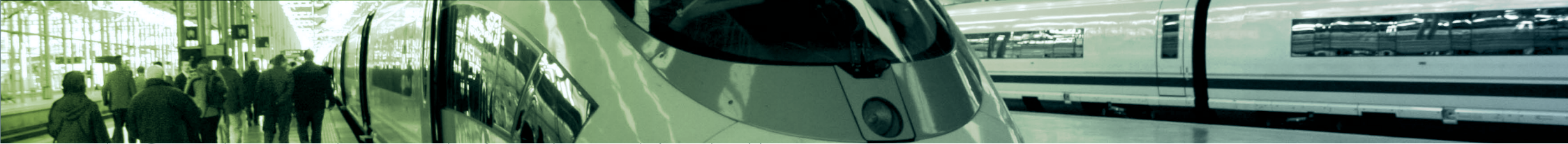
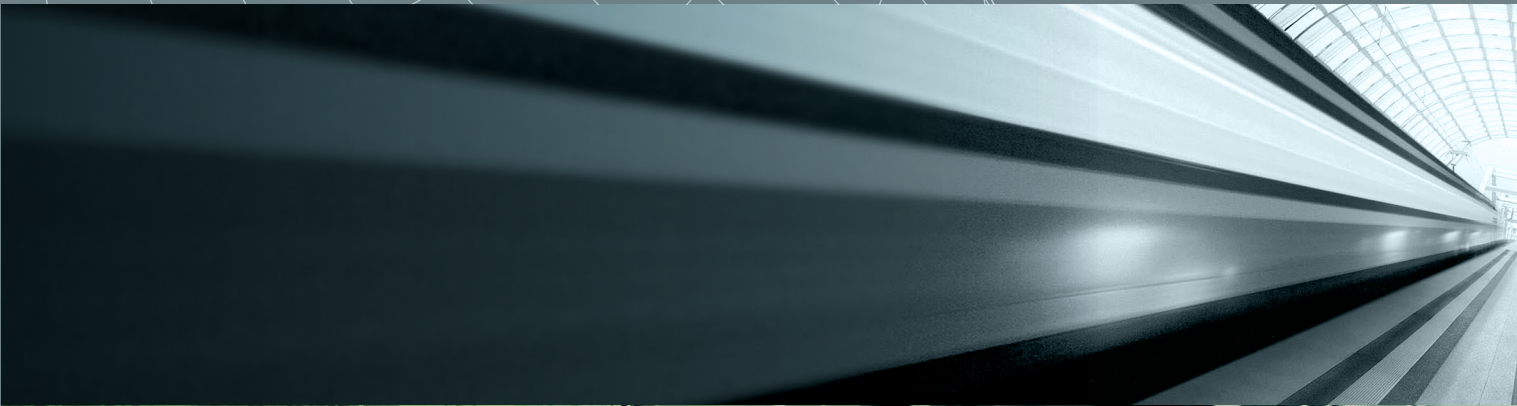


Activities Report

2010 >



INTERNATIONAL UNION
OF RAILWAYS



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Foreword by UIC Chairman

“

At the General Assembly in December 2010, myself and Mr Moretti, UIC Vice-Chairman, together with Mr Loubinoux, were supported by all the UIC Members and re-elected to our present positions as Chairman, Vice-Chairman and Director-General of UIC. I, as UIC Chairman, decided to place all my efforts in contributing to the further development of UIC until 31 December 2012.

I was first appointed as Chairman of UIC (from April 2009 to December 2010) at the General Assembly in December 2008, when UIC was in the middle of its crisis. During a very short period from that December to March 2009, there were active and fierce discussions to get UIC restarted, and the new UIC Statutes and the Internal Regulations were drafted to define and develop UIC as the world railway technical Platform, respecting the autonomy of the UIC Members and under the firm determination of the persons concerned to ensure that the crisis would never occur again.

To start the new UIC based on these new Statutes and Internal Regulations was the first mission I faced as UIC Chairman. I continued the sincere discussions among the UIC Members with the support of all the UIC Members, and the degree of transparency in the association's management was increased through the revision of the International Regulations approved at the General Assembly in December 2010.

