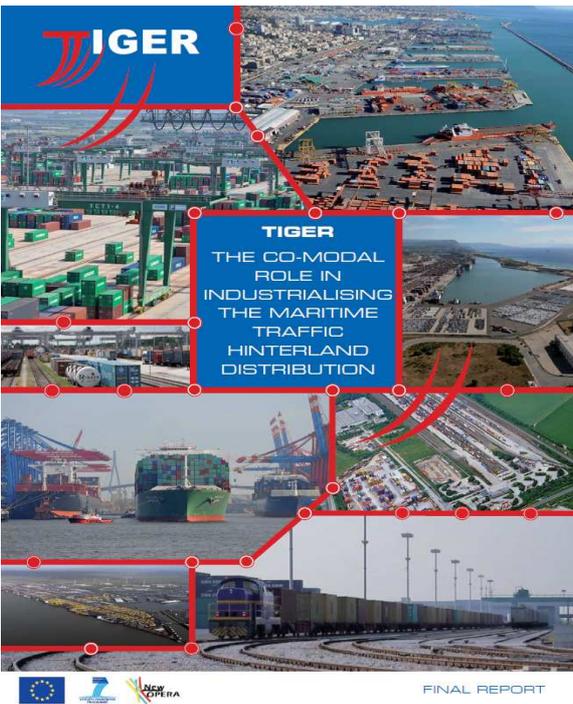


## CONTENTS

Page 1-3 The TIGER Project demonstrators & fundamentals  
Page 4 The TIGER Project Management  
Page 5-7 The TIGER dissemination & FINAL EVENT  
Page 7 -The TIGER partners



## The TIGER strategic perspective in the light of the European Freight mobility policies.

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 by the 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, e-freight, e-customs, e-security, RFID 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 if the forecasted CTS traffic volumes for 2020 are to be kept moving.

Issue 5 September/October 2012

## TIGER Heading for Conclusion

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

The project officially started on 1 October 2009 to last 36 months. So far, four TIGER Newsletters have been issued, and this is the fifth and FINAL one, delivered at project closure.

The FINAL TIGER EVENT which took place in Brussels at Bibliothèque Solvay on September 27th 2012, was very successful being attended by more than 120 delegates from all over Europe. All the attending delegates were handed over the TIGER FINAL REPORT BOOK containing the description of the Project fundamentals, the Work Packages development, the adopted solutions, the impacted activities and the realised benefits up to the project conclusion. For those who will not have the time to read the whole REPORT a “Red Thread” introduction is provided explaining the project Rationale, the identified Best Practices, the conclusive Remarks and Recommendations.

## The TIGER Research on Market Assessment: NEWO leadership

The Maritime Market Assessment involving the traffic projection 2015-2020 conducted for the 6 nominated TIGER ports of Genoa, Gioia-Tauro, Taranto, Hamburg, Bremerhaven and Jade-Weser (Wilhelmshaven) was the first research completed for TIGER project. This research work was a fundamental pillar providing the database for the TIGER pilot demonstrators.

These traffic projections visualized the situation of each TIGER port at 2020 compared to its total throughput technical capacity. At the same time the projected traffic volumes were assigned to each transport mode in order to establish the sustainability of traffic handling and distribution up to the Hinterland European destinations. The whole research work was supported by a dedicated tool capable of calculating automatically the traffic volumes according to the scenarios taken as reference. The traffic projections were made by adopting three methodologies the CAGR, the GNP and NESTEAR.



For more TIGER Project information please contact  
Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy

