TIGER NEWSLETTER



Transit via Innovative Gateway concepts solving European – intermodal Rail needs



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The White Paper objectives for modal shift & GHG emissions reduction achievable through Research & Innovation in Transport Systems

By Paul Verhoef, DG MOVE, Head of Unit.

Road mode is by far the largest investing sector in R&D. Other Transport modes have themselves realized that bigger efforts in this area are necessary. The White Paper objectives of reducing 60% the GHG emissions by 2050 and the dependency from fossil fuels can be achieved through a better use of the existing infrastructures, reduction of energy consumption and the adoption of environment friendly transport means. Such ambitious results cannot be fulfilled unless a long term planning view is taken from now to 2050 on the whole European mobility system involving both passengers and freight. The drivers for change amongst others are: efficient, clean and safe vehicles, better use of existing infrastructures, seamless mobility services, bottlenecks elimination, technology evolution, transport industrialisation, cooperative approach between the actors involved, last mile management.

The co-modal industrialisation chain from Ports to the Hinterland destinations

By Franco Castagnetti, TIGER Project Leader

TIGER Project fulfils the challenges posed by the EU Commission long term objectives optimising very substantial transport flows represented maritime/Sea Ports /Hinterland traffic. The economies of scale at sea with giant CTS vessels up to 18.000 TEUs impose on land the adoption of a new business model based on transport industrialisation to/from the Sea Ports with inland Dry Ports capable of inducing modal shift. Shuttle service frequencies with time tabling regularity at reduced costs for economies of scale, bring the ships nearer to the ultimate customers. The use of e-seals, efreight, e-customs, e-security, track and trace technologies are pre-requisite for reducing transit time of CTS during the whole overland transport chain. The Sea Ports have to increase their rail freight intermodal performances to/from inland destinations by huge percentages if they want to keep themselves free from congestion. Rail Freight and other transport modes, including inland waterways and road, have to contribute in the distribution process of the 2020 forecasted CTS traffic volumes.





January 2012

TIGER AT WORK

TIGER is the acronym of "Transit via Innovative Gateway concepts solving European - intermodal Rail needs".

The project officially started on 1 October 2009. Project duration is 36 months. The First TIGER newsletter was issued in May 2010 shortly after the project kick-off meeting. The Second TIGER newsletter was issued in December 2010 immediately after the First Annual Event which took place in Brussels on November 23rd at the Bibliothèque Solvay. The Third newsletter was distributed during the TIGER second Annual Event which took place in Hamburg on November 30th 2011 in the exhibition floor of INTERMODAL EUROPE 2011. All these newsletters had the objectives of disseminating the TIGER Project progress and are available on the www.tigerproject.eu website.

The TIGER Project "from Concepts to Pilots Implementation"

Market Assessment – NEWO leadership

The Market Assessment Task 1.2 partially described in the TIGER newsletter n.2 was completed and delivered on time on March 31st 2011. The last and final meeting took place in Rome on January 31st 2011 as planned hosted by Trenitalia Cargo. The Task partners decided that all necessary information were available for fulfilling research allowing to complete the market assessment involving the traffic allocation 2015-2020 of the TIGER Ports to the Rail Network. The results of this research were available for presentation at the TIGER 2nd Annual event in Hamburg on November 30th 2011. As part of this deliverable, likewise done for Task 1.1, the research conducted by the Task 1.2 partners involved both market, commercial, and shipping sources as well as the Nestear results originating from the application of mathematical modelling. Nestear was asked to satisfy a specific request under their Port Print model. They were requested to provide a series of additional maps by which it was to become apparent the comparison between the existing distribution TIGER Ports accessibility and the new TIGER Ports accessibility resulting from the application of the new TIGER concepts. Nestear was able to complete this work and the emerging maps were indeed very effective in providing an immediate visual impression of the improvements to be achieved through the implementation of the TIGER Project. These maps are instrumental for supporting the validity of the TIGER concepts and the improvement of the operating conditions during the progressive transition from the concepts towards the full Pilots implementation.





