



TNE3-CT-2003-506513

**EURNEX**

**EUropean Rail research Network of EXcellence**

**SIXTH FRAMEWORK PROGRAMME**

**PRIORITY 1.6.2: SUSTAINABLE SURFACE TRANSPORT**

**Final activity Report 2004 - 2007**

Period covered: from 01.01.2004 to 31.12.2007 Date of preparation: 10.06.2008

Start date of project: 01.01.2004 Duration: 48 months

Project coordinator name: Thomas Meissner

Project coordinator organisation name: FAV Revision: V1

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## 1 Executive Summary

With the founding of EURNEX Association on October 30, 2007, the integration of the excellent European rail researchers has been achieved and EURNEX becomes more and more visible in the top rail research on international level. This includes as well the launch and the further development of EURNEX Scientific *Poles of Excellence*. With the Poles – thoroughly defined by matching of rail sector driven top-down and scientists based bottom-up process – the involved and committed EURNEX scientists profit by

- Internationalisation through establishing new and trusting partnerships with colleagues from other countries, thus complementing the own capabilities to improve the “individual scientific competitiveness”,
- Improving the knowledge about the specific challenges and future issues of the rail system in other countries => important contribution to enhance the understanding of the European dimension for the future rail system,
- Learning more and discussing about the future issues and the project approaches to cope with these challenges through the direct dialogue with industry's and operator's representatives in the Poles,
- Initiating and developing R&D projects on European scale within in the Poles and with cross-pole multidisciplinary cooperation (already done with FP 7 1st call, for instant).

According to the EC's recommendations in the project review the activities of EURNEX have **concentrated the activities on the business burn-in process**. This includes the EURNEX statutes and the final business plan. Within that very difficult process of EURNEX business burn-in the contributions of the most active EURNEX members have been included. The EURNEX Council agreed to the proceedings of the sustainable business burn.

For the preparation of the overall business plan the facts and figures out of the business plans of the corporate services have been included. In this context the available business plans for the corporate services have been arranged in the same structure. Under the EURNEX umbrella a set of decentralised corporate services have been defined and further developed. These corporate services are dedicated to provide added value to the members of EURNEX, but also for the European rail sector as a whole. The corporate services are important to *improve the position, standing and integrated competence of the EURNEX scientific community to be world class player*

as well as being visible to the industrial and political decision makers by integrating the European research area for the rail system. Therefore, the specified corporate services

- **EURNEX EURail**, the virtual rail university – first step: post graduate training, incl. short training courses
- **Rail knowledge library** within the EURNEX KMS (knowledge management system) to preserve and to improve the integrated knowledge on the rail system for all stakeholders
- Neutral support for harmonised **product qualification methods**, railway testing and simulation; i.e. to support the European Rail Agency (ERA)
- **Gender equality promoting activities** to skill women for leading positions in rail research; launch of the mentor-trainee programme
- **EURNEX management, business and acquisition support** by secretary general; definition, precision and prioritisation of service items by the network members

represent an essential part of EURNEX' sustainability.

The **Statutes** of the EURNEX association were mature for further processing within members internal gremia. The the EURNEX statutes considers

- \* the written comments from EURNEX members we received on the draft version of the statutes distributed 25 June 2007
- \* the intensive Council discussions 10th and 23rd of July 2007
- \* the final (and mostly formal) amendments made by a specialised German lawyer necessary to comply with the German law on associations

The University internal procedures to adopt the statutes and to declare the entry to the EURNEX association often took time. Therefore, the Secretary General encouraged the members to start the internal gremia procedure. On 30 October the EURNEX association has been founded (please see next page) with the minimum number of founder members required by law. This is common practise and helped to reduce the time for the legal procedure connected with registration etc. Right afterwards, all the institutions forming EURNEX NoE today will be invited to join the new EURNEX association:

**On 30 October the European rail research has been set up on a new quality. EURNEX, the EUropean rail Research Network of Excellence, as an association according to the German law (e. V. = “eingetragener Verein”) has been founded at the TSB-FAV premises in Berlin. In a smooth transformation process the founding Assembly of Members unanimously elected Prof. Manuel Pereira of IST Lisbon as Chairman of the EURNEX Council, Prof. Petr Moos of CVUT Prague as Vice-Chairman and Assistant Prof. Wolfgang H. Steinicke as Secretary General of EURNEX.**

The EURNEX Corporate Office is located in Berlin, Germany.



