IQ-C Action plan 2006-2010 for rail freight corridor Rotterdam-Genoa

July 2006

The action plan has been decided upon by the Ministries of Transport from Germany, Italy, Netherlands and Switzerland on 30 May 2006. The action plan is based on the requests from Ministers as expressed in the Rotterdam-Genoa progress report March 2006 in the Bregenz meeting (3 March 2006). The action plan has been discussed and accepted by the involved infrastructure managers, rolling stock & safety authorities. The action plan is based on the MOU ''Lugano'' for the Rotterdam-Milan corridor from 9 January 2003 which was extended to Genoa by decision of Ministers of 10 July 2004 at Rotterdam. The original action plan from 2003 is in this way amended. The current action plan takes into account the Letter of Intent for ERTMS deployment on corridor Rotterdam Genoa which was signed by Ministers 3 March 2006. On an annual basis the IQC-working group of Ministries will report to the Ministers on the progress of the project.

OVERVIEW 2006-2010 ACTION PLAN IQC CORRIDOR ROTTERDAM – GENOA

MoT = cooperating ministries of Transport, IM = cooperating Infrastructure Managers, RB = cooperating regulatory bodies, SA = cooperating safety and rolling stock authorities

Nr.	Action	Responsible	Milestone	Year
1	Digital coordination	IM	implementation Pathfinder, EICIS and Europtirails	2007
		IM	implementation plan on the corridor for the SEDP regarding TSI TAF	2007
2	One stop shop optimization: shortening response time	IM	Full use of all organizational and technical possibilities to ensure response times for short term path requests to 5 days for international train paths train paths	2007
		IM	Set up and implement measurement system for response time regarding international requests for train paths	2007
3	Monitoring traffic and performance	IM	Design of corridor specific Management Information System by Infrastructure Managers with performance indicators	2006
		IM	performance monitoring and improvement,	2007
4	Improving punctuality	IM/MoT	Development of European Performance Regime including corridor aspects on the basis of punctuality measurements and broader shared analysis of causes of delay	2006
		IM	Pilot Phase European Performance Regime on Rotterdam – Genoa	2007
		IM	Implementation of European Performance Regime on Rotterdam – Genoa	2008
5	Improvement international capacity allocation process	IM/MoT	Infrastructure Managers will introduce common deadlines in the allocation process (by 2006) and make the use of Pathfinder mandatory (by 2007)	2006 2007
		IM/MoT	Introductions of authorised applicants on cross border basis on the basis of a feasibility study	2007
		RB	Assessment by regulatory bodies of international cooperation of	2006

			ministries and infrastructure managers regarding allocation of capacity for international freight trains on the corridor	
6	Integrated elimination of infrastructure bottlenecks	IM	Annual monitoring of developments of bottlenecks at medium-long term for the corridor by the infrastructure managers	Starting 2006
		IM/MoT	Annual discussion between Infrastructure Managers and Ministries to ensure the infrastructure bottlenecks are discussed at the right places (e.g. bilateral level between countries, EU-TEN-T financing, ERTMS corridor group) and take into account the corridor perspective	2006
7	Mutual recognition of engine drivers	SA	Implementation of cross border recognition of general qualifications of engine drivers on a bilateral basis (D-CH, CH-I).	2006, 2007
		SA	Scaling up to a corridor wide implementation in line with the new EU directive for engine drivers.	2008
8	Mutual recognition of locomotives	SA	Finalizing of the International Requirement List for certification of locomotives	2006
		SA	Implementing of the International Requirement List in conformity with the new EU guideline currently in development	2007
9	Monitoring of market regulations	RB	the regulatory bodies will report at least yearly about the result of their cooperation	2006
10	ETCS	IM/MoT	Ministries and EU agree upon implementation of the "project 2012"incl. budgets	2006, 2007
		IM/MoT	Infrastructure managers organise their cooperation	2006
		IM	tendering of the project. by the joint project organisations of the infrastructure managers	2008
		IM	completion	2012
11	Terminal issues	IM/MoT	Study on quality of interface of terminals with railways	2006/2007

Explanation action points

1. Digital coordination

Aim
Infrastructure managers will organize their digital cooperation in such a way that virtual coordination of infrastructure management on the corridor is possible with one face towards railway undertakings on a cross border basis.

