager DBNetz started the preparations.

End of June 2011, German state secretary Scheurle decided to change the approach for the German deployment of ERTMS; the revised planning foresees not installing ERTMS but instead facilitating the foreign ERTMS equipped locomotives with an interface to the German signalling system (STM approach). Dutch, Swiss and Italian Ministries stated their concern over this intended change of strategy referring to the impact on corridor interoperability in a letter July 2011.

A series of meetings between both - the corridor ministries and between European Commission and German Ministry - did not lead to a new common approach on the development on ERTMS. The German Ministry outlined its position on the STM strategy in a paper February 2012 to European Commission. This paper was discussed with corridor partners and was followed up by a letter from Dutch, Belgian, Swiss, and Italian Ministries April 2012 stating a number of questions on the STM approach as proposed by German Ministry.

This ERTMS question remains an important open point at the time of publication of the annual report. Politically there is no common view any longer on the ERTMS deployment whereas legally the obligation to deploy ERTMS still applies per 2015. German Ministry proposes in the letter from February 2012 to amend European legislation by allowing STM as alternative approach for each Member State.

The decision making process regarding ERTMS deployment is therefore in a critical stage, which must be addressed urgently. Otherwise ERTMS investments on other parts of the corridor

will be losing part of their benefits and Railway undertakings cannot prepare for the implementation.

The ERTMS development progressed rather well in other areas like implementation progress in Switzerland, EU baseline 3 development and NSA cooperation.

6. Status of implementation of measures in the responsibility of Infrastructure Managers[1]

The European Rail Freight Regulation 913/2010, which came into force in November 2010, required the set-up of a new working group of the Infrastructure Managers for taking care of its implementation. Main activities and achievements had been the agreement on common core requirements, the verification and commenting of the implementation handbook published by the EC, and the preparation of concepts as input requirements from our corridor towards the working groups of RNE. Furthermore the working group reviewed and prepared feedback on the RNE working group results in order to ensure a good reflection of the requirements of our corridor IMs in the RNE guidelines.

The set-up of the “Terminal Advisory Group” (TAG) required the selection of two to four terminal operators per country as TAG members for representing the interests and obligations of all terminals along the corridor. The Executive Board supported the selection process to avoid any assumption of discrimination by the IMs. The Belgium ministry organised a terminal workshop with presentations from Corridors A/1, C/2 and F/8 in order to inform the terminal operators in Belgium about their obligations in this respect, as well as the concepts and framework conditions for the TAG. By the end of 2011 the ministries had nominated all TAG members except for Italy, where the process needs more time.

The cooperation in the framework of the CODE 24 project with various communities, regions and cities close to Corridor A/1 continued in 2011. The Managing Director of the EEIG Corridor Rotterdam-Genoa as a member of the Political Steering Board (PSB) of CODE 24, took part in the PSB meeting and the workshops of the four work packages in Torino.

Regarding the financing of the corridor activities of the Infrastructure Managers, together with Corridor C/2 the EEIG applied for co-financing for the Transport Market Study, the study on 740 m long trains and the study for the implementation of the corridor information management system in the frame of the third TEN-T call 2011-2014. The TEN-T Executive Agency approved the application for the full amount; the final decision is expected beginning of 2012.

[1] For details see the Annual Progress Report of the Infrastructure Managers in Annex III.

The EEIG considers this as a sign of high trust in our work and a strong recommendation of the European Commission to continue the efforts in developing Corridor A/1.

Infrastructure development

Particular focus this year was given on the question of train length, distinguishing between systematic and maximal train length. The allowed systematic train length of a line is the length that each train running on the line may have. On the other hand, the maximal train length of a section is the maximal length that a certain amount of regular trains may have, e.g. between Domodossola and Basel 1 out of 3 trains per hour may have a max. length of 750m, whereas the other 2 trains can only have a max. length of 690m.

However, although all members of the Management Board agree on this distinction, at the moment a common definition of systematic and maximal length in Belgium, Germany and on the Lötschberg line Basel-Domodossola is not possible.

It is part of the regular activities of the Infrastructure Managers to monitor current and future traffic demand and to compare it with the capacity supply. 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 may happen even earlier than 2020. In particular, this will be the case in the corridor sections south of Basel. Another activity was to analyse the infrastructure parameters on Corridor A/1 in detail and to search for quick wins. The last years clearly showed that the focus should be on longer trains and higher profile and secondly also on heavier trains.

RUs have a clear demand for longer trains with a relatively low total weight. In 2010, a first potential analysis was conducted about the implementation of infrastructure at the standard of 740 m long trains. For this task, it became obvious that collaboration with Terminals would be crucial for having a complete view on the transportation chain which is decisive for RUs for determining the train length of each of their trains. Based on this analysis, an investment plan for the implementation of the train length standard has to be derived including realistic time horizons. On this basis, a study will be launched in 2012 for the analyse of what is necessary for accommodating the demanded amount of longer trains by means of the maximal train length (using operational, timetable, and infrastructure measures) and in a longer time horizon upgrading the systematic train length.

7. Status of implementation of measures in the responsibility of the National Safety Authorities (NSA)

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 placing in 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 a common process for authorising the placing in 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 placing in service have to be understood before a common approach can be agreed to achieve transparency and to streamline the authorisation process in order to gain the much desired synergetic effects.

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

In 2011, the working groups of the National Safety Authorities were mainly engaged in the following topics:

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 1. As the focus of the ministries is set on the development of a harmonised authorisation process for placing in 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 placing in service of vehicles and testing procedures arise.

II. The authorisation process: Since 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 placing in service of ERTMS. In order to compare the national processes more easily and to achieve

highest transparency between the different national processes, a template based on CENELEC has been developed. As a result, the four 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 1 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 of one harmonised process for the placing in 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 placing in service rolling stock (ERTMS onboard).

In 2011 the focus of the work has been on the drafting and development of Guidelines for CCS Authorisation on Corridor A and of an APS template called “The on-board CCS subsystem related part of the Authorisation for placing in service of vehicles”. The work in 2011 was also based on new European legislation. Based on this the group raised open points and remarks. In the guidelines two drawings play an important role: system overview and authorisation stages overview. These two drawings were presented in the Executive Board Meeting.

III. Task Force Interoperability: as a working group aiming at 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: The Directive 2007/59/EC on the certification of train drivers has been implemented nationally through the Train Drivers Licence Regulation (Triebfahrzeugführerscheinverordnung, TfV) in April 2011. The mutual agreements of recognition of drivers between Germany and Austria, Denmark and the Netherlands are valid only during the transition periods according to Art. 37 of the EC directive. In 2011, the mutual agreement of recognition of drivers between Germany and Switzerland was in the course of being adapted to the German Train Drivers Licence Regulation. In 2011, 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. Furthermore, Switzerland (BAV) and Italy (ANSF) have elaborated a bilateral agreement for mutual recognition of driver licences on the cross border network. The agreement will be signed by ANSF and BAV mid 2012.

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

The main focus of the Working group of the Regulatory Bodies is on distinctive problems that only can be dealt with on corridor level. Regularly there should be direct contact with the executive board and if necessary with the management board of the corridor. This group functions as a structure for cooperation (not yet based on 913/2010 but on article 31 of 2001/14/EC) and will meets 2-3 times a year. In case of complaints of RUs about regulatory issues (e.g. discrimination), this group will exchange all necessary information to solve the complaint. No complaints regarding access and discriminatory behaviour of IMs however were filed during the 2011.

Several goals are identified as core business for this group:

- cooperation on market regulation should be continued for issues of common interest on the corridor regarding complaints and barriers for access;
- report on recommendations for improvements of the allocation process of capacity on the corridor (assessment of allocation for international freight train paths on the corridor);
- attention should also be paid to the analysis and relief of congested infrastructure with focus on legal application of priority rules and the non-discriminatory application of priority rules by the IM’s in case of disturbance of traffic;
- at last, it was recognized that the access of the clients of terminals and other service facilities should be in line with EU-legislation.

The Regulatory Bodies represented in corridor IQC have confirmed that they should work on the following issues:

- Implementation of Regulation (EU) No 913/2010 and its consequences taking into account the position of the Swiss Regulator;
- 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.

The Dutch Regulator NMa conducted a pre-investigation to the quality of capacity allocation on the cross- border traffic between The Netherlands and Germany. The results will be published by September 2012.

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

Terminal platform

Based on a study on terminals of combined transport in 2008[2] 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. During the 2011 meetings the decision was taken to transfer the Terminal platform fully into the Terminal Advisory Group of the Management Board.

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. The delay with the implementation of the new EU customs law offers more time for solution finding 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

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

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. The Memorandum of Understanding „Swiss Corridor T 2“ was prolonged until beginning of 2015 by the customs authorities of the Corridor.

Noise

Regarding noise there were important developments to be noted that could facilitate the needed source related measures for freight wagons:

- Executive board stated in a letter to UIC its request for confirmation on the intended date of authorization of the LL blocks in the framework of Europtrain before 1st July 2012. UIC confirmed this intention but also mentioned risks in the authorization process. Executive board cooperated with EC to this objective;

- Switzerland proposed to the European Commission to include in the EU-CH agreements a ban on noisy wagons at medium term;

- German Ministry continued to work on the implementation of noise differentiated track access charges with the intention to introduce such measures by December 2012. Germany intends to compensate wagon owners for retrofitting while modifying the infrastructure charge for noisy trains;

- Belgium realised a Study which was an Extension of the Rail Noise Study on Corridor A;

- Netherlands adopted its legislation to maximize noise levels for railway transport as part of their allocation framework;

- European Commission took up in its proposal for the CEF – TEN-T the possibility to finance retrofitting of freight cars up to 20%;

- The EU Transport Council decided in its general approach of the recast of the first railway package to make Noise Differentiated Track Access Charges optional for Member States, while European Parliament was in favor of mandatory differentiation in its first reading.

10. 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: 29.06.2012

checked by: ProRail, Infrabel, DB Netz, SBB, BLS, RFI

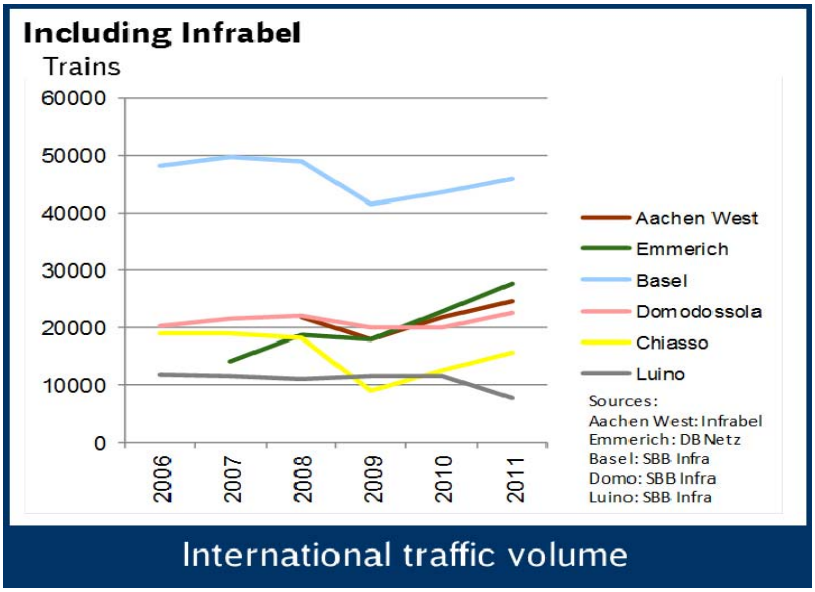
Period	Year	Country	Line section (from North to South)	Project	Cost (M €)	Funding Status	Remarks
2007 - 2014	2007	NL	Kijfhoek - Zevenaar	Betuwe Line	4.580	Realised	
	2007	CH	Frutigen - Brig	Base Tunnel	2.800	Realised	
	2009	NL	Maasvlakte I - Kijfhoek	25 kV + ERTMS	-	Realised	
	2009	NL	Meteren	improving 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	BE	Hasselt - Y.Glons	Genk-Freight: electrification and	16,1	Secured	
	2012	BE	Zeebrugge - Brugge	Bocht ter Doest	9,2	Secured	
	2012	CH	Bern - Thun	Block distance	25	Secured	
	2013	NL	Maasvlakte II - Maasvlakte I	New line + Marshalling Yard	30	Secured	
	2014	IT	Bergamo-Treviglio	2nd track	95	Secured	
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	IT	Gallarate - Rho	upgrade	500	Planned	
	2015	NL	ZvO Zevenaar - Border	ERTMS, 3rd track, 25kV	96	Secured	3rd track together with DB Netz
	>2015*	DE	Border - Emmerich	3rd track	200	Planned	construction rights still open
	2016	IT	Novara	Node upgrade	471	Planned	
	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	BE	Zeebrugge - Brugge	L51, L51A, L51C	119,3	Secured	Brugge-Dudzele: constr. 3rd track
	2017	BE	Zeebrugge - Brugge	Masterplan Port of Zeebrugge	66,3	Planned	(SPV Zwankendamme)
	>2017*	DE	Emmerich - Oberhausen	3rd track	1.500	Planned	construction rights still open
	2018	BE	Brugge - Gent-Sint-Pieters	L50A-B: Gent-Brugge	338	Secured	3rd and 4th track
	2019	CH	Bellinzona - Lugano	Ceneri Basetunnel	1.400	Secured	
	2019	BE	Gent-Sint-Pieters - Schellebelle	Junction Ledeberg, Melle en Schellebelle	74	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	BE	Belgian part Corridor A	ETCS	tbd	D / R	
	2024	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 funding 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
	2024	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
	2024	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
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	BE	Belgian part Corridor A	Level crossing removal Corr A	165	Planned	
	>2025	BE	Antw.-Noord-Antw.-Berchem	Port of Antwerp	2.020	Planned	2nd rail acces to the port
	>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 €)		37.761		

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 in Germany is under revision at present

International transport volume

A new multi-annual chart shows the development of the last years. In general, 2011 has been another year of growth for rail traffic on the corridor. In overall perspective traffic via the corridor border points increased by 9%. Emmerich benefited strongly from iron ore traffic (3000 trains/a)

gained from Venlo and new customers on the Betuwe line. Only Luino lost due to heavy works (partly closure). While traffic demand via Montzen / Aachen West and Emmerich / Zevenaar hardly has been influenced by the economic crisis in 2009 due to stable economy in Germany and strong demand for Hinterland traffic in the Belgian and Dutch ports, train figures in Basel, Chiasso and Luino are still below 2008.



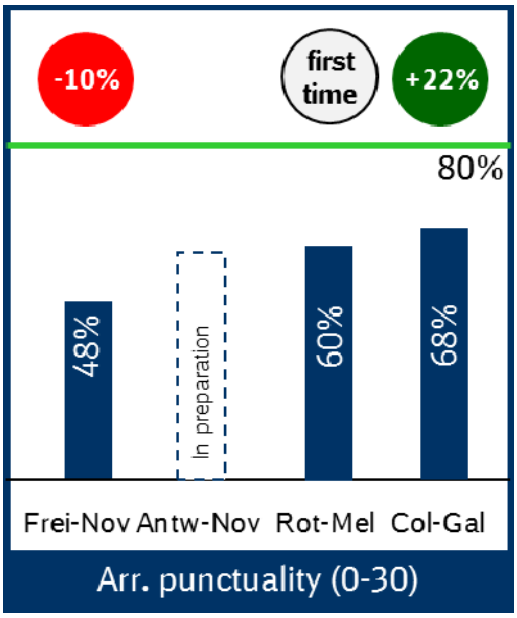
Definition: number of international freight trains per year crossing one (or more) of the border stations of Corridor A/1 in both directions, regardless of origin or destination.
Border stations are:
NL-DE: Zevenaar/ Emmerich
DE-BE: Aachen W./ Montzen
DE-CH: Basel
CH-IT: Domodossola, Chiasso and Luino

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.

Arrival punctuality

The punctuality figures 2011 are shown in the figure below. The figures relate to the overall quality of all involved stakeholders. The KPI from Rotterdam to Melzo is available for the first time after validity problems have been solved. Taking into account the increase of traffic the overall development of punctuality was notable.

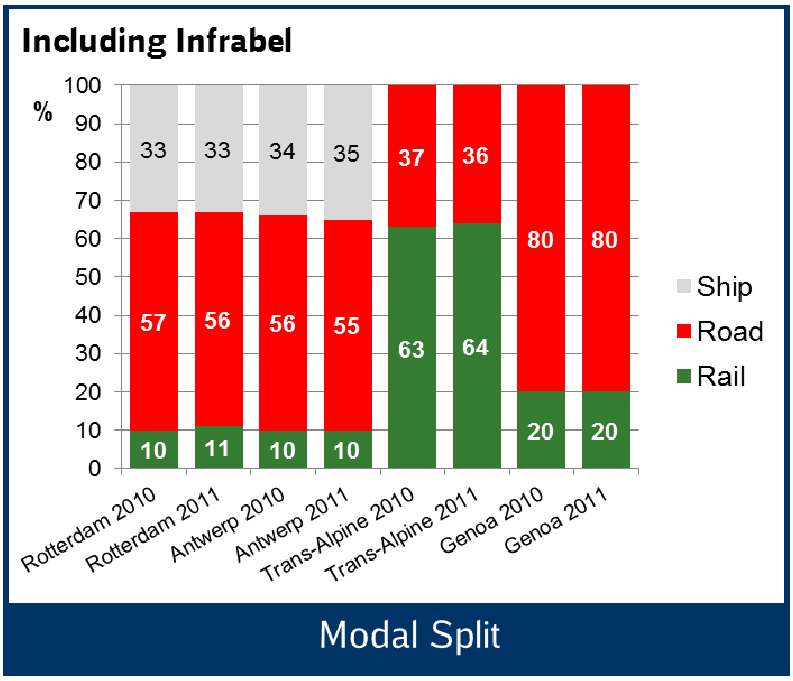


Definition:
average punctuality level (arrival at destination within a 30 minutes time span) for selected relations of: Freiburg–Novara; Rotterdam–Melzo (new) and Cologne–Gallarate (all start/ end points of these transport relations are directly located on Corridor A/1). A level of 80% is targeted.

Some major events affected punctuality in 2011: derailment in Olten, fire in Simplon-tunnel, flooding and landslides in Central Switzerland and heavy works between Emmerich and Oberhausen. Trains of the Rolling Highway system further on have been affected by works between Freiburg and Basel and conflicts with passenger services; punctuality dropped by 10%. On the contrary a higher punctuality of trains between Cologne and Gallarate could be observed. Trains between Rotterdam and Melzo performed somehow on average which is not bad for such a long route. Regarding Antwerp – Novara in 2011 experts of the WG Traffic Quality checked the validity of data and prepared regular analysis and will be included in 2012. The targeted value of 80% punctuality could not be reached.

Modal split

The modal split for Corridor A/1 is illustrated in the figure below. In 2011, the share of Trans-Alpine rail traffic increased to 64%. In the seas ports, Genoa shows a stable situation while moderate modal shift from road to other modes can be observed in Antwerp and Rotterdam (barge respectively rail increased by one per cent while road lost one per cent). Regarding Rotterdam obstacles by low-water levels and accidents in the middle section of the Rhine have favoured transport by rail. Since the Port of Antwerp primarily serves Hinterland destinations within a radius less than 250 km barge was in a position to gain market share by one per cent while road lost in the same extend. Rail is used mainly for long distance haul. Also a certain share of long distance freight is shipped to German inland ports as additional cargo and reloaded to rail or road in the connected terminals.



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.

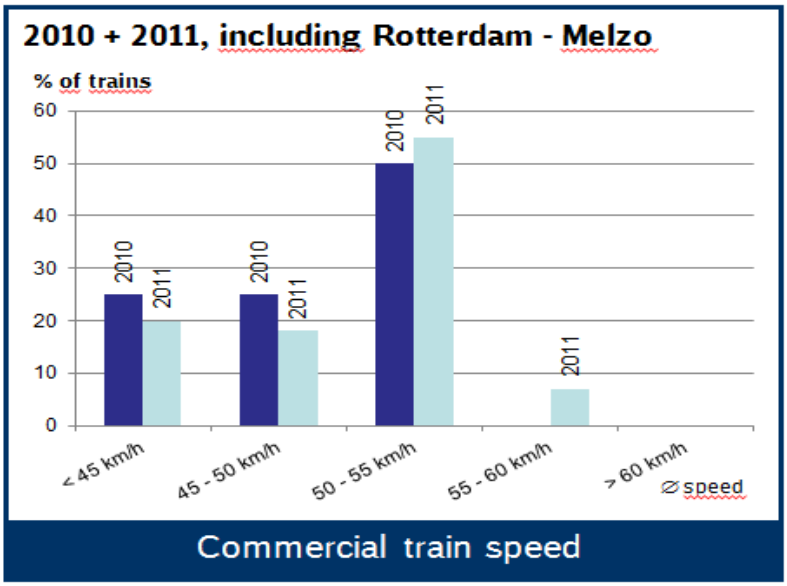
Commercial train speed

The figure below shows the distribution of commercial train speed for three selected traffic relations on Corridor A/1. 25 pairs of trains were analysed. The result of the analysis shows a general increase of the average train speed offered to the customers. The minimum average speed in 2011 has been 32.4 km/h whereas the fastest connection offers 58.6 km/h according to the timetable. The fastest train paths are offered on the short distance, average speed is slowing down with the length of the train path. There are several reasons:

a) On the long distance, trains are more frequently affected by waiting times (overhaul, construction works, e.g.)

b) More handover situations at borders or between cooperating RUs require more buffer time

c) On the long distance path construction takes more buffer time into account for recovery of delays



Definition: average speed [km/ h] of trains according to valid time table for selected relations: Freiburg–Novara; Rotterdam–Melzo and Cologne –Gallarate (all start / end points of these transport relations are directly located on Corridor A/1) in both directions. Measured based on annual timetable and classified in five different categories. Basis: 24 freight train services on 3 different relations.

11. Conclusions and recommendations

Regarding the development of Corridor 1 in 2011, the decisions and discussions inside the Executive Board and between Executive Board and Infrastructure Managers, the Executive Board gives the following recommendations:

Recommendation 1

In 2011, the decision making process regarding ERTMS deployment came in a critical stage, which must be addressed urgently. Otherwise ERTMS investments on other parts of the corridor will be losing part of their benefits and Railway undertakings cannot prepare for the implementation. There is an urgent need to address politically the diverging opinions among Ministries on the approach to implement ERTMS on the corridor and decide about to a common approach together with EC.

Recommendation 2

In 2011, the Terminal Advisory Group was implemented, while the Railway Advisory Board already worked since several years and is now transformed into Railway Advisory Group. With the implementation of the Regulation 913/2010 these groups have the function to inform the Management Board about and coordinate, where possible, their needs concerning infrastructure with the Management Board. It is necessary to strengthen the functioning of the advisory groups of railway undertakings and terminals on the corridor.

Recommendation 3

Regarding the necessary reduction of rail noise there were important developments in the different corridor countries. It is necessary to increase the cooperation of the corridor concerning

the rail noise problem to set common incentives (e.g., to facilitate the implementation of source related measures for freight wagons)..

Recommendation 4

With the adoption of the new Mission Statement and the need to set up an implementation plan for Corridor, it is necessary to revise the corridor action plan with view of implementation of the regulation 913/2010/EU and setting priorities.

Therefore, the Ministries ask the Ministers of Transport in the Corridor for their approval of the Progress Report 2011 of the Executive Board Corridor 1 and its recommendations.

Annex I: 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;

3

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

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In presence of :

European Commission
Siim Kallas, Vice-president

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

EU Coordinator for ERTMS
Karel Vinck

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Annex II: Mission statement executive board corridor 1, 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 22nd 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.