The Standing Committee of the EURNEX association

Prof. M. Pereira, Lisbon; Assist. Prof. W. Steinicke, Berlin; Prof. P. Moos, Prague



EURNEX member at Founding Meeting on October 30, 2008 in Berlin

EURNEX Logo:



EURNEX Website:

[WWW.EURNEX.NET](http://WWW.EURNEX.NET)

#### **4th Integration Conference on 29 and 30 November 2007 in Prague**

At the 4th Integration Conference the EURNEX member confirmed their support towards EURNEX that is now stepping into a new phase which is envisaged to lead into a sustainable business case. The inauguration of the EURNEX association by it's committed members set out a clear sign towards our partner and clients on the readiness of EURNEX to be the service provider for rail research in Europe. The 4th EURNEX Integration Conference with the official EURNEX inauguration took place on 29 and 30 November 2007 in Prague at CVUT.

#### **Added values provided by EURNEX to the rail community**

Added Value is the key ingredient for EURNEX because EURNEX is a network of voluntary members, providing services to its partners in industry and governing / regulating agencies. The existence of EURNEX is not critical for the (short-term) survival of any of its members or partners. EURNEX will only be sustainable if it is providing value added to its members and to its partners.

The part of the Research Institutions is to make sure those customers funds to the Association are better spent than until now,

- By increasing the knowledge basis available to them, and
- The level of quality of the results and of the efficiency of the research process, which is made possible by the structured coalition of the excellent institutions
- By high level education
- By new relationship with partners from rail industries, operators and infrastructure managers
- Individual contact locally to integrated European knowledge

EURNEX role is to state this clearly as the first principle of the Business Model as an instrument to persuade industry clients that EURNEX can deliver improved results and higher efficiency when acting as a stable network.

**EURNEX is prepared to contribute to and integrate in ERRAC**

EURNEX did organise its contribution and the integration of EURNEX expert know how into ERRAC future actions and is ready to foster ERRAC's scientific research base.

Having succeeded in the integration of excellent rail research institutions throughout the EU 27, EURNEX and its Pole Leaders and members are ready to support the European research roadmaps. It was and still is the EC's strong desire to overcome fragmented approaches in the rail research. With EURNEX and its members organised in the association and constituting an integrated European Rail Research Area, ERRAC is kindly requested to take the opportunity offered by EURNEX members and foster its competencies as a research advisor.

In several project reviews we learned that the European Commission was strongly interested to strengthen ERRAC's scientific base making better use of the investment into the EURNEX sustained integration.

EURNEX member expression of interest and with no doubt also common sense to make better use of integrated scientific excellence has been discussed and agreed by all Pole Leaders in our Sept. 25, 2007 Lille meeting.

Leadership and membership of WP teams: All the EURNEX Poles may contribute through their Pole Leader in the WPs. Specifically a scientific leadership will support CSA tasks for

- WP01 Pole 2
- WP02 Pole 6
- WP03 Pole 5
- WP04 Pole 3
- WP05 Pole 8
- WP06 Pole 7
- WP07 KMS by UIC, member of EURNEX
- WP08 Pole 10
- WP09 Pole 1

The Pole Leaders are ready to join in and also ready to detail tasks and schedule with an appropriate budget.

## Common project development in FP7

EURNEX did contribute with approximately 27 common project proposal to the first call of Framework Programme 7 and 24 project proposals in the second call of FP7. In the bids the following projects for execution as Corporate Services have been addressed:

- EURail: in the project proposal FutuRail
- Business development tasks: in the project proposal CETRRA

EURNEX as an legal entity is project partner in two successful 1<sup>st</sup> call and four 2<sup>nd</sup> call projects and take the lead in two 2<sup>nd</sup> call project proposals as well as participation in a national project, as:

1st Call 2008-2010 projects:

FutuRail (CSA)

CETRRA (CSA)

2nd Call 2009-2011 projects:

EUR-Steps (CP)

SkillRail (CSA)

CETRRAplus (CSA)

SafeCors (CP)

## 2 Section 1 - Project Objectives and Major Achievements during the Reporting Period

### 2.1 Overview of general project objectives

The mission of EURNEX is to create an excellent European network of rail research institutes as world class player that shall support the Railway sector and assist the members of EU to operate an interoperable and competitive rail system across the continent. EURNEX is therefore dedicated to contribute to major industrial and traffic policy aims of the European Union. The main objectives of EURNEX are

- to integrate the fragmented European Rail research landscape to provide European leadership and world class excellence in that sector.
- to promote the railway contribution to the sustainable transport policy in Europe.
- to improve the competitiveness and the economic stability of the railway sector by
  - creating a customer oriented and durable network
  - promoting technological innovations and knowledge management
  - implementing knowledge not only from scientific institutes but also from rail operators, infrastructure managers, supply industry including SME's,
  - focussing on the priorities given by ERRAC's Strategic Rail Research Agenda 2020 (SRRA), but prepared to cover new critical items which might come up in the future.