Explanation
For virtual coordination IT tools are needed before, during and after the driving of a train. These tools need to be compatible with:

- national systems of IM's like, RUTH-K, VPT/PTI etc.
- systems of RU's in order to facilitate seamless digital communication between IM's and RU's, also cross border.

Several tools are developed already by RailNetEurope in a broader EU context, like Pathfinder and EICIS. More is to follow in cooperation with other projects like Europtirails. These tools will be implemented on the corridor in order to facilitate virtual coordination of capacity management, traffic management and performance monitoring. In this way it is not necessary to create a hardware center. The digital coordination can have a virtual character.
The digital corridor coordination should be set up in such a way that it is in conformity with the technical specifications for telematic applications of rail freight transport of the EU (TSI TAF). A Strategic European Deployment Plan (SEDP) is under construction. The corridor can play a leading role in the implementation of the SEDP for TSI TAF.

Milestones

- ⇒ Full implementation on the whole corridor of Pathfinder, EICIS and Europtirails in 2007 at the latest.
- ⇒ Presentation of an implementation plan on the corridor for the SEDP regarding TSI TAF by upgrading of IT tools on basis of customer evaluation and cost benefit analysis in 2007, to be implemented after approval.

2. Shortening response time for train paths requests

Aim
Allocating preconstructed and tailormade train paths on a full cross border basis by infrastructure managers to railway undertakings and other applicants.

Explanation
RailNetEurope has set up One Stop Shops (OSS) in every EU member state and Switzerland. OSS are serving as the portals to railway undertakings. Railway undertakings no longer need to address the infrastructure managers of different countries in different languages. The OSS provide a spectrum of advising, co-ordination and sales services, before, during and after the train journey. This includes, for example, assistance to the customer on traffic planning, international co-ordination of tailor-made train paths and information on the level of infrastructure charges.
The OSS are also functioning on the corridor. They have proven they can fulfill a good role. Still a lot of work has to be done to optimize cooperation of the OSS. The OSS possess a quickly growing toolbox with better procedures, tools like Pathfinder etc. The challenge in the coming years will be to maximize customer satisfaction by optimizing the service levels through use of all new possibilities coming available. More in particular the response time for answering to specific requests for international rail freight paths to the infrastructure managers must be shortened.

Milestones

- ⇒ Full use of all organizational and technical possibilities to ensure response times for short term train path requests to 5 days for international train paths train paths in 2007.
- ⇒ Set up and implement a measurement system for response time regarding international requests for train paths in 2007

3. Monitoring traffic and performance

Aim
Ensure by monitoring that on the corridor use, quality and performance of train paths for international freight is of the highest possible level.

Explanation
Infrastructure managers are responsible for constructing train-paths on the corridor that are in line with the requests from railway undertakings. Infrastructure managers shall co-operate in order to make good connecting train paths. Three aspects are most important here:

- whether the infrastructure managers are able to offer a sufficient number of train paths (quantity) to the railway undertakings;
- whether the infrastructure managers can offer sufficient quality of train paths. E.g. the transit-time from Rotterdam-Genoa is important here;
- Whether the performance of trains on the allocated train paths is in practice as expected.

To implement this action the Infrastructure Managers will develop clear performance indicators and an implementation program to enhance performance. A corridor specific Management Information System is being developed within the framework of RailNetEurope For this purpose basic data can be used from Europtirails and the pilot with European Performance Regime (EPR) The implementation of ETCS can facilitate the improvement of quality and quantity of train paths. The ETCS corridor CBA study clearly shows the economic importance of good quality train paths. Where the legal priority rules for cases of congested infrastructure would form an obstacle in achieving the desired improvement the infrastructure managers should report this to the Ministries.