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

4.3 FREQUENCY OF MEETINGS

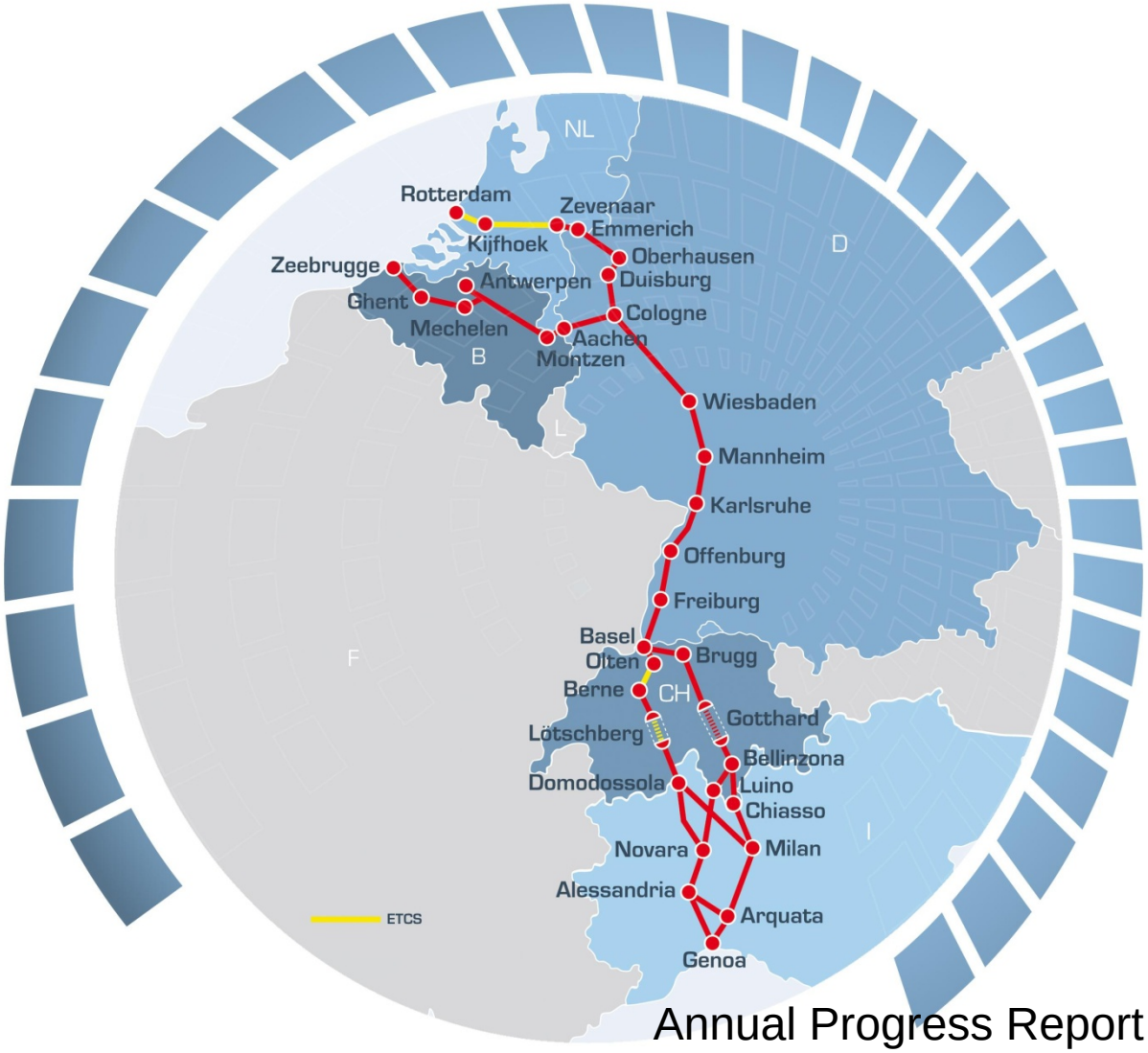
The Executive board decides to designate a Member State that is mainly responsible to organize and to chair the meetings of the Executive board, and is responsible for the secretariat. The chairman maintains a close working relationship with the Management board in order to assure an optimal work flow.

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.

Annex III Annual Progress Report Corridor A/1 2011 (Infrastructure Manager), 2012

CORRIDOR A/1
ROTTERDAM-GENOA



Annual Progress Report
2011

www.corridor1.eu

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

Table of Content

0 Executive Summary

In 2011, the Rail Freight Corridor Rotterdam-Genoa could benefit from a very positive development as a result of the following topics:

a) The positive trend of 2010 driven by a strong economy in Europe continued, which directly reflected on our corridor by steadily further growth of rail transport. In total, the traffic volume has risen from 132.084 trains in 2010 to 143.929 in 2011 at the border points which make an increase of 9%. This is the highest traffic volume since we are measuring, exceeding the highest figure before the crisis of 140.541 in 2008 by already 2.4%. The Dutch-German border shows an extreme increase of 21% from 2010 to 2011 and from 2007 (opening of the Betuwe line) to 2011 even a 97%! In Chiasso we had also a high increase of 25.6%, which was mainly due to the loss in Luino of 33.8% caused by heavy construction works.
Looking at the modal split, the increase of about 1% in average appears not very significant. However this has to be related to the high traffic increase which means, that in reality a considerable higher amount of transport has gone on rails.
Regarding above figures confirming the positive development, the great need for swift establishing competitive means for European rail transport is even more justified.
Our corridor is the paramount factor for the further growth of the European market.

b) After adoption of the EU Regulation 913/2010 in September 2010, our corridor focused its efforts in 2011 on preparing the concepts needed for the implementation until 2013. In January, a new corridor working group was set up to prepare core requirements and definitions regarding pre-arranged paths, time tabling, capacity allocation and traffic management. Our corridor delivered vital inputs to RNE as the common service provider for the freight corridors in preparing common implementation guidelines, and supported with expert knowledge in steering the related working groups. The transport ministries of the corridor have set up together with the IMs a task force for the monitoring of the implementation process as well as to steer the deliveries in their responsibility. A corridor subgroup for managing the Transport Market Study was set up and prepared the terms of reference. A European call for tenders for executing the short term part of the study was published still in 2011. Regarding the long term part of the study, the corridor IMs decided to carry it out themselves.
Keyrail and the allocation body Trasse Schweiz were integrated in the corridor organisation in a practical way in the course of 2011, thus allowing acting mutually and in consensus with all partners. The official finalisation of the governance structure depends on the final concept for the set-up of the corridor OSS, for which discussions started in order to prepare for the implementation in due course after the respective RNE guidelines are available in 2012.

In all matters, Corridor A/1 liaised closely with the management of freight Corridor C/2 in order to establish coherent and compatible concepts and implementations.

c) The ERTMS implementation on the corridor made a major step forward due to the contracting of ETCS for all remaining corridor lines in Switzerland. In June 2011, the possibility to contract baseline 3 products upfront to the finalisation of its validation in 2012 was already legalised in the TSI CCS through vote by RISC.
In Italy, RFI assessed level 2 as the best choice for those corridor sections where performance of existing lines needs to be maintained respectively to be increased. Level 1 will be used to reach interoperability for large shunting areas and for complicated installations as only little changes on the already existing SCMT will be needed. Two trial projects testing level 1 and level 2 over imposed on SCMT have been initiated. The target date for completion of ETCS on the corridor remains 2015.
Though not part of the original ERTMS corridor, Infrabel elaborated its Master plan ETCS 2010–2025 in 2011, aiming at equipping its whole network with ETCS by 2022. The branch of Corridor A/1 would be equipped by 2020.
In November 2010, the German ministry of transport had decided to implement purely level 2 in all sections of the German corridor part. Based on this decision, DB Netz started in 2011 the design works and negotiation of the financing agreement with the ministry. In June 2011 the German ministry changed their strategy and decided not to implement ETCS trackside on the corridor from Oberhausen to Schliengen until 2015. Instead, financing STMs for on board units shall be granted to RUs who have locos equipped only with ETCS and need compatibility with German national ATP systems. This was a step backwards for the corridor as this new German strategy is neither conform to the letter of intent signed by the transport ministers in 2006 nor to the European deployment plan, and it endangers the European ERTMS migration in general. The EU as well as the other ministries of transport belonging to the corridor rejected this decision and are requesting the German ministry to submit an acceptable concept meeting the original commitments and agreed targets.

In February 2011, the corridor decided to provide an assistant to the NSA corridor working group which allowed them to advance very well in preparing the first draft version of the corridor test & authorisation guideline. The NSAs and ERA worked closely together which reflected also on further developments of Regulation DV 29 respectively the European process and TSI CCS. A fist set of national technical requirements could be prepared and notified by RISC.
The corridor continued to analyse common concepts for accounting the risks, which have to be expected due to our position as a front runner in international ETCS implementation. A cross impact study (called CIACA) was launched with the ERTMS Users Group in Brussels, employing two further expert consultants and involving the University of Aachen for assessing all visible and hidden risks, except for political ones. Various meetings and interviews were held with experts from all stakeholders, the consultants and the Users Group on the need for system integration and cross

impact risks. As the results of this study are not linked to specific Corridor A/1 situations, it is shared with all others who are interested.

Apart from the positive traffic development, the infrastructure managers could maintain performance and quality on the same level as last year although the corridor infrastructure suffered from heavy destructions by force majeure. The commercial train speed remained in average on about the same level, but with tendency to a wider spread. However, this depends very much on the length of train runs and construction works along the lines.

Despite the financial crisis, most infrastructure projects progressed positively and according to plan. Between Bodio and Faido the installations in the Gotthard tunnel could be completed and works are about one year ahead of schedule. In Germany the projects financed out of the recovery programme could be successfully completed. Financing for the tunnel in Raststatt seems to be decided by the German ministry. Nonetheless, the influence of the public gets stronger and stronger. For the construction of the third and fourth track between Karlsruhe and Basel as well as the third track from Emmerich to Oberhausen, the approval of the requested construction permits is still a problem due to public interventions. The German ministry together with DB Netz has drawn up an incentive programme for noise reduced rolling stock. Although this is a very positive measure, it will take many years to become effective. In Italy, projects continue to suffer from stiff budgets thus being postponed further. Available budgets are used to prepare the project design, however the execution is mostly not financed yet.
The bilateral expert working groups of ProRail with DB Netz and SBB with DB Netz made good progress in designing the complex border sections. Furthermore, for the Swiss / Italian border points bilateral working groups from SBB and RFI could also be set up and started with first activities.

In December 2011, some member RUs of the RU advisory board published a position paper describing 31 requirements and measures, which they see important for a successful improvement of the corridor and rail transport. The measures comprise issues related to bottlenecks, interoperability and processes, and are addressed to all responsible stakeholders in the transport from door to door, like IMs, RUs, terminals, ministries, NSAs etc. This position paper is proof of the importance and high interest of our customers in our corridor.

High interest in our Corridor Rotterdam-Genoa was noted on all levels. Our experts participated and contributed in many working group meetings from RNE, UIC, CER, ERTMS Users Group, ERA, NSAs, ERTMS corridor group, RUs, Terminal Platform, as well as in other freight corridors. Furthermore, the corridor was represented by the Managing Director at high level summits like RNE Business Conference, CODE 24 Political Advisory Board in Florence, UIC ERTMS workshop, Ministers Conference Antwerp, Corridor Conference Rotterdam, IRSE ERTMS Conference, and the RU press conference in Berlin. This led to a fruitful and constructive dialogue.

The Management Committee of the corridor had a three day workshop to discuss and accomplish the new tasks from EU Regulation 913/2010 and agreed on further proceedings. The annual meeting of the corridor CEOs took place in Frankfurt, hosted by DB Netz.

In order to ensure the financial means for continuing the successful activities of the corridor EEIG and IM organisations, the EEIG participated in the TEN-T call 2011-2014 together with the freight Corridor C/2 in a multi beneficiary request. The co-financing is foreseen to cover costs for the Transport Market Study, a study on 740 m long trains, and a study on data management for the corridor information document. The request was fully granted by the EU, the decision is expected soon.

0.1 Management Dashboard

Figure 1 displays the progress of the implementation of the corridor programme (input KPIs) for 2011.[3]

The total work progress of the WGs is 72.3%; this is an increase of 17.0% compared to the previous year. Due to a high total work progress in some working groups (WG Traffic Quality, WG Terminals), a regular end of the current working period at the end of 2012 (WG Capacity and WG Operations) and new tasks from EU Regulation 913/2010, it was necessary to set up a new baseline starting in 2012.

Altogether, the majority of IM projects are nearly in line with the planned work progress, stating a total of 45.1% actual work progress. Apart from the planned progress, the infrastructure projects of Infrabel have been gathered in the business plan of the corridor and a new baseline has been set up (starting in 2012). Including Infrabel the corridor track length has risen by 22% and sums up to 5071 km now.

Figures regarding ETCS deployment do not include Belgium as it is not part of the original ERTMS corridor. In 2011 the tendering procedure for ETCS has been finished in Switzerland. The German decision not to install ERTMS timely on the corridor lines has an impact on the overall status of progress.

In 2011 the sum of used funds has increased by 5%. Nevertheless used and planned budgets are too low to reach the original target of implementing the ERTMS corridor until 2015. Due to the delay of some big projects (e.g. Ceneri-tunnel in Switzerland) or a change of strategy (e.g. STM in Germany) significant budgets have been moved to the period after 2015 (+17%).

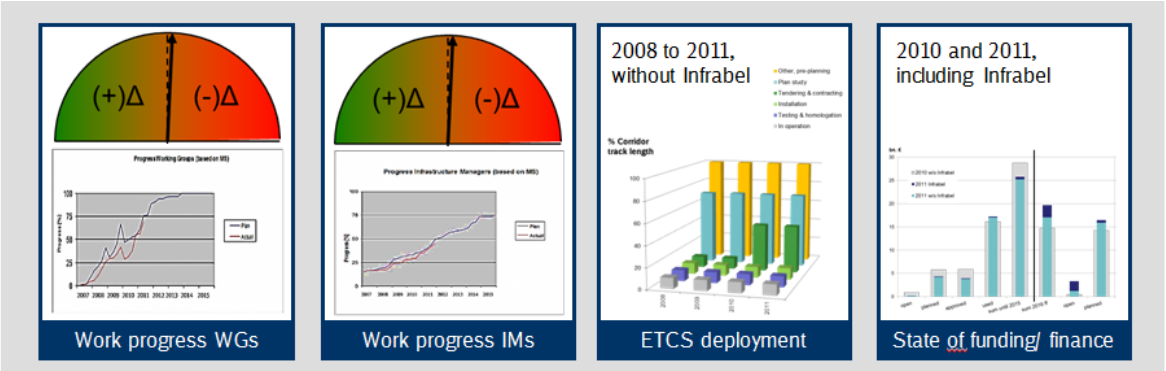


Figure 1: Management Dashboard 2011 (part 1)

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

The progress of the corridor performance can be seen in figure 2. Economic recovery continued in 2011 despite the financial crisis. So traffic growth has been weaker on destinations from/to Italy compared to destinations between the Belgian/Dutch seaports and Germany. Train figures via the Swiss-Italien border points (Domodossola, Chiasso and Luino) increased by 4.4%, via Basel (CH – D) by 5.4%; Emmerich (NL – D) saw an increase by 21% and Montzen/Aachen West (BE – D) by 12.8%.

The part of rail transport in the modal share has grown by roundabout 1%. This development was mainly influenced by an increase of hinterland traffic from the Belgian and Dutch ports as well as Trans-Alpine rail traffic which recorded the best result so far (64,9% market share of rail).

Reduced capacity by construction works and temporary line closures due to force majeure (landslides, floods) had a negative impact on punctuality of the Rolling Highway service.

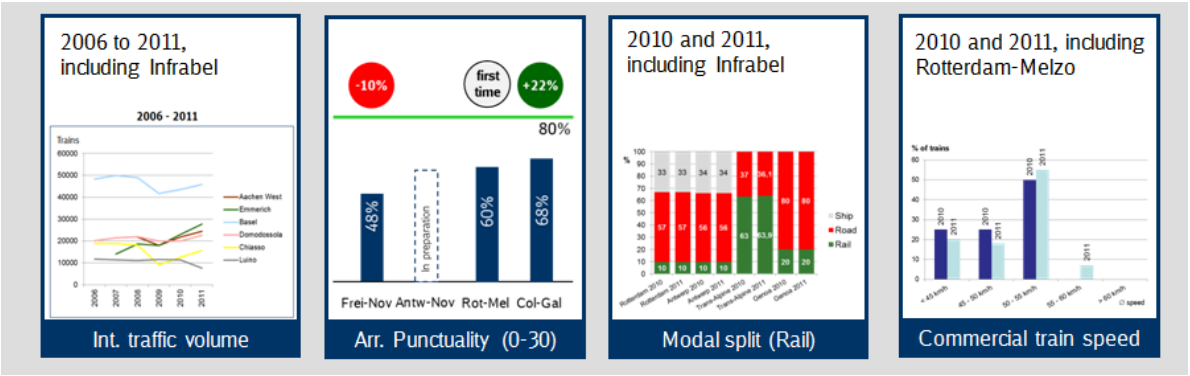


Figure 2: Management Dashboard 2011 (part 2)

0.2 Management Summary

The European Rail Freight Regulation 913/2010, which came into force in November 2010, required the set-up of a new working group for taking care of its implementation. Main activities and achievements had been the agreement on common core requirements, the verification and commenting of the implementation handbook published by the EC, and the preparation of concepts as input requirements from our corridor towards the working groups of RNE. Furthermore the working group reviewed and prepared feedback on the RNE working group results in order to ensure a good reflection of the requirements of our corridor IMs in the RNE guidelines.
The Executive Board of ministries convened a task force for the monitoring of the implementation process of the corridor IMs and steering of those tasks which are in the responsibility of the ministries. The corridor IMs where represented in the task force meetings and reported about their progress and proposed concepts. Representatives of the EC are also invited to the task force meetings to support in the correct interpretation of the regulation respectively handbook recommendations.

In the context of EU Regulation 913/2010, the ExB of Corridor A made the transition into the ExB of Corridor A/1 in 2011. A task force was set up by the ministries which proposed a new mission statement for the ExB of Corridor A/1. This mission statement was approved on 27th June 2011 at the occasion of the Antwerp Corridor Conference.

The set-up of the “Terminal Advisory Group” (TAG) required the selection of two to four terminal operators per country as TAG members for representing the interests and obligations of all terminals along the corridor. The Executive Board supported the selection process to avoid any assumption of discrimination by the IMs. The Belgium ministry organised a terminal workshop with presentations from Corridors A/1, C/2 and F/8 in order to inform the terminal operators in Belgium about their obligations in this respect, as well as our concepts and framework conditions for the TAG. By the end of 2011 the ministries had nominated all TAG members except for Italy, where the process need more time.

The cooperation in the framework of the CODE 24 project with various communities, regions and cities close to Corridor A/1 continued in 2011. The Managing Director of the EEIG Corridor Rotterdam-Genoa as a member of the Political Steering Board (PSB) of CODE 24, took part in the PSB meeting and the workshops of the four work packages in Torino.

After the German MoT had decided in November 2010 to implement ETCS level 2 in the entire German part of the corridor, the MoT has revised its decision in June 2011 by publishing a new deployment strategy, which foresees no trackside ETCS implementation until 2015 but indicates funding of STM equipment for locomotives instead, in order to establish interoperability. As this new strategy is not in line with previous commitments, it was basically rejected by the European Commission, the other MoTs of the corridor and the

IMs. The German MoT was asked to submit a detailed analysis providing reasons for this decision, respectively an analysis of suitable options for ERTMS trackside implementation which are still possible in the opinion of the EC.

Despite this, in Switzerland the roll-out of the remaining entire network with ETCS has been tendered and contracted, to be ready until 2015 on the corridor sections and until 2017 on the entire network. Italy has decided to abandon the idea of Radio Infill and is investigating the implementation of a mix of level 1 and 2.

The corridor working group of the NSAs could complete a first draft of the corridor guideline for testing and authorisation, which will be a major step forward regarding predictable and successful authorisation. The corridor ERTMS working group conducted a cross border impact analysis in close liaison with the ERTMS Users Group in Brussels, who carried out the detailed study as a contractor of the corridor. 71 potential risks had been identified and ranked, which need to be managed in the further process of implementation. This risk analysis will support the IMs in their strong intention to carry out the implementation of ETCS in the corridor in the most economical manner as well as providing highest quality and performance.

The bilateral working groups for the border sections Zevenaar / Emmerich and Basel node progressed very well in preparing the basic concepts for the border crossing engineering of ETCS at both borders, as well as the connection of third track and the traction power transition at Zevenaar / Emmerich. Furthermore, bilateral working groups for the three border transitions between Switzerland and Italy could be implemented.

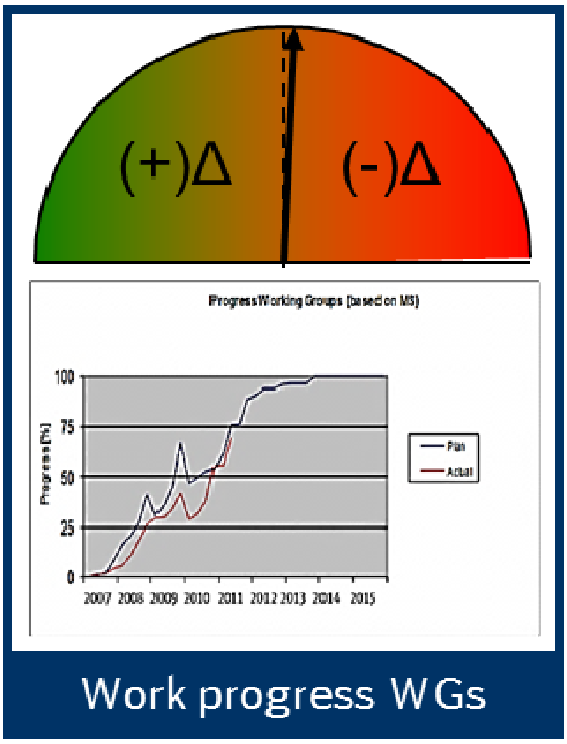
Regarding the financing of our corridor activities, together with Corridor C/2 the EEIG applied for co-financing for the Transport Market Study, the study on 740 m long trains and the study for the implementation of the corridor information management system in the frame of the third TEN-T call 2011-2014. The TEN-T Executive Agency approved our application for the full amount; the final decision is expected beginning of 2012.
The EEIG considers this as a sign of high trust in our work and a strong recommendation of the European Commission to continue the efforts in developing Corridor A/1.

1. Activities on corridor level

1.1 Work results in 2011

Work progress of WG activities

Figure 3 indicates the work progress of the corridor WGs which sums up to 72.3% compared to 79% planned work progress. The works could not fully cope with the baseline which did not include new tasks that came up in 2011. Not least a new WG Freight Regulation was created in January 2011 to fulfil the obligations of the EU Regulation 913/2010. These tasks had to be integrated in the baseline. Participants from Infrabel have been integrated in all WGs.



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

Although the work of the WG Operations has been interrupted between May 2009 and May 2010 (leader of WG had to be replaced) the decision cards for harmonisation of operational rules have been completed.

The WG Capacity adopted the execution of a Transport Market Study (TMS) as a new task from the EU Regulation 913/2010. In 2011 a subgroup TMS has been initiated which prepared the terms of reference and the tendering process. In parallel the WG started preparation of a study about the feasibility of longer trains (740m) on the corridor.

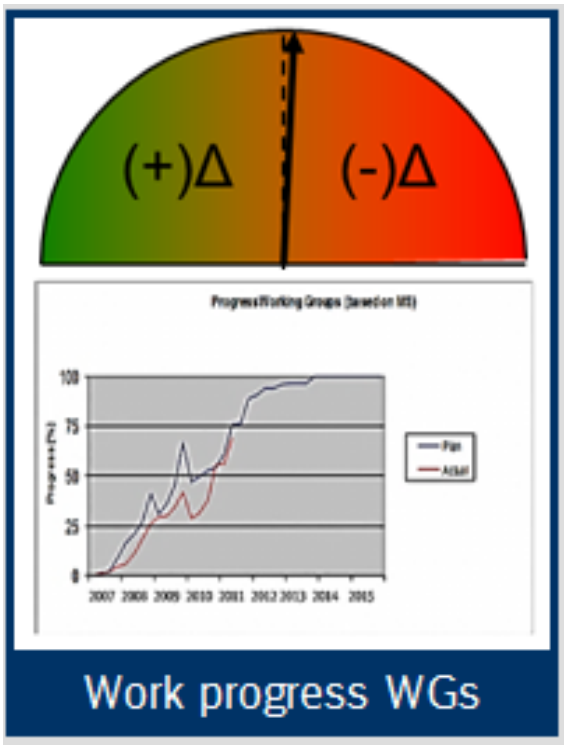
Nevertheless the regular work programme for the period 2009 – 2011 has been completed on time. The work programme and the baseline have been updated (starting in 2012).

In 2011, WG Traffic Quality started regular monitoring of trains on the route Rotterdam – Melzo. Train data between Belgium and Italy have been analysed; monitoring shall start in 2012. In January 2011, twelve pre-arranged paths have been offered for the first time to the RUs that stretched out from terminals in Belgium and the Netherlands to terminals in Italy (path catalogue 2012). Each path crossed more than one border. All twelve pre-arranged paths of the new type have been requested and allocated. In the past pre-arranged paths mostly have been offered just on the border lines.

The WG ERTMS is behind the planned progress because decisions taken outside the influence of the WG do not allow following the intended programme. The new baseline will reflect this and the results of a Cross Impact Analyses (CIACA) delivered by the EEIG ERTMS Users Group in fall 2011.

Work progress of IMs project implementation

The actual progress of the projects of the IMs sums up to 45.1% vs. 48.7% planned work progress, see figure 4. In figures, the backlog increased from 1.3% to 3.6% compared to the year before.