The 4 Demonstrators "from Concepts to Implementation" – The TIGER Effects on Pilots

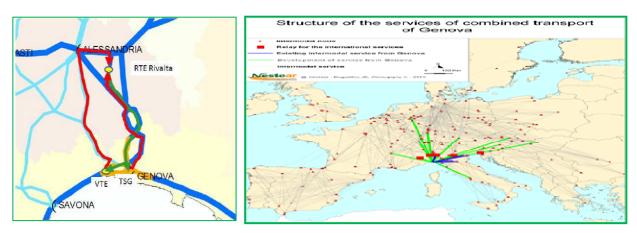


Fig. 1. Genoa Fast Corridor (GFC) "LOOP" system and new Genoa Port accessibility. Source Tiger

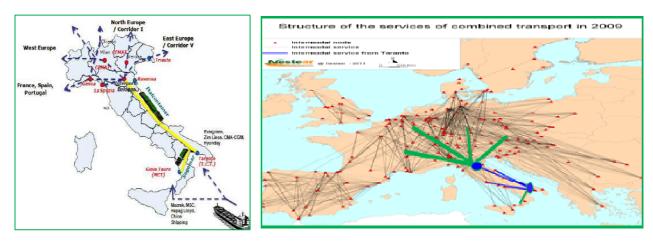


Fig. 2. MARIPLAT "Y" concept and new Gioia Tauro and Taranto accessibility Source Tiger

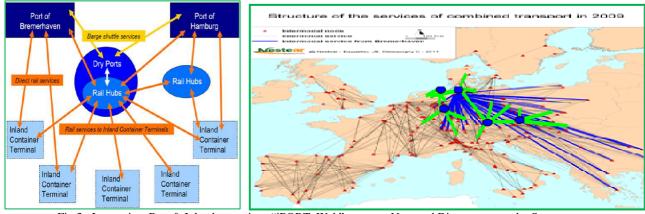
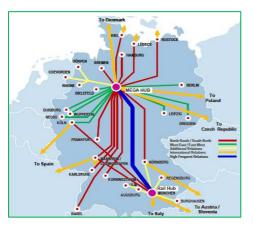


Fig.3. Innovative Port & Inland operations "iPORT Web" concept. Near and Distant approach . Source Tiger.







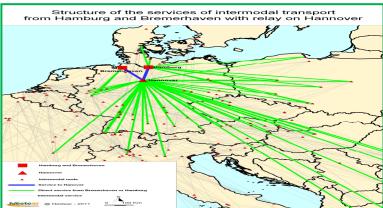


Fig.4. Intermodal Network 2015 "Mega-Hub SPIDER" concept. Source Tiger.

Technical Coordination – Hacon Leadership

On September 30th 2011 the second year of the TIGER project was closed. The Deliverables completed and delivered to the EU Commission are:

- D 4B.1 Report on Training Plan
- D 1.2 Report on traffic assignment to each demonstrator port, dry port or rail hub
- D 2D.2 Report on the Mega-hub Concepts
- D 4A.1 Plan for Training Activities
- D 3A.2 Report on integrated implementation of ICT & software
- D 3B.1 Report on New Logistics chain process
- D 5A.1 Report on first year pilot demo
- D 2C.2 Report on organisation concepts "sea ports inland traffic via innovative dry ports/rail hubs
- D 3D.1 Report on implementation plan for an "Innovative Production System"
- D H4.2 Organisation of second major event and issue of the second newsletter
- D 3C.1 Report on feasible hinterland concepts for implementation
- D 3C.2 Report on a long term development strategy

These deliverables are the result of the extensive work of consortium partners and their affiliates, coordinated by the tutors allocated by the Technical Coordinator HaCon.

A peer review process has been carried out for all deliverables prior to their submission in order to secure high quality standards and to fulfil all requirements of the European Commission.

In order to facilitate the project technical tasks, HaCon has established a local branch in Italy. Mrs Miriam Mascolo, former representative of Rail Traction Company, coordinated the research and development work of the two Italian demonstrators supported by HaCon Technical Director Mr Lars Deiterding and its Legal Advisor Mr René Keppler. In the same way, the work of the German Demonstrators was supervised by the dedicated German Tutors, Johannes Hildebrandt and Eckhard Riebe.

This team of experts proved successful to smooth the project development and effectively coordinate the work, especially since problem solving skills were required for the fulfilment of its ambitious objectives. During the implementation of such a large scale project, some minor adjustments and corrective measures were needed.

Due to the difficult situation caused by the economic crisis, with unstable conditions – either for the development of concepts and /or for the definition of appropriate business models and –cases, one of the major tasks that had to be dealt with during the second project year was the full implementation of all tasks or the adjustments to the changed situation.

The technical coordination consisted in finding alternative solution to save and respect project scopes and results, even when external causes changed the basis for their implementation, always having in mind the overall goal to disburden the port- and hinterland infrastructure by more productive solutions.