The customer-orientation of EURNEX is the essential key factor for its long-term durability beyond the EU granting period. The sustainable business case to be developed has to build on the trusting relation between the researchers organised in the network and the rail sector demanding for scientific services.

In a sector were R&D expenditures are far less than in competitor sectors, EURNEX is prepared to contribute to overcome strategic disconnect, but roles and tasks of the "Partnership's triangle" among EURNEX Researchers, Rail industry and operators to improve the Rail System's competitiveness needs to be clear. The key challenge for the Rail community in the partnership triangle

**Partnership's triangle to improve Rail System's competitiveness needs clear task assignment and trustful cooperation**

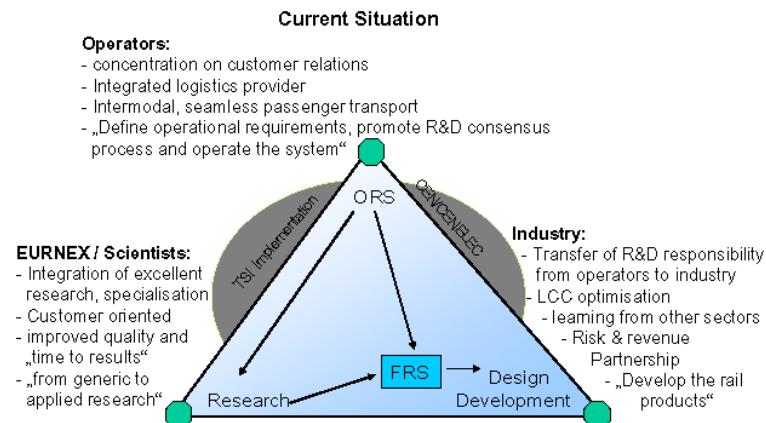


Fig. 1

Rail research needs a clear statement by all stakeholders to overcome the so called “strategic disconnect” between sales and R&D expenses.

**Strategic disconnect endangers future competitiveness of the rail system**

Rail sector spends far less portion of total sales for R&D than its competitors

- Rail: ~ 2%
- Aeronautics: 16 – 20%
- Automotive: 12 – 14%

This strategic disconnect endangers future competitiveness of the rail system and questions achievements of ambitious goals (e.g. ERRAC SRRA 2020)

EURNEX is prepared to contribute to overcome strategic disconnect through

- Reliable, sustainable strategic partnership with industry, operators, authorities, bodies
- Better use of resources (integration of researchers with expanded knowledge basis, multidisciplinary cooperation)
- Targeted benchmarking with other modes/branches to perform reasonable and efficient knowledge/technology transfer

Fig. 2

The performance of the EURNEX network therefore has to attract the supply industry and the operators by providing added-value research towards the state-of-the-art in Europe:

- establishing coherent and integrated knowledge and innovation services for the rail stakeholders, e.g. by the development of a unique Knowledge Management System (KMS) on railway technology
- integration of members new organisation of future excellent rail research remain the key challenge in the phase of the transfer of EURNEX towards a self standing

business case, including strengthen the existing scientific strengths, building-up trusting partnership and interdependencies as well as multidisciplinary collaboration

- strengthen and further development of the business case
- further development the thematic orientation towards the ERRAC SRRA 2020 key priorities ⇒ creating and maintaining poles and platforms of excellence in a way to efficiently response on these priority areas
- trusting cooperation of EURNEX members has to result into synergies to further enhance quality of research and “time-of-result-creation”
- EURNEX EURail schemes for post-graduate education and training developed by EURNEX have to meet the future requirements of the stakeholders on international level
- Close and permanent link to the stakeholders is essential, therefore the international associations UNIFE, UIC and UITP are directly involved in EURNEX. Key factor for EURNEX success will be the strengthen of the relation to tier 1 and tier 2 suppliers and their national associations

In fact, EURNEX has to justify performance and efficiency towards the customers of rail research. On the other hand, the EURNEX membership must be attractive for the capable scientific institutions.

Members must feel comfortable while being prepared to integrate their capabilities, researchers and facilities into the network and action. In the same way EURNEX requests a strong member's commitment and members must act according to the obligations Members that will be:

### **Quality**

- EURNEX member are requested to provide excellent research
- Quality peer review : a member of EURNEX should not only be recognised as a provider of excellence in knowledge, but also be perceived by its peers as willing to contribute to the survival and welfare of the network as such

### **Collaboration (transparency and competition)**

- Open discussion of request for proposals within the poles and members, team adjustment including competitive approaches if needed
- Transparency: Transparency across Poles and to the higher level is vital to avoid that independent not coordinated and unintended internal competition actions by different Poles

### **Contribution (knowledge contribution)**

- EURNEX valid membership demands for the willingness to share knowledge (i.e. by contribution to KMS), to provide information on projects and research topics currently undertaking and to cooperate within poles and on cross-pole activities