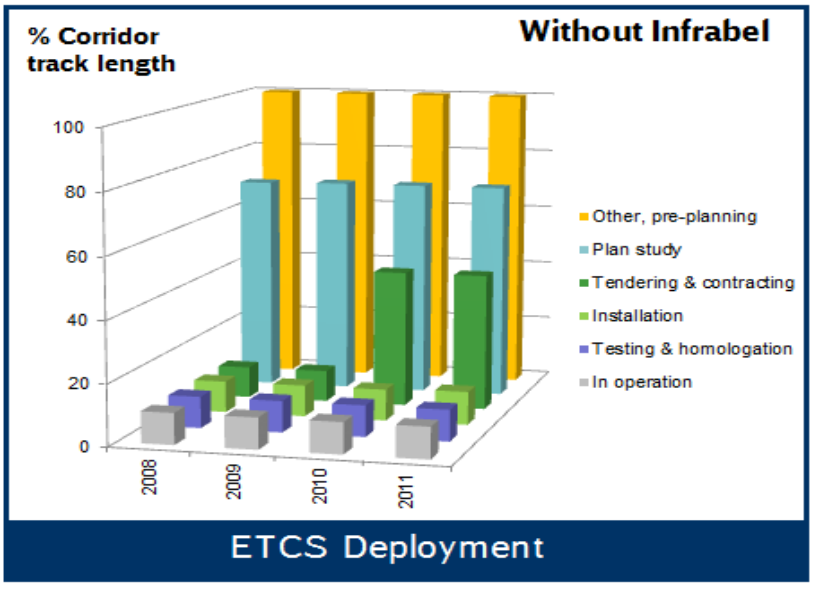
Definition: percentage [%] of the total work amount completed, based on completed project phases (IMs) or activities (WGs) of the baseline (earned value). The blue line displays the planned work progress whereas the red line shows the actual work progress. The speedometer indicates the trend of the delta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

Figure 4: KPI Work progress IMs

Most of the infrastructure projects in Switzerland are still on-going and well on schedule. The tube of the Gotthard base tunnel could be completed before the scheduled target date.
As a result of the financial crisis the funding of projects in Italy is widely uncertain which leads to delays. In the section Oberhausen to Schliengen Germany stopped the plans for upgrading of those interlockings, which are not yet under construction, as well as the other ERTMS related projects after the decision was taken not to install ERTMS on the existing lines until 2015. The figures do not include the extension from Cologne to Antwerp and Zeebrugge as the baseline will be adjusted from 2012 on.

ETCS deployment (on basis of the LoI in 2006 about monitoring ETCS deployment, meaning Infrabel is not included)

In 2011, SBB finished tendering for ETCS Level 1 LS on the lines of Corridor A/1 in Switzerland. Subsequently, 1.423 track km are now in the tendering & contracting phase (figure 5). Switzerland is right on track to complete ETCS installation on the corridor lines until the end of 2015.
ETCS deployment at DB Netz has been interrupted due to the decision of the German Ministry to install a STM solution instead of ERTMS. As a consequence Italy took its strategy under revision; no tenders have been issued in 2011.
In the Netherlands the process was delayed due to evaluation and decision making about ETCS Level 1 or 2 on the border line. In regard of the L2 decision in the NL completion of ERTMS and implementation of 25 KV between Emmerich and Zevenaar is scheduled for the end of 2016.



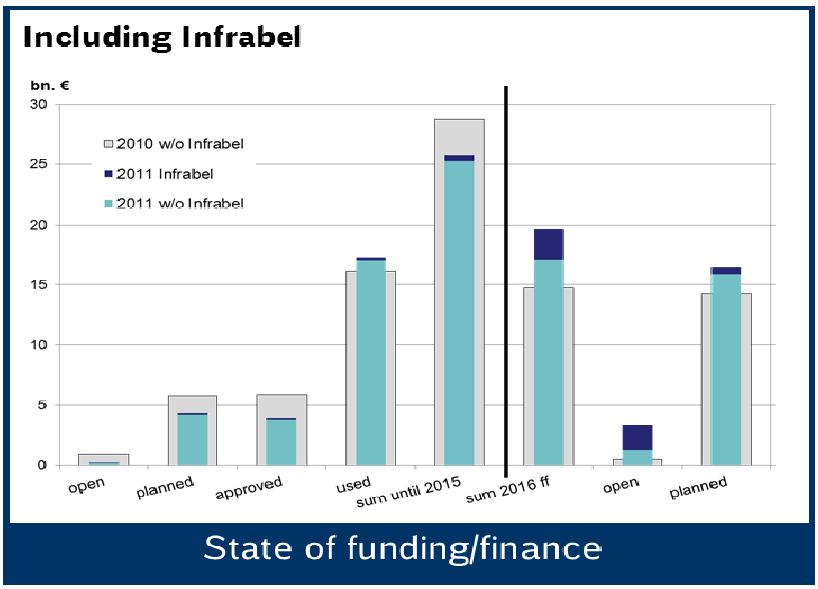
Definition: Yearly progress in [%] of ETCS corridor single track length [Basis 4171 km] which passed through the phases of pre-planning / plan study / tendering & contracting / installation / testing & authorisation or in operation.

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 2011 in comparison to 2010.

In 2011 investments of circa 1 bn. Euros have been accomplished. By this the total sum of used budgets increased by 5% to 17 bn. which is not sufficient to achieve the objectives by 2015. Basically it also has to be noted that funds have been shifted to the period after 2015. Taking Infrabel into account overall budgets increase by 7% to 46.5 bn Euro. Additional budgets in Belgium primarily relate to the period after 2015 and are predominantly not yet confirmed.

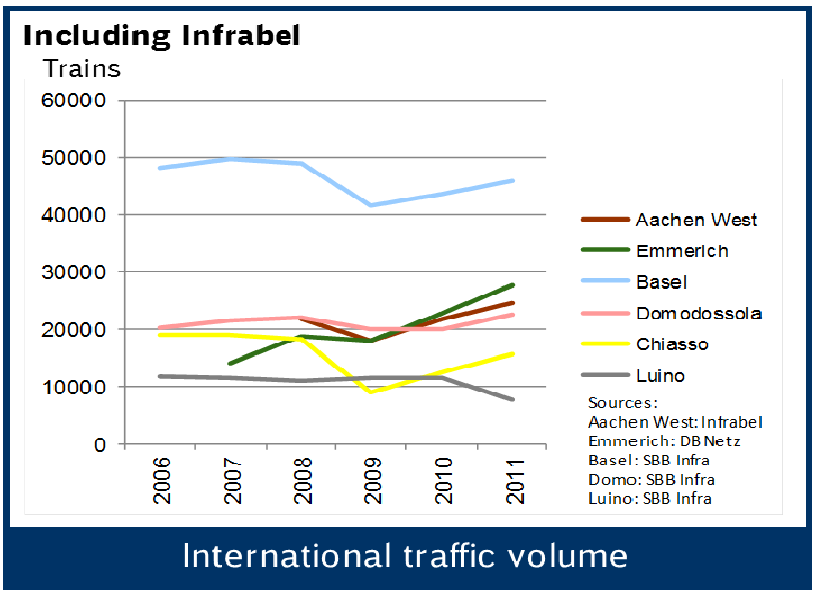


Definition: amount of planned/ approved/ open/ used budget [bn. €] for all kinds of Corridor A/1 projects (interoperability, bottlenecks, total service concept) as per 31.12.11 related to the total budget planned until 2015 (open, planned, approved, used, total) respectively from 2016 to 2025 (total, open, planned).

Figure 6: KPI funding

International traffic volume

A new multi-annual chart (figure 7) shows the development of the last years. In general, 2011 has been another year of growth for rail traffic on the corridor. In an overall perspective traffic via the corridor border points increased by 9%. Emmerich benefited strongly from iron ore traffic (3000 trains/a) gained from Venlo and new customers on the Betuwe line. Only Luino lost due to heavy works (partly closure). While traffic demand via Montzen / Aachen West and Emmerich / Zevenaar hardly has been influenced by the economic crisis in 2009 due to stable economy in Germany and strong demand for Hinterland traffic in the Belgian and Dutch ports, train figures in Basel, Chiasso and Luino are still below 2008.



Definition: number of international freight trains per year crossing one (or more) of the border stations of Corridor A/1 in both directions, regardless of origin or destination.
Border stations are:
NL-DE: Zevenaar/ Emmerich
DE-BE: Aachen W./ Montzen
DE-CH: Basel
CH-IT: Domodossola, Chiasso and Luino

Figure 7: KPI international traffic volume

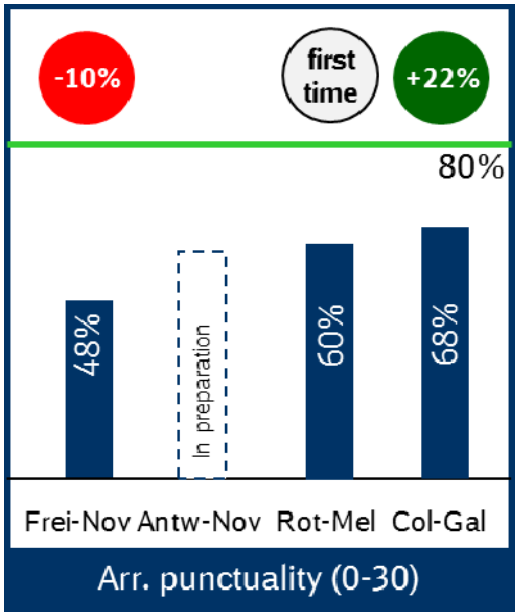
Figure 8 displays the data stored in the graphic of figure 7

2006	Aachen West	Emmerich	Basel	Domodossola	Chiasso	Luino
2007 (year)			48.250	20.158	18.848	11.738
2007	**Aachen West**	**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	**Aachen West**	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2008 (year)	21.825	18.592	48.947	21.908	18.196	11.073
2009	**Aachen West**	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2009 (year)	18.005	17.892	41.669	19.979	9.042	11.568
Delta to 2008	- 3.820	- 700	- 7.278	- 1.929	- 9.154	495
Delta in %	- 17,5	- 3,8	- 14,9	- 8,8	- 50,3	4,5
2010	**Aachen West**	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2010 (year)	21.698	22.871	43.552	20.023	12.477	11.463
Delta to 2009	3.693	4.979	1.883	44	3.435	- 105
Delta in %	17,0	21,8	4,3	0,2	27,5	- 0,9
2011	**Aachen West**	**Emmerich**	**Basel**	**Domodossola**	**Chiasso**	**Luino**
2011 (year)	24.471	27.674	45.899	22.625	15.671	7.589
Delta to 2010	2.773	4.803	2.347	2.602	3.194	- 3.874
Delta in %	12,8	21,0	5,4	13,0	25,6	- 33,8

Figure 8: KPI international traffic volume - Absolute data

Arrival punctuality (0 – 30 min)

The punctuality figures 2011 are shown in figure 9. The figures relate to the overall quality of all involved stakeholders. The KPI from Rotterdam to Melzo is available for the first time after validity problems have been solved. Taking into account the increase of traffic (figure 8) the overall development of punctuality was notable.



Definition: average punctuality level (arrival at destination within a 30 minutes time span) for selected relations of: Freiburg–Novara; Rotterdam–Melzo (new) and Cologne–Gallarate (all start/ end points of these transport relations are directly located on Corridor A/1). A level of 80% is targeted.

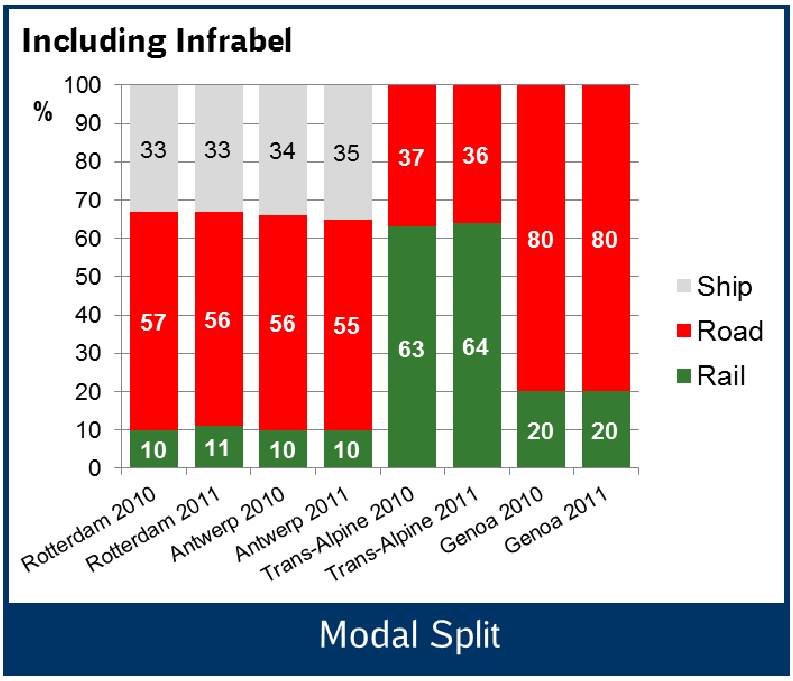
Figure 9: KPI punctuality

Some major events affected punctuality in 2011: derailment in Olten, fire in Simplon-tunnel, flooding and landslides in Central Switzerland and heavy works between Emmerich and Oberhausen. Trains of the Rolling Highway system further on have been affected by works between Freiburg and Basel and conflicts with passenger services; punctuality dropped by 10%. On the contrary a higher punctuality of trains between Cologne and Gallarate could be observed. Trains between Rotterdam and Melzo performed somehow on average which is not bad for such a long route. Regarding Antwerp – Novara in 2011 experts of the WG Traffic Quality checked the validity of data and prepared regular analysis and will be included in 2012.
The targeted value of 80% punctuality could not be reached.

Modal split

The modal split for Corridor A/1 is illustrated in figure 10. In 2011 the share of Trans-Alpine rail traffic increased to 64%, the highest ever recorded percentage. In the seas ports Genoa shows a stable situation while moderate modal shift from road to other modes can be observed in Antwerp and Rotterdam (barge respectively rail increased by one per cent while road lost one per cent). Regarding Rotterdam obstacles by low-water levels and accidents in the middle section of the Rhine have favoured transport by rail. Since the Port of Antwerp

primarily serves Hinterland destinations within a radius less than 250 km barge was in a position to gain market share by one per cent while road lost in the same extend. Rail is used mainly for long distance haul. Also a certain share of long distance freight is shipped to German inland ports as additional cargo and reloaded to rail or road in the connected terminals.



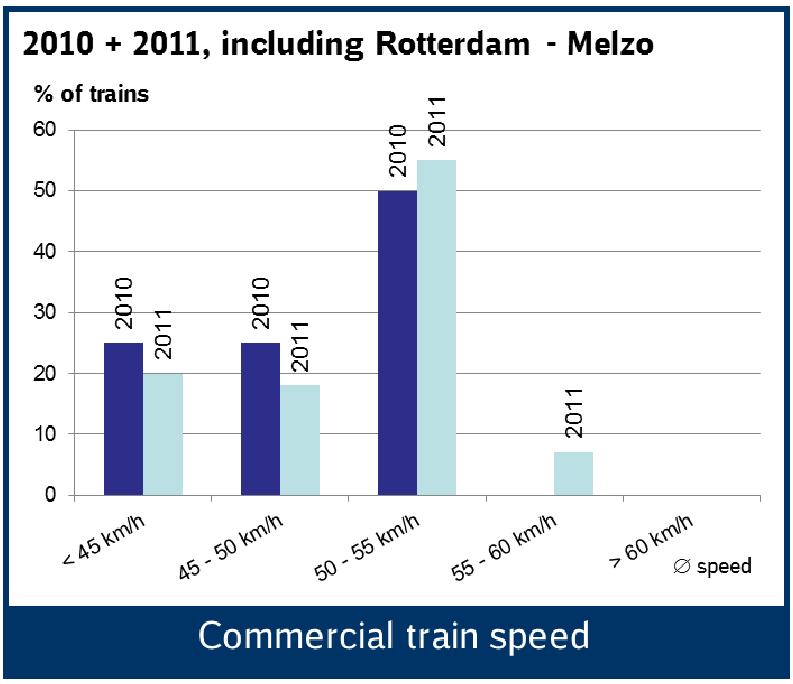
Definition: modal split [%] of freight traffic at sea port of Rotterdam, sea port of Genoa and trans-alpine. For Rotterdam and Genoa the modal split is calculated based on TEUs (containers) for the Hinterland traffic. For the trans-alpine freight traffic the basis is net tons. It is separated by rail,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

Figure 10: KPI Modal split (Rail)

Commercial train speed

Figure 11 shows the distribution of commercial train speed for three selected traffic relations on Corridor A/1. 25 pairs of trains were analysed. The result of the analysis shows a general increase of the average train speed offered to the customers. The minimum speed in 2011 has been 32.4 km/h whereas the fastest connection offers 58.6 km/h according to the timetable. In 2011, the average speed of all measured trains is 50,2 km/h. The fastest train paths are offered on the short distance, average speed is slowing down with the length of the train path. There are several reasons:

a) On the long distance, trains are more frequently affected by waiting times (overhaul, construction works, e.g.)
b) More handover situations at borders or between cooperating RUs require more buffer time
c) On the long distance path construction takes more buffer time into account for recovery of delays



Definition: average speed [km/ h] of trains according to valid time table for selected relations: Freiburg–Novara; Rotterdam–Melzo and Cologne –Gallarate (all start / end points of these transport relations are directly located on Corridor A/1) 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 2011 values in the context of the previous year and the target 2015. In addition, it shows the delta in absolute or relative figures. The value of the KPI ETCS Deployment (figure 5) differs compared to last year's report due to a change in the exposition the of the data base. In 2011 a remarkable reduction of open, planned and approved budgets until 2015 has to be noticed, essentially caused by the German decision not to implement ERTMS on the corridor on time. The figures include Infrabel except for two figures.

KPI	2010 (Actual)	2011 (Actual)	Delta [%]	2015 (Target)
Work progress WGs [%]	55.3	72.3	22.7	100
Work progress IMs [%] (without Infrabel)	34.6	45.1	30.0	81
ETCS deployment [%] (without Infrabel)				
Pre-planning, other	100,0	100,0	±0	-
Plan Study	71,2	71,2	±0	-
Tendering and Contracting	45,0	45,0	±0	-
Installation	10.3	10.9	+5,8	-
Testing and homologation	10.3	10.3	±0	-
In operation	10.3	10.3	±0	100
State of funding [bn. €]				
Open	1,0	0,2	-80	-
Planned	5,8	4,2	-28	-
Approved	5,9	3,8	-35	-
Used	16,1	17,0	+6	25.3
Int. traffic volume [trains]				---
Montzen / Aachen West	21.698	24.471	+13	
Emmerich / Zevenaar	22.871	27.674	+21	
Basel	43.552	45.899	+5	
Domodossola	20.023	22.625	13	
Chiasso	12.477	15.671	+26	
Luino	11.463	7.589	-1	
Arrival punctuality [%]				
Rotterdam – Melzo	N/A	60	N/A	80
Antwerp - Novara	N/A	N/A	N/A	80
Freiburg – Novara	54	48	-10	80
Cologne – Gallarate	56	68	+22	80
Modal split rail [%]				
Port of Rotterdam	10	11	+1	
Port of Antwerp	10	11	±0	
Trans alpine	63	64	+2	
Port of Genoa	20	20	±0	
Commercial train speed [%] of trains above average 50 km/h	50	62	+24	

Figure 12: Development of KPIs

1.2 Summary of general activities 2011

Terminal platform meetings of the ministries
The Ministries organized two terminal platform meetings in 2011, one in April (Duisburg) and another in September (Antwerp). Central topics were the opening of the EOPT tool (now Train Information System - TIS) for terminal managers and the setup of a terminal advisory group. At the second meeting the procedure for the selection of TAG-members was presented to the representatives of the terminals.

Task Force meeting by the ministries
The Executive Board of Corridor A/1 appointed a special task force as a working group with the objective to deliver a strategic approach for the implementation of EU Regulation 913/2010 for Corridor A/1, and to propose a new mission statement for the Executive Board. The new mission statement for the Executive Board of Corridor A/1 was approved in June 2011. The task force met 5 times throughout the year.

Political advisory board CODE 24 project
The political advisory board and regional steering group meeting of CODE24 took place on 21 September 2011 in Turin. Corridor A/1 was represented by Stefan Wendel. Topics included:

- Stimuli for regional economic development in the logistics sector on the corridor
- Overviews/consequences in terms of spatial and infrastructural development of the corridor
- Noise issues in planning decision-making processes on the corridor

Railway undertakings advisory board
One RU advisory board meeting took place on 16 February 2011 in Frankfurt. Furthermore, a workshop with the members of the RU advisory board was organised on 18 May 2011 at the premises of the EEIG ERTMS Users Group in Brussels. The level of attendance of both was good. Main topic was the discussion of requirements from EU Regulation 913/2010. A questionnaire has been presented and RUs were asked to provide comments until the end of June; it was planned to discuss the answers in the next meeting. After the meeting a group of RUs decided not to answer the questionnaire but to develop a common position paper on European Freight Corridors in general. This position paper was published in December 2011.

CEO meeting Corridor A/1
The CEOs of Corridor A/1 met in Frankfurt on 31 May 2011. They were informed about the current status of the corridor programme and requirements from EU Regulation 913/2010. The participants appreciated the information provided and expressed their expectations about the alignment for the next year. Regarding EU Regulation 913/2010 the corridor organisation was asked to focus its work even more on essential priorities and measurable results such as market oriented requirements and ERTMS implementation.

From the discussions, the following tasks were assigned to the corridor organisation:

- Sharpening the definitions and the layout regarding the funding status
- Improvement of the long term traffic prognosis
- Solutions to concepts regarding the implementation of EU Regulation 913/2010

The next CEO meeting shall be organised in connection with the High Level Infrastructure Meeting of CER and EIM at the end of May 2012.

Workshop of the Management Committee

From 26-28 March 2011, a MC workshop was held with the members of the Management Committee in Gelnhausen in Germany who were joined by their Programme Infrastructure Managers (PIMs) on the last day of the workshop. The agenda included the following:

- Extension to Antwerp/ Zeebrugge, update implementation plan
- Longer trains, implementation strategy
- Ministers Declaration Antwerp, position of the corridor
- ZEUS feasibility study, update and how to continue
- Rail Freight Regulation 913/2010, Transport Market Study, OSS, RNE role
- Track access charges, recommendations for CEOs
- ERTMS corridor implementation plan
- Corridor reporting, content, structure, layout
- MC, PMO, WGs objectives and expectations
- Vision/ mission statement 2011/2012

Fruitful discussions were held and targets and to-do's for the future determined.

TEN-T Call

On 28 June 2011, the TEN-T Executive Agency of the European Commission launched the 2011 ERTMS Multi-Annual Call for proposals. Corridor A/1 submitted a multi-beneficiary call together with Corridor C/2 for the funding of the Transport Market Studies of both corridors as required by the EU Regulation 913/2010. In addition, Corridor A/1 applied for funding for a study on longer trains and the set-up of the implementation plan. The final decision is expected for early 2012.

Corridor conferences Antwerp and Rotterdam

On 27 June 2011 the Federal Public Service of Mobility & Transport together with Infrabel, Antwerp Port Authority and the European Commission held a conference on the development of European rail corridors for freight transport in Antwerp. The conference linked up policymakers, track operators, rail companies and customers. Participants were treated to presentations of the current situation regarding corridors and the future plans. Various rail companies and major users outlined their vision of their needs and expectations.

The Swiss Federal Office of Transport and the Swiss Embassy organised the first international Corridor 1 conference on 9 November 2011 in Rotterdam, to be repeated in

various countries along the Corridor 1 in the coming years. The idea behind the series of conferences is to engage politicians, experts, citizens and companies, in each of the countries linked to the corridor, in discussion about the future development of international freight transport.

Corridor A/1 was represented at both occasions by Stefan Wendel who also contributed to the conferences as active speaker and promoted the corridor.

Representative for National Safety Authorities

In order to support the work of the NSAs with regard to test specifications and other safety issues, the EEIG contracted an ERTMS expert for the assistance of the NSA working group in order to facilitate their work.

Communication and promotion

The extension to Antwerp/Zeebrugge had to be integrated into the corridor communication. The routing and connection of the corridor to Belgium was included into the corridor map as shown in figure 13.

Figure 13: New corridor map including branch to Belgium

The corridor website as well as the corridor brochure in leporello fold (figures 14 & 15) were updated and newly include information about the extension to Belgium and the cooperation with Infabel.

Besides www.corridora.eu, the corridor website can be additionally accessed via www.corridorone.eu and www.corridor1.eu. The corridor brochure was published on the website and distributed in print to the participants of the corridor conferences in Antwerp and Rotterdam.