A useful tool in this activity was represented by the Tiger Risk Management Plan, prepared by HaCon with the support of the Demonstrator Leaders. Taking into account commercial evolution, political investments decisions, market developments, technical problems and other relevant sources of risk, this Plan allowed the Project Management to monitor and prevent on time any sort of risk.

The results of the demonstrators activities were often discussed during dedicated Project Board meetings, organised to ensure that the project development was coherent with its plans.





Project Management - TRAIN Leadership

The Second Project Periodic Report has been issued and delivered as planned.

Steering Committees & Project Boards

On April 13th 2011 the Steering Committee and Project Board were convened in Hamburg at the Hafen Club on the Port Sea front supported by the German Partners and Newopera. HHM, HPA and Eurogate after the meeting organised a guided boat trip inside the Port to give all partners the possibility of seeing the Port facilities in full operation from the water. Both Ocean going vessels and feeders were seen at work. The EU Commission Scientific Officer Dr Theodor Schlickmann was in attendance. The Project Board was chaired by Hacon. Each TIGER demonstrator leader made detailed report on their individual Project situation underlining problems and planned solutions. In particular the individual presentations started with GFC who presented the Genoa situation around the Terminal San Giorgio, Genova Voltri and Rivalta Terminal Europe. MARIPLAT confirmed the completion of all the planning with the next activities being concentrated on the running of the trains. IPort Demo Leader confirmed the subcontracting of the train operation to BoxXpress who was given the opportunity for making a specific presentation on the planned train operations. Finally MegaHub Demo Leader communicated that the MegaHub in Lehrte, because of delayed investments, could not be included in the Project implementation phase. In substitution the Demo Leader suggested that the Munich Riem MegaHub which is being completed with a full new terminal with the same technical characteristics of Lehrte will be included in the Pilot phase. However it was confirmed that the Lehrte MegaHub will indeed see the light although not in time for the Project conclusion.

The Steering Committee was chaired by Newopera immediately after the conclusion of the Project Board. The suggestions made during the Project Board were approved and validated. The item regarding the organization of the 2nd Annual event was discussed and the emerging decision was to have the Event organised in Hamburg taking the opportunity of the major international exhibition of INTERMODAL EUROPE 2011. With this decision fully approved Newopera, in charge of dissemination, could start making then necessary arrangements for the Event organization.



Fig. 5. Project Board & Steering Committee members in Hamburg

On December 15th 2011 the TIGER Project management decided to convene a Project Board and Steering Committee since it was necessary to make a full update of the Pilots situation also in the lights of the start of the TIGER DEMO Project and the transition from the Pilots into the full Demonstrators phase. The suggestion made by HaCon to have these meetings in Hanover was supported and accepted with the meetings taking place in the HaCon headquarters.

The Project Board was chaired by HaCon who allowed each Pilot leader to make the presentation on the state of the art of each Pilot. GFC presented a video covering all the activities carried out and demonstrating the innovations introduced in the train operations. MARIPLAT made its presentation followed by IPort and MegaHub. Some technical impediments were underlined in each Demonstrator for which the appropriate solutions were envisaged. HaCon entrusted each Demo leader to go back and adopt the applicable solutions as appropriate in order to bring the Pilots to their planned conclusions.

The Steering Committee was chaired by Newopera and having been present at the Project Board supported and adopted the envisaged solutions approving them at unanimity.

The Steering Committee moreover decided to have the Final TIGER Event in Bologna on September 27th -28th just ahead of the Project closure which by contract is due to finish on September 30th 2012. Newopera, in charge of dissemination, will liaise with Bologna Interporto for the necessary organizational efforts.

THE SECOND TIGER ANNUAL EVENT – NEWO Leadership

The 2nd TIGER Annual Event took place in Hamburg on November 30th 2011 on the exhibition floor of INTERMODAL EUROPE 2011 at Hamburg Messe. INTERMODAL EUROPE 2011 is a major International Annual Event attracting a lot of visitors from worldwide and TIGER management, considering the direct participation in the Project of key actors from this area, thought it to be advisable to take the opportunity for making the two events to coincide. NEWOPERA took charge of all organisational aspects making sure that both on the TIGER mailing list of nearly 4.000 European addresses and on the INTERMODAL EUROPE 2011 mailing list of over 50.000 addresses worldwide, the TIGER logo and agenda were given the proper relevance. Both the TIGER website and INTERMODAL EUROPE 2011 websites were activated and were constantly updated with the various versions of the agenda up to the final one. INTERMODAL EUROPE 2011 had the support of the International specialised Press so that proper News dissemination was secured before, during and after the TIGER Event. A dedicated Press office and Press stand was available during the three days of the Exhibition and this was used by TIGER for communicating with the Press leaving Newsletters, Press releases and the TIGER Conference folders with the delegates documentation. An official photographer was officially engaged for the Event who provided adequate coverage for the TIGER Conference.