# The 4 TIGER Demonstrators



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

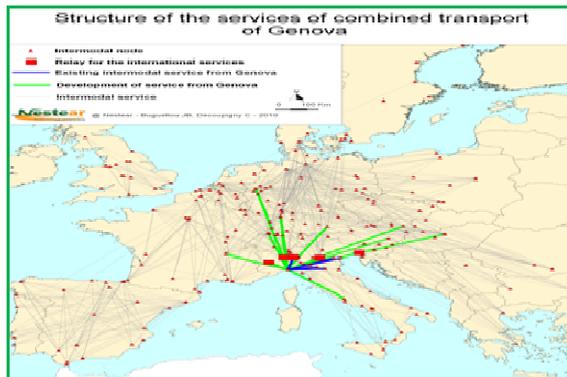


Fig.2. The new competitive reach(Green) of Genoa Port. Source: TIGER

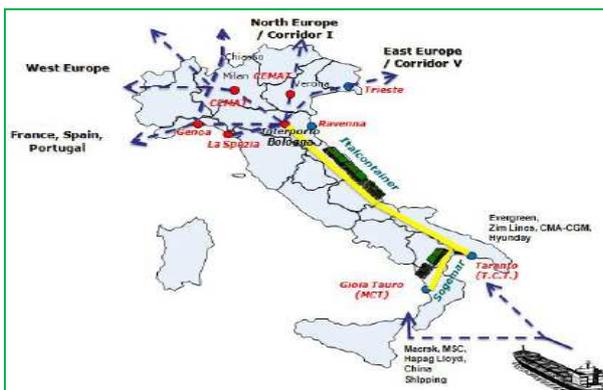


Fig. 3. MARIPLAT "Y" concept and new Gioia Tauro and Taranto accessibility. Source: TIGER

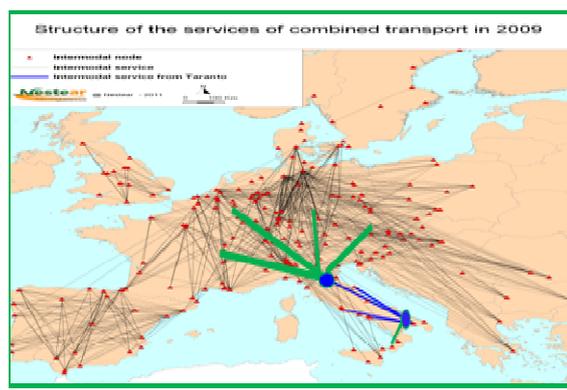


Fig.4. The new competitive reach(Green) of Gioia Tauro and Taranto Ports. Source: TIGER

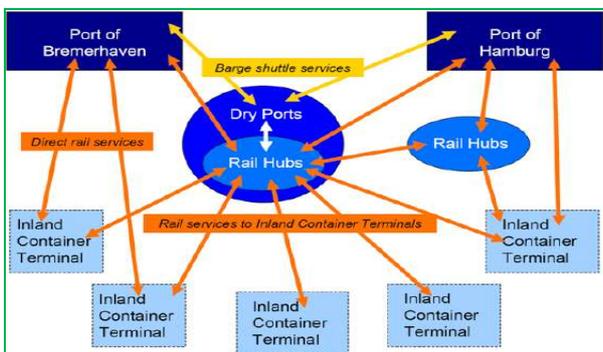


Fig.5. Innovative Port & Inland operations "iPORT Web" concept: Close to Port & Close to Market. Source: TIGER