### **Integration / cohesion**

- Members are requested to integrate their excellencies in the network by active participation at pole work and common projects
- Cohesion: Sustainable EURNEX requires strong internal cohesion to become and to remain a reliable strategic partner for the rail sector.
- Relations with the external partners (industry, associations, EC) are an important support for the internal cohesion

Therefore the profit they can expect from EURNEX membership has to predominate, e.g.:

- Improving the own research strengths by the establishment and development of specialised EURNEX poles and platforms
- Improving the own expertise by establishing new and trusting multidisciplinary and international co-operations with complementary research partners
- Improving the efficiency of test and simulation facilities by enhanced opportunities for common use
- Strengthening the interaction with the customers to learn more about the business driven needs for current and future rail research
- Improved access to European rail technology projects (e.g. IP's), as well as other project funding sources
- Profiting from corporate services provided to EURNEX to promote research business opportunities (project involvement)
- Using existing contacts to customers while offering additional value through excellent research out of the EURNEX network
- Profiting from the EURNEX label for own PR ⇒ to be member of the World Class Player in rail research.

Achieving a win-win situation for the different players involved by meeting those objectives was the challenge for EURNEX within the EU granting period of 48 months. A crucial item is the need to maintain a durable, self-standing and long-lasting network. The grant for integration was only the initial financing within a given time. Therefore the implementation and further development of a sound business case is of utmost importance for the EURNEX success.

### 3 Dissemination and use

Dissemination and using and disseminating the knowledge

#### 2004 Overview table of main external dissemination activities EURNEX

Planned / Actual Dates	Name of activity	Type of audience	Countries addressed	Size of audience	Partner responsible / involved
<b>Press releases</b>					
28.01.2004	Kick-off Meeting press release	General public	EU 25		Participants : FAV, UoB, INRETS, IST, TFK, NITEL, UNIFE, UIC, UITP, CVUT
21.09.2004	Innotrans press release and interview	General public	EU 25		FAV
<b>Conferences</b>					
18-19.05.04	The international meeting of heads of transport, higher educational institutions of the state-participants CIS	Politicians and Heads of research units	CIS <sup>1</sup> and Baltics	200	FAV, MIIT

<sup>1</sup> CIS: Commonwealth of Independent States

	and Baltics, Moscow				
26-28. 05.04	ZEL 2004	Researchers	Mainly CEEC <sup>2</sup>	300	UNIZA, FAV
24.06.2004	BMVIT/RTCA, Summertalks	Mainly Industry, Partly Researchers	Austria	50	FAV
23.09.2004	Innotrans UNIFE Seminar	Industry	World wide	200	UNIFE, FAV
03.12.2004	INTRANSNET, Final Conference	Researchers	EU-25	100	FAV
17.02.2005	SEC, Katowice	Project managers, researchers	Mainly CEEC	100	SUT, FAV
15- 17.03.05	SIFER 05	Industry	Mainly France, EU-25	300	INRETS, FAV
23- 25.05.2005	ZEL 2005	Researchers	Mainly CEEC	300	UNIZA, FAV
07- 08.07.05	RSD, Pardubice	Researchers	Mainly CEEC	100	UPCE, FAV
<b>Exhibitions</b>					
21.- 24.09.04	Innotrans 2004	Rail related Industry and Research	World wide	45.000	FAV, UNIFE
<b>Publications</b>					

<sup>2</sup> CEEC: Central and East European Countries

09/04	Annual Newsletter	Railway stakeholder	World wide		UITP, FAV
<b>Flyers</b>					
09/04	Innotrans Brochure	Rail related Industry and Research	World wide		FAV, UNIFE
<b>Posters</b>					
09/04	Innotrans Posters	Rail related Industry and Research	World wide		FAV, UNIFE

## 2004 Conferences

- The international meeting of heads of transport, higher educational institutions of the state-participants CIS and Baltics, Moscow: Presentation and talks of Assist. Prof. Wolfgang H. Steinicke, FAV, with CIS and Baltic Russian high-level Politics, e.g. the Russian Minister for Transport and heads of research units.
- International Railway Conferences in Zilina, Slovakia: ZEL 2004 and ZEL 2005: Presentation and Work shopping of EURNEX approach, achievements and way ahead.

Please see "[www.zu-zel.sk](http://www.zu-zel.sk)"

- BMVIT/RTCA, Summertalks: Presentation of EURNEX approach, achievements and way ahead to Austrian Railway stakeholders
- Innotrans UNIFE Seminar: Presentation of EURNEX approach, achievements and way ahead by Assist. Prof. Wolfgang H. Steinicke, Fav and Dr. Tjark Siefkes, EURNEX Advisory Board Chairman, Vice Chairman of UNIFE and Bombardier Transportation to Railway stakeholders from Industry at Innotrans Fair in Berlin.
- INTRANSNET, Final Conference: Key note speech by EURNEX, represented by FAV.