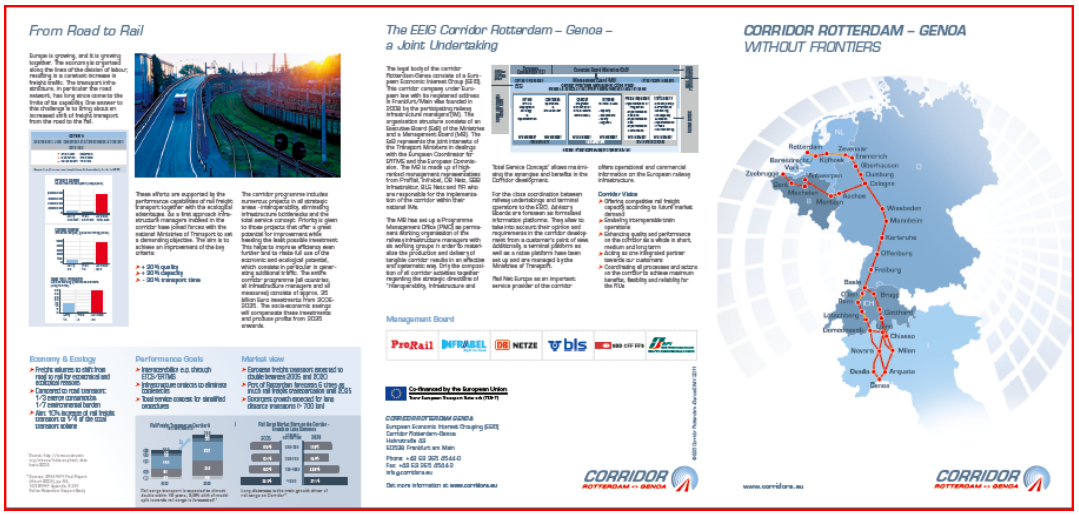


Figure 14: New corridor brochure (Outside pages)

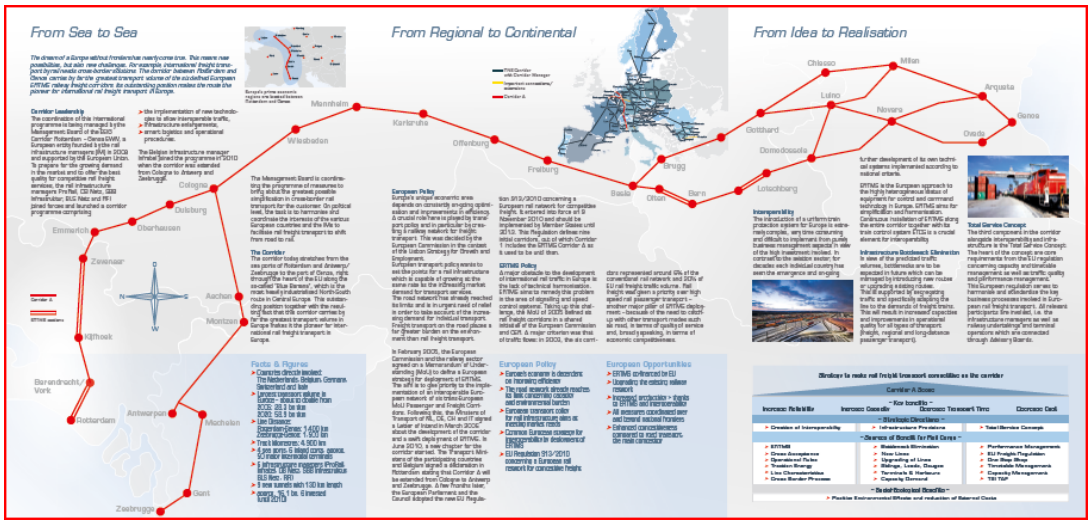


Figure 15: New corridor brochure (Inside pages)

1.3 Outlook for 2012

Activities in 2012 will include:

- Start of implementation of EU Regulation 913/2010
- Adaptation of governance structures according to EU Regulation 913/2010

- Strengthening of working structures (WGs, new baseline) by reviewing and adapting to changed scope of work
- Set up of Terminal Advisory Group (TAG)
- Evaluation of STM-strategy in Germany
- CIACA risk management plan
- Baseline 3 legalisation
- Execution of Transport Market Study
- Tendering and execution of Data Management Study

1.4 Organisation

The legal body of the Corridor Rotterdam-Genoa consists of a European Economic Interest Grouping (EEIG). This corridor company under European law with its registered address in Frankfurt/Main was founded in 2008 by the participating railway infrastructure managers (IM) from the Netherlands (ProRail B.V.), Germany (DB Netz AG) and Italy (RFI S.p.A.). The Swiss IMs, SBB Infrastruktur and BLS Netz AG, joined as associated partners since companies from non-EU member states – such as Switzerland – cannot join an EEIG as an official member. In 2011, also Infrabel joint the corridor by means of a cooperation agreement.

Since the beginning, Claudia Cruciani of RFI has acted as Deputy Managing Director and Stefan Wendel of DB Netz as Managing Director of the EEIG. In 2011, the General Assembly was chaired by Klaus Junker (DB Netz); further members were Umberto Foschi (RFI) as well as Guus de Mol (Keyrail) who took over the mandate from Hugo Thomassen (ProRail). The associated partners were represented by Nicolas Germanier (SBB Infrastruktur) and Felix Loeffel (BLS Netz AG). Guy Vernieuwe (Infrabel) participated as observer.

The overall corridor organisation including the EEIG is shown in figure 16.

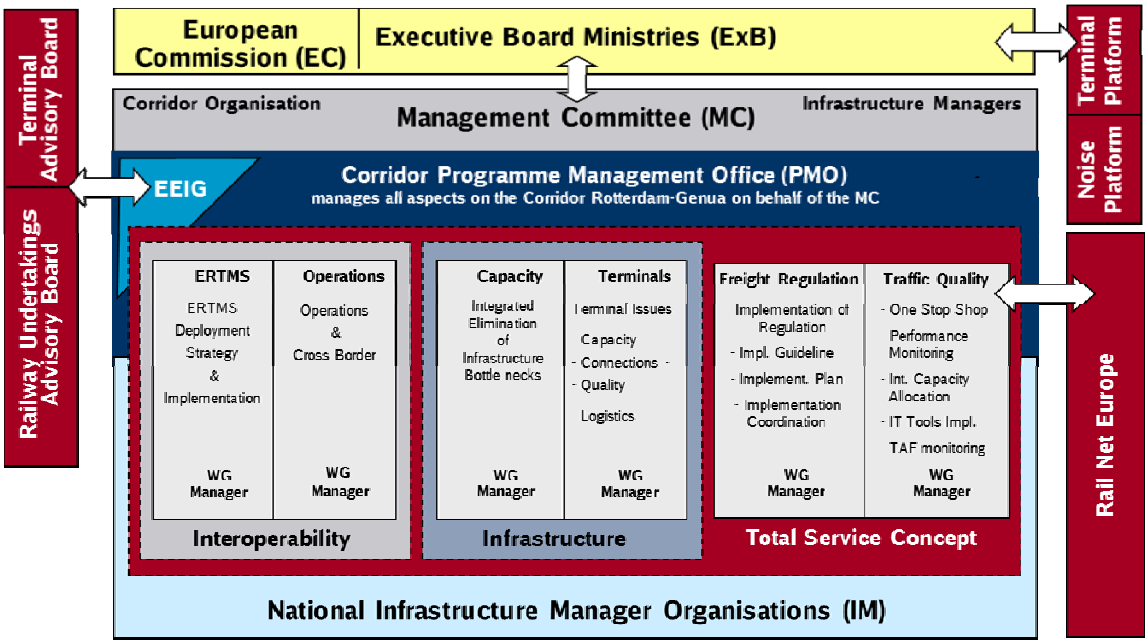


Figure 16: Corridor Organisation 2011

The organisation structure consists of an Executive Board (ExB) of the Ministries and a Management Committee (MC). The ExB represents the joint interests of the Transport Ministers in dealings with the European Coordinator for ERTMS and the European

Commission. The MC is made up of high-ranking management representatives from ProRail B.V., DB Netz AG, SBB Infrastruktur, BLS Netz AG and RFI S.p.A. who are responsible for the implementation of the corridor within their national IMs. They were joint by the representative of Infrabel in 2011.

The Management Committee set up a Programme Management Office (PMO) as permanent working organisation of the railway infrastructure managers with six working groups in order to materialise the production and delivery of tangible corridor results in an effective and systematic way. Only the composition of all corridor activities together regarding the strategic directions of “Interoperability, infrastructure and total service concept” allows maximising the synergies and benefits in the corridor development.

In 2011, the hitherto existing WG structure was analysed and finally revised to adapt to the tasks from the EU Regulation 913/2010. A new WG, dealing with the overall issue “Freight Regulation” was set-up, while the WG TAF TSI was dissolved and remaining projects assigned to other WGs.

1.5 Monitoring & Reporting Methodology

The working methodology of the corridor organisation remained basically unchanged in 2011 except for minor adjustments based on experience gained. For interested or new readers, detailed explanations can be found in annex C.

1.6 Release Notes & Contact Details

This report has been set up, reviewed and finalised between November 2011 and April 2012 by the working organisation of the Management Committee of Corridor A/1 and 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), Infrabel (BE), 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/1 programme please contact:

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2. 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.

- ERTMS (IQ-C Action Item #8): Stefan Wendel
- Operations (IQ-C Action Item #6, #10): Sebald Stumm
- Capacity (IQ-C Action Item #5): Gabrio Caimi
- Terminals (IQ-C Action Item #9): Thomas Schneider
- WG Freight Regulation (IQ-C Action Item #2, #13): Mathias Ebel
- Traffic Quality (IQ-C Action Items #1, #2, #3, #4): Hansruedi Kaeser

A cross reference table mapping the IQ-C action items with the structure of the annual report can be found in figure 34 (Annex D).

2.1 ERTMS (IQ-C Action Item #8)

2.1.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	92	**WG Result [%] Actual**	79
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

2.1.2 Work Progress

2.1.2.1 Achievements

According to the above KPI with an actual work progress of 79% versus 92% planned, the ERTMS working group may appear to be far behind schedule. This is due mainly to the following reasons:

- The work plan also includes activities and work results required for the ETCS implementation on Corridor A, which will be delivered by non-corridor national and

European working groups of the ERTMS Users Group, NSAs, UIC, ERA and IMs. The progress of these working groups is beyond the control of the corridor organisation.

- The effort has considerably grown for some activities due to multiple changes in scope and some national implementation strategies. This is not yet been reflected in the baseline above.
- Some work results could not be delivered as scheduled because political decisions in Germany do no longer allow the continuation of the implementation programme as intended.

However, although the overall ERTMS progress is behind schedule, the working group ERTMS was very busy reviewing and adopting their work to the changing conditions. In the beginning of 2012, the baseline has to be adjusted in order to account for above issues in order to depict the realistic progress again.

In 2011, the working group ERTMS continued its work with the regular members Adri Verbraak (ProRail), Martin Zürcher (SBB/ BLS), Didier Léautey (DB Netz) and Stefan Wendel of the EEIG as working group manager. Giovanni Zanelli (RFI) left his company and hence the working group at the end of 2010. No substitute was nominated by RFI in 2011 and consequently the working group had to cope without a representative of RFI.

Nonetheless, Jean-Luc Ghisbain joined as new member from Infrabel and it could be arranged that Stefan Bode of DB Netz who also takes part in the NSA working group, as well as Hugh Rocheford of the ERTMS Users Group attended the meetings as standing guests. This ensured the linking of all relevant parties in an effective manner. For specific topics the WG was further supported by additional experts from the corridor IMs.

The working group meetings are scheduled on a monthly basis.

Common strategy Corridor A (PSP 2.1)

Based on the decision of the German MoT of November 2010 to deploy level 2 only on the German section of the corridor, the WG ERTMS reviewed the ETCS implementation on the corridor with the aim to prepare and propose a final implementation plan to the ExB which would account for seamless ETCS operation along the entire corridor by the end of 2015. The negotiations between MoT and DB Netz for the funding started accordingly. However, due to the fact that the requested level 2 installations in Germany requires the upfront renewal of the mechanical and electronic interlockings, maintaining 2015 as target date turned out to be unrealistic.

End of June 2011, the German MoT changed its strategy and informed that in order to achieve interoperability by 2015; the German government will pay RUs for equipping their locomotives with “Specific Transmission Modules” (STM) which enable ETCS equipped locomotives to capture the existing national ATP systems. The track side installation of ETCS will be postponed until the end of the lifetime of the national systems is reached and their renewal will be necessary. This new strategy generated intensive discussions with the

German MoT on the level of the European Commission, ministries and ExB as well within the MC members. None of the parties was willing to accept the German STM decision unless the German MoT proves in detail that there are no other possibilities to reach the given target of track side installation. Until the end of 2011, no documentation was provided.
Despite the changes in Germany, ProRail, SBB and BLS as well as RFI confirmed to continue ETCS track side implementation as planned. However, they expressed their concern about possible impacts on the corridor development and ETCS migration by the Germany STM decision. As a result, the WG ERTMS was kept busy in preparing an impact analysis, discussion papers and trying to develop a common corridor implementation plan considering all these difficult circumstances.

The WG ERTMS focused additionally on the analysis of cross impact risks in ETCS implementation along the corridor because of the limited experience and little knowledge about international ETCS installation projects and the state of maturity of products, test and authorisation procedures, as well as of interoperability and the organisation of cross border installation projects. Early in 2011, the EEIG Corridor Rotterdam-Genoa contracted the ERTMS Users Group for the elaboration of a “Cross Impact Analysis for Corridor A” (CIACA).

The following scope of risks was assessed in detail:
- Risks concerning cross border connections
- National implementations as far as a change of baseline or level is concerned
- Safety aspect in the cross impact analysis
- Connection to Corridor C in Basel

Issues out of the scope:
- Belgian section of the corridor (since it is not planned to enter into service by 2015)
- Risks related to financing and politics

The risks are categorised as follows:
- Interoperability risks
  - Technical risks: related to implementation
  - Operational risks: related to the national operational rules
- Organisational risks
  - Management: the programme management as well as the organisation by each Infrastructure Manager
  - Timing risks: different time frames used all over Corridor A
  - Project experience: human resources needed for the ERTMS/ETCS implementation all over Corridor A
  - Information: processes to manage the information exchange between parties involved
- Legal aspects
  - EU legislation: the context as being defined by the European Union

  - National legislation: the legislation of the four countries involved in Corridor A
- Contractual risks
  - Contractual risks: risks that have to be considered when closing corridor related contracts by an IM with a supplier of ERTMS equipment in order to mitigate risks with specific conditions in a dedicated contract
  - After Sales risks: risks that emerge after the contract between IM and supplier has been executed (during after sales period)

The analysis also includes the transition between ERTMS and Class B signalling systems. The impact of existing interlocking equipment on the ERTMS signalling equipment was taken into consideration too, as well as the influence of different operational rules in the countries concerned.

In the frame of CIACA, the WG ERTMS was actively involved in interviews of all relevant stakeholders, preparation of the national aspects and delivering data and information, as well as checking and commenting the works of the contractor.
Based on the evaluation of risks delivered by the CIACA report, the next step of the WG is the start of the risk mitigation process.

Specification and product (PSP 2.2)
In a test campaign of subset 76 (test cases for the OBU) in SRS 2.3.0 d, major deficiencies were identified. Subsequently and together with the authorised laboratories, ERA arranged a thorough check and revision of basically all test cases. The success of this revision has still to be validated in another test campaign in 2012.

The specification of baseline 3 was further discussed and completed by ERA and the ERTMS Users Group until the end of 2011. Agreement could not be reached on all CRs yet. In order to maintain the target for legalisation of the baseline 3 in 2012, ERA proposed to close the basic release of baseline 3 at this point and to transfer some of the CRs to a maintenance release at a later stage. The basic release shall be ready for voting in the RISC in mid of 2012 and publication by the end of 2012. According to a first check of the WG ERTMS, all CRs relevant for the corridor should be included in the basic release.

The collection of operational test cases (OTC) could be successfully completed. About 300 OTCs are currently available in the ERTMS Users Group and still need to be translated into script coding for processing in a next step.
Regarding cross acceptance, the national technical requirements so far known by the IMs and NSAs were reported to ERA and notified by mid-2011. ERA started with the establishment of a reference data base (RDB) for collection, administration and publication according to Commission decision no. 2011/155 on the directive for a reference document.

The DMI specification which will be mandatory for baseline 3 was completed by ERA and passed a final ergonomic test campaign.

The Key Management System (KMS) is still subject to on-going discussions among experts. It is still unclear whether safety or security requires information between RBC and loco to be encrypted. The issue was taken up again by the ERTMS Users Group and new work packages were defined. Basic questions are still whether keys are needed from safety point of view and how the key management process can be established in such a way that its enormous administration does not hinder interoperability. A safety assessment is underway to analyse the detailed requirements for key management.

Common processes and responsibilities (PSP 2.3)

It is of utmost importance and our aim to provide one seamless integrated ETCS corridor installation to our clients in the end. To achieve this, in Corridor A/1 as early implementer of ETCS applications, the track/ train integration has to be further developed to reach a mature standard. The test and authorisation criteria and processes which are mostly nationally oriented have to be analysed, made transparent and aligned at borders, too.

In 2010, the WG ERTMS had prepared a corridor test concept which was proposed to the NSAs as a basis for a pragmatic authorisation process. Based on this, in 2011, the NSA corridor working group in close liaison with ERA, analysed, discussed and enhanced the interoperability directive 2008/57, the save integration and system flowcharts, and defined roles, responsibilities and activities for each member state. The results were documented in a first draft of a “guideline for testing and authorisation”.

The working results of the NSA corridor working group are seen as a major step forward in establishing a common understanding about the European process for authorisation for putting into service. The WG ERTMS accompanied the works of the NSAs and provided necessary information such as national technical requirements, etc.

2.1.2.2 Risk management and chances

The external A1 risk of not being able to complete a sound ETCS track side implementation plan ensuring the ETCS implementation in the corridor until 2015 has become evident due to the STM decision of the German MoT.

The risk for not having enough available experts has risen due to the need for German STM development, certification, testing and authorisation. All this has to be investigated in the frame of the STM impact analysis.

Due to the fundamental changes, the WG ERTMS could neither complete the ERTMS implementation plan nor prepare a corridor ERTMS roll out plan.

Throughout 2011, the risks were reported in each ExB meeting.

Besides all this, good progress could be achieved in the cross border design at Zevenaar-Emmerich and the hub of Basel, allowing us to close the related risk.

2.1.2.3 Change request management

Changes due to the new situation in Germany and the risk mitigation work resulting from CIACA will be considered in the revision of the work plan and baseline in 2012.

2.1.3 Outlook

The common European process of testing and authorisation for putting into service and the completion of the related guideline by the NSA working group are paramount for the ETCS implementation on the corridor and will go on. The completion and legalisation of baseline 3 also remains on the agenda in 2012.

The CIACA report provides many challenges for the WG ERTMS regarding the prioritisation of risks, development of mitigation options and the allocation of resulting measures to the responsible stakeholders. In this context, also many additional tasks and changes have to be expected by the PMO and the WG ERTMS.
It will be further aimed to partly finalise the implementation plan and prepare the corridor roll-out concept. The execution of the impact analysis about the STM decision in Germany will be a pre-condition to evaluate the best further proceeding.

2.2 Operations (IQ-C Action Items #6, #10)

2.2.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	92	**WG Result [%] Actual**	61
Work Packages Total	2	**Work Packages Finished**	1	**Work Packages Pending**	1
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

2.2.2 Work Progress

2.2.2.1 Achievements

For almost two years, the Working Group Operations, consisting of the members Laurens Berger (ProRail), Sven Rodel (SBB), Jacques Audenaert (Infrabel), Emmanuele Vaghi (RFI) and Sebald Stumm (DB Netz AG, head of the working group), has been working on reviewing several operational issues and evaluating whether and how these could be harmonized.

These issues are recorded in so-called “Decision Cards” (DCs) which are relevant for the IM/RU interface. After completion, they will be handed over to ERA Working Group TSI OPE to be included into Annex B of the TSI Operations, if possible. Each of these Decision Cards covers an operational issue, such as orders to be given or measures to be taken in case of danger. The Decision Cards can also be made available for other purposes, for example for Agreements on Interconnecting Infrastructure between the different IMs on Corridor A/1 or for local supplementary agreements/features of the respective railway border crossings concerning Corridor A/1.

Some operational issues, such as train composition and brake issues were not worked on any longer, because the RUs themselves had become responsible for these issues some time ago.

Other operational issues were quite difficult to harmonize directly due to structural differences of the respective IMs of the corridor, for example concerning the development of infrastructure or concerning the differences between operational principles and rules.

An analysis of reasons for trains to stop at borders still has to be carried out. This open task has been taken for the new baseline starting in 2012.

2.2.2.2 Risk management and chances

No risks to report.

2.2.2.3 Change request management

No changes to report.

2.2.3 Outlook

The analysis and review of the operational issues shall be finished in spring 2012. Subsequently, the working group will deal with different operational issues, such as the review of system interfaces at border crossings or a consistent process flow concerning the drafting of special train schedules by operation. This is of great importance in order to achieve an optimal and safe operation flow throughout the whole Corridor A/1. In general the focus must be directed to the themes coming from EU Regulation 913/2010 like the coordination of traffic management. Therefore other experts have to be gained.

2.3 Capacity (IQ-C Action Item #5)

2.3.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	100	**WG Result [%] Actual**	100
Work Packages Total	5	**Work Packages Finished**	5	**Work Packages Pending**	0
Start	01.10.07				
End	31.12.11				

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 completed

2.3.2 Work Progress

2.3.2.1 Achievements

The members of the group are: Roland Bärlocher (SBB), Hugo van den Berg (ProRail), Dr.-Ing. Albrecht Hinzen (DB Netz), Dr. Gabrio Caimi (BLS Netz) and Patrizia Cicini (RFI). Gersende Bidelot (Infrabel) joined in 2011.
By the end of 2011 the overall work progress sums up to 100%, meaning that the planned activities for 2011 were completed. A new work programme and a new baseline have been set up for 2012

Capacity analysis 2011 (PSP 5.5)
The group managed and updated the corridor inventory, i.e. the extensive data collection for the entire corridor established in 2009. By reasonable geographical sections, this data table contains relevant corridor characteristics and attributes of the railway infrastructure.

Particular focus this year was given on the question of train length, distinguishing between systematic and maximal train length. The allowed systematic train length of a line is the length that each train running on the line may have. On the other hand, the maximal train length of a section is the maximal length that a certain amount of regular trains may have, e.g. between Domodossola and Basel 1 out of 3 trains per hour may have a max. length of 750m, whereas the other 2 trains can only have a max. length of 690m.

However, although all members agree on this distinction, at the moment a common definition of systematic and maximal length in Belgium, Germany and on the Lötschberg line Basel-Domodossola is not possible.

The data table is completed by an investment plan for the corridor as elaborated in figure 17 below, 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 as well as for the steering of the entire corridor programme.

Investment Plan - Corridor A

Project list with funding status, elaboreted by WG Capacity

State: 29.06.2012

checked by: ProRail, Infrabel, DB Netz, 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	BE	Hasselt - Y.Glons	Genk-Freight: electrification and	16,1	Secured	
	2012	BE	Zeebrugge - Brugge	Bocht ter Doest	9,2	Secured	
	2012	CH	Bern - Thun	Block distance	25	Secured	
	2013	NL	Maasvlakte II - Maasvlakte I	New line + Marshalling Yard	30	Secured	
	2014	IT	Bergamo-Treviglio	2nd track	95	Secured	
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	IT	Gallarate - Rho	upgrade	500	Planned	
	2015	NL	ZvO Zevenaar - Border	ERTMS, 3rd track, 25kV	96	Secured	3rd track together with DB Netz
	>2015*	DE	Border - Emmerich	3rd track	200	Planned	construction rights still open
	2016	IT	Novara	Node upgrade	471	Planned	
	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	BE	Zeebrugge - Brugge	L51, L51A, L51C	119,3	Secured	Brugge-Dudzele: constr. 3rd track
	2017	BE	Zeebrugge - Brugge	Masterplan Port of Zeebrugge	66,3	Planned	(SPV Zwankendamme)
	>2017*	DE	Emmerich - Oberhausen	3rd track	1.500	Planned	construction rights still open
	2018	BE	Brugge - Gent-Sint-Pieters	L50A-B: Gent-Brugge	338	Secured	3rd and 4th track
	2019	CH	Bellinzona - Lugano	Ceneri Basetunnel	1.400	Secured	
	2019	BE	Gent-Sint-Pieters - Schellebelle	Junction Ledeberg, Melle en Schellebelle	74	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	BE	Belgian part Corridor A	ETCS	tbd	D / R	
	2024	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 funding 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
	2024	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
	2024	IT	Novara - Oleggio - Arona	2nd track 4meters	535	Planned	
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	BE	Belgian part Corridor A	Level crossing removal Corr A	165	Planned	
	>2025	BE	Antw.-Noord-Antw.-Berchem	Port of Antwerp	2.020	Planned	2nd rail acces to the port
	>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 €)		37.761		

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 in Germany is under revision at present

Figure 17: Investment plan of the Corridor 1/A updated in May 2011

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. In 2011, the time horizon of 2030 was added. However, traffic forecasts for 2030 are still in preparation and not yet available from all countries.
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 may happen even earlier than 2020. In particular, this will be the case in the corridor sections south of Basel.

Another activity of the WG was to analyse the infrastructure parameters on Corridor A/1 in detail and to search for quick wins. The last years clearly showed that the focus should be on longer trains and higher profile and secondly also on heavier trains.