Along with these efforts, the global projects in the five fields were started from 2010 with support and cooperation from all the UIC Members, regardless of their forms of organisation, whether infrastructure and operations, were separated or integrated, to make UIC's activities more successful as a global organisation. Activities in four of the fields: freight, signalling, environment, and safety/security started in 2010.



*Yoshio Ishida,
UIC Chairman*

From 2011, the activities in standardisation will be strengthened under the IRRB (International Rail Research Board), which has become an official group of UIC.

Looking over the achievements of UIC for the past year and nine months from April 2009 to December 2010, I am certain that the operation of UIC has come back and is sound, and the framework for the expected activities is now prepared.

Considering the above situation, the present theme for UIC is to be challenged to achieve significant results as the world railway technical Platform.

Henceforth I expect UIC to hold the following two visions:

The first vision is to transmit information that demonstrates the superiority of the railways in the fields of safety, environment, and cost, and furthermore in reliability and comfort, in a positive and strategic way. The recent transport policies of individual governments do not always give priority to the railways. From this point of view, there are many things that UIC could offer as the only global organisation in the railway sector.

The second vision is to strengthen UIC's Members to increase the superiority of the railways. To accomplish this, it is vital for UIC to be the place where the top management of UIC Members can discuss railway technology, and discuss it freely and vigorously. This is because the various advantages of rail will be heightened only through the development of railway technology and innovation, and it is only the top management of the UIC Members who hold these responsibilities.

”

“ Following 2009, which saw the adoption of the new Statutes and a root-and-branch redefining of UIC’s tasks to better meet the new challenges of the rail sector, 2010 can be characterised by the strengthening of our association and an increase in the rate and expansion of its activities at global level, as mapped out by the Members’ during General Assemblies.

Its role as a platform for technical cooperation and the integration of the various areas of railway business having been reaffirmed, UIC has set up high-level professional cooperation bodies capable of defining and directing technical projects to best serve the interests of its members. Thus, alongside the already established Passenger and Freight Forums, the new “Rail System Forum”, encompassing numerous technical and operational areas, has been set in place and tasked with instilling projects with renewed dynamism, covering the areas of infrastructure, rolling stock and train dynamics, signalling and control-command. In addition, the Fundamental Values Department created at UIC Headquarters is tasked with giving fresh impetus to and maintaining coherence between a number of areas of activity vital to the success of the railways: safety and security, sustainable development, research, and expertise development. All these activities have resulted in the launch of new projects or campaigns to promote the advantages of rail across the world.

In 2010, international cooperative arrangements in the area of research were redefined to ensure more coherence and efficiency, starting with the Research Coordination Group, tasked in particular with coordinating European research activities in liaison with European Union research programmes. 2010 was also marked by the re-launch of the International Rail Research Board (IRRB), which is to play a pivotal role in encouraging exchange and benchmarking between players involved in rail research across the globe, in liaison with the World Congress on Railway Research (WCRR).

Organisational changes were also made in 2010 to regional railway cooperation activities. The regions of Europe, Asia, Middle-East and Africa each have a work programme, a set of activities and a specific budget decided upon during Regional Assemblies. Regional offices operate in Delhi, Tehran and Tunis. The North American region is also in the process of consolidation.

Another of members’ major objectives related to the bolstering of UIC’s role and its status as a global association representing the railway sector, recognised and respected by all stakeholders. Significant results were achieved in this respect in 2010 with the forging of cooperative ties – through Memoranda of Understanding and technical agreements – with several leading institutions in economic, financial and technical areas, including UN bodies, the World Bank, African Union, ERA (European Railway Agency), etc. By virtue of these agreements, UIC is recognised for the quality of its general railway expertise and impartial stance. UIC’s role as a global platform enabling technical cooperation and benchmarking between players has also been established through the organisation of world conferences – now considered references – on topics such as high speed, freight corridors, safety, security, sustainable development, signalling and control-command.

It is through these varied yet coherent actions that UIC seeks to serve its Member community, whilst respecting their strict financial constraints by observing thorough and transparent budget and project monitoring.