Please see "[www.intransnet.org](http://www.intransnet.org)"

- SEC Conference in Katowice: SEC - Science, Education, Cooperation – 2005: Presentation of EURNEX approach, achievements and way ahead by FAV

Please see "[www.forumsec2005.polsl.katowice.pl](http://www.forumsec2005.polsl.katowice.pl)"

- SIFER 05 in Lille: Salon International de l'Industrie Ferroviaire : Presentation of EURNEX approach, achievements and way ahead by INRETS and FAV to mainly French Railway Stakeholder from Industry

Please see "www.sifer05.com"

- RSD, Pardubice: Reliability, Safety and Diagnostics of Transport Structures and Means: Presentation of EURNEX approach, achievements and way ahead by FAV or EURNEX Pole Trigger person

Please see "www.upce.cz"

## 2004 Exhibitions

- Innotrans : Important Rail Fair in Berlin with about 45.000 business visitors

Please see "www.innotrans.com"

## 2005 Overview table of main external dissemination activities EURNEX

Planned / Actual Dates	Name of activity	Type of audience	Countries addressed	Size of audience	Partner responsible / involved
<b><i>Press releases</i></b>					
	Regular articles in UNIFE newsletters and monthly electronic updates	UNIFE members – railway manufacturing industry	European Economic Area		UNIFE
May 2005	Article in UNIFE Annual Report, mention in the presentation to General Assembly	UNIFE members – railway manufacturing industry	European Economic Area		UNIFE
March 2005	Note on EURNEX in "UITP Direct"	PT Operators, Authorities, Industry	EU-25 and beyond	10,000 copies	UITP
March 2005	Information regarding EURNEX 2 <sup>nd</sup> integration Conference	TSB Newsletter	Germany		FAV

August 2005	Establishment of pole structure	TSB Newsletter	Germany		FAV
<b>Conferences</b>					
17.02.2005	SEC, Katowice	Project managers, researchers	Mainly CEEC	100	SUT, FAV
15-17.03.05	SIFER 05	Industry	Mainly France, EU-25	300	INRETS, FAV
23-25.05.05	ZEL 2005	Researchers	Mainly CEEC	300	UNIZA, FAV
07-08.07.05	RSD, Pardubice	Researchers	Mainly CEEC	100	UPCE, FAV
March 2005	EUROTRAFFIC, Prague	General transport audience	Mainly CZ and SK	100	UITP
08.06.2005	UITP World Congress, Rome	PT Operators, Authorities, Industry	EU-25	30	UITP, FAV
17.11.06	ERRAC plenary meeting, Brussels	ERRAC member	EU-25	30	IST
<b>Publications</b>					
May 2005	2nd EURNEX Newsletter		EURNEX member	3000copies	UITP, FAV
Nov 2005	3rd EURNEX Newsletter		EURNEX member	5000copies	UITP, FAV

## Conferences 2005

- The international meeting of heads of transport, higher educational institutions of the state-participants CIS and Baltics, Moscow: Presentation and talks of Assist. Prof. Wolfgang H. Steinicke, FAV, with CIS and Baltic Russian high-level Politics, e.g. the Russian Minister for Transport and heads of research units.
- International Railway Conferences in Zilina, Slovakia: ZEL 2004 and ZEL 2005: Presentation and Work shopping of EURNEX approach, achievements and way ahead.

Please see "[www.zu-zel.sk](http://www.zu-zel.sk)"

- BMVIT/RTCA, Summertalks: Presentation of EURNEX approach, achievements and way ahead to Austrian Railway stakeholders
- INTRANSNET, Final Conference: Key note speech by EURNEX, represented by FAV.

Please see "[www.intransnet.org](http://www.intransnet.org)"

- SEC Conference in Katowice: SEC - Science, Education, Cooperation – 2005: Presentation of EURNEX approach, achievements and way ahead by FAV

Please see "[www.forumsec2005.polsl.katowice.pl](http://www.forumsec2005.polsl.katowice.pl)"

- SIFER 05 in Lille: Salon International de l'Industrie Ferroviaire : Presentation of EURNEX approach, achievements and way ahead by INRETS and FAV to mainly French Railway Stakeholder from Industry

Please see "[www.sifer05.com](http://www.sifer05.com)"

- RSD, Pardubice: Reliability, Safety and Diagnostics of Transport Structures and Means: Presentation of EURNEX approach, achievements and way ahead by FAV or EURNEX Pole Trigger person

Please see [www.upce.cz](http://www.upce.cz)

- UITP World Congress, Rome: A side session devoted entirely to EURNEX and ERRAC, addressed to Congress and Exhibition participants from the public transport sector

Please see [www.uitp.com](http://www.uitp.com)

- EUROTRAFFIC conference, Prague: Presentation of EURNEX approach and activities in the context of UITP research activities

Please see [www.eurotraffic.cz/2005](http://www.eurotraffic.cz/2005)

Other knowledge management activity:

Sept. 2005: Development and implementation of Knowledge Management System including the European and national rail research project, European research centers and researchers database which in use by the EURNEX community.