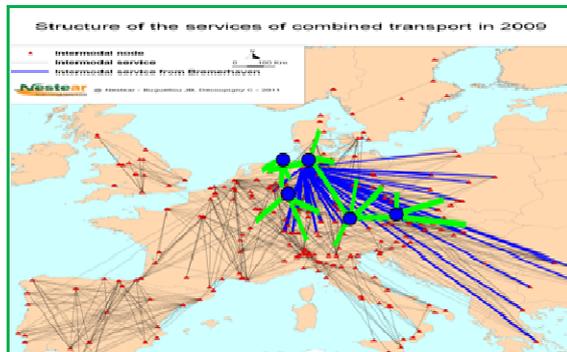


Fig.6. The new iPORT Distribution model(Green) Source: TIGER

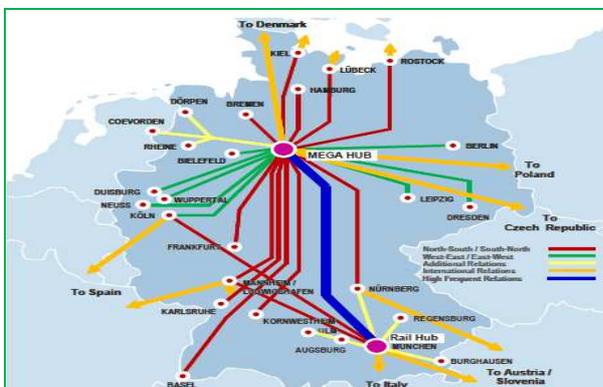


Fig.7. Intermodal Network 2015 "Mega-Hub,-SPIDER" concept. Source: TIGER

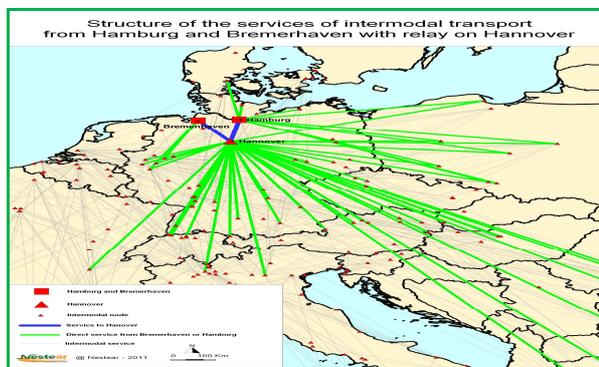


Fig.8. The new MEGA-HUB Distribution model (Green) supplementing/complementing the existing German Ports competitive reach. Source: TIGER



For more TIGER Project information please contact  
 Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
 Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
 TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy



## EXTRACT from the Article Published on *ELSEVIER Behavioural Science Journal*

New technologies, innovative management systems, new productions systems, track and trace, E/Customs as well as investments in dry ports, mega hubs, ports infrastructures, ports internal rail network, rolling stock, handling equipment are integral part of the TIGER four demonstrators. Rail freight however, despite a lot of efforts by European authorities, Governments and operators, has not been capable of attracting new market share. This is due to a number of factors amongst which the lack of competitiveness and inadequate service profile, are major contributors. A profound modernization of the rail economy based on lower costs and the restructuring of the service offerings are necessary. In order to achieve these two major objectives, the capacity generation obtained either by increased productivity or by new investments in infrastructures, becomes paramount. These tasks are possible by acting on five complementary dimensions described in the following paragraphs.

### *Infrastructure investments to reduce bottlenecks in execution.*

The Rail system itself through a UIC financed project called DIOMIS has identified a number of bottlenecks on the European rail network to be removed. One has to understand that a "European Corridor" is as strong as its weakest point which is limiting the entire "corridor" performance. These points have been largely identified and corrective actions are in progress. However delays and Budget constraints of the Governments involved are postponing the effective solutions of the bottlenecks.

### *Operating longer heavier & faster trains on existing lines. The MARATHON project.*

The answer to resolving the paradigm of increasing the rail capacity at lower costs is provided by operating longer, commercially faster and heavier trains. This approach can be synthesized by a declaration of a Top Rail Official when he sentenced that "we have to transport much more cargo with the available resources" Road transport is limited by the truck dimensions and any efforts to change the existing rules in the general public environment awareness seems to go against history. Rail Freight, on the contrary, has the ability to fulfil in practice the basic criteria of transporting more cargo at substantially reduced costs by managing longer, commercially faster and heavier trains on the existing infrastructures. Longer faster and heavier trains are deployed in many areas of the world and also in Europe, particularly in Russia. The reasons why these trains have not been developed in Central Europe which is the busiest area of commercial interchanges, is due to a number of reasons. One can indicate only few as examples: lack of technology, old rolling stock, braking and signalling to be upgraded, infrastructures to be upgraded, axle load limited to 22.5 Tons, psychological

barriers and, last but not least, the lack of a clear policy in order to operate these trains on the existing lines. The MARATHON project which is co-financed by the European Commission is dealing with this dimension and is currently in execution. Through the adoption of double traction with the second loco in the middle of the convoy, new radio communication technologies, adequate signalling systems, new rolling stock, and innovative ways of managing the rail infrastructure, MARATHON is set to demonstrate the actual feasibility of managing a train of 1500m on a section of the European Rail Network in France between Lyon and Miramas (near Marseille). The final MARATHON project output will be a TEC REC and a HANDBOOK containing the recommendations for operating these trains on the European network. Some infrastructure upgrading are necessary for overtaking rail sidings on the main lines, as well as in the hubs and terminals.