”

Foreword by UIC Director-General



*Jean-Pierre Loubinoux,
UIC Director-General*



UIC in 2011

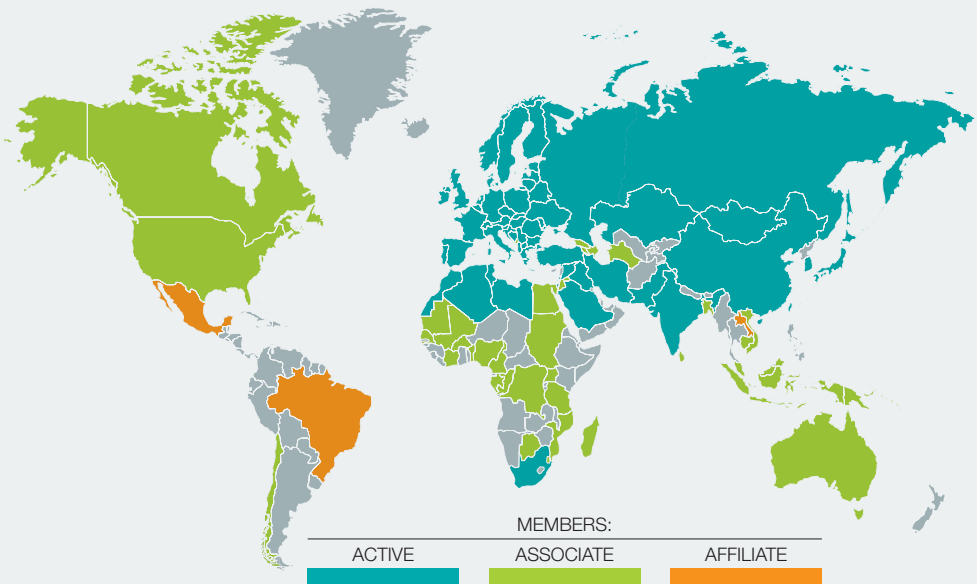
UIC: encompassing the worldwide railway community

UIC in 2011 comprises:

200 Members across **5** continents

Including

- Integrated railway companies
- Rail passenger and freight operators
- Infrastructure managers
- Railway service providers
- Rail research institutes
- Railway-related bodies



With transport volumes of

2,700 billion passenger-kilometres

9,000 billion tonne-kilometres

Operating

1,000 000 kilometres of lines

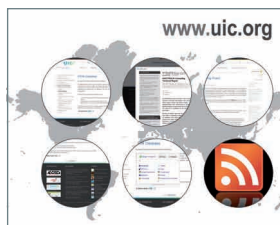
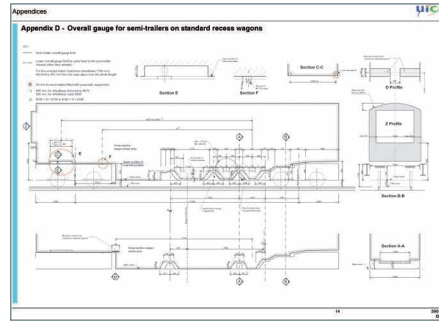
Employing more than

7,000 000 railway staff worldwide



- | | | |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <p>AFRICA
 5 active Members
 22 associate Members
 3 affiliate Members</p> | <p>ASIA-OCEANIA
 9 active Members
 15 associate Members
 12 affiliate Members</p> | <p>EUROPE
 60 active Members
 35 associate Members
 19 affiliate Members</p> |
| <p>MIDDLE-EAST
 6 active Members
 2 associate Members
 4 affiliate Members</p> | <p>NORTH AMERICA
 3 associate Members
 1 affiliate Member</p> | <p>SOUTH AMERICA
 2 associate Members
 2 affiliate Members</p> |

UIC: serving its Members through...



6 Regional Assemblies (Africa, Asia, Europe, Middle-East and North America, and Latin America to be set up)

7 Forums and Platforms (Freight, Passengers/High Speed, Rail System Forums; Safety, Security, Environment-Energy-Sustainability, Expertise Development Platforms)

2 Research working bodies (IRRB and RCG)

Close to **700** "UIC Leaflets" covering all the main railway areas (passenger, freight, finance-statistics, operations, rolling stock, traction, infrastructure, information technology, etc.)