## 2006 Overview table of main external dissemination activities EURNEX

Planned / Actual Dates	Name of activity	Type of audience	Countries addressed	Size of audience	Partner responsible / involved
<b><i>Press releases</i></b>					
21.09.2006	Information EURNEX	BerliNews	Germany	<a href="http://www.berlinnews.de/archiv-2006/1586.shtml">http://www.berlinnews.de/archiv-2006/1586.shtml</a>	TSB/FAV
10.11.2006	Article about EURNEX network	ZU-Zel	Slovakia	<a href="http://www.zu-zel.sk/index.php?page=11&amp;lang=us">http://www.zu-zel.sk/index.php?page=11&amp;lang=us</a>	University of Zilina
	Regular articles in UNIFE newsletters and monthly electronic updates	UNIFE members – railway manufacturing industry	European Economic Area	www.unife.org	UNIFE
May 2006	Article in UNIFE Annual Report, mention in the presentation to General Assembly	UNIFE members – railway manufacturing industry	European Economic Area	www.unife.org	UNIFE
March 2005	Note on EURNEX in "UITP Direct"	PT Operators, Authorities, Industry	EU-25 and beyond	10,000 copies	UITP
March 2006	EURNEX progress	TSB Newsletter	Germany	<a href="http://www.technologiestiftung-berlin.de/">http://www.technologiestiftung-berlin.de/</a>	FAV
August 2006	Info on InnoTrans	TSB Newsletter	Germany	<a href="http://www.technologiestiftung-berlin.de/">http://www.technologiestiftung-berlin.de/</a>	FAV
Sept. 2006	Info on InnoTrans	TSB Newsletter	Germany	<a href="http://www.technologiestiftung-berlin.de/">http://www.technologiestiftung-berlin.de/</a>	FAV
18.10.2006	Information regarding EURNEX 3 <sup>rd</sup> Integration	TSB-Newsletter	Germany	<a href="http://www.technologiestiftung-berlin.de/index.php/news/2530.html?page=2">http://www.technologiestiftung-berlin.de/index.php/news/2530.html?page=2</a>	FAV

	Conference				
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<b>Conferences/Fairs</b>					
Planned / Actual Dates	Name of activity	Type of audience	Countries addressed	Size of audience	Partner responsible / involved
29 - 30 May 2006	ZEL 2006	Researchers	Mainly CEEC	300	UNIZA, FAV
4- 8 June	7 <sup>th</sup> World Congress on Rail Research (WCRR 2006)				
19- 22.09.2006	InnoTrans 2006	EURNEX Poster Presentation	international		FAV, Poles of Excellence
14- 15.09.2006	UPCE International Conference on "New Challenges in Transport and Communications"				
15.05.06	ERRAC plenary meeting	ERRAC member	EU-25	30	FAV, IST
21.09.06	ERRAC plenary meeting	ERRAC member	EU-25	30	IST, FAV

Planned / Actual Dates	Name of activity	Type of audience	Countries addressed	Size of audience	Partner responsible / involved
<b><i>Publications</i></b>					
September 2006	4th EURNEX Newsletter	To disseminate the actualities of EURNEX events (Poles' information, KMS news, business case, etc) in line with the InnoTrans fair. The newsletter is available online and in print copies.	EURNEX member	5000copies	UITP, FAV
	Who-Is-Who booklet	High level representatives of Industry, operators, politicians and administratives	all	560 Copies	FAV, UoB
	Website	Regular and periodical update of EURNEX Presentation on UNIFE, UIC and UITP website:	all		UIC
	EURNEX Poster	Marketing poster for general information on EURNEX	all	200	FAV

## Conferences 2006

- EURNEX Poster show at InnoTrans Fair 2006 in Berlin Germany, worlds leading rail fair, 19-22. September 2006
- 7th World Congress on Railway Research, June 4/8, 2006 - Montréal, Canada  
Knowledge Management System  
For Rail Research NoE Hugo Michel , IT Senior Advisor - UIC
- EURNEX ZEL Conference, 29 - 30 May 2006, Zilina, International Railway Conferences in Zilina, Slovakia: ZEL 2006: Presentation and Work shopping of EURNEX approach, achievements and way ahead.