RUs have a clear demand for longer trains with a relatively low total weight. In 2010, a first potential analysis was conducted about the implementation of infrastructure at the standard of 740 m long trains. For this task, it became obvious that collaboration with the WG Terminals would be crucial for having a complete view on the transportation chain which is decisive for RUs for determining the train length of each of their trains. Based on this analysis, an investment plan for the implementation of the train length standard has to be derived including realistic time horizons. Thus, the WG Capacity elaborated a differentiation between systematic and maximal train length as explained earlier in the text. On this basis, a study will be launched in 2012 for the analyse of what is necessary for accommodating the demanded amount of longer trains by means of the maximal train length (using operational, timetable, and infrastructure measures) and in a longer time horizon upgrading the systematic train length.

In 2012, a very important topic of the WG Capacity will be the execution of a transport market study. The WG prepared the concept of the study in 2011 and decided to distinguish between a short and a long term perspective. Work for either needs to be coordinated and will finally be combined for the complete transport market study. In this way, it is possible to focus on different aspects of the short and long term view, making the work more efficient. The short term view is more market-oriented; it will be primarily used for the creation of pre-arranged paths satisfying market demand. This part will be outsourced to external consultants specialised in this field. The long term view basically deals with traffic prognosis data, the detection of bottlenecks on the network and with big projects for their elimination. This part is technically and politically oriented and needs close collaboration with national studies and plans in particular. Therefore, this part will be executed by the involved IMs themselves.

Furthermore, there is a clear demand from RUs for a train profile enabling 4m high cube containers. In order to transfer this significant market sector onto rail, a significant improvement of capacity for high profile through the Alps is a mandatory requirement.

Nevertheless, extending the profile requires heavy investments and its implementation will be monitored carefully from line to line.

2.3.2.2 Risk management and chances

Due to the many important and new tasks of the WG Capacity for the next years, more human resources will be necessary. These resources are currently not available from the members of the WG Capacity. Therefore, a clear discussion on how to deal with this situation is necessary at PMO and Management Committee level. For instance, it would be possible to increase the available resources of the corresponding member in the WG Capacity or to distribute the work to several specialists by creating sub-groups for special topics, similar to the already created sub-group for the short-term view of the transport market study.

2.3.2.3 Change request management

In 2011, a sub-group of the WG Capacity was created for the organisation and supervision of the short-term view of the transport market study. Head of the group is Dr. Daniel Thelen (DB Netz). Other members of the subgroup are Dr. Eric Blaas (ProRail), Gersende Bidelot (Infrabel), Steffi Klughardt-Mann (DB Netz), Nadine Wirnitzer (SBB), Dr. Gabrio Caimi (BLS Netz) and Patrizia Cicini (RFI).

2.3.3 Outlook

In 2012, the WG Capacity will revise the development of demand in traffic volume on the entire Corridor 1/A (including Belgium), extending the methodology to the year 2030. They will also document the methodology and integrate it into the transport market study.

Furthermore, works for the study for accommodating longer trains on the corridor will begin.

2.4 Terminal Studies (IQ-C Action Item #9)

2.4.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	86	**WG Result [%] Actual**	92
Work Packages Total	3	**Work Packages Finished**	2	**Work Packages Pending**	1
Start	01.10.07				
End	31.01.13				

PSP	WP	Results and Milestones achieved
6.1	Information collection	Data collection for the usable length of 740 m trains Review 2011 of national/ international studies completed. Review 2011 of harbours/ port selection completed Data collection and review 2012 open
6.2	Active study with partners	Train runs to improve the logistic chain issue have been determined. The analysis of the process of the logistical chain is still on-going.
6.3	Active studies of WG	The terminals of Belgium have been included The data for the Belgium terminals have been elaborated. Work package completed The preparatory work for establishment of the Terminal Advisory Group started

2.4.2 Work Progress

2.4.2.1 Achievements

Thomas Schneider (DB Netz) is leading and coordinating the activities of this working group. Peter Andersson (ProRail), Viktor Janz (DB Netz), Dirk Bartsch (DB Netz), Giulia Costagli (RFI), and since 2011, Michelle Geubelle and Deborah Cauchie from Infrabel are representatives of the IMs in this WG. SBB has not yet nominated a new team member. The group conducted 5 regular meetings throughout 2011.

By the end of 2011, 86% of the work progress has been completed whereas the group planned to complete 92%. Due to the revision of remaining tasks as well as new themes like the Terminal Advisory Group the work programme has been updated and a new baseline has been set up for 2012.

Information collection (PSP 6.1)

Based on the discussion on the usage of infrastructure for 740 m train length, a first evaluation was carried out on usable track length for last mile operations. Figure 18 is a collection of the available data but does not include Infrabel as they had not joined the WG at this stage. The table will amended in 2012.

In general, it can be observed that the transfer station is usually not the limiting factor. Especially in Switzerland the usable length in terminals is the restricting factor to run 740 m trains from start till end of the train run.

Country	Name	Terminal / Marshalling Yard / Harbour	TSI CCS 561/ 2009	Transfer station	usable track length transfer station [maximum]	usable track length terminal [maximum]
NL	Zeeland Seaport	Intermodal Terminal	no	Sloe-Haven	?	855/800
NL	MCT Moerdijk	Intermodal Terminal	no	Lage Zwaluwe	?	900
NL	Amsterdam Ceres	Intermodal Terminal	yes (2020)	Awhv	?	700
NL	Rotterdam - RSC Waalhaven Zuid	Intermodal Terminal	yes (2015)	Waalhaven Zuid	?	750
NL	Rotterdam - ECT Delta	Intermodal Terminal	yes (2015)	Mct	?	>750
NL	Rotterdam - Euromax	Intermodal Terminal	yes (2015)	Kijfhoek	>750	>750
NL	Rotterdam Delta Maasvlatke West und Maasvlatke West (different terminals)	Intermodal Terminal	yes (2015)	Kijfhoek	>750	>750
NL	Rotterdam - Europoort	Intermodal Terminal	yes (2015)	Kijfhoek	>750	?
NL	Rotterdam - Botlek	Intermodal Terminal	yes (2015)	Kijfhoek	>750	450
NL	Rotterdam - Pernis	Intermodal Terminal	yes (2015)	Kijfhoek	>750	1.400 m on 4 tracks
DE	Emmerich	Intermodal Terminal	no	Emmerich	663	250
DE	DeCeTe	Intermodal Terminal	yes (2015)	Duisburg Ruhrort Hafen	750	700
DE	Ruhrort Hafen (Mega Hub)	Intermodal Terminal	yes (2015)	Duisburg Ruhrort Hafen	750	700
DE	Ruhrort Hafen PKV	Intermodal Terminal	yes (2015)	Duisburg Ruhrort Hafen	750	780
DE	Duisburg Logport I (Rheinhausen) - DIT	Intermodal Terminal	yes (2015)	Vorbahnhof Logport	795	700
DE	Duisburg Logport I (Rheinhausen) - D3T	Intermodal Terminal	yes (2015)	Vorbahnhof Logport	795	?
DE	Duisburg Logport I (Rheinhausen) - DKT	Intermodal Terminal	yes (2015)	Vorbahnhof Logport	795	470
DE	Duisburg Logport II - Gateway	Intermodal Terminal	yes (2015)	Duisburg-Wanheim	750	400
DE	Neuss Hessentor	Intermodal Terminal	no	Neuss	1.000	650
DE	Köln Kalk Nord MY	Marshalling Yard	yes (2015)	not applicable	not applicable	750
DE	Gremberg MY	Marshalling Yard	yes (2015)	not applicable	not applicable	750
DE	Köln Eifeltor	Intermodal Terminal	yes (2015)	Köln-Eifeltor	750	700
DE	Köln Godorf (planned)	Intermodal Terminal	no	not applicable at the moment	not applicable at the moment	not applicable at the moment
DE	Köln Niehl Hafen	Intermodal Terminal	yes (2015)	Köln-Kalk Nord /Gremberg	750	400
DE	Mainz-Bischofsheim MY	Marshalling Yard	no	not applicable	not applicable	750
DE	Mannheim MY	Marshalling Yard	yes (2015)	not applicable	not applicable	750
DE	Ludwigshafen KTL BASF	Intermodal Terminal	yes (2015)	Ludwigshafen-Oggersheim	786	620
DE	Ludwigshafen Triport	Intermodal Terminal	yes (2015)	Ludwigshafen Gbf	750	475
DE	Mannheim Handelshafen	Intermodal Terminal	yes (2015)	Mannheim Rbf	>750	650
DE	Mannheim Wincanton	Intermodal	yes	Mannheim Rbf	>750	>250

		Terminal	(2015)			
DE	Karlsruhe MY	Marshalling Yard	no	not applicable	not applicable	750
DE	Karlsruhe	Intermodal Terminal	no	Karlsruhe Gbf	>750	500
DE	ETK Euroterminal Kehl	Intermodal Terminal	no	Kehl	?	680
DE	Offenburg MY	Marshalling Yard	no	not applicable	not applicable	750
DE	Freiburg	Rola	no	not applicable	not applicable	(400)
DE	Basel - Weil am Rhein	Terminal	no	Basel Bad Rbf	678	640
CH	Basel CT	Intermodal Terminal	no	Basel Rbf CH	750	340
CH	Aarau	Intermodal Terminal	no	Aarau Gbf	450	280
CH	Rekingen	Intermodal Terminal	no	Rekingen	640	290
CH	Chiasso	Intermodal Terminal	no	Chiasso RB	750	150
CH	Limmerthal (planned)	MY / Intermodal Terminal	no	not applicable at the moment	not applicable at the moment	not applicable at the moment
IT	Busto Arsizio / Gallarate	Intermodal Terminal	no?	Fascio Hupac / Busto Arsizio Station	?	760
IT	Milano Certosa	Intermodal Terminal	yes (2015)	?	?	377 (average)
IT	Milano Smistamento MY	Marshalling Yard	yes (2015)	not applicable	not applicable	?
IT	Milano Smistamento Terminal	Intermodal Terminal	yes (2015)	Milano Smistamento	?	465 (average)
IT	Milano Segrate	Intermodal Terminal	yes (2015)	Milano Smistamento	?	600
IT	Novara Boschetto MY	Marshalling Yard	yes (2015)	not applicable	not applicable	600
IT	C.I.M Terminal	Intermodal Terminal	no	Novara	?	?
IT	Alessandria Smistamento MY	Marshalling Yard	no	not applicable	not applicable	?
IT	Genova Voltri Terminal Europe (VTE)	Intermodal Terminal	yes (2015)	Genova Voltri Mare	450	700
IT	Genova South Europe Container Hub (SECH)	Intermodal Terminal	yes (2015)	Genova Campasso	?	370
IT	Messina	Intermodal Terminal	yes (2015)	Genova Marittima U.M. Bacino	?	?
IT	Genova San Giorgio	Intermodal Terminal	yes (2015)	Genova Marittima U.M. Bacino	?	350
Country	**Name**	**Terminal / Marshalling Yard / Harbour**	**TSI CCS 561/2 009**	**Transfer station**	**usable track length transfer station [maximum]**	**usable track length terminal [maximum]**

Figure 18: Terminals usable track length transfer station and terminal

To reach a basis for process improvement, a list of train runs was elaborated (see figure 19). The goal is to evaluate the reasons for delays under the umbrella of all parties involved in the process chain. To work this out, the WG Terminal closely cooperates with the WG Total Service Concept.

from	to	Via
Novara	Rotterdam Waalh.	Basel SBB/Offenburg Gbf/Karlsruhe Gbf/Mannheim/ Mz-Bischofsheim/Gremberg/Neuss/Emmerich
Novara	Rotterdam Waalh.	Luino/Basel SBB/Freiburg Gbf/Offenburg Gbf/

		Karlsruhe Gbf/Gremberg/Neuss Gbf/Emmerich
Rotterdam Waalh.	Novara	Kijfhoek/Emmerich/Neuss/Mainz Bischofsheim/ Karlsruhe/Offenburg Gbf/ Basel Bad Rbf
Rotterdam Waalh.	Novara	Kijfhoek/Emmerich/Neuss/Gremberg/Mainz B/Karlsruhe/Basel Bad Rbf
Rotterdam Waalh.	Neuss Gbf	Kijfhoek/Venlo/Kaldenkirchen
Rotterdam Waalh.	Novara	Emmerich/Neuss/K-Eifeltor/Weil-Rhein
Gallarate	Rotterdam Waalh.	Luino/Basel SBB/Offenburg Gbf/Karlsruhe Gbf/ Mz-Bischofsheim Pbf/Neuss/Emmerich
Rotterdam Waalh.	Novara	Kijfhoek/Emmerich/Oberhausen/Neuss/Gremberg/Mainz B/Basel Bad Rbf
Rotterdam Waalh.	Gallarate	Kijfhoek/Emmerich/Neuss/Köln-Eifeltor/ Mainz Bischofsheim/Karlsruhe/Basel Bad Rbf
Novara	Rotterdam Waalh.	Luino/Basel SBB/Offenburg/Karlsruhe Gbf/Mz-Bischofsheim/Neuss/Emmerich
Novara	Rotterdam Waalh.	Luino/Basel SBB/Offenburg/Mz-Bischofsheim/ Gremberg/Neuss Gbf/Emmerich
Milano Segrate	Zeebrugge	via Domodossola
Milano Segrate	Zeebrugge	via Domodossola
Zeebrugge	Milano Segrate	via Domodossola
Zeebrugge	Milano Segrate	via Domodossola
Maasvlakte West	Padova	Kijfhoek/Venlo/Köln-Eifeltor/Karlsruhe Gbf/Weil am Rhein
Maasvlakte West	Melzo	Kijfhoek/Venlo/Basel
Melzo	Rotterdam EP	Chiasso/Basel SBB/Offenburg Gbf/Karlsruhe/BingenKaldenkirchen/Venlo
Rootterdam EP	Melzo	Maasvlakte West/Kijfhoek/Venlo/Karlsruhe/Basel SBB Rb/Chiasso
Milano Segrate	Zeebrugge	via Chiasso
Milano Segrate	Zeebrugge	via Chiasso
Milano Segrate	Zeebrugge	via Chiasso
Milano Segrate	Zeebrugge	via Chiasso
Milano Segrate	Bierset	
Bierset	Milano Segrate	
Milano Segrate	Bierset	
Bierset	Milano Segrate	
Milano Segrate	Bierset	
Bierset	Milano Segrate	
Novara Boschetto	Genk	via Domodossola
Genk	Novara Boschetto	via Domodossola
Novara Boschetto	Genk	via Domodossola
Genk	Novara Boschetto	via Domodossola
Maasvlakte West	Basel SBB Rb	Rotterdam Waalh/Emmerich/Oberhausen West/ Neuss/Köln Eifeltor/Mannheim/Offenburg
Niederglatt	Maasvlakte West	Basel SBB/Basel Bad/Freiburg Süd/Offenburg Gbf/Karlsruhe Gbf/ Mannheim Rbf/Oberhausen West/Emmerich/Kijfhoek/Rotterdam Waalh.
Rotterdam Waalh.	Novara	Kijfhoek/Emmerich/Neuss/Offenburg Gbf/Basel Bad Rbf
Novara	Rotterdam Waalh.	Domodossola/Basel SBB/Offenburg Gbf/Karlsruhe Gbf/Mannheim Rbf/Neuss/Oberhausen West/Emmerich
Rotterdam Waalh.	Novara	Kijfhoek/Emmerich/Neuss/Köln Eifeltor/Mainz Bischofsheim/Mannheim/Karlsruhe/Basel Bad Rbf
Basel Bad Rbf	Novara	

Figure 19: Train routes from terminal to terminal

The terminals listed in figure 20 below are considered by the corridor IMs as being relevant for Corridor A/1 and will be monitored in the forthcoming years. The list is provisional and not to be considered as final. It will be discussed and decided per country by the national MoT together with the concerned IM after the routing of Corridor A/1 is stable und the results of the transport market study are available.

No.	No. per country	Country	Name	Terminal / Harbour / Marshalling Yard
1	1	The Netherlands	Rotterdam - Waalhaven Zuid - RSC Waalhaven Zuid	Intermodal Terminal
2	2	The Netherlands	Rotterdam - Maasvlakte - ECT Delta	Intermodal Terminal
3	3	The Netherlands	Rotterdam - Maasvlakte - Euromax	Intermodal Terminal
4	4	The Netherlands	Rotterdam - Maasvlakte - EMO	Bulk Terminal
5	5	The Netherlands	Rotterdam - Maasvlakte 2 in future - APM	Intermodal Terminal

6	6	The Netherlands	Rotterdam - Maasvlakte 2 in future - RWG	Intermodal Terminal
7	1	Belgium	Antwerpen Cirkeldyck	Intermodal Terminal (4)
8	2	Belgium	Antwerpen Main Hub	Intermodal Terminal (3)
9	3	Belgium	Antwerpen Main Hub 2	Intermodal Terminal (3)
10	4	Belgium	Antwerpen Zomerweg	Intermodal Terminal (3)
11	5	Belgium	Antwerpen Gateway DP World Terminal	Intermodal Terminal (4)
12	6	Belgium	Hupac Terminal Antwerpen	Intermodal Terminal (3)
13	7	Belgium	Combinant	Intermodal Terminal (2)
14	8	Belgium	Antwerpen ATO	Intermodal Terminal (3)
15	9	Belgium	Noordzee Terminal PSA	Intermodal Terminal (4)
16	10	Belgium	Europa Terminal PSA	Intermodal Terminal (4)
17	11	Belgium	SHIPIT Multimodal Platform 1616	Intermodal Terminal (3)
18	12	Belgium	Terminal in Meerhout (WTC)	Intermodal Terminal (3)
19	13	Belgium	Mexico Natie NV	Intermodal Terminal (3)
20	14	Belgium	Deurganck PSA	Intermodal Terminal (4)
21	15	Belgium	Delwaide Dock Terminal (DP World)	Intermodal Terminal (4)
22	16	Belgium	Schijnpoort (Antwerpen)	Intermodal Terminal (3)
23	17	Belgium	Euroterminal Genk Exploitatie	Intermodal Terminal (2)
24	18	Belgium	Haven Genk	Intermodal Terminal (3)
25	19	Belgium	Albertterminal (Lanaken)	Intermodal Terminal (2)
26	20	Belgium	Dry Port Muizen	Intermodal Terminal (2)
27	21	Belgium	Tilbury (Oostende)	Intermodal Terminal (2)
28	22	Belgium	Zeewezendok (Oostende)	Intermodal Terminal (3)
29	23	Belgium	Plassendale 1 (Oostende)	Intermodal Terminal (2)
30	24	Belgium	Container Handeling Zeebrugge (CHZ)	Intermodal Terminal (3)
31	25	Belgium	Zeebrugge International Port	Intermodal Terminal (3)
32	26	Belgium	APM Terminal	Intermodal Terminal (3)
33	27	Belgium	P&O Ferrymasters	Intermodal Terminal (3)
34	28	Belgium	2XL	Intermodal Terminal (2)
35	29	Belgium	Ghent container terminal	Intermodal Terminal (3)
36	30	Belgium	IPG (Intermodaal Platform Gent)	Intermodal Terminal (3)
37	31	Belgium	Liège Logistique Intermodal	Intermodal Terminal (2)
38	32	Belgium	Liège Container Terminal (Renory)	Intermodal Terminal (3)
39	33	Belgium	Liège Trilogiport	Intermodal Terminal (3)
40	34	Belgium	Antwerpen Noord	Marshalling Yard
41	35	Belgium	Bundel Zuid (Antwerpen)	Marshalling Yard
46	1	Germany	Emmerich	Intermodal Terminal
47	2	Germany	DeCeTe	Intermodal Terminal
48	3	Germany	Ruhrort Hafen (Mega Hub)	Intermodal Terminal
49	4	Germany	Ruhrort Hafen PKV	Intermodal Terminal
50	5	Germany	Duisburg Logport I (Rheinhausen) - DIT	Intermodal Terminal
51	6	Germany	Duisburg Logport I (Rheinhausen) - D3T	Intermodal Terminal
52	7	Germany	Duisburg Logport I (Rheinhausen) - DKT	Intermodal Terminal
53	8	Germany	Duisburg Logport II - Gateway	Intermodal Terminal
54	9	Germany	Neuss Hessentor	Intermodal Terminal
55	10	Germany	Köln Kalk Nord MY	Marshalling Yard
56	11	Germany	Gremberg MY	Marshalling Yard
57	12	Germany	Köln Eifeltor	Intermodal Terminal
58	13	Germany	Köln Godorf (planned)	Intermodal Terminal
59	14	Germany	Köln Niehl Hafen	Intermodal Terminal
60	15	Germany	Mainz-Bischofsheim MY	Marshalling Yard
61	16	Germany	Mannheim MY	Marshalling Yard
62	17	Germany	Ludwigshafen KTL BASF	Intermodal Terminal
63	18	Germany	Ludwigshafen Triport	Intermodal Terminal
64	19	Germany	Mannheim Handelshafen	Intermodal Terminal
65	20	Germany	Mannheim Wincanton	Intermodal Terminal
66	21	Germany	Karlsruhe MY	Marshalling Yard
67	22	Germany	Karlsruhe	Intermodal Terminal
68	23	Germany	ETK Euroterminal Kehl	Intermodal Terminal
69	24	Germany	Offenburg MY	Marshalling Yard
70	25	Germany	Freiburg	Rola
71	26	Germany	Basel - Weil am Rhein	Terminal
72	1	Switzerland	Basel CT	Intermodal Terminal
73	2	Switzerland	Aarau	Intermodal Terminal
74	3	Switzerland	Rekingen	Intermodal Terminal
75	4	Switzerland	Chiasso	Intermodal Terminal
76	5	Switzerland	Limmerthal (planned)	MY / Intermodal Terminal

		IT	to be defined	
No.	**No. per country**	**Country**	**Name**	**Terminal / Marshalling Yard / Harbour**

Figure 20: Updated Terminals Corridor A

On the basis of the TSI CCS 561/2009, the terminal focus was laid on intermodal terminals. Due to EU Regulation 913/2010, the terminal definition has broadened and harbours and bulk terminals were added. The definition of terminals in use now refers to Art. 2 (2c) of EU Regulation 913/2010.

In addition, Art. 8 (7) of EU Regulation 913/2010 asks for the set-up of a so-called Terminal Advisory Group (TAG) with no commercial or directive competencies, consisting of managers and owners of terminals. As the number of its corridor terminals cannot be determined, Corridor A/1 decided that the transport ministries, members of their executive board, would nominate 2 to 4 terminal managers and/or owners. Still, the EEIG Corridor Rotterdam-Genoa EWIV is the organising body.

The nominated members, as given in figure 21 on the next page, are representing all terminals from their countries.

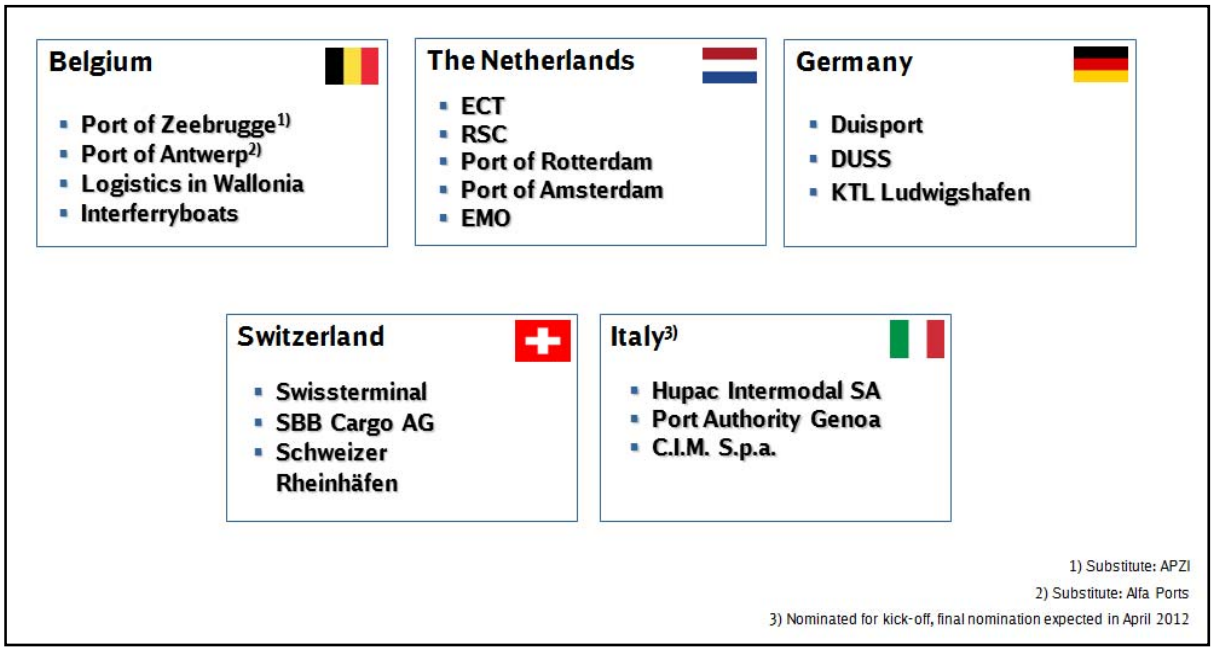

Figure 21: Nominated members for the Terminal Advisory Group on Corridor A/1

On 7 November 2011, the Belgium ministry organised a workshop on the development of freight corridors, such as is provided for in EU Regulation 913/2010. On this occasion, the regulation was presented and its implications for ports and terminals was underlined, as well as the requirement, for each of the three corridors crossing Belgium, to set up an advisory

group made up of managers and owners of the freight corridor terminals. The Managing directors of these three corridors were also present to give their vision of the creation of these advisory groups.