### *Adoption of new technologies both in equipment and management systems.*

The Rail Freight has been rather refractory to technological system innovations and to ICT technologies. A huge effort has to be undertaken for modernizing every segment of the rail freight and Intermodal transport chain. The European Commission is also dealing with these dimensions through E/Service and E/Freight innovations. TIGER, TIGER DEMO and MARATHON are projects where new systems and technologies are tested and introduced.

### *Transport Industrialization*

Industrialization of Rail transport between ports, hubs, dry ports and freight villages, in order to reduce costs and to adapt the overland handling capacity to the traffic volumes generated by the maritime industry is one of the TIGER, TIGER DEMO key objectives. In particular longer commercially faster and heavier trains are to be deployed between Ports, Dry Ports and Mega hubs and between Terminals/Freight Villages once the full MARATHON implementation is achieved.

### *Cooperation between Key Actors of the Rail Transport Chain*

The selling of transport capacity is the generator of the economy of scale driving itself the transport industrialization and hence force giving significance to the "asset based business model". The asset based business model is the opposite of the traditional Rail Freight business approach adopted by the incumbents based on service costs on top of which an element of profit was calculated for reaching the selling price. This philosophy supported by the monopolistic situation never took into consideration the competitive market forces. Gradually but surely the customers abandoned Rail for more competitive modes of transportation. The selling of transport capacity equates to a revolution for Rail Freight. The reversing of decades of wrong practices is achievable through the adoption of a business model where services are "products". Service products must be available for the



For more TIGER Project information please contact  
Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy



market to access them immediately according to customers' needs. The prices must be competitive when compared to other transport modes-The advertised service products must have the characteristics of regularity and punctuality. The transit time on the declared journey must be guaranteed. The transport capacity must be available for the market and is adequate for the traffic basins serviced by the transport links. The service products distribution is multi-channel using both direct, indirect and E-freight tools. These channels are capable of generating the required traffic volumes adequate for filling up the operating trains. The marketing techniques are adopted as supporting tools for the selling of the service products. The approach of selling the service products through the multi-channel distribution network is pro-active and not re-active. The multi-channel distribution approach is achieved through a cooperation with all the key actors in the Rail transport chain such as forwarding agents, MTOs, logistics operators, integrators, consolidators, etc. Such cooperation is based on economic interests through the sharing of the benefits deriving from economy of scale generation and the traffic industrialization. The selling and the filling up of the trains capacity is a driving force of this industrialized business model. The filling up of the capacity is generating the lowest operating costs which is the fundamental pillar of service competitiveness. The standardized efficiency through the best rotation of assets secures the return of the capital employed. The selling of capacity business model is adopted by maritime, airlines and integrators industry as well as in the Rail field itself by the High Speed services where standardization and services industrialization has been in execution for some time (Thalis, Frecciarossa, Italo, etc.).

#### *THE CONCLUSIONS*

Many operators have used the recent economic recession for optimizing the freight system productivity by extracting from each available transport mode its overall best performance. Mega hubs and freight villages are being built in strategic nodal points of Europe where integration of maritime, overland, transport and logistics activities are concentrated. Rail traffic industrialization between these Mega hubs is achieved using longer heavier and faster trains, generating the conditions for reducing Rail operating costs and improving the service performance. Urban hubs built in the vicinity of densely populated areas provide the platform for last mile distribution of consumers products. After the TIGER Project start-up phase, the European and Global economy started to grow again demonstrating the validity of the TIGER Project concepts. In fact the TIGER Ports traffic volumes projections obtained by combining separate researches which adopted both market and commercial tools as well as mathematical modelling, showed a new steady season of continuous growth. These projected volumes targeted at 2020 would imply the full technical capacity saturation of the ports involved failing corrective measures. Only by applying the TIGER concepts of routing the traffic to/from the Sea Ports to the hinterland dry ports by rail in an industrial way, the container traffic will keep moving avoiding congestion problems. By so doing the Sea Ports will regain their original mission of being the link between ship to shore achieving maximum productivity of the

deployed resources and at the same time valuing the rail intermodal services for what they are most capable of producing. The Co-modal approach is used at its best with Road services performing the last mile connections between the dry ports and the customers, or other short hauls. The inland waterways are also integral part of this European network. The emerging result is delivering the desired benefits of costs competitiveness combined with sustainable development, better services and environmental protection. The visual impression is provided by the previous Figures 5, 6, 7 and 8.