180 Projects (including worldwide, multi-regional and regional projects)

More than **30** Expert working groups

100 Conferences, seminars, training sessions every year

A permanent information system on railway cooperation attracting **65,000** Visits every month to the UIC website www.uic.org

1,600 Visits every day to UIC extranet workspaces

53 Issues of "UIC eNews", the weekly electronic newsletter

2,500 Readers of "UIC eNews" worldwide

UIC's mission, objectives and values

6





UIC Headquarters in Paris

UIC, the worldwide professional association representing the railway sector

The mission and overall objectives for UIC activities result from the new Statutes that were unanimously adopted by the UIC Members at the General Assembly on 31 March 2009 as well as from the strategic priorities announced by the new UIC Chairman Yoshio Ishida at this General Assembly meeting and successive Executive Board and General Assembly meetings on 16 June and 8 December 2009. UIC's mission in 2011 has the following main focuses:

- Promote rail transport at world level with the objective of optimally meeting current and future challenges of mobility and sustainable development
- Promote interoperability, improve the overall coherence of the rail system, create new world standards for railways (including common standards with other transport modes)
- Develop and facilitate all forms of international cooperation among Members, facilitate the sharing of best practices (benchmarking)
- Propose new ways to improve the technical and environmental performance of rail transport, reduce costs
- Support Members in their strategies to improve their competitiveness and business focuses



UIC leads an innovative and dynamic sector, helping Members find continuing success and opportunities.

Members take a proactive role in the UIC working groups and assemblies where the railways' position on regional/worldwide issues is shaped. Active participation in the working groups is a unique opportunity to voice opinions and benefit from the weight of the railway sector at a coordinated worldwide level.

As an association for technical cooperation among railways, UIC coordinates the sector's position vis-à-vis the supply industry and research partners.

UIC Chairman and Director-General define course of UIC action



UIC Chairman Yoshio Ishida and Director-General Jean-Pierre Loubinoux at the UIC General Assembly in Tokyo, June 2010

AT THE GENERAL ASSEMBLY ON 31 MARCH 2009, UIC CHAIRMAN YOSHIO ISHIDA HIGHLIGHTED THE NEW COURSE OF UIC ACTION IN YEARS TO COME:

“UIC must help exploit the effectiveness of the railways in helping to overcome current global environmental problems, as well as the prospects for the building of superior future railway systems based on cooperation and solidarity of railway companies and railway-related organisations worldwide.”

UIC DIRECTOR-GENERAL JEAN-PIERRE LOUBINOX FOCUSED ON THE IMPORTANCE OF:

“Shaping UIC as the prominent and professional railway organisation with a global reach, adapting UIC to the current and future challenges of rail transport, developing all technical and institutional partnerships useful to UIC and its Members – in particular with international organisations and technical bodies – the permanent objectives being those of pooling expertise, solidarity and efficiency in a transparent manner.”

A three-level cooperation structure

In order to effectively fulfil its mission, UIC works at 3 different levels:

■ Strategic level

Coordination with and between the 6 UIC Regions and their Members according to the new Governance (Regional Assemblies for Africa, Asia, North America, Latin America to be set up, Europe and Middle-East).

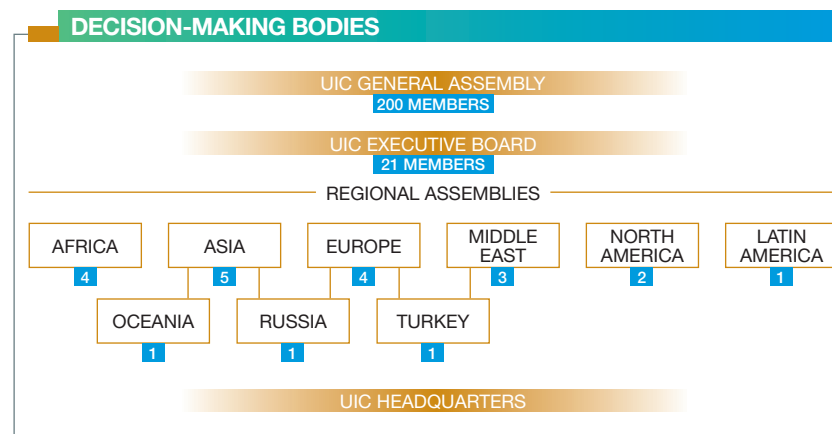
■ Technical/professional cooperation level