In order to ensure we have an optimal representation of the ports and terminals sector throughout Belgium, the members selected for the advisory group of Corridor A/1 committed themselves by signing a representation charter. They have in particular committed themselves to:

- contributing to the development of the rules of cooperation established by mutual agreement between the members of the Advisory Group and the Management Board of Corridor A/1;
- participating actively in all meetings of the Advisory Group;
- treating all information that they receive in the context of this cooperation confidentially but transparently with regard to the other terminals on the corridor they represent;
- defending the interests of all terminals on Corridor A/1 and in particular representing the managers and owners of the Belgian terminals that are a part of the corridor not represented within the Advisory Group. To do so, the signatories of this charter will offer the managers and owners of Belgian terminals on Corridor A/1 who are not members of the Advisory Group, the possibility to ask questions and to guarantee them a response within the advisory group.

Active study with partners (PSP 6.2)
The analysis of the process of the logistic chain is still on-going.

2.4.2.2 Risk management and chances
No risks to report.

2.4.2.3 Change request management
No changes to report.

2.4.3 Outlook
The focus in 2012 will lie on the establishment of the Terminal Advisory Group and the fulfilment of obligations given by EU Regulation 913/2010. This includes especially the regular update and publishing of a document containing for example the list and characteristics of terminals, as well as the capacity allocation of pre-arranged path to freight trains taking into account the access to terminals.

To support the transport market study of Corridor A/1, the cooperation with WG Traffic Quality will become an issue in order to analyse departure quality. A closer cooperation with the WG Capacity will be necessary, too.

The update of the working plan will be necessary to reflect EU Regulation 913/2010 and the decisions to be taken concerning the impact of TSI CCS.

2.5 Freight Regulation (IQ-C Action Item #2)

2.5.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	0	**WG Result [%] Actual**	0
Work Packages Total	4	**Work Packages Finished**	0	**Work Packages Pending**	4
Start	13.01.11				
End	09.11.13				

PSP	WP	Results and Milestones achieved
X.1	Implementation plan	Monitoring a master plan regarding the implementation
X.2	Designation and governance	Governance of freight corridor, Measures for implementing the freight corridor plan, Consulting the applicants regarding the implementation plan
X.3	Investment in the freight corridor	Investment planning, Coordination of works
X.4	Management of the corridor	One-stop shop for application of infrastructure capacity, Framework for Capacity allocation to freight trains on the corridor, Definition of authorised applicants, Traffic Management, Traffic management in the event of disturbance, Drawing up and publishing information on the conditions of use of the freight corridor, Quality of service on the freight corridor

2.5.2 Work Progress

2.5.2.1 Achievements

The WG Freight Regulation was set up on 13 January 2011. The WG was appointed to be in charge for the entire implementation of EU Regulation 913/2010 on Corridor A/1. This includes the coordination and supervision of work packages and milestones to be performed by other WGs as well as the implementation process to be performed by the involved IMs/ABs. The final objective of the WG Freight Regulation shall be the harmonised implementation of EU Regulation 913/2010 on Corridor 1/A on 9 November 2013. This also includes representing the common Corridor 1/A approach vis-à-vis the European Commission. In 2011 the WG focused on conception work required for the implementation of the EU Regulation 913/2010.

In 2011, the WG focused on the conception work required by the EU Regulation 913/2010. The achievements can be described as follows:

- Common comments on the EC Handbook elaborated

- First application of Regulation 913/2010 on Corridor 1/A fixed (annual timetable 2015)
- Common requirements concerning the “RNE Member project for the implementation of parts of the EU Regulation 2010/913” elaborated
- Common comments on the first results of RNE elaborated:
- RNE Guidelines Pre-arranged Paths (version 0.6)
  - Analyse corridor OSS Set up (version 1.0)
  - Corridor Statement Common Structure Specification (version 1.1)
- Functional input provided, e.g. to Task Force ExB or RNE WG Legal Matters
- Meetings with regard to EU Regulation 913/2010 attended, e.g. Task Force ExB, RNE European Rail Freight Corridors Conference, Antwerp Rail Freight Corridors Conference, RNE Business Conference 2011, etc.

2.5.2.2 Risk management and chances

No risks to report.

2.5.2.3 Change request management

No risks to report.

2.5.3 Outlook

In 2012, there are different activities foreseen concerning the implementation of EU Regulation 913/2010 on Corridor A/1:

- Implementation of the measures developed in the conception phase taking into account the timeline
- Supervision of the general timeline of the implementation process as well as coordination with all associated activities. Especially monitoring of the tasks and milestones in 2012 (e.g. completion of the Transport Market Study, implementation plan)
- Supporting the MB in the implementation process (consulting and preparation of decisions)
- Taking care that negative impact on the core business of the IMs will be avoided
- Ensuring an intense consultation with RNE regarding work and the proposals of the “RNE Member project for the implementation of parts of EU Regulation 913/2010”
- Provision of proposals / recommendations to the ExB on basis of the conceptual work of RNE about the framework for capacity allocation
- Taking care of cooperation with other corridors, especially regarding Pre-arranged paths and corridor OSS.

2.6 Traffic Quality (IQ-C Action Items #1, #2, #3, #4)

2.6.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	100	**WG Result [%] Actual**	91
Work Packages Total	4	**Work Packages Finished**	2	**Work Packages Pending**	2
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. RNE has started a "project group 2nd step" with the goal to fulfil the requirements of the EU Regulation 913/2010
3.2	Monitoring Traffic Performance	Due to their impact on freight traffic, reporting about punctuality of the EC traffic from Zurich/Basel to Milan has been introduced. As well passenger traffic reports for TGV and ICE trains from France/Germany to Switzerland will be ready in 2012. First steps to implement a reporting for freight trains from Antwerp to Northern Italy have been taken. This report will be ready from 2012 onwards
3.3	Implementation of EPR	Development and testing of the validation tool in order to harmonize and validate delay coding. Development of the calculation tool with the possibility to calculate different EPR functions. Due to delays in the development of the IT applications the EPR project is scheduled to be finished in December 2012- EPR will be ready as an RNE product in 2013.
3.4	International capacity allocation	The publication of catalogue paths was on time in January 2011. Path requests by the RUs were placed on time in April. The conflict solving process for freight traffic experienced a small delay of some days due to late passenger path concepts. The timetable change in December was not affected negatively.

2.6.2 Work Progress

2.6.2.1 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/1 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[4]. He works together with a team of experts:

- OSS: Esther Romijn (Keyrail), Jan Deeleman (ProRail), Sonia Mancinelli (Infrabel), Steffi Klughardt (DB Netz), Christoph Rüegg (trasse.ch), Rudolf Achermann (SBB/ BLS) and Simona Garbuglia (RFI)
- Timetable: Erik Schut (ProRail), José Gaseau (Infrabel), Klaus Kaiser (DB Netz), Beat Affolter (BLS), Erich Grau/Christoph Lüthi (SBB) and Gian-Piero Gagliardi (RFI)
- Quality and Operations: Patrick Timmermans (Keyrail) André Beerthuizen (ProRail), Ann Verstraelen (Infrabel) Siegfried Nierichlo (DB Netz), Alexander Paulus (BLS), Rudolf Achermann (SBB), Saro Battaglia (RFI).

TSI TAF is the EC Regulation for the Railway Freight Sector on Telematic applications. The aim is to improve the performance of the freight traffic by an improved exchange of standardised messages between Infrastructure Managers (IMs) and Railway Undertakings (RUs). 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 IMs and RUs started their national implementation plan until the end of 2011. IMs and RUs are asked to set up new implementation plans until the end of May 2012. The full TSI TAF implementation, originally planned for 2013, will depend on the development of Common Components, especially the Common Interface (CI). Actually, the project plan is delayed for about two years due to financial problems of the IT company that builds these components.

By the end of 2011 the work programme has been nearly completed (91% of the work progress). A new work programme has been developed and a new baseline has been set up for 2012.

OSS optimisation (PSP 3.1)

Usually, for path requests RUs are using the national electronic tools of the IMs. Due to a number of workshops as well as enhanced PCS functions, the usage of the OSS has improved. With EU Regulation 913/2010 for competitive freight, the OSS process will be in the focus not only for requests but also for allocation issues. Interfaces between PCS and national tools will be built – financing and planning is on-going.

Monitoring Traffic Performance (PSP 3.2)

With the extension to Antwerp, first steps for a new reporting have been initiated. Traffic from Antwerp to Northern Italy will be reported in order to improve punctuality. A representative of

[4] 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.

Infrabel joined the group of performance managers in 2011. Some pilot reports have been produced and reports will be ready in 2012.

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 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 and continued in 2011. The finalisation of all EPR components was planned by end of 2011.

International Capacity Allocation (PSP 3.4)
For the first time the 2012 catalogue shows paths from Antwerp/Rotterdam to Novara. The new timetable 2012 was implemented successfully in December 2011. The 2013 path catalogue will show twice as much through going paths as in the previous year.

2.6.2.2 Risk management and chances
No risks to report.

2.6.2.3 Change request management
No changes to report.

2.6.3 Outlook
After the successful performance management kick-off meeting in January, there have been four performance management working group meetings together with the RUs. The fruitful feedback from the RUs was considered in the reports and processes. Another four meetings are planned for 2012.

The EPR calculation functions shall be ready by the end of April 2012. After the formal approval of EPR the commercial application of the model is planned for 2014 earliest on the first selected corridors.

In 2012, the coordination and publication processes for the 2014 path catalogues will be reviewed and improved.

The Pilot Application will be continued until the end of 2012.

3. Implementation of corridor measures by Infrastructure Managers

The following chapters refer to infrastructure projects that are being realized by each Corridor Infrastructure Manager.

3.1 ProRail

3.1.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**IM Result [%] Plan**	58	**IM Result [%] Actual**	44
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	Redundant, as WG TAF TSI was suspended.
1.4	Harbour line	Havenspoorline Go-live (2009)

3.1.2 Work Progress

3.1.2.1 Achievements

By the end of 2011, the overall actual work progress sums up to 44%.

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 technical 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 were made in connection with the 15/25 kV project study. As this project is of cross-border nature, ProRail and DB Netz work closely together for the planning and layout. DB Netz will build the 3rd track in phases from Oberhausen in 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 and 2011, 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-T 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 on-going.

Extension of harbour (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, and the construction works for the railway extension started in 2011. 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.

3.1.2.2 Risk management and chances
With the acceptance of the technical solutions at Zevenaar border section some important risks could be eliminated.

Although the ERTMS, 25 kV and third track projects are still complex, specific risks are not reported yet. However, ERTMS installation in this section as well as 25 kV at Kijfhoek 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 level changes from level 2 to level 1 and back to level 2. Whereas the problem identification and solution finding study for 25 kV still has to be undertaken. The ERTMS upgrade 2.3.0d of the Betuwe line in service is already financed and does not present a financial risk.

3.1.2.3 Change request management

No changes to report.

3.1.3 Outlook

Looking at the actual progress of all projects, it can be expected 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 non-stop 25 kV from the border to the starting point is still insecure due to the complexity and, hence, high costs at Kijfhoek.
After the successful recovery of volume in the port of Rotterdam in 2010 (11%) the Port of Rotterdam reported a growth of 1% in 2011. The Maasvlakte 2 project makes a further increase volume and, subsequently, further growth of transport volume on the corridor possible.

3.2 Dutch-German bilateral working group (IQ-C Action Item #8)

3.2.1 Activities and achievements

The status of specifications and design regarding the interfaces between the DB Netz and ProRail infrastructure in the section Zevenaar – Emmerich has been produced by bilateral working groups and several subgroups of the common DB Netz – ProRail organisation which had been established in November 2010.

The following technical interfaces have been studied by the common organisation:

- ERTMS interface
- GSM-R interface
- Interlocking interface
- Traffic Control interface
- 25kV Traction Power interface
- 25kV Catenary interface
- 25kV Earthing System interface
- Hotbox detection interface
- Environmental Impact Analysis (EIA)
- Third track interface.

Due to the fact that German and Dutch railway systems do not have standard interfaces which easily fit together, specifications and designs are needed in order to determine what will be built exactly and how technical and organizational interfaces have been defined. Finally, this will lead to agreements between ProRail and DB Netz which clearly define a plan about the scope of building activities and the related time schedule.

The projects Zevenaar – G/N and the Emmerich – G/N border are responsible for the design and construction activities between Zevenaar and Emmerich.

The main goals of the project are:

- Realisation of 25kV and 15kV
- Realisation of ERTMS
- Realisation of a third track.

Other goals of the project to be fulfilled are:

- The realisation of the communication between the German and Dutch traffic control systems in order to optimise traffic flows as a significant increase of trains is expected between 2013 and 2025
- The realisation of hot box detection system between Emmerich and the border to prevent trains with hot axles running into Zevenaar tunnel.

ERTMS interface

Based on the decisions which were made in early 2010, a detailed study was performed to compare possible solutions in the border section of Zevenaar – Emmerich regarding the implementation of ERTMS Baseline 3 & PZB in Germany and ERTMS Baseline 2 V2.3.0d in the Netherlands. The study resulted in a solid technical analysis of ERTMS transitions between Level 1 in the Netherlands and Level 2 in Germany as well as Level 2 in the Netherlands and Level 2 in Germany. The transitions were elaborated for both directions from Germany to the Netherlands and vice versa.

For each analysed ERTMS transition and each direction, preferred solutions were selected and risks identified for each preferred solution. The outcome showed a technical favour for the implementation of ERTMS Level 2 in the Netherlands.

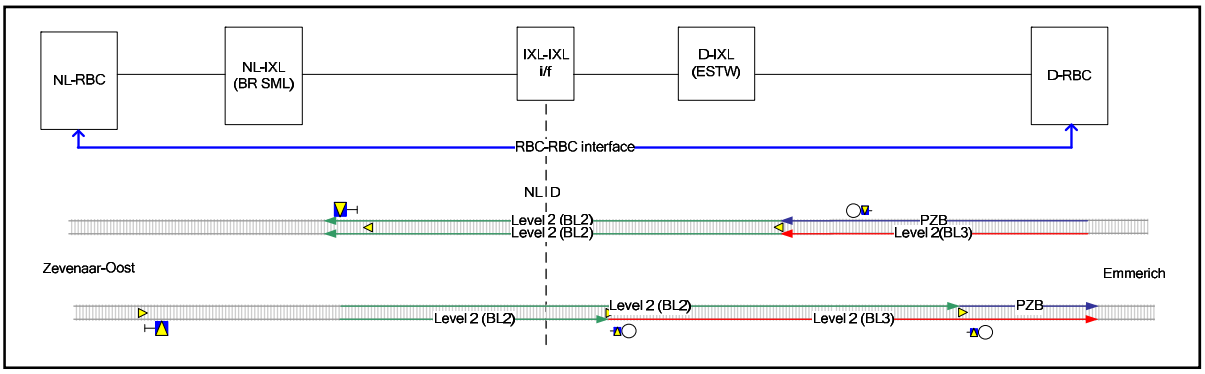

Figure 22: Level 2 – Level 2 solution border NL / DE

GSM-R interface

Several meetings took place to discuss the Radio plan and the frequency planning of GSM-R in the border section in Germany and the Netherlands.
Also an analysis was made to obtain the consequences of implementing ERTMS Level 2 for the GSM-R implementation, which resulted in a draft nominal Cell Plan for the Dutch GSM-R network. The nominal Cell Plan contains the overview of sites which have to be adjusted for ERTMS Level 2 and for complying to the so called “Vienna Agreement”.

For ERTMS Level 2 in the Netherlands, ProRail is planning to relocate the site at the border (Babberich) to Dutch or German territory, to locate it closer to the railway. It needs to be examined wether this can be combined with the existing German site in Elten (site sharing). Independent from the chosen ETCS level (L1FS or L2 in the Netherlands), German GSM-R coverage is, with reduced distance for the ETCS planning, necessary up to km 106,6. This is located in the Netherlands, outside Zevenaar tunnel at the east portal. It was investigated if the necessary coverage can be served by the existing German base station (BTS) in Elten

next to the border. The result of measurement do not give a clear answer. Because of this and the information that on Dutch side a new BTS near km 106 is planned, a new German BTS must be build in the Netherlands, preferably with site sharing at the same location like the new Dutch BTS. Because of the implementation of level 2 in the Netherlands and Germany, the Dutch GSM-R needs different adjustments (change antenne tilts, move sites, new sites) in the area around Arnhem – Zevenaar. Together, DB Netz and ProRail will perform additional measurements which will be used to define the final configuration in the border section.
ProRail and DB Netz are both responsible for the changes in their own networks. Nevertheless, whenever there are combined activities possible, ProRail and DB Netz shall help each other.

Traffic Control Interface
The implications for controlling the rail traffic due to the infrastructure changes which are foreseen between Zevenaar and Emmerich in the coming years were identified and analysed. Based on the analysis a concept for train control was elaborated. In this concept, the announcement of trains (Zugnummer Meldung) and the offering & accepting (Anbieten & Annehmen) of trains across the border between the Bedienzentrale Duisburg and the Traffic Control Centre Kijfhoek were the main topics which have been described thoroughly.
The concept of operations for train control on this route and the functional interface specification which has been worked out and described in the OCS, have been agreed upon. Also the basic technical principles to the exchange of information via internet were accepted by DB Netz and ProRail.

Operations
All operational interfaces between ProRail and DB Netz have been described by means of operational scenarios. The scenarios detail the joint operational procedures as well as the interaction between operational staff and the systems and infrastructure in order to ensure safe and efficient operation. The scope comprises all new or to be adapted technical systems (e.g. ERTMS Level 1, GSM-R, 25kV, third track, Traffic Control).

Special attention was given to the discussion regarding the operational impact of the implementation of ERTMS Level 2 versus Level 1 on the Dutch side of the border.
Results of the discussion have indicated a preference for Level 2 albeit that several issues require further analysis and design to ensure smooth operation (e.g. proper means for ensuring the safety of the track workers, smooth cross border transition of trains with one modem, implementation of Key Management, application of Temporary Speed Restriction).

Energy (Catenary systems / Voltage Change Over 25kV Traction Power interface / 25kV Catenary interface / 25kV Earthing System interface)
Based on the decisions which were made in early 2010 regarding the location of the Voltage Change Overs in Germany and the Netherlands, the activities focused on the three main interfaces to connect the Catenary and Traction Power systems of DB Netz and ProRail:

- the catenary interface between the German Re200 system and the Dutch B4 system
- the interface between the Dutch 25kV and the German 25kV traction power system
- the interface between the German and Dutch earthing systems.

For these three interfaces, suitable solutions were found to connect the German and Dutch systems.

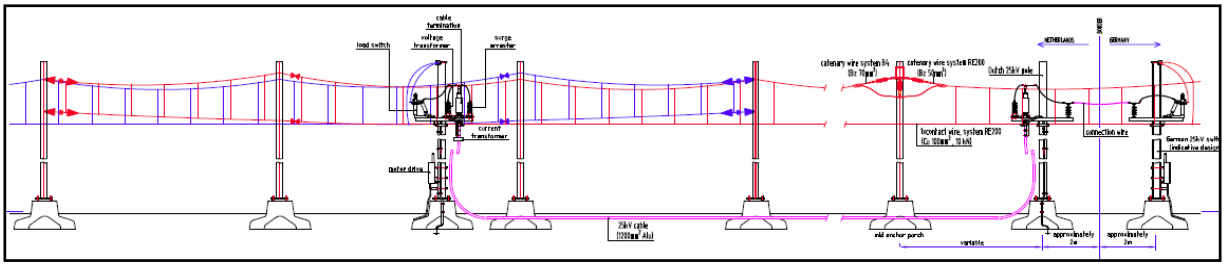

Figure 23: Detailed drawing of the interfaces

The design will comply with the TSI Energy requirements. Height of the overhead wire will be 5.5 m and trains with both 1.600 mm and 1.950 mm pantograph will be able to use the line. For each interface, technical agreements were made:

- Catenary:
  - A fixed point interface will be built on the Dutch side of the border
  - Insulated overlap will be built on the Dutch side of the border
  - Only German overhead wire will cross the border
- Traction:
  - ProRail will supply the energy which is needed for the German 25kV system.
  - Both DB Energy and ProRail can switch off the 25kV system in Germany.
- Earthing:
  - The German and Dutch earthing system will be connected to each other.

Hot box detector

In the present situation, a hot box detection system has been installed at the Dutch-German border to prevent trains with a hot axle to enter the tunnel Zevenaar. In the future situation, the location of the Dutch hot box system at the border will have to be shifted into the direction of Emmerich because of the higher speeds.

A second interface between the hot box system and the German Bedienzentrale shall be realized. The new hot box system will be on German territory and located under responsibility of the Bedienzentrale Duisburg instead of the Traffic Control Centre Kijfhoek. New operational procedures have been elaborated, which will be worked out during the realisation phase.

Environmental Impact Analysis (EIA)

Regarding the environmental impact studies a contact between the involved parties in Germany and the Netherlands has been established. In the initial meeting it was determined that planning approval section 3.5 (Emmerich-Elten) is relevant for cross-border environmental impact assessment (EIA) and planning approval shall include disclosure in the Netherlands. It was agreed that it is sufficient to disclosure DB plans for the third track only in Zevenaar. The Province of Gelderland must also be involved in the procedure as a representative of public interests.
The Dutch Commission for Environmental Assessment suggested performing a coherent study (together with the German study) on the effects of the third track on the Natura2000 area. In Germany only a preliminary study of the Bird protection area “Unterer Niederhein” is currently available. The preparation of a more detailed report will start when the design activities of the third track are finished. This detailed study will not be ready before spring 2012.
DB Netz provided ProRail with the draft management plan of the Bird protection area “Unterer Niederhein”; it was taken into account in the Dutch project. The German ecology impact study contains also the effects on the Natura2000 area “Gelderse Poort”.

Third Track
Following the results of the Dutch EIA/MER study, ProRail announced at the end of February 2011 that the third track on the Dutch side of the border will be executed on the northern site. On the basis of that decision, DB Netz has recommenced planning in March 2011 to adjust the location of the third track on the German side.
In September 2011 specialists defined the exact location of the tracks at the border and the design parameters for the new track on both sides of the border were harmonized. All design activities are geared to one another: NL: ProRail-geodetic coordinate system (ETRS89), RD (Rijksdriehoekmeting), NAP (Normaal Amsterdam Peil) D: DB-geodetic coordinate system (DB REF), NN (Normalnull = Normaal Amsterdam Peil).

3.2.2 Outlook
Expectations for 2012 include:

ERTMS-Activities
Safety analysis for preferred variant has to be done in a common approach between DB Netz and ProRail. Furthermore, specification of the interface between the ESTW and the new interlocking Zevenaar Oost is expected.

GSM-R-Activities
For the implementation of the GSM-R networks, the German and Dutch suppliers have to cooperate. It has to be agreed on how to organise the coordination and how this will be laid down in an agreement between suppliers (Mobirail and DB Systel) or between DB Netz and ProRail.

E-interlocking
The e-interlocking of Emmerich (Germany) will go live in 2012.

Train control
Operational aspects regarding the offering & accepting (Anbieten & Annehmen) of trains have to be discussed in more detail before this can be implemented.

Operations
The document Operational Scenario's Zevenaar – Emmerich will be amended in the near future with respect to the implementation of ERTMS Level 2 on the Dutch side of the border. It is also expected that a joint DB-ProRail approach will be discussed from the second Quarter 2012 onwards; it shall be agreed about the way how to inform the Railway Undertakings on the operational implementation of ERTMS, 25kV and the third track.

Energy
Based on the interface agreements, technical specifications will be drawn up.

Hot box detectors
It seems most appropriate for ProRail to ask DB Netz Duisburg to organise the realisation of the hot box system in Germany and to interface the system at the national border between Zevenaar and Emmerich. Preparations for the realisation of the hot box system could start in 2012 (precondition: financing has to be arranged).

Third Track
The planning approval documents (expert opinions on noise emissions and vibrations, environmental impact study) will be updated for the planning approval section 3.5 Elten.

3.3 Infrabel

3.3.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**WG Result [%] Plan**	0	**WG Result [%] Actual**	0
Work Packages Total	10	**Work Packages Finished**	0	**Work Packages Pending**	10
Start	Not included in baseline yet				
End	Not included in baseline yet				

PSP	WP	Results and Milestones achieved
W.1.1.1.1	Level Crossing removal	
W.1.1.1.2	Side tracks 750 m	
W.1.1.2	Brugge - Dudzele L51, L51A, L51C construction 3rd track	
W.1.1.3	Gent - Brugge L50A-B 3rd and 4th track	
W.1.1.4	Construction curve Ter Doest	
W.1.1.5	Bifurcation Ledeberg, Melle and Schellebelle + Merelbeke	
X.1.2.1	Master plan port of Zeebrugge	
X.1.2.2	Port of Antwerp	
Y.1.3.1	Hasselt tracks reorganisation	
Z.2.1	ETCS Equipment	

The work packages of Infrabel were integrated into the business plan in 2011 and the monitoring of the work progress (baseline) will start in 2012.