Nothing was left to chance both during the agenda finalization, during the exhibition where the INTERMODAL EUROPE 2011 personnel was continuously supporting the NEWOPERA efforts for TIGER in order to achieve complete success. In addition to INTERMODAL EUROPE 2011 circulation NEWOPERA entrusted a specialised internet operator, AGISLAB, for the agenda dissemination, the invitation letter, the booking form, the hotel list, through five separate mailing shots. UNIFE was an active partner in supporting NEWOPERA in the organization process. They kept the booking sheets, provided the attendance and speakers lists. HHM, being in Hamburg, were also very helpful offering their facilities for receiving and completing the delegates folders, making the last-minute corrections and providing the Hamburg Port banners, the German as well the EU flags placed at the entrance of the Conference theatre. Around the Conference Theatre giant banners with the TIGER logo and giant agenda were displayed making them visible from the distance. The personalised folders contained the invitation letter, the flyers with the agenda, the TIGER Project description, the TIGER Newsletter specially issued for this Event, the speakers and delegates lists as well as notes and question sheets. All this material organised and prepared by NEWOPERA was sent to HHM in Hamburg. The delegates Conference pack was completed with a TIGER pin reproducing the TIGER logo which the delegates put on their lapel and had shown to appreciate. A special TIGER registration desk with a TIGER logo was organised at the exhibition entrance in order to provide the TIGER delegates with a preferential lane and a personalised welcome.

The Events was very successful. More than 160 seated places in the Conference theatre were taken with additional people standing up at the end and on the side of the Conference theatre. NEWOPERA had prepared 250 folders for the delegates and very few were left. Most of the delegates stayed the whole day signifying the high interest in the TIGER Project solutions.

The acts of the Conference were uploaded on the TIGER website www.tigerproject.eu under the Events section.

Being TIGER a EU Commission FP7 co-financed Project this Event was officially supported by the EU Commission itself having the FP7 logo printed on all Conference paper work.

The title of the conference was "The Co-modal Industrialisation chain from Ports to the Hinterland destinations answering the challenges of growing maritime traffic volumes". The key note opening speech address to the Conference was made by Dr Paul Verhoef of the European Commission DG MOVE, Head of Unit – Research and Innovative Transport Systems. Dr Theodor Schlickmann, the TIGER Project Officer, was also in attendance having provided advice during all the organization process and contributing to the Conference proceedings.

Mr Franco Castagnetti, NEWOPERA President and TIGER Project Leader, after his presentation on the maritime traffic evolution 2020 moderated the first panel session centred on the Shipping lines and customers view point on such 2020 traffic forecast and the volume assigned to a constrained overland Infrastructure, particularly Rail. The panel was constituted by Johannes Fritzen (K-Line Group), Martin Dixon (DREWRY, UK),

Jens Mielke (PANALPINA Gmbh), Steffen Rudkowsky (Siemens AG). The audience interacted actively with the panel making the debate very interesting.

The second Panel dealt with the Production Processes and Logistics Activities in and around the Sea Ports Terminals. This panel moderated by Sebastian Doderer of Hafen Hamburg Marketing, was constituted by Hendrik Peterburs (HHLA - CTA), Torsten Meyer (EUROGATE), Maurizio Anselmo (Terminal San Giorgio), Olga Denschikova (Ust-Luga CTS Terminal). Very interesting innovative business cases were presented. Some presentations involved short videos giving a brief overview of the innovations being introduced in the Port Production processes. They provoked questions from the audience with appropriate provided answers.

The third panel related to the optimisation between Sea Ports and Dry Ports took place after the mid-day break and was moderated by Marian Gaidzik, HaCon Managing Director. The panel was constituted by Werner Sommerfeld (HaCon – Hafas Cargo), Johannes Gregor (boxXpress.de), Heiko Krebs (Kombiverkehr), Zeno D'Agostino (Bologna Interporto). Business models, production systems and management tools represented the core of this panel where Dry ports and Sea Ports are getting ready to deal with increased traffic volumes and also increased competition. The floor interacted with the panel members with questions and answers.