Structured around the following railway activities: Passengers, Freight, Rail System – including Infrastructure, Rolling Stock, Operations, Signalling – and Fundamental Values including cross-sector activities such as Sustainable Development, Research Coordination, Safety, Security, Expertise Development. Strategic priorities for technical cooperation activities are set out by Forums and Platforms composed of member representatives.

■ Support services level

Finance, Human Resources and Legal, Communications, Institutional Relations.

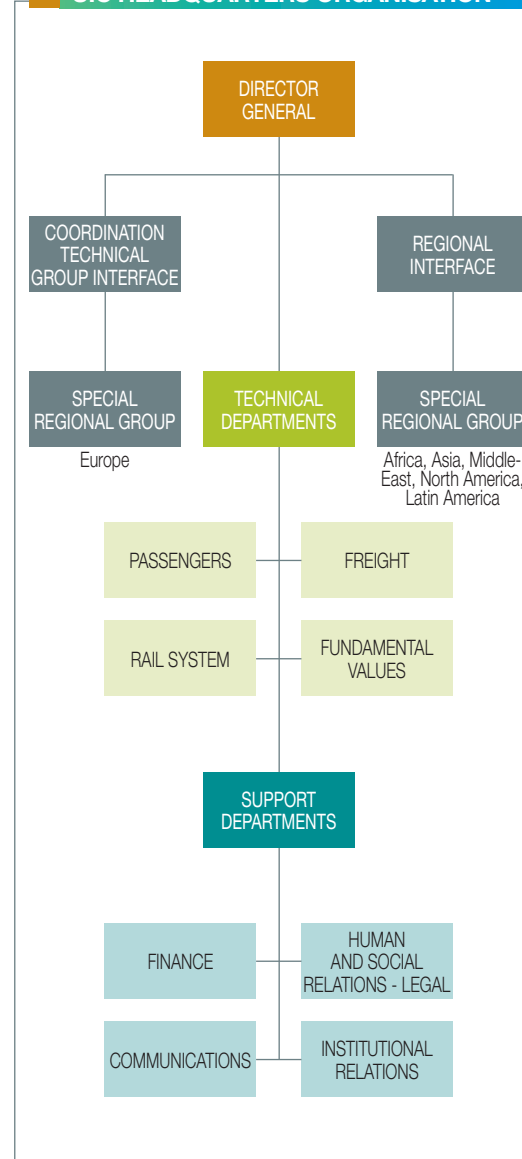
The UIC Executive Board and General Assembly additionally approved on 8 December 2009 the Chairman's proposal to focus further UIC activities on **5 key areas to be developed in the interest of the worldwide railway community**: Environment, Safety and Security, Freight/International Corridors, Signalling and Standardisation.



UIC TECHNICAL COOPERATION BODIES

PASSENGERS	FREIGHT	RAIL SYSTEM	FUNDAMENTAL VALUES
CER / UIC High Level Passenger Meeting	CER / UIC High Level Freight Meeting	UIC Rail System Forum	
UIC Passenger Forum	UIC Freight Forum		
High Speed Plenary Committee	CTG Combined Transport Group with INTERUNIT (UIRR)	Track and Structures Sector	Environment, Energy and Sustainability Platform
Station Managers Global Group -SMGG	Special Groups Wagonload -Xrail -IFC	Train Dynamics and Running Gear Sector	Safety Platform
Commercial Group	Special Group RAILDATA	Operations and Control, Command and Signalling Sector	Security Platform
Technical Group	TAF TSI -Deployment -CGG	Energy Management Sector	Expertise Development Platform
	Use of Wagons -RIV -GCU Joint Committee (UIP, ERFA)	Rolling Stock Sector	International Railway Research Board (IRRB)
	GTE Intercontinental Freight Corridors		Research Coordination Group (RCG)

UIC HEADQUARTERS ORGANISATION



UIC's values: "Unity, Solidarity, Universality"

In order to reflect the new ambitions for UIC, Members unanimously agreed on 3 core values forming a common basis for UIC action.