3.3.2 Work Progress

3.3.2.1 Achievements

2011 saw the further integration of Infrabel in the governance structure and the working groups of Corridor A/1 after the signing of the cooperation agreement in January 2011. Representatives were nominated for all working groups, including the newly created WG Freight Regulation.

An extension plan for the corridor to Antwerp and Zeebrugge via Aachen-West and Cologne was elaborated and distributed during the Antwerp Conference in June 2011.

In June 2011 Infrabel approved its Masterplan ETCS aiming at the equipment of its whole network with ETCS by 2022, too. The Belgian part of Corridor A/1 is foreseen to be fully equipped by 2020.

On 7 November 2011 a workshop was organised by the Belgian ministry in cooperation with Infrabel in order to inform the terminals in Belgium on EU Regulation 913/2010 and the obligation to establish a terminal advisory group. 4 Belgian terminals were selected by the Belgian ministry to take part in the Advisory Group.

One of the major investment projects planned by Infrabel is the construction of the second access to the port of Antwerp. The aim of this new infrastructure is to enhance the possibilities of circulating between the main hub in Antwerp-North and the station of Lier. Hence, the number of train paths could be doubled. Studies are being carried out at the moment in order to reach a political agreement on the technical solution to be applied.

A number of major infrastructure works is going on in the port of Zeebrugge aiming at increasing the capacity for receiving and sending trains to and from this port; it is about constructing and modernising a complex of sidings and laying the tracks. This project is possible thanks to a pre-financing agreement with the Flemish region.

The growing flows of traffic between Zeebrugge and the interior of the country makes it necessary to put a third track between the bifurcation of Dudzele and Bruges on the one hand, and the doubling from 2 to 4 tracks between Bruges and Ghent. All these project are currently launched but at different stages in the process.

3.3.2.2 Risk management and chances

Infrabel also prepared its multiannual investment plan (2013-2025) for which the financing will have to be negotiated with the government in 2012. The investment plan foresees 3 scenarios: basic, medium and ambitious. Depending on the choices that will be made, this will have an influence on the investment projects planned along the Belgian part of Corridor A/1.

3.3.2.3 Change request management

No changes to report.

3.3.3 Outlook

The major task for the coming year will be to secure the financing of the investment projects taking into account the economic and austerity measures being taken by national governments throughout Europe following the financial crises.

3.4 DB Netz

3.4.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**IM Result [%] Plan**	64	**IM Result [%] Actual**	54
Projects Total	83	**Projects Finished**	19	**Projects Pending**	64
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 (2010/2011)
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 (2010/2011) Restart planning approval procedure PFA 1.1., 3.1 and 3.3. (2011) Open the planning approval procedure for PFA 1.4 and 3.2 (2011)
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 on-going (2010)
2.1.1.2.4	Karlsruhe – Basel/ 2. stage: ABS/ NBS Kenzingen – Buggingen (StA 8 NBS)	Initial plan study completed (1998) Budget approved (1999)
2.1.1.2.5	Karlsruhe – Basel ABS/ NBS	Initial plan study completed Preparation and process planning approval

PSP	Project	Results and Milestones achieved
	Kenzingen – Freiburg – Buggingen (StA 8 ABS)	procedure on-going (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 on-going
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, update in 2011 due to decision of NL to implement L1 on Dutch side) 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); start of construction works (2011) Gremberg: initial plan study completed; approval of budget; start of construction works (all 2010), go-live (2011) Rechter Rhein (2. BS): construction works ongoing Bensheim: initial plan study completed; approval of budget; start of construction works (all 2010), partially go-live (2011) Karlsruhe: Initial plan study completed (2009); approval of budget; start of construction works (all 2010), go-live (2011) Rastatt: Initial plan study completed (2009); approval of budget; start of construction works (all 2010), go-live (2011) Achern: go-live (1996) Appenweier: Initial plan study completed (2009); approval of budget; building licence (all 2010), go-live (2011) 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), go-live (2011) 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	Redundant, as WG TAF TSI was suspended.

3.4.2 Work Progress

3.4.2.1 Achievements

By the end of 2011, the actual work progress of the German projects (infrastructure, ETCS) is 54% which is slightly behind the planned progress of 64%. Out of 83 national projects along the corridor, 19 could be completed, 64 remain open or pending.

The decision of the German Ministry in June 2011, not to implement ETCS on trackside until 2015 had a major impact on the activities on the German part of the corridor and negotiations for financing ETCS have stopped. However, the realisation of e-interlocking projects on the corridor that have already started continues and is financed by the German Recovery Programme.

Except for the section from Emmerich to Oberhausen, the projects related to ETCS and electronic interlockings have been stopped. Therefore, neither a final deployment strategy nor the German implementation plan including the information on ETCS L1 LS and L2 sections could be prepared or published in 2011.

Emmerich – Oberhausen (PSP 2.1.1.1.1 - 2.1.1.1.3)
Following the results of the Dutch EIA/MER study, ProRail announced at the end of 02/2011 that the third track on the Dutch side of the border was to be executed in the northern site. On basis of that decision, DB Netz recommenced planning in March 2011 to adjust the location of the third track on the German side of the border section to match the location on the Dutch side. In accordance with the agreement made in 2010, the twist in the track (S curve) is to be executed on the German side. The working group "subgroup third track & axle shift" started their activity to discuss detailed plans for the third track project in the mid of 2011.

Further information can be found in Chapter 3.2 - Dutch-German bilateral working group.

Karlsruhe – Basel (PSP 2.1.1.2.1 – 2.1.1.2.2.6)
A bilateral WG SBB – DB Netz has developed a common planning for all infrastructure projects and the ETCS concept in the node of Basel. This concept was delivered to the Eisenbahnbundesamt at the beginning of 2011. So far, no final decision has been taken. EBA together with the BAV (Switzerland) are currently working on a common concept concerning the responsibility for licensing and approval activities for ATP (ERTMS) equipment on German line sections on Swiss territory.

The ABS/NBS Karlsruhe – Basel is divided into 9 line sections (StA), as illustrated in figure 24 on the next page. All sections of the new 3rd and 4th track Karlsruhe – Basel are in the stage of planning permission procedure or in preparation. Until the end of 2011 the investment volume was about 1.8 bn Euro.

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. The commissioning of the section is scheduled for December 2012.

Construction in section 9.2. and 9.3 began in the last quarter of 2010. The provisional connection of the second Rhine bridge is envisaged for the end of 2012.

PfA 9.3 is on Swiss territory; the beginning of the planning approval procedure is now planned in 2012, initial construction rates in 2014 and commissioning approximately 2017.

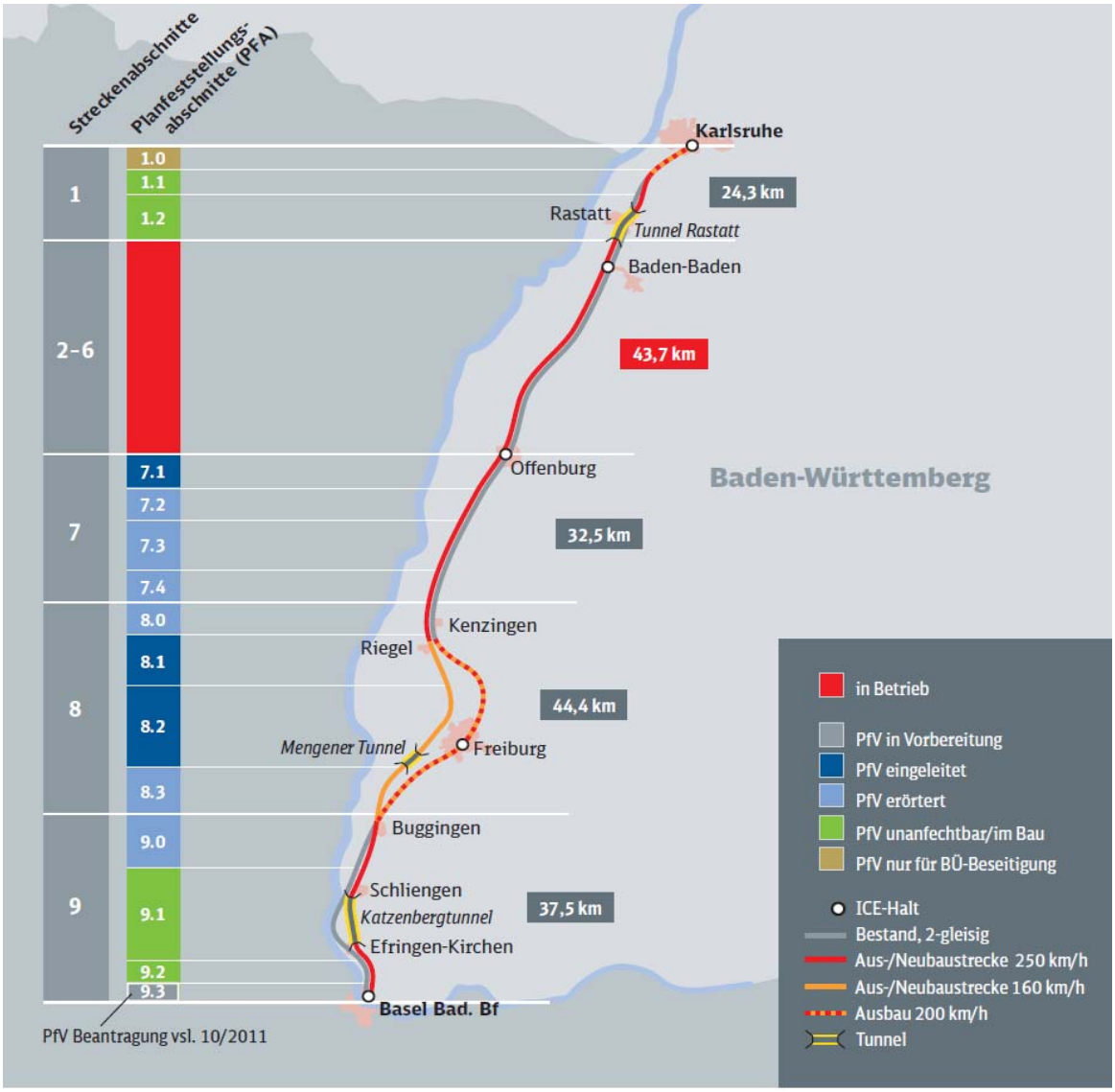

Figure 24: Update Karlsruhe – Basel planning 2011

ETCS projects – 16 projects (PSP 2.2.1.1 – 2.2.1.16)

Due to the decision of the MoT the ERTMS projects are on hold. An exception is the section Emmerich – Oberhausen financed out of the “Bedarfsplan”, where a detailed study was performed to compare possible solutions in the border section of Zevenaar – Emmerich regarding the implementation of ERTMS Baseline 3 & PZB in Germany to ERTMS Baseline 2 V2.3.0d in the Netherlands. For each analysed ERTMS transition and each direction, preferred solutions were selected and risks for each preferred solution identified. The

outcome shows a technical favour for the implementation of ERTMS Level 2 in the Netherlands.
Nevertheless, the financing activities for the corridor will be an on-going process between the German MoT and DB Netz.

Electronic interlocking projects – 35 projects (PSP 2.2.3.1 – 2.2.3.35)
Most of the e-interlockings financed out of the German Recovery Programme (GRP) had their go-live at the end of 2011 (all remote controls; e-interlockings Gremberg, Bensheim with Darmstadt-Eberstadt and Karlsruhe Gbf) as shown in figure 25.

Figure 25: Overview Remote Controls / Electronic Interlockings

In addition, within the Project “ESTW Rechter Rhein” the Königswinter, Troisdorf and Oberlahnstein were commissioned.

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.

3.4.2.2 Risk management and chances

With regard to the implementation of ETCS on the German corridor sections the pending decision concerning financing the trackside ETCS-equipment leads to an implementation after 2015.

The risks to be mentioned are the timeline for the realisation of ETCS which cannot be evaluated seriously due to the open question of financing.

Due to the necessity to update the planning documents for the 3rd track of Emmerich - Oberhausen and to restart planning approval procedures started 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. This has a major impact on PfA 7 Offenburg – Kenzingen. It was decided to look on a scenario called “Offenburger Tunnel” and a second scenario called “Autobahnparallele”.

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.

3.4.2.3 Change request management

Due to the financial framework for ETCS, the baseline containing all corridor projects of DB Netz will be adopted in 2012 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 political changes leads to uncertainties. The commissioning of the infrastructure projects cannot be predicted before the planning approval procedure has been finalised.

3.4.3 Outlook

The main emphasis in 2012 will be the realisation of building activities:

1. **Emmerich – Oberhausen (PSP 2.1.1.1.1 - 2.1.1.1.3)**
   Hot box detection systems – start of building – 3 Hot box detection
   Switch renewal – start of building – 2 different projects
   Go-live electronic interlocking in May 2012 and at end of 2012
   Track renewal – start of building - 8 different projects
   Realisation of planning approval procedure for increasing the number of signal blocks
   Open the planning approval procedure for all remaining sections PFA 1.2, 1.3, 2.1, 2.2, 2.3, 2.4 and 3.4

2. **Karlsruhe – Basel (PSP 2.1.1.2.1 – 2.1.1.2.2.6)**
   The provisional connection of the 2.Rhine bridge envisaged for the end of 2012.
   The commissioning of the Katzenberg tunnel scheduled for December 2012

3. **Electronic interlocking projects – 35 projects (PSP 2.2.3.1 – 2.2.3.35)**
   Go-live Emmerich
   Go-live of Solingen 1. BS
   Go-live of Bensheim (second part)
   Go-live Rheinweiler and Efringen-Kirchen

For the section of Karlsruhe-Basel the decision of the 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/1 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.

3.5 Swiss – German bilateral working group (IQ-C Action Item #8)

3.5.1 Activities and achievements

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. reconstruction node of Basel (see figure 26), as well as the ABS / NBS Karlsruhe – Basel, and a new bridge over the river Rhine. Within this f reconstruction node of Basel ramework ETCS installation has to be integrated into many different building steps.

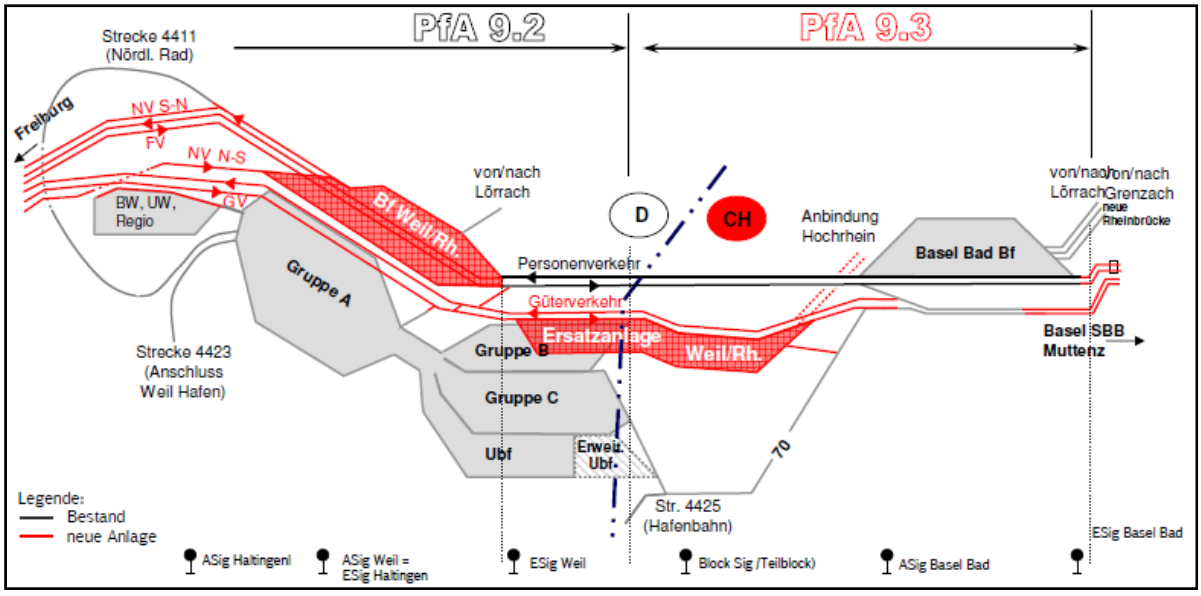

Figure 26: Planning approval sections Node of Basel

Border section node of Basel - Progress in 2011

18.01.2011: Finalization of the concept for an adequate solution of ERTMS in the node of Basel; Submission of the concept to EBA; Replying to questions, filing of documents at the Eisenbahnbundesamt (EBA; German approval authority)

09.08.2011: Feedback of the EBA to the ERTMS concept

30.09.2011: Comments on the EBA feedback by DB

22.11.2011: Meeting with EBA, BAV, DB Netz and SBB-Infrastructure in Munich
Core goal: Find a practical, feasible and sustainable solution in terms of ATP trackside, concentrated in a first phase to the node of Basel

Since 22.11.2011:
Elaboration of a concept concerning responsibility for licensing and approval activities for Swiss ATP equipment (ETCS components for EuroSIGNUM/EuroZUB, Packet 44) on German line sections on German and Swiss territory by EBA and BAV. This concept ist expected to be available at the begin of the 2nd quarter 2012.

3.5.2 Outlook

Expectations for 2012 include:

Finishing the “Concept concerning responsibility for licensing and approval activities for ATP (ERTMS) equipment on German line sections on German and Swiss territory” elaborated by EBA and BAV.

Plan approval documents for Basel Bad Bf shall be prepared as well as finalised and the plan approval process will start.

3.6 SBB Infrastruktur

3.6.1 Key Performance Indicators

Due Date of Reporting	30.12.11	**IM Result [%] Plan**	38	**IM Result [%] Actual**	45
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 on-going (42% completed)
3.1.1.1.3	Basel – Chiasso headway reduction	Initial plan studies started or to be started Construction on-going (1st project Axentunnel) Construction (2nd project Castione) started in 2009 Progress of works like planned
3.1.1.2.1	Cadenazzo – Pino (Capacity increase)	Initial plan study started (2009) Progress of works like planned
3.1.1.3.1	Bern – Thun headway reduction	Initial plan study for final project started in 2009 Progress of works like planned
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	Redundant, as WG TAF TSI was suspended

3.6.2 Work Progress

3.6.2.1 Achievements

By the end of 2011, the overall actual work progress sums up to 45% versus 38% of planned work progress. The sharp increase of 12% compared to last year refers in the first place at the Gotthard base tunnel.

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 in the west-tunnel at the beginning of 2011. 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 newly 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 27 and 28 show the status of the drilling works at the end of 2011.

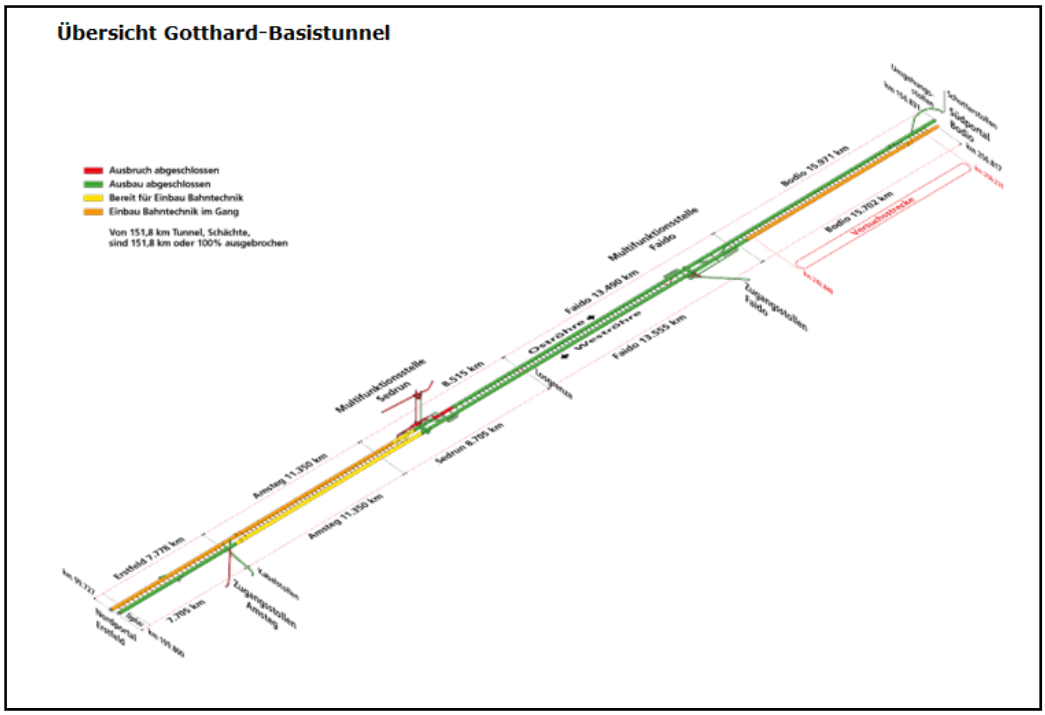

Figure 27: Drilling works at Gotthard base tunnel (31.12.11)

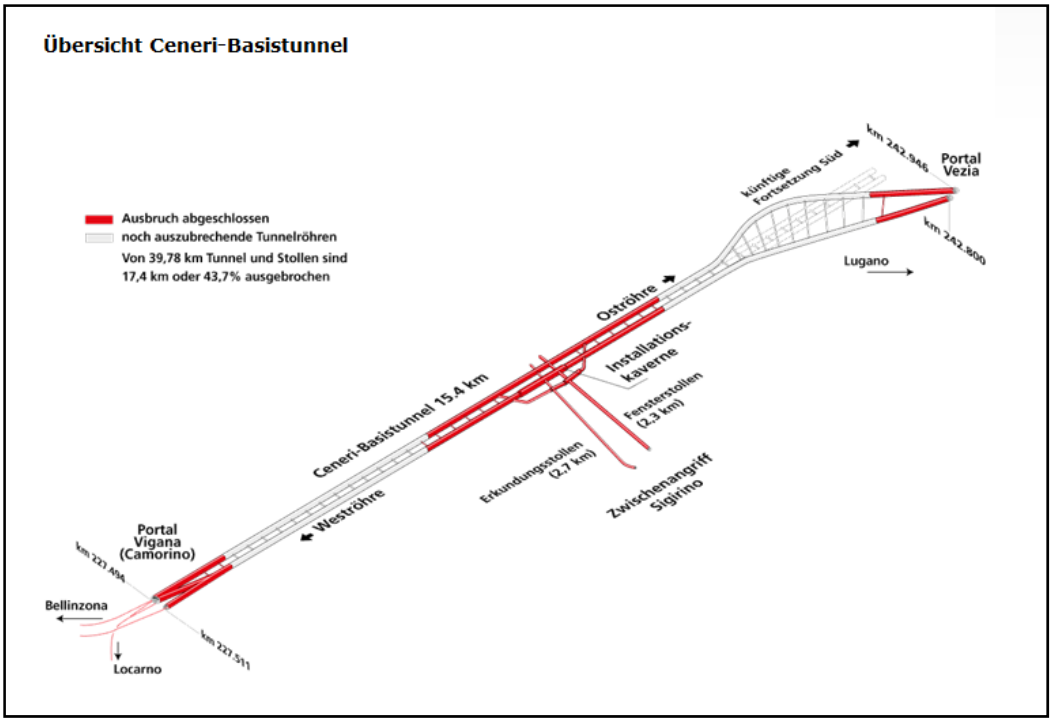

Figure 28: Drilling works at Ceneri Tunnel (01.01.2011)

3.6.2.2 Risk management and chances

No risks to report.

3.6.2.3 Change request management

No changes to report.

3.6.3 Outlook

In 2012, 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 made a progress. The “pre-projects” are in elaboration. Go life is foreseen one year after the Ceneri base tunnel opening. The work concerning the noise protection on the Luino line has successfully finished. The project of a new access charging system is going on and the introduction for 2013 is foreseen as planned.

3.7 BLS Netz AG

3.7.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**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	Redundant, as WG TAF TSI was suspended

3.7.2 Work Progress

3.7.2.1 Achievements

Lötschberg Base Tunnel (PSP 3.1.1.3.2)

On 3 March 2011 the 100.000th train passed the Lötschberg Base Tunnel (LBT). Since its opening on 9 December 2007 on average 85 trains have passed the tunnel every day which means an average usage of 80% of the offered capacity. During peak days the capacity limits of the line are reached. On 10 March 2011 a new traffic record on the Lötschberg-Axis was set: 102 freight trains with 132.445 gross tons passed within 24 hours. Impressive also the reliability of the tunnel-system: the LBT had an average availability of more than 99%. Nevertheless, the importance of alternative routings, flexibility and reserve capacity became evident by two incidents that happened on the Lötschberg-Axis. A freight train took fire in the Simplon Tunnel on 9 June 2011 and destroyed parts of the infrastructure. Since then, the whole traffic is carried out on one track within half of the tunnel. Besides this, heavy rain and flooding destroyed parts of the old Mountain Line on 10 October 2011 and led to a traffic interruption of 2 weeks. Within this time the complete traffic (with some restrictions due to the available capacity) was diverted through the LBT.