### ***Technical Coordination – HaCon Leadership***

On September 30th 2012 the TIGER project was closed. The Deliverables were completed and uploaded on the TIGER website. HaCon the Technical Coordinator managed the last Project Board on September 26th in Brussels where the demonstrators situation was described in details and finally summarised for the project closure. All the Project deliverables were the result of the extensive work from the consortium partners and their affiliates. Appreciation was recognised to the HaCon team composed by the Technical Director Mr Lars Deiterding, supported by the tutors for each demonstrator Mrs Miriam Mascolo, Jan Hildebrandt, Eckhard Riebe and the senior leading expert of intermodal transport Marian Gaidzik .

The experienced team effort proved successful to smooth the project development, to resolve problems and difficulties encountered, as well as finding the appropriate solutions.

### ***Project Management – TRAIN Leadership***

After the project board which was held the day before the last TIGER EVENT, a final Steering Committee was convened. At the meeting Mr. Valerio Recagno of Consorzio TRAIN the Project Coordinator gave account of the full administrative situation making comparison between budgeted costs and realised costs for each TIGER Partner. He explained the procedures and obligations in connection with the final reporting. The project partners expressed their gratitude to TRAIN and its team around Elisabetta Noce for a well done administrative management.

At the end of both Project Board and Steering Committee a networking event was organised by NEWOPERA at the Renaissance Hotel to mark the end of a long standing collaboration between partners during the 3 years of project duration and to discuss the continuation of the demonstrators in the TIGER DEMO project.



**For more TIGER Project information please contact  
Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy**



## **THE TIGER FINAL EVENT – NEWO Leadership**

The TIGER FINAL Event with the title “The TIGER Strategic Perspective in the Light of the Future European Freight Mobility Policies” took place in Brussels on September 27<sup>th</sup> at Bibliothèque Solvay attracting more than 120 delegates from all over Europe. NEWOPERA took charge of all organisational aspects supported by UNIFE. In order to secure the maximum dissemination the event was also uploaded on the European Commission website [www.transport-research.info](http://www.transport-research.info) in addition to TIGER and NEWOPERA websites. An official photographer was engaged for the Event who provided adequate coverage for the TIGER FINAL Conference.

Nothing was left to chance. 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 provided a TIGER “Totem” which was placed at the venue entrance, they kept the booking sheets, provided the attendance and speakers list as well as supplied the delegates Badges. The personalised folders were organised by NEWOPERA containing the invitation letter, the agenda, the TIGER Project description, the TIGER TRA 2012 poster, the questions slips. The speakers folder contained the TIGER pin. A TIGER and two TRA 2012 posters were attached to the registration desks.

A main feature of the TIGER FINAL EVENT was the delivery to the delegates of the TIGER FINAL REPORT BOOK with the title “The Co-modal Role in Industrialising the Maritime Traffic Hinterland Distribution”. The event organizers brought 140 books and they all went being much appreciated. The delegates took more than one book up to the last one available.

The acts of the Conference were uploaded on the TIGER website [www.tigerproject.eu](http://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 and on the TIGER FINAL REPORT BOOK.

Antonio Colaço, of DG Move Policy Officer of Research and Innovative Transport Systems Unit, was in attendance having provided advice during all the organization process together with the TIGER project officer Theodor Schlickmann. Both of them contributed to the Conference proceedings.

Mr Franco Castagnetti, NEWOPERA President and TIGER Project Leader made the opening by presenting the TIGER FINAL REPORT BOOK and setting the scene for the First Panel debate on the conference title called “The Rail Industry Response”. This panel was moderated by Nicolette Van Der Jagt, Clecat Director General interacting with Eric Fontanel UNIFE General Manager, Libor Lochmann CER Executive Director, Monika Heiming EIM Executive Director, Jerzy Wisniewski UIC Director of Fundamental Values. Time for questions and answers was

provided. Then individual presentations were made by each TIGER Demonstrator Leader with Alexio Picco starting with GFC, followed by Zeno D’Agostino of MARIPLAT, then Benjamin Brügelmann for iPort, with Uwe Sondermann for MEGA-HUB being the last Demonstrator. Valerio Recagno presented the applied methodologies and the KPI used during the whole project development to end this morning session.