UNITY

UIC is the professional and technical association representing the unity of the railway sector at world level. Some specific activities are organised at regional level and monitored by the 6 Regional Assemblies.



SOLIDARITY

UIC represents Members with different levels of development. UIC will therefore step up its efforts to narrow the divide between Members, in particular by promoting exchange of information, experience and best practice across the world. To achieve this goal, a solidarity fund was set up in 2009 in order to facilitate the involvement of Members in its work.

UNIVERSALITY

UIC's scope of activities is global and embraces the universality of railway topics. UIC can create a framework to develop new projects on all kinds of issues requested by Members, whether technical or non-technical.

UIC Statutory Meetings

10





In 2010 all UIC Statutory meetings were held in Asia: in Tokyo in June and in Beijing in December



UIC in Tokyo and Beijing in 2010: two highlights



Mr Yoshio Ishida



Mr Jean-Pierre Loubinoux



Mr Mauro Moretti



Mr Marc Laliberté



Mr Hubert du Mesnil



In 2010, the UIC Statutory meetings (Executive Board and General Assembly) were held alongside major rail-related events. Thus, Members attending the June 2010 meetings in Tokyo could also participate in the “TM & CCS 2010” global signalling conference, while the December 2010 sessions were held in Beijing around the same time as “UIC HIGHSPEED 2010”, the UIC World Congress on High Speed Rail. These two highlights in the UIC calendar were chaired by UIC Chairman Yoshio Ishida of Japan Railways (JR East), together with UIC Vice-Chairman Mauro Moretti of Italian Railways (FS) and UIC Director-General Jean-Pierre Loubinoux.

UIC GOVERNANCE: RENEWED MANDATES FOR THE UIC CHAIRMAN, VICE-CHAIRMAN AND DIRECTOR-GENERAL TO CONTINUE THEIR WORK SUCCESSFULLY DEVELOPING UIC

During Beijing the UIC General Assembly held in December 2010, the mandates of the UIC Chairman and Vice-Chairman were renewed until December 2012 and the mandate of the UIC Director-General until March 2013. In addition, Hubert du Mesnil, President of French Infrastructure Manager (RFF), was appointed to the UIC Executive Board to replace Bert Klerk, Dutch Infrastructure Manager (ProRail), as well as Marc Laliberté, CEO of Canadian Railways (Via Rail), as the second Executive Board Member representing North America.

1 Mr Zbigniew Szafranski

2 Mr Moha Khaddour

3 Mr Thomas Joindot

4 Mr Jerzy Wisniewski

5 Mr Boris Lapidus



6 Mr Marc Descheemaecker

7 Mr Christophe Chéron

8 Mr Joachim Kettner

9 Mr Jean-Michel Richard

10 Mr Alexander Netolicky

APPOINTMENTS TO UIC WORKING BODIES IN 2010

During both UIC General Assemblies, Members approved a series of appointments. The following appointments were made in June 2010 in Tokyo:

- Zbigniew Szafranski, Polish Railways (PKP/PLK), as Chairman of the UIC Rail System Forum
- Moha Khaddour, Moroccan Railways (ONCF), as Chairman of the UIC Security Platform
- Thomas Joindot, SNCF, as Chairman of the UIC Finance Committee

The Assembly also took note of the appointment of Jerzy Wisniewski, Polish Railways (PKP), as Director of the Fundamental Values Department at UIC HQ.

A series of appointments was also approved by the General Assembly in Beijing at the proposal of the UIC Director-General. Boris Lapidus,

Senior Vice-President of Russian Railways (RZD), was appointed (along with 3 Vice-Chairmen) Chairman of the International Rail Research Board, IRRB, that will play a greater role in the exchange of research policies at world level.