Performance Management and Data Quality

The CCL project which SBB started together with RFI and BLS for the line section between Domodossola and Iselle in 2010 was partly realized in 2011. The dispatchers in the traffic control centre of Spiez (DOLS) now receive some automatic information about train positions. Also the data handover to TIS/EPR could be improved. In the next step a full integration in the dispatching systems of the DOLS is planned. Subsequently, real-time data for dispatching will be fully available as well as better data in TIS/EPR for analysis by the performance management.

For improvements in the daily work, institutionalised information exchange and regular bilateral meetings with the involved IMs and RUs could be established within the year.

3.7.2.2 Risk management and chances

No risks to report.

3.7.2.3 Change request management

No changes to report.

3.7.3 Outlook

Completion of Lötschberg (PSP 3.1.1.3.3)

Four years after the opening of the Lötschberg Base Tunnel (LBT) capacity limits are almost reached. Significant traffic increase will only be possible by the completion of the second track on the full length in the LBT.

Political discussions about the financing of the further development of the Swiss railway network will come into a decisive phase in 2012. The Project “FABI” (Finanzierung und Ausbau Bahninfrastruktur) will determine the next steps and projects. At the moment the completion of Lötschberg is not explicit foreseen. To get more influence to the decisions the Lötschberg-Committee was founded on 8 March 2011. Amongst others, all Cantons along the Lötschberg-Axis of Corridor A/1 and BLS are involved in the Committee.

The project start of completion of Lötschberg is still scheduled for 2020. Variants and conditions for further expansion of LBT have been already identified.

3.8 Italian – Swiss bilateral working group (IQ-C Action Item #8)

3.8.1 Activities and achievements

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 13 October 2011 in Milan, Italy.

The following main topics were investigated:

1. Traffic with large gauge: The offered capacity (on the Simplon axis) today is sufficient to satisfy the demand. With the planned (financing under discussion) infrastructure measures until 2015 on the line Domodossola-Borgomanero-Novara, the capacity for this kind of transport appears to be enough until 2020 for the expected demand. Later, it will be insufficient. Therefore, a project was started to analyse the necessary measures to upgrade the Gotthard axis Basel-Chiasso-Milan for a loading gauge P/C 80.
2. Train length: the original agreement foresees a train length of up to 650 meter in crucial points of the line. A study is on-going within the corridor WG Capacity to evaluate the possibility and opportunity to enhance this length up to 740 meters.
3. Demand forecast: Demand forecasts for freight were presented for the time scenarios 2015-2020-2025 and they are coordinated with the forecast of the WG Capacity.

3.8.2 Outlook

RFI appointed representatives for the bilateral working group in December 2011 to support ETCS realisation of the cross border systems between Italy and Switzerland. Meetings will start in 2012. The objective of the working group is to find simplified transition at the border for topics regarding ETCS and to analyse cross border signalling topics in general.

3.9 RFI

3.9.1 Key Performance Indicators

Due Date of Reporting	31.12.11	**IM Result [%] Plan**	38	**IM Result [%] Actual**	34
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) Start of the studies for the building license re-scheduled for 2016
4.1.1.1.2	Simplon platform (several small projects)	(*)
4.1.1.1.3	Novara Node (0223.PO)	Initial plan study started (2008), its completion expected first half of 2012
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 completed (2011)
4.1.1.1.5	Upgrading of Novara-Alessandria line (1178.PO)	Go live (2007)
4.1.1.2.1	Luino platform (several small projects) (1282)	(*)
4.1.1.2.2	Doubling of Laveno-Luino (0265.PO)	Project start scheduled for 2016
4.1.1.3.1	Chiasso-Monza section (0266.PO)	Initial plan study completed (2003) Project start scheduled for 2014
4.1.1.3.2	Bergamo-Seregno section upgrade (0277.PO)	Initial plan study completed (2005) – Conclusion of Building license expected second half 2012 Works start scheduled for 2017
4.1.1.3.3	3rd track Gallarate- Rho (0294.PO)	Initial plan study completed Budget approved for the first phase Building licence granted for the first phase
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 on-going (until 2014)
4.1.1.3.7	Quadrupling of Tortona-Voghera section (0286.PO)	Initial plan study completed (2006) Building license on going
4.2.1.1	ETCS Domodossola-Genoa	Project under review after the change of

PSP	Project	Results and Milestones achieved
		domestic and European scenarios Approval of budget (2008)
4.2.1.2	ETCS Luino-Genoa	Project under review after the change of domestic and European scenarios Approval of budget (2008)
4.2.1.3	ETCS Chiasso-Milan	Project under review after the change of domestic and European scenarios Approval of budget (2008)
4.2.1.4	ETCS Milan-Genoa	Project under review after the change of domestic and European scenarios Approval of budget (2008)
4.3	TAF TSI	Redundant, as WG TAF TSI was suspended.

(*) The Luino and Simplon Platforms are a set of measures of different nature agreed upon at bilateral level. Several of the foreseen actions have been completed. The remaining actions are object of regular bilateral meeting within the GDL1 as explained in chapter 3.9.

3.9.2 Work Progress

3.9.2.1 Achievements

In 2011 the framework agreement between RFI and the Italian Ministry of Transport was reviewed and the completion of the ministerial approval procedure is expected in the first quarter of 2012. Due to the general Italian economic situation RFI faces further financing reductions from the State. Consequently, the postponement of some projects is confirmed. The analysis of possible alternative smaller interventions shows that the shortening of travel time between protection sections could allow a sufficient capacity gain to accommodate the expected traffic forecast until 2020. The involved sections are Bivio Rosales - Milan and Gallarate - Parabiago. At the same time, the prolonging of the sidings up to 650 m in 5 stations between Premosello and Vignale and Laveno-Luino will create more possibilities to run longer trains and thus contribute to a capacity increase. These measures were partially already part of the two platforms Simplon and Luino. All these projects will be reshaped in 2012. The financial measures are in a discussion phase.

The new track in Gozzano went live in December 2011.

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 2016.

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 on-going and is expected in the second quarter of 2012.

Linking of Novara-Domodossola track near Gozzano (PSP 4.1.1.1.4)
Works could be completed and the project went live on 4 December 2011.

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.

Luino platform (PSP 4.1.1.2.1)
Main scope of the works are shorter block sections, modernized ATC/ ATP trackside devices and prolonging of sidings. These works are almost completed. The prolonging of sidings which are not yet completed is analysed in the GDL1.

Doubling of Laveno – Luino section (PSP 4.1.1.2.2)
The start of the project is scheduled for 2016.

Chiasso – Monza (PSP 4.1.1.3.1) / (PSP 4.1.1.3.6)
The start of the Building License is scheduled for 2014. Works are not financed.

Bergamo – Seregno (PSP 4.1.1.3.2)
The project is on-going. A building licence is expected for the first half of 2012. Start of work is postponed to 2017.

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

Giovi pass and double track line Genoa – Milan/ Alessandria (PSP 4.1.1.3.4)
A first funding of € 500 Mio 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 kV DC / 25 kV AC, ERTMS / ETCS Level 2.
The realisation of the new pass will allow 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. Recipient 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. The contract between RFI and the General Contractor was signed in July 2011. Figure 29 illustrates the routing of the perspective new line.

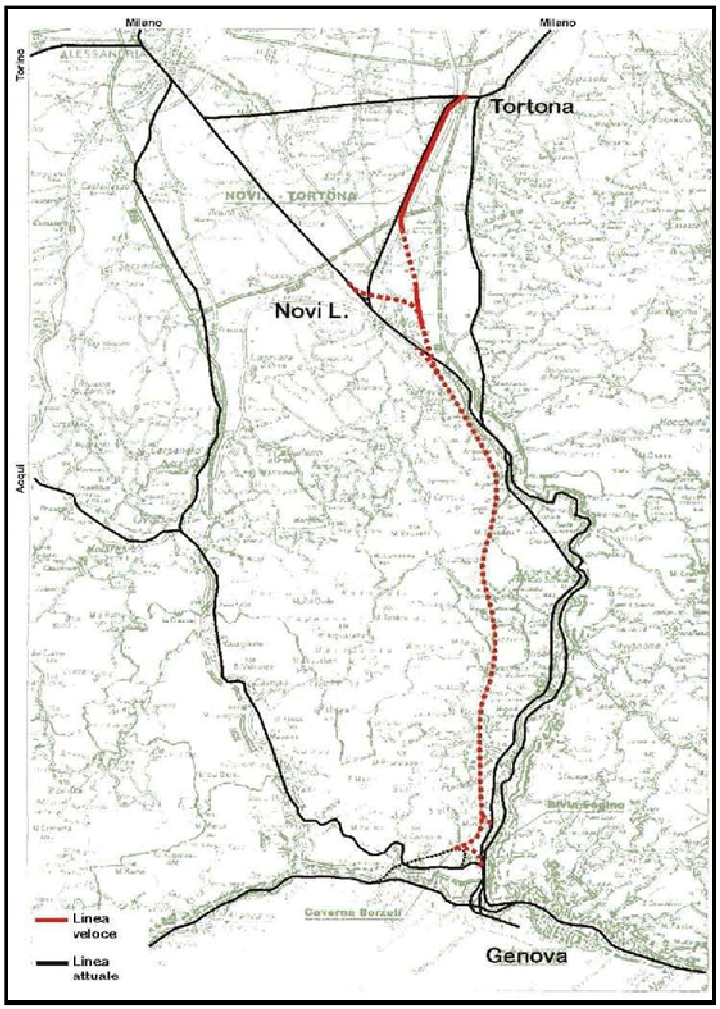

Figure 29: Genoa – Milan/ Alessandria

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 on-going 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 has been postponed to 2017.

ETCS projects (PSP 4.2.1.1 to 4.2.1.4)
In 2011, RFI reviewed its strategy as a result of new political and economic scenario, both at national and European level, also in order to decide the most appropriate level of performance to achieve depending on different uses and characteristics of the lines. The results of this assessment show that the "Level 2" solution appears to be the best choice for the Italian part of corridors where there is a need to maintain or increase existing line performances and that the "Level 1" solution, which requires little changes on the already existing Italian system (SCMT), is the best solution to reach interoperability for large shunting area and for complicated installations. Besides such commercial inputs, the technical findings of two trial projects are also needed before starting the tender process. These two trial projects will clarify the requirements to overpose ETCS L2 and ETCS L1 to the existing domestic system. The official target deadline to go live with ETCS on the Italian sections of the corridor remains 2015.

3.9.2.2 Risk management and chances
The risk for the Italian infrastructure investments 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 were 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. The latter being delayed for several projects.

3.9.2.3 Change request management
No changes to report.

3.9.3 Outlook
Since the financial crises, which started in 2009 and has not been completely overcome yet, analysis of smaller “alternative” projects has started. Some of these alternative investments regard the shortening of train protection sections that would lead to increased capacity.

4. Other IQ-C Action Items

4.1 Noise platform of the Ministries (IQ-C Action Item #11)

Railway noise remains a key topic for the further growth of freight traffic on the corridor. There are already different approaches within the corridor to cope with this problem. The retrofitting of existing wagons seems to be the most efficient and effective way to reduce the noise significantly until 2020.

Overview of existing approaches within the corridor:

ProRail:
The current incentive system gives a bonus for retrofitted wagons on the Dutch rail network. The system is being evaluated at the moment. Other ideas are looked at, under which the German system.

DB Netz AG:
A NDTAC system will be introduced on 9 December 2012 for quiet freight wagons to create a system of financial incentives that encourages retrofitting silent brakes on wagons. The goal is to achieve considerable, lasting reductions in train noise by 2020. The system consists of two components and is financed half by the federal government (max. of 152 million €) and half by an increase in track access charges for noisy freight trains. A surcharge of 1% on all freight transport will be raised when the LL-blocks are homologated and available. Wagon owner will receive a bonus, if the wagons are retrofitted with noise-mitigating braking systems.

SBB:
There is already an existing incentive scheme which was under revision in the last year. Starting from 2013 on there will be a new bonus system with an increasing bonus for rail freight wagons within the current track access charges. Moreover, there is an announcement for 2020 that there will be further measures to ban "non-silent" wagons from the Swiss network.

EU:
The EU is currently working on a regulation to implement a system which is applicable European wide. Moreover there are discussions on EU-funding for retrofitting and a modification of the latest TSI Noise, so that the maximum noise levels are also obligatory for existing rolling stock about 10–12 years after a transition period.

4.2 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:

- Market regulation (IQ-C action item #7)
- Customs (IQ-C action item #12)
- Rail Freight Regulation (IQ-C action item #13)

They will not be highlighted any further in the present annual report 2011 of the IMs.

5. Conclusions

Summarising, the major activities of 2011 were e.g.

- A further continuing improvement of performance figures due to the recovery of the economy of the European market reflected in a strong increase of business and transport volumes;
- The development of concepts and preparation of guidelines together with RNE for major topics regarding the implementation of the EU Regulation 913/2010, which have to be materialised until November 2013;
- Preparation and publication of the European call for tenders for the execution of the Transport Market Study;
- Analysis and development of proposals to modify the statutes and contracts of the EEIG in order to comply with the EU Regulation 913/2010;
- Preparations for setting up the Terminal Advisory Group including selection of terminal operators by the ministries as potential members;
- The analysis and change of the RU Advisory Board with regard to their function as RU Advisory Group according to the EU Regulation 913/2010;
- Carrying out together with the ERTMS Users Group a cross border impact analysis to assess potential risks and support ETCS implementation;
- Investigation of impact from the decision of German MoT to no longer equip ETCS track side until 2015 and to finance STMs on vehicles instead;
- Preparation together with Corridor C/2 of a joint application for EU TEN-T co-funding 2011-2014 of studies to ensure the future financial basis for vital corridor activities.

The corridor made a major step forward regarding market perspectives, corridor structure and scope of the entire programme. Thanks to the EU Regulation 913/2010, attendance of stakeholders is now emphasising even more on all strategic directions and operational options, which lead to swift enhancements of rail transport from door to door. The more and more critical budget situations of ministries affect the investment programmes, and the performance and productivity improvement based on operational measures and process harmonisations are the paramount activities in the successful development of the corridor in future.

Despite the fact that Corridor A/1, as the blue print for the EU in drawing up EU Regulation 913/2010, had already experienced many of the measures in the past, their implementation is much more challenging than expected, e.g. EU Regulation 913/2010 asks not only for an extension of existing coordination and best practices, but in some cases also requires changes of methodologies used by the IMs which are difficult to implement without worsening the situation on the network like e.g. for passenger trains in high dense and mixed traffic lines. In addition, the regulation sometimes is interpretive in several ways although the network needs coherent and compatible solutions in all corridors, and by this also in

coherence with all national networks of the IM organisations. Achieving this will mean major changes which can only be accomplished in a step by step approach from all stakeholders. This refers mainly to the definitions of pre-arranged capacity and train paths, traffic management rules, as well as timetable processes and the capacity allocation on corridors by a Corridor One Stop Shop. The difficulty lies in combining the requirements from the EU Regulation 913/2010 with the existing practices in such a manner, that the implementation will finally be beneficial for freight transport without harming other business.

The preparation of the corridor information document and publication of corridor related data need professional methods and tools for managing the huge amount of corridor data. The EEIG had contracted and carried out a feasibility study for setting up a database tool for the complex data structure, the storing and updating of the manifold data and their formats, as well as delivering corridor reporting on infrastructure data and performance figures. The access to all this information shall be supported by a geographical user interface, which can be reached by all stakeholders via internet. The implementation of this information management system is indispensible for our successful corridor management and the study for its implementation is part of our agenda for 2012.

Corridor A/1, with associated Swiss partners in the EEIG, with the Betuwe line dedicated to freight and further difficult mixed traffic conditions with a very high market share, surely represents one of the most complex systems. Therefore the IMs and their ministries carry a very high responsibility in implementing EU Regulation 913/2010, which has to be accounted for in the careful evaluation and preparation of beneficial and suitable solutions for all IMs.

In the same way, Corridor A/1 has also a leading role in the implementation of ETCS until 2015. Unfortunately, this objective has been put in question by the decision of the German ministry not to install ETCS trackside equipment in this frame. The past discussions in the Executive Board, of the IMs and with other experts could not really deliver tangible advantages resulting from this migration strategy. Just the opposite, the development, test and authorisation and operation of STM equipment in vehicles present a major risk for our corridor goals, as well as for the further development of ERTMS as such and the migration process in general in Europe. Since ERTMS is already widely asked for and implemented in railway systems on other continents, the industry has to look for other markets and might abandon the European requirements.
Germany, at the centre of the European rail network and economy, on which all European countries rely for establishing international traffic and business, carries in this context a major responsibility for the whole of Europe! Let’s hope that with the help of all stakeholders a suitable and beneficial solution for Germany can finally be found in 2012.

The above conclusions and the steady increase of the market demand are the most important and stimulating perspective for the continuation of our activities. Corridor Rotterdam-Genoa is the nucleus for developing competitive rail transport solutions for the whole of Europe!

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 (Italian 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 (Swiss ministry)
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)
CCS	Command and control systems (TSI)
CEO	Chief Executive Officer
CER	Community of European Railway and Infrastructure Companies
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, renamed TIS
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
MAP	Multi Annual Programme
MIS	Management Information Systems
mio	million (€)
MoT	Ministry of Transport
MoU	Memorandum of Understanding
MS	Member state
NBS	Neubaustrecke (new 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 (Italian IM)
RI	Radio Infill (ETCS)
RNE	RailNetEurope
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)
UVS	Umweltverträglichkeitsstudie / Study on environmental impacts
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

Implementation 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 Funktionsfähig-keit (HDF) und Abnahme	Abnahme	Collaudo
Go-Live	Indienststelling	Inbetriebnahme (IBN)	Inbetrieb-nahme (IBN)	Messa in esercizio

Figure 30: 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 31: Risk scoring matrix

The risks are classified by the following criteria:

Risk Types: O: Organisational; E: External; T: Technical; F: Functional

Annex C: Work methodology and organisation (since 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[5]. 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/1 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.

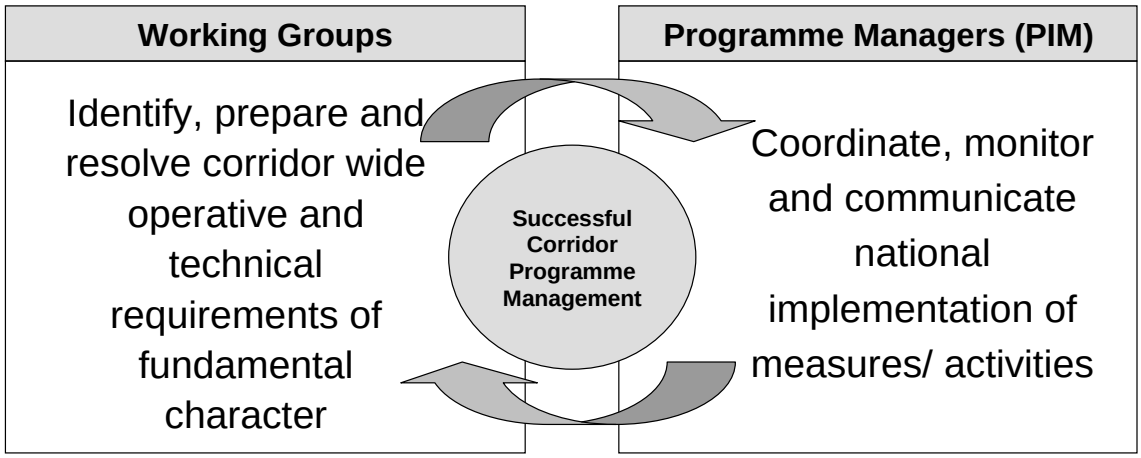

Figure 32: Roles of WGs and PIMs

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 31). 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.

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

[5] See Business Plan documents for more details.

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[6], 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 generates quarterly reports to be submitted to the MC, ExB, IQ-C ExB and to the CEOs (see figure 32).

[6] SBB and BLS subsumed

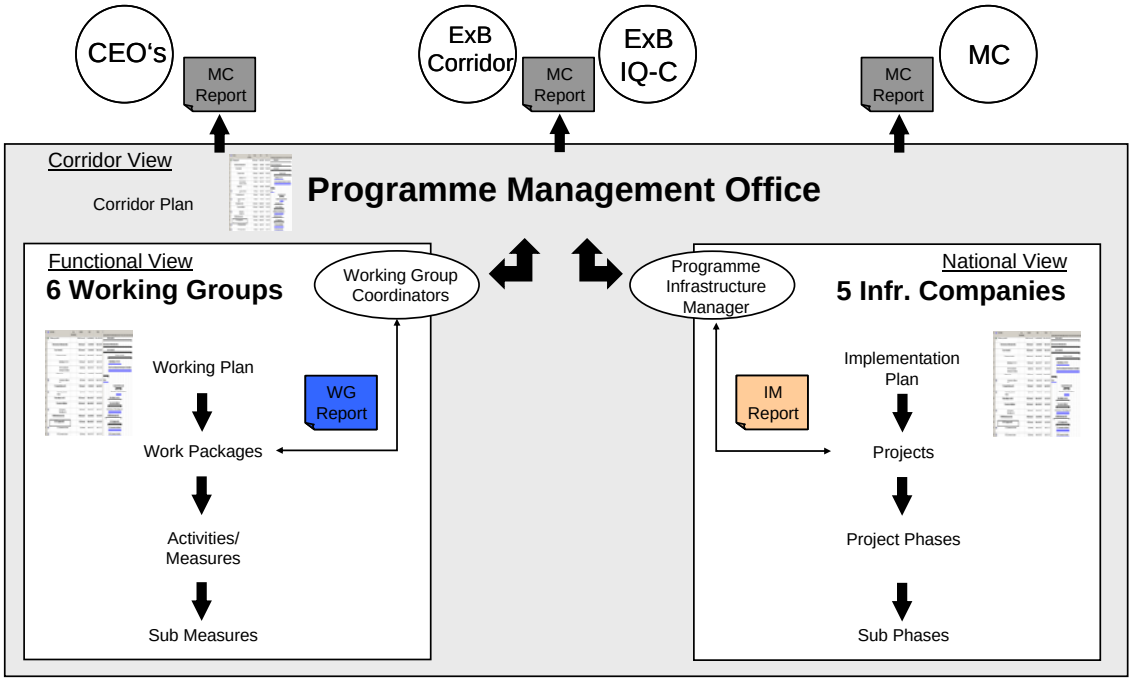

Figure 33: Reporting of the PMO

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/1 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 information given in this report is based on the above mentioned principles. 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 33 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 34: 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 in figure 35 is to identify the IQ-C action items and to enable a quick and convenient reference.
The IC-C action Plan 2006-2014 was updated in June 2010. This report newly refers to the action items of the updated plan unless stated otherwise.

IQ-C #	Action	Chapter	Page
1	Digital coordination	2.6	50
2	Services	2.5, 2.6	48,50
3	Improving punctuality	2.6	50
4	International capacity allocation	2.6	50
5	Capacity / bottlenecks	2.3	36
6	Cross-acceptance	2.2	34
7	Market regulations		
8	ETCS/ ERTMS	2.1, 3.2, 3.5, 3.8	28, 56, 72, 79
9	Terminal facilities	2.9	40
10	Operational Rules	2.2	34
11	Noise	4.1	86
12	Customs		
13	Rail Freight Regulation		

Figure 35: IQ-C cross reference June 2010

Annex E: Development and history of document

Delivery and Approval of the Working Group chapters

Chapter	Working Group	Responsible WGM	Delivery	Approval
2.1	ERTMS	Stefan Wendel	09.01.2012	19.04.2012
2.2	Operations	Sebald Stumm	27.11.2012	20.04.2012
2.3	Capacity	Gabrio Caimi	22.02.2012	16.04.2012
2.4	Terminal Studies	Thomas Schneider	03.04.2012	18.04.2012
2.5	Freight Regulation	Mathias Ebel	21.12.2011	20.04.2012
2.6	Traffic Quality	Hansruedi Kaeser	05.03.2012	18.04.2012

Delivery and Approval of the Infrastructure Manager chapters

Chapter	Infrastructure Manager	Responsible PIM	Delivery	Approval
3.1	ProRail	Jan Deeleman	13.02.2012	20.04.2012
3.2	WG NL-D	Thomas Schneider	03.04.2012	18.04.2012
3.3	Infrabel	Gerda Van Den Heede	16.01.2012	20.04.2012
3.4	DB Netz	Thomas Schneider	03.04.2012	18.04.2012
3.5	WG CH-D	Thomas Schneider	03.04.2012	18.04.2012
3.6	SBB Infrastruktur	Hansruedi Kaeser	05.03.2012	18.04.2012
3.7	BLS Netz AG	Alexander Paulus	15.12.2012	16.04.2012
3.8	WG IT-CH	Silvia Carloni	14.02.2012	
3.9	RFI	Silvia Carloni	14.02.2012	

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	31.05.2012	18.06.2012
0.2, 1.1, 2.3	ExB	Hinne Groot	28.06.2012	02.07.2012