Please see [www.zu-zel.sk](http://www.zu-zel.sk)

- RSD, Pardubice: Jan Perner Transport Faculty of the University of Pardubice:4<sup>th</sup> International Scientific Conference on: "New Challenges in Transport and Communications", 14-15 September 2006, W.H.Steinicke presented EURNEX in the Scientific Committee

Please see [www.upce.cz](http://www.upce.cz)

- Technology and Research Workshop; UIC HQ, Paris, 25.10.2006 EURNEX - Coordinator report on the project results and future developments

## **EURNEX 4<sup>th</sup> Integration Conference 2007**

Date	place	Major outcome
22/30.11.2007	CVUT Prague	<ul style="list-style-type: none"> <li>• EURNEX 4<sup>th</sup> Integration Conference, CVUT Prague</li> </ul>

### ***Publications 2007***

May2007	5th EURNEX Newsletter	To disseminate the actualities of EURNEX events (Poles' information, KMS news, business case, etc) in line with the InnoTrans fair The newsletter is available online and in print copies.	EURNEX member	5000copies	UITP, FAV
	Website	Regular and periodical update of EURNEX Presentation on UNIFE, UIC and UITP website:	all		UIC
Beg 2007	Parliaments Magazin	The European Rail Research Network of Excellence - contribution to the European Research Area -			

### **Conferences 2007**

- EURNEX ZEL Conference, 29 - 30 May 2007, Zilina, International Railway Conferences in Zilina, Slovakia: ZEL 2006: Presentation and Work shopping of EURNEX approach, achievements and way ahead.

Please see [www.zu-zel.sk](http://www.zu-zel.sk)

- UITP World Congress, Helsinki, Mai 2007, EURNEX – Rail research Network of Excellence
- TRB, Washington January 2007, EURNEX - SCIENTIFIC AND TECHNOLOGICAL INNOATIONS TOWARDS THE COMPETITIVE, EFFICIENT, SAFE AND SECURE RAIL SYSTEM OF THE FUTURE
- EC Transport Committee, Lisbon December 14, 2008 Specific Programme Committee «Cooperation», EURNEX – paving the way ahead for a co-modal more competitive rail system

## 4 Appendix 1: Plan for using and disseminating the knowledge3

### General

The dissemination of knowledge has been organised with presentations while relevant events with participation of railway related partner and customer. Further on the EURNEX newsletter has been distributed by the members to partners and customers and at events.

The EURNEX website is the web-based platform for provision of information. It will be part of the EURNEX KMS in the future. This EURNEX web site contains regular updates of progress and information about the objectives of the Network of Excellence, along with a list of participants. The it informs as well on the activities of the Network as poles, EURNEX short training courses and test facilities.

In 2005 EURNEX started to establish the Knowledge Management System (KMS), which to date has an internal character for disseminating the Knowledge within the NoE. *The Knowledge Management System shall support successful acquisition of R&D projects* by creation of structures and processes that will facilitate transfer of scientific knowledge from the universities to industry and the Commission to support commercial product innovation. An open access for external user incl. payment modes therefore will be part of the EURNEX business case.

One major issue of the EURNEX is the establishment of a sound knowledge management system (KMS): Relevant information usually resides in various documents, processes, and most of the time in people's heads. The EURNEX KMS will provide a unique entry point to rail research knowledge in order to simplify access to information, communicate more efficiently among the experts and prevent knowledge lack or loss.

The system will connect to all kinds of documents, but also to people who are able to provide knowledge and competencies, to projects, institutions, test laboratories...

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<sup>1</sup> **Knowledge:** means the results, including information, whether or not they can be protected, arising from the *project* governed by this *contract*, as well as copyrights or rights pertaining to such results following applications for, or the issue of patents, designs, plant varieties, supplementary protection certificates or similar forms of protection (Article II.1.14 of the contract)

The EURNEX KMS has been tested and is now ready for implementation. It consists of:

- Directory of Rail Research Institutions (address, link, members, phone, related projects...)
- Dir. of Researchers (photo, title, research institution, projects, specialist knowledge and R&D experience, principal publications, email, phone...)
- Dir. of Rail Research Projects (Title, abstract, dates, link, project team, deliverables...)
- Meetings & Events database with dynamic calendar (Title, dates, place, description, link, related documents (agenda...))
- Document Management system ((GEIDE) with versioning (VCS) , e-mail notifications for updates, search engine)
- Internal Messaging system
- Newsletter creation & diffusion tool
- Advanced consultation statistics system (stats. per user, workspace, action, file...)