The fourth and last panel dealt with Dry Ports/Terminals/Mega Hubs restructuring and their new industrial production processes. It was moderated by Uwe Sondermann, Director of Kombiconsult. The panel was composed of Harald Rotter (HHLA Intermodal), Wolfgang Müller (DUSS), Michele Giromini (La Spezia CTS Terminal), Volker Berkhahn (Hanover University). The core of this panel discussion centred around the strategic importance of the Dry Ports and their innovative production concepts for developing industrialised intermodal chains for the new market opportunities. Dry Ports are capable of providing capacity optimisation and traffic bundling. Interaction with the audience took place like in all other panels.

The Event conclusion were drawn by Horst Kubek (NEWOPERA) with closing remarks made by Franco Castagnetti, the TIGER Project leader expressing thanks to the EU Commissions, INTERMODAL EUROPE 2011, the speakers and all the delegates for the very evident success of the Conference and of the Event in general. The meeting results were multi-folds. Just to cite the most important these can be summed up as follows:

- The EU Commission presenting the ambitious goals of the White Paper underlined the need of achieving Transport Innovation through R&D particularly in the Rail Freight and to this effect Projects such as TIGER and TIGER DEMO working actively for promoting Transport Innovation in the maritime - overland sectors are good example for fulfilling these goals.
- The maritime traffic projections 2020 indicate the need to industrialise the Transport chain from the Ports to the Hinterland if the EU Ports want to avoid congestion. Bottlenecks elimination and





- adequate Dry Ports facilities are paramount for achieving the desired objective.
- The Shipping Lines and the customers view point further supported the 2020 traffic projections indicating that the race to giant CTS vessels will not stop. CTS vessels design of up 23.000 TEUs have been made. This implies continued competition in the maritime field and continued challenges both for the Ports efficiency and their distribution facilities.
- Despite these traffic challenges for the Sea Ports, it was demonstrated that investments in new Sea Ports facilities are not unlimited due to the very long payback in the investments. Massive efforts such as Wilhelmshaven provide additional capacity are not easy to be repeated which means that the best Ports productivity must be extracted from the existing infrastructures. Ports resources optimisation is the "name of the game" with selected investments to correct the bottlenecks.
- Innovation, Research and Development must be addressed to technologies, systems, new management concepts, new business models, new tools, new planning and on the Rail side new corridors and Infrastructures management. The optimization between Sea Ports and Dry Ports is to be achieved by applying new technologies in production and train management concepts as well as correcting bottlenecks in the Infrastructures on the major corridors linking the Sea Ports with the Dry Ports.
- The Dry Ports/Mega Hubs and Terminals themselves have to restructure their operations, adapt their Infrastructures, apply new industrial production processes, being ready for Transport industrialisation and traffic bundling. The 2020 traffic forecasts indicate the need to increase many folds the existing traffic by Rail intermodality and the Dry Ports are the natural traffic multipliers for achieving this objective.
- The Sea Ports/Dry Ports/Mega Hubs and Terminals must become ready to deal with Longer, Faster and heavier trains of up to 1.500 m which is a necessary step change for generating capacity on the Rail lines with relatively minor investments. It was cited during the debate that easiest strategic decisions to take are the ones which cannot be avoided. Europe needs desperately additional Rail transport capacity and this is the only way to achieve it in the short term. A EU Commission supported FP7 Project called MARATHON is already at work on this issue. Mr Armand Toubol, MARATHON Technical Coordinator and NEWOPERA Vice President, was at the Conference to give information.
- The 2020 Traffic projections indicate that in addition to an extraordinary performance requested by Rail Freight and intermodality in particular, all other modes such as road and inland waterways have themselves to increase substantially their performances. Therefore integration and cooperation between modes is paramount for keeping the traffic moving. The comodal approach supported by the EU

Commission of extracting the best performances from each mode represents the most realistic possibility for reducing the carbon footprint introducing an environmental friendly transport Society.