Minimum performance indicators, e.g.:

- number of train paths (e.g. per week / working day) requested and used by railway undertakings, number of train paths offered by IM for international rail freight for each section of the corridor;
- commercial speed and realised travel time for typical origin-destinations on the corridor.
- Average waiting time at border.
- Punctuality of train services on the corridor.
- Volume of international rail freight transport on corridor (data source to be assessed)

Milestones

- ⇒ Design of corridor specific Management Information System by Infrastructure Managers with performance indicators by 2006;
- ⇒ performance monitoring and improvement, 2007 onwards

4. Improving punctuality

Aim
Improve punctuality on the corridor by giving infrastructure managers and railway undertakings the right incentives

Explanation
Punctuality on the corridor is still not satisfactory; the progress report March 2006 from Rotterdam – Genoa stated 42-52% of all international freight trains through Switzerland had a delay of more than 30 minutes in 2005. The reasons for these ongoing delays must be clarified and discussed among stakeholders.
In addition to that, the Infrastructure managers will introduce a performance scheme to enhance quality on the corridor which is compatible with art 11 2001/14/EC. The Infrastructure Managers will consult stakeholders in the development phase. The Infrastructure Managers plan to measure punctuality of train services on the corridor including the causes of delay (delays caused by infrastructure manager, railway undertaking, other). Based on the number of delays caused by a particular infrastructure manager or railway undertaking a financial penalty will have to be paid. This

scheme (European Performance Regime, EPR) is currently being developed taking into account the work UIC has undertaken for this. EPR is developed in the UIC/RNE working group and will be introduced as a pilot on the Rotterdam-Genoa corridor (pending decision by Infrastructure Managers). EPR will make use of the EUROOPTIRAILS project implementation on the corridor.

Milestones

- ⇒ Development of European Performance Regime including corridor aspects on the basis of punctuality measurements and broader shared analysis of causes of delay, 2006;
- ⇒ Pilot Phase European Performance Regime on Rotterdam – Genoa, 2007;
- ⇒ Implementation of European Performance Regime on Rotterdam – Genoa, 2008

5. Improvement international capacity allocation process

Aim

Improve transparency and efficiency of the capacity allocation process for designing the regular time-table and dealing with short-term requests for train paths (art 20- 22 plus 23 2001/14/EC).

Explanation

Infrastructure Managers develop a cooperation scheme for the allocation of capacity on the corridor. At present railway undertakings ensure their international paths in very different ways, e.g. via the one-stop-shop, via combined national procedures, via RailNetEurope / FTE. This makes the process not transparent and less efficient for all players. Within RailNetEurope the international allocation process is currently being revised (Dupuis process), with a possible pilot role for the Rotterdam-Genoa corridor. The RailNetEurope Handbook has been developed for this purpose recently, The cooperation shall result in a more transparent and efficient allocation process for all railway undertakings / applicants. The introduction of the concept of authorised applicants on the whole corridor could be another possibility to improve the international capacity allocation process. When ports, logistic service providers and industry can themselves buy international train paths from infrastructure managers, rail freight transport can be more attractive for big customers. However the detailed information necessary to apply for train paths is currently a hindrance for the effective use of this concept. The Infrastructure Managers will actively seek for possibilities to solve this hindrance and to make the concept of authorised applicants really working.

Regulatory bodies are responsible for monitoring the allocation process for international rail freight paths on the corridor. They will exchange information and discuss cases of complaints regarding the allocation process. Regulatory bodies have also a role in ex-officio investigating the international cooperation of infrastructure managers, e.g. within the framework of RailNetEurope. A specific issue for regulatory bodies to assess is how framework agreements ex art 17 2001/14/EC to secure multi-annual capacity are being dealt with by the Infrastructure Managers.

Milestones

- ⇒ Implementation of the improved new capacity allocation process by the infrastructure managers. As part of this the Infrastructure Managers will introduce common deadlines in the allocation process (by 2006) and make the use of Pathfinder mandatory (by 2007)
- ⇒ Introductions of authorised applicants on cross border basis on the basis of a feasibility study, (2007)
- ⇒ Assessment by regulatory bodies of international cooperation of ministries and infrastructure managers regarding allocation of capacity for international freight trains on the corridor (2006).