- Marc Descheemaecker, CEO of Belgian Railways (SNCB Operator), is the new Chairman of the UIC Passenger Forum
- The Research Coordination Group (RCG) will be chaired by Christophe Chéron, French Railways (SNCF)
- Joachim Kettner, German Railways (DB), was renewed as Chairman of the UIC Environment, Energy and Sustainability Platform
- Jean-Michel Richard, French Railways (SNCF), as Chairman of the UIC Safety Platform
- Alexander Netolicky, Austrian Railways (ÖBB), was appointed as Chairman of the UIC Expertise Development Platform

UIC in pictures



TOP MANAGEMENT AT UIC HQ

UIC Director-General Jean-Pierre Loubinoux with the UIC Board of Directors

CHAIRMEN OF REGIONAL ASSEMBLIES

1 UIC AFRICA
Mr Mohammed Khliie, Director-General of Moroccan National Railways (ONCF)

2 UIC ASIA
Mr Huh, Joon-Young, CEO of Korea Railroads (Korail)

3 UIC EUROPE
Mr Guillaume Pepy, President of French National Railways (SNCF)

4 UIC LATIN AMERICA
Mr Guilherme Quintela, Chairman of Estação da Luz Participações Ltda (EDLP), Brazil

5 UIC NORTH AMERICA
Mr Robert VanderClute, Senior Vice-President, Safety and Operations, Association of American Railroads (AAR)

6 UIC MIDDLE-EAST
Mr Süleyman Karaman, President & CEO of Turkish National Railways (TCDD)

CHAIRMEN OF UIC FORUMS

7 Mr Zbigniew Szafranski

8 Mr Ferdinand Schmidt

9 Mr Marc Descheemaeker

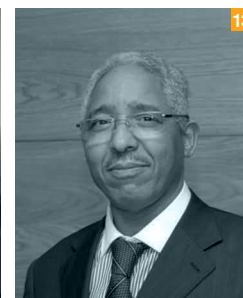
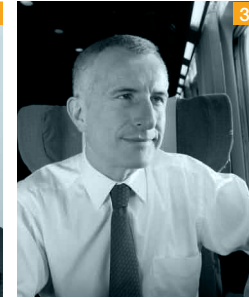
CHAIRMEN OF UIC PLATFORMS

10 Mr Joachim Kettner

11 Mr Jean-Michel Richard

12 Mr Alexander Netolicky

13 Mr Moha Khaddour





The globalisation of UIC activity is reflected by the organisation of a series of major events promoting rail transport across the world

Gaining global presence

At both General Assemblies held in 2010, the UIC Director-General summarised the recent activities aiming to reinforce the role and influence of UIC as a worldwide association promoting rail transport. These activities include the development of partnerships (through Memoranda of Understanding) with a number of leading international organisations such as the World Bank, UN Regional Organisations, the African Union Commission, APTA, OSJD, ADB and ANTT.

Another important trend is the stronger role devoted to the Regional Assemblies to decide and implement regional action plans and specific projects. The globalisation of UIC's activities is also reflected in the organisation and support by UIC of a series of major events with the objective of promoting rail transport across the world. These international events held in 2010 focused on Global Signalling (7-9 June 2010, Tokyo), Sustainable Development (16-17 June 2010, Madrid), Security (23-25 June 2010, Istanbul), Safety (IRSC in Hong Kong), Global Rail Freight (6-7 July 2010 with RZD in Saint Petersburg), Level Crossings (October 2010, Tokyo) and the UIC HIGHSPEED Congress on High Speed Rail organised with the Chinese Ministry of Railways on 7-9 December 2010 in Beijing.

With regard to how UIC Members can achieve a shared vision of UIC's contribution to promote rail transport worldwide, the Assembly confirmed the importance to capitalise on the recent success of the campaign on sustainability and climate change ("Train to Copenhagen" campaign) and to define an ambitious strategy and action plan to efficiently communicate on rail advantages for the sustainable development. In this respect, almost all of the UIC Members supported the proposed "UIC Declaration on Sustainable Mobility and Transport" that should provide a common framework for coordinated actions by the Members. This "Declaration" signed by 45 UIC Members will be supported by guidelines.