Fig. 6. Paul Verhoef -DG MOVE - Head Of Unit -



Fig. 7. Conference Theatre



Fig. 8. Panel 1 – Shipping Lines/Customers Viewpoint





Fig. 9-10. Panel 2 – Sebastian Doderer HHM- Hendrik Peterburs HHLA on Production Processes -



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Fig.11 Panel 3 – Marian Gaidzik Hacon on Overland new business model -



Fig. 12 Panel 4- Dry Port Restructuring -

Events featuring TIGER as from

January 2011- Previous ones in Issue 02-

27-28 September 2012 ,**Rome**– H4- TIGER Final Event **18-21 September 2012**, **Berlin** – H4-WP7 - INNOTRANS

12 June2012, Budapest - H4-Retrack Final Event

5 June 2012, Brussels – H4 –NEWOPERA Aisbl General Assembly

14-16 May 2012, Wien - H4- Real Corp 2012

10-11 May 2012, Lucerne - H4 - F&L GENERAL CONFERENCE

23-26 April 2012, Athens - H4 - EU TRA CONFERENCE

16-18 April 2012 ,Gijon – WP7 –SuperGreen Event

26-27 March 2012, Poznan - H4 - HINTERPORT CONFERENCE

21 March 2012, Brussels - H4 - Errac Plenary Session -

14 March 2012, Genoa – H4 –Tiger Demo Seminar

12 March 2012, Berlin – H4 –The Future of Rail Freight

7-9 March 2012, Zurich - H4 – Signalling and Train Control

2 March 2012, Mantova – H4-International Propeller

27-29 February 2012, Wien – H4-Rail Tel Europe

27 February 2012, Milan - H4-Consulta of Logistics

8 February 2012, Brussels - H4 – CER UNIFE European Railways Award 2012

30 January 2012, Rome– H4 – Italian Parliament Seminar on Infrastructures with Italia Decide

24 January 2012, Rome – H4 –Italian Parliament Conference on Infrastructures development

15 December 2011, Hanover - H1 - TIGER Steering Committee

13 December 2011, Bologna - H4 - HINTERPORT CONFERENCE

1 December 2011, Wien - H4 - Rail Net Europe Conference

30 November 2011, Hamburg - H4 - TIGER 2ND ANNUAL EVENT- Intermodal Europe 2011 -

10 - 11 November 2011, Bologna - H4 - F&L Conference **7 November 2011, Bratislava -** H4 – Trans New Project Final Workshop

20 - 21 October 2011, Prague - H4 - Information and Communication Technology on Trains

18 October 2011, Brussels - H4 - NEWOPERA Aisbl General Assembly

4 - 6 October 2011, Berlin - H4 - Freight Locomotives

30 June - 1 July 2011, Berlin - H4 - F&L Conference

13-14 June 2011, Sofia - H4 - Balkan Intermodal

9 June 2011, Rome - H4 - FLC GM & Conference on Logistics ITC Technology

22-26 May, Lille - H4 - WCRR: World Conference on Railway Research - UNIFE & EU Commission

12 May 2011, Brussels - H4 - ERRAC Plenary Session - 10-13 May 2011, Munich - H4 - Transport Logistics -

HaCon, NEWOPERA

5 May 2011, Rome - WP1 - H4 - Logistics Conference

13 April 2011, Hamburg - H1 - TIGER Project Board & Steering Committee

5-7 April 2011, NEC Birmingham - H4 - Multimodal 2011 29 March 2011, Milan - H4 - NEWOPERA Aisbl General Assembly

23 - 25 March 2011, Prague - H4 - IRFC 2011

23 March 2011, Brussels - H4 - ECG Conference on Sustainable Logistics at EU Parliament, Brussels

22 March 2011, Zagreb - H4 - Infrastructure Logistics

8 March 2011, Brussels - H4 - Conference with EU Commission

28 February 2011, Genoa - H4 - Motorways of the Sea in the MED

25 February 2011, Belgrade - H4 - CARGO 10 Challenges and Perspectives

16-17 February 2011, Rotterdam - H4 - BE LOGIC Final Conference Toubol and Kubek attending for TIGER

1 February 2011, Antwerp - H4 - Super Green Workshop

31 January 2011, Rome - WP1 - Task 1.2 meeting

12 January 2011, Brussels - H4 - FERRMED Conference

The TIGER Project Partners

The Partners incorporate technical, commercial, engineering, marketing resources and know-how in several fields of activities. These extend from infrastructure management, rail operations, port management to intermodal handling operations.

Vital competencies include intermodality, inland dry ports and freight villages operations, Port Authorities, Institutional Regional Governments, engineering, software & management system technologies as well as marketing & research. Sectorial association connected with Rail industry are also present in the Consortium.















