#### **Progress towards objectives carried out in 6 parallel sub-tasks:**

1/ To further develop and integrate the EURNEX KMS towards the 3 pillar concept, involving

- EURNEX internal workspace
- Public website
- Knowledge library as the unique rail system database, part of EURNEX business

This further improve KMS user friendliness and is realized by provision of periodic updating and maintenance the KMS.

This task included:

- Identification and implementation of key success factors for frequent use of KMS, based on UIC experiences with running system
- Identifying and adding research links useful for EURNEX – for example Rail Safety and Standards Board (RSSB) in the UK and links to EU FP7 website

- Developing and adding bibliography to KMS
- Investigate and develop other possibilities to make use of KMS (identification of synergies)

According to the common decision the WP 6 has concluded this work including pole's KMS managers who steered the updating of database of their pole together with user/pole members.

This method was chosen because of the Knowledge Management System is organised around poles of excellences providing a pole-oriented permanent contact between the researchers, database on research projects, facilities and abilities.

Updating KMS was done after having common approval on the process to be executed and on using the same template elaborated by UoB for this purpose. The members have been requested by pole KMS managers to update their existing (KMS) projects and send data concerning additional projects using common template for this.

The updating addressed the following:

- New projects added
- No. projects updated
- Potential Improvements
- Proposal for future use

To encourage users to adopt the KMS, a particular emphasis has been given to the user-friendliness aspect.

The main tasks on this topic:

- Identification and implementation of key success factors for frequent use of KMS, based on UIC experiences with running system
- Improving KMS user friendless
- Disseminate information of meetings & projects only via KMS
- Identifying and adding research links useful for EURNEX – for example Rail Safety and Standards Board (RSSB) in the UK and links to EU FP7 website
- Developing and adding bibliography to KMS Improvement based on results of user questionnaire

The KMS had a low priority within the research community, because of not needing the information, which is already in the system. Therefore the WP 6 intended to focus on providing more adequate pole-based information. The main element of this first step of improving:

- Continually consultation evolution from the opening until now
- A more dynamic homepage
- With forthcoming meetings and last projects added
- Extension & Re-organisation of the menu
- Structures towards a more coherent classification of information classes
- Improved and more attractive e-mailing possibilities (message board)
- Multiple Addressee
- Conferences & demonstrations

The more efficient solution to improve the use of KMS was to have documents and all materials for EURNEX meetings but also for ongoing projects available only in the KMS.

In order to increase the interest of use of KMS some important links have been added to the system (RSSB, ERRAC, EU, ERA etc)

Other possibility to develop bibliography adding it to KMS, it is in progress and in the first step in most probability the UoB bibliography will be added which contains worldwide publication results on railway research.

2/ To move the password protected internal area of the EURNEX website to the internal area of the KMS => merge the internal areas to one coherent workspace for EURNEX poles and members.. (led: UNIFE/UIC,)

In order to increase KMS effectiveness the password protected internal area of the EURNEX website has been moved into the internal area of the KMS merging the internal areas to one coherent workspace for EURNEX poles and members. An action

list of task was undertaken by UIC and UNIFE to enable the two site to be merged. This action list was agreed in Mach 2007 and finished by end of May 2007.

3/ To elaborate appropriate business case for the area "knowledge library" as a part of the overall EURNEX business case. It includes the analysis of different modalities/policies for payment (e.g. annual fee vs. charge for use) This task shall be supported by pole 1 and is close linked to WP 8. (led by UoB/WP6 partners)

The elaboration of business case is in progress. The show page is discussed and practically approved by WP 6 members.

The contribution of pole 1 promoted the general understanding the financial and property right issues, nevertheless the user of KMS is still to be identified first of all from outside of the EURNEX community.

### **Further use of EURNEX knowledge in CETRRA**

EURNEX knowledge will be further on used in the CETRRA project "Contributing to the European Research Area in surface transport to strengthen the competitiveness of the European surface transport sector" which start in June 2008 in the frame of FP7 1st call.

The CETRRA project will help partner to develop joint industrial projects but as well the contribution with joint projects to the 7th Framework Programme. Through the international co-operation in CETRRA it is even possible for SMEs to get in contact with non-European research excellencies. CETRRA will support SME to use the facilities of European Research programmes as FP7 together with other partners and will activate transport associations for stronger involvement with their SME in European Programmes or thematic clusters. The results of CETRRA will be distributed with common participation at conferences, events as well as fairs.

CETRRA, with back up of EURNEX, supports European transport development to enhance the usability of Trans–Europe systems. It aims at maintaining a good understanding and coherence of railway and other transport mode knowledge and developing a new technology. It supports all strategic research and development in the context of transport. It aims also at promoting knowledge, experiences and best practices to various types of audience including regulatory authorities, transport authorities, transport operators, infrastructure managers, standardisation bodies,

notified bodies, universities and research centres, passengers organisations, manufacturers and engineering companies.