After the networking lunch the conference re-started at 14.00 with the “Market Response Panel” moderated by Sergio Menegazzi F&L Vice President and former Transportations & Services Executive at LyondellBasell interacting with Axel Mattern Port of Hamburg Marketing Executive Board Member, Barbara Müller of DUSS, Maurizio Aponte MSC Executive Director Europe, François Jaeger CFL former CEO, Erik Kessels SABIC Europe head of Sourcing, Contracting & Supply Chain Polymers. Questions and answers time allowed the debate to continue after the panel discussion.

Armand Toubol Technical Coordinator of the MARATHON Project made an interesting presentation on the development of Longer Heavier and Faster trains which appear to be the only solution for transporting more cargo with the existing resources generating additional capacity on the rail tracks.

Mr. Antonio Colaço summed up the day’s proceedings by drawing the conclusions and opening a window on the European Commission future mobility priorities. The event was formally closed by Mr. Franco Castagnetti handing over to Mr. Antonio Colaço several copies of the TIGER FINAL REPORT BOOK which symbolically signifies the TIGER project end. A picture of this moment was taken.

### **Events featuring TIGER**

as from January 2012- Previous ones in Issue N 4

<b>27-September 2012 ,Brussels</b> – H4- TIGER Final Event
<b>26 September 2012, Brussels</b> –H1 –TIGER PB & SC
<b>18-21 September 2012, Berlin</b> – H4-WP7 - INNOTRANS
<b>5 July 2012 , Bologna</b> – H1 MARIPLAT Workshop
<b>21 June 2012 , Wien</b> – WP4-Österreichischer Exporttag
<b>21 June 2012, Madrid</b> – WP7-TIGER Workshop
<b>21 June 2012, Genoa</b> – WP7 –TIGER GFC Workshop
<b>13 June 2012, Antwerp</b> – WP7 –TOC EUROPE
<b>12 June 2012, Budapest</b> –H4-Retrack Final Event
<b>5 June 2012, Brussels</b> – H4 –NEWOPERA Aisbl GA
<b>14-16 May 2012, Wien</b> – H4- Real Corp 2012
<b>10-11 May 2012, Lucerne</b> – H4 – F&L GENERAL CONF.
<b>1-2 May 2012, Birmingham</b> -H4 – MULTIMODAL 2012
<b>23-26 April 2012, Athens</b> - H4 - EU TRA CONFERENCE
<b>16-18 April 2012 ,Gijon</b> – WP7 –SuperGreen Event
<b>26-27 March 2012, Poznan</b> - H4 - HINTERPORT CONF.
<b>21 March 2012, Brussels</b> - H4 - ERRAC Plenary Session -
<b>16 March 2012 ,Wien</b> – H4 28 <sup>th</sup> Logistic Dialog
<b>15 March 2012 ,Wien</b> – H4 Road Map 2050
<b>14 March 2012, Genoa</b> – H4 –TIGER Demo Seminar
<b>12 March 2012 , Berlin</b> – H4 –The Future of Rail Freight
<b>7-9 March 2012, Zurich</b> - H4 – Signalling and Train Control



**For more TIGER Project information please contact  
Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy**



**2 March 2012, Mantova – H4-International Propeller**  
**1 March 2012, Wien- H4 Future of Autobahn Conf.**  
**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**  
**2 February 2012, Wien –H4 CEE Research Conference**  
**30 January 2012, Rome– H4 – Italian Parliament Seminar on Infrastructures with Italia Decide**  
**24 January 2012, Rome – H4 –Italian Parliament Conference on Infrastructures development**

**TIGER FINAL EVENT -Bibliothèque Solvay – Brussels September 27<sup>th</sup> 2012 - PICTURES**



**For more TIGER Project information please contact**  
**Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)**  
**Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)**  
**TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy**





## 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.



Interporto Bologna SpA



For more TIGER Project information please contact  
 Mr. Franco Castagnetti at [franco.castagnetti@newopera.org](mailto:franco.castagnetti@newopera.org)  
 Or visit the website [www.tigerproject.eu](http://www.tigerproject.eu)  
 TIGER Project Office – Via Valtellina 7, 20159 Milan - Italy