6. Integrated elimination of infrastructure bottlenecks

Aim

Improvement of cross border traffic by facilitating the management / solving of existing infrastructure bottlenecks on an integrated basis

Explanation

The finalisation of ETCS on the corridor can only bring full benefits for the railway undertakings if a set of infrastructure improvements has been realised at that time. A selected number of relatively small

infra projects will be integrated in the ETCS project plan. Some examples are: removing 1500 Volt islands in the Netherlands, shortening the block length between Oberhausen and Emmerich by Germany, increasing capacity of the Sempione Platform by Switzerland and Italy. Other bottlenecks require more substantial investments and are often being dealt with on national or bi-national basis. All the bottlenecks have an impact on the functioning of the corridor. For this action point there needs to be in particular an active cooperation between the ERTMS corridor group (Executive Board, with special interest to bottlenecks with limited financial implication), IQ-C and the existing bilateral cooperation between States. The IQC project does not intend to change any responsibilities in these investments in infrastructure but merely wants to ensure the bottlenecks are treated at the right place and take well account of the corridor perspective.

Milestones

⇒
⇒ Annual monitoring of developments of bottlenecks at medium-long term for the corridor by the infrastructure managers, from 2006 onwards;
⇒ Annual discussion between Infrastructure Managers and Ministries to ensure the infrastructure bottlenecks are discussed at the right places (e.g. bilateral level between countries, EU-TEN-T financing, ERTMS corridor group) and take into account the corridor perspective, from 2007 onwards.

7. Mutual recognition of engine drivers

Aim
Mutual recognition of general qualifications of train drivers on the whole corridor.

Explanation
Qualifications of train drivers have partly a general character (for example eye tests) and partly a specific national character (for example track knowledge). It is clear that national qualifications like track knowledge cannot be a subject for cross border recognition. The general qualifications can however be subject of cross border recognition. This is also foreseen in the new EU directive that will be implemented around 2010. It is important to undertake action sooner for the corridor in order to prevent that trains must stop at borders to change drivers.
The general qualifications fit for cross border recognition are:

- Medical examination
- Psychological examination
- Language examination
- Examination and monitoring of knowledge of locomotive types
- Examination and monitoring of general professional knowledge

Germany and the Netherlands have developed a model for cross border recognition on these issues. This model will also be implemented at the borders Germany-Switzerland and Switzerland-Italy.

Milestones

⇒ Implementation of cross border recognition of general qualifications of engine drivers on a bilateral basis (D-CH, CH-I), 2007.
⇒ Scaling up to a corridor wide implementation in line with the new EU directive for engine drivers, 2008.

8. Mutual recognition of locomotives

Aim
Mutual recognition of certification processes for locomotives on the whole corridor.

Explanation
Certification of locomotives is a long and expensive process due to hundreds of items that must be checked and tested while there is virtually no cross border recognition. The result is that locomotives must pass the whole expensive procedure in every country again. This is not at all necessary as can be

seen in the automotive sector. First steps are already made for cooperation of authorization bodies (which was started in the framework of the Brenner corridor) regarding certification for new locomotives on the corridor. The next step will be to draw up an International Requirement List (IRL) specifying more in detail which requirement exists currently on the corridor per country. In 2006 this work will be carried out.
When the IRL is ready the next step must be to examine which items are fit for mutual recognition and which items have a national character and are therefore not fit for mutual recognition (for example certification of national safety devices). The work on this issue shall be closely coordinated with the ongoing EU work on principles of cross-border certification of locomotives.
Another issue that will be treated is mutual recognition of maintenance facilities for locomotives. This will be increasingly important the more locomotives are internationally used.

Milestones

- ⇒ Finalizing of the International Requirement List for certification of locomotives in 2006.
- ⇒ Implementing of the International Requirement List in conformity with the new EU guideline currently in development in 2007.

9. Monitoring of market regulations

Aim
Ensure cooperation of regulatory bodies for issues of common interest on the corridor.

Explanation
The regulatory bodies of the corridor have developed their cooperation for issues that are related to international freight transport on the corridor. Within this framework they will exchange information on their current work and work together on issues of mutual interest like access to services and capacity allocation process. Railway undertakings can address the cooperation of regulators for concerns that they may have.

Milestones

- ⇒ The regulatory bodies will report at least yearly about the result of their cooperation.

10. ETCS implementation

Aim
International locomotives can use the corridor with just ETCS on-board equipment by completing ETCS in the infrastructure in 2015. As from 2012 ETCS will be installed in the infrastructure of Switzerland, Netherlands, Italy and partly in Germany, which means that in a first phase STM PZB will be required on board.

E*xplanation*
Thanks to ETCS, infrastructure managers can improve their Traffic Management.
Without national signalling systems a strong entrance barrier will be removed. The homologation of new locomotives on the corridor will become easier and is maybe even possible to allow drivers without national infra knowledge to enter to ETCS-2 sections of the corridor. As concluded by the Ministers concerned in the Letter of Intent of 3 March 2006, the implementation of the ETCS-project will be carried out by a joint project organisations of the infrastructure managers. IQ-C will initiate and observe the overall progress.

As from 2012 the ETCS locomotives can run along the corridor without the expensive signalling systems of The Netherlands (ATB), Switzerland (Signum), Italy (BACC) and the Germany (LZB). Only PZB, which remains at that time as single system between Oberhausen and Mannheim will be required on board. In practice most of the locomotives will need PZB for many years, even after completion of the ETCS on corridor in 2015, since PZB enables locomotives to divert from the corridor onto the extensive German network. Apart from saving costs on board the operational advantages of ETCS can be materialised already in 2012 by improving the performance of cross border movements.

The corridor countries choose the ETCS technology, which meets their national policy. The Netherlands will install ETCS as a dual system on the remaining parts of their Betuweline. Germany will apply a dual system too since they don't want to interfere the movement of national traffic and choose for ETCS level-2 for reasons of capacity of infrastructure. Switzerland wants to install level-1 Limited Supervisons for reasons of cost. Italy needs radio infill in order to utilise their recent interlocking.
Despite these variety of applications ETCS level-1 sufficiently offers technical interoperability. The trainborn equipment will be then limited to the electronic vital computer (EVC).

ETCS level-2 is a step further in the European Train Management System (ERTMS) and offers interoperability on an operational level. The ETCS train can run consequently without any signal or information along the infrastructure. Level-2 offers opportunities for operational benefits to infrastructure managers and railway undertakings.

Milestones

- ⇒ 2006/2007 Ministries and EU agree upon implementation of the "project 2012"incl. budgets.
- ⇒ 2006 Infrastructure managers organise their cooperation.
- ⇒ 2007/2008 tendering of the project. by the joint project organisations of the infrastructure managers.
- ⇒ 2012 completion.

11. Terminal issues

Aim
Improve the interface between terminal operators and infrastructure managers.

Explanation
Quality of the corridor is not only dependent on infrastructure but also on terminals and how they are handled. Is the capacity of terminals sufficient? How is the cooperation between terminal operators and infrastructure managers in constructing and maintaining quality train paths? Also important is the quality of the work at terminals; if trains leave the terminal too late punctuality of trains on the whole corridor will be distorted. Information from the Netherlands shows that delay in terminal operations has a dramatic impact on punctuality on the whole corridor. Better cooperation in the logistical chain can lead to great improvement of punctuality on the terminal level with positive effect for the whole corridor.
The terminals are mostly nationally organised and it remains to be seen what can be improved at corridor level and who should be addressed. Therefore as a first step it is envisaged with infrastructure managers and terminals operators along the corridor to do a benchmarking study to define common problems and common areas of improvement. The action is dependent on the cooperation of infrastructure managers and terminal operators.

Milestones

- ⇒ Study on quality of interface of terminals and infrastructure managers in 2007, taking into account other parties in the logistical chain like railway undertakings and intermodal operators.