The General Assembly unanimously approved the financial results for 2009, the presentation of the 2010 budget and the 2011 budget perspectives.

- APTA, the American Public Transportation Association (USA)
- OSJD, the Organisation for Cooperation of Railways
- ADB, the Asian Development Bank
- ANTT, the National Land Transport Agency of Brazil

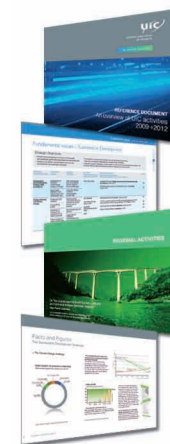
PROGRESS ON GLOBAL ACTIVITIES AND REGIONAL COOPERATION

The meetings provided an opportunity to report on the progress of UIC's work since the previous UIC General Assembly in Tokyo in different areas: global activities, structured around 5 key issues (world research, sustainable development, freight including corridors, safety and security, signalling, standardisation); level of regional cooperation with the presentation of priorities in the UIC regions: Africa (with the recent opening of the UIC regional office in Tunis), North and Latin America, Asia (supported by the regional office in Delhi and CIS representation in Tashkent), Europe (in close cooperation with CER and EIM), Middle-East (supported by the regional office in Tehran); technical activities monitored by UIC working bodies (Forums and Platforms) and Departments.

THE "REFERENCE DOCUMENT": AN OVERVIEW ON UIC ACTIVITIES OVER THE 2009-2012 PERIOD

Following a first draft version circulated at the Tokyo General Assembly in June 2010, an updated version of the "Reference Document - An overview of UIC activities 2009-2012" was handed over to participants of the UIC General Assembly held on 6 December 2010 in Beijing. This document responded to a need for a comprehensive and coherent overview of all activities monitored or coordinated by UIC.

This synoptic document has been published for the first time and constitutes a practical reference tool for all Member representatives involved in UIC cooperation activities, at decision-making as well as at technical expert level. It provides clear information on the progress of projects and activities, and also highlights connections and synergies between each project. It will serve as a means to encourage Member railways to join technical, regional or multi-regional projects. An updated version integrating new projects is set to be published on a yearly basis.



UIC regional activities are supported and coordinated by offices located in Delhi, Tunis and Tehran



2010 sees UIC developing new synergies with leading institutions

An important development in UIC activities is the conclusion and preparation of agreements or Memoranda of Understandings with a series of leading intergovernmental organisations (the UN and its various bodies, as well as the OECD and ITF, OTIF, the African Union Commission), financial institutions (World Bank, Asian Development Bank), standards bodies (GEN/CENELEC), professional organisations (OTA, USA; IMM, the Institute of Asset Management). Special support from the General Assembly will be provided to develop a partnership with ISO for global standards with UIC.

Some important UIC activities are linked with the worldwide promotion of rail transport for its advantages in terms of sustainable development and CO₂ emissions. UIC Members are in the process of signing the UIC Declaration on Sustainable Mobility and Transport and so will commit themselves to optimising their contribution for sustainable transport. The Declaration is supported by UNEP and Global Compact. This was an important high-level event for the promotion of the UIC Sustainability Declaration, jointly organised with the United Nations and held in New York on 11 May 2011 to mark this close partnership.

UIC is developing close cooperative relationships with leading intergovernmental organisations such as the UN

UIC's membership further expands in 2010

Both General Assemblies voted to admit a number of new Members to UIC.

IN JUNE 2010:

- **RFF**
French infrastructure manager,
active Member



- **NTV** (Nuovo Trasporto Viaggiatori Spa, Italy)
new passenger operator,
affiliate Member



- **EDLP**
Brazilian freight operator and rolling stock
leasing company,
affiliate Member



IN DECEMBER 2010:

- **CJSC**
South Caucasus Railways,
associate Member



- **Department of Transport of Victoria,**
Australia,
affiliate Member



- **Arenaways,**
Italian passenger operator,
associate Member



- **FFE,** Fundación de los Ferrocarriles
Españoles,
affiliate Member



- **ANTT,** Brazilian National Transport
Administration,
affiliate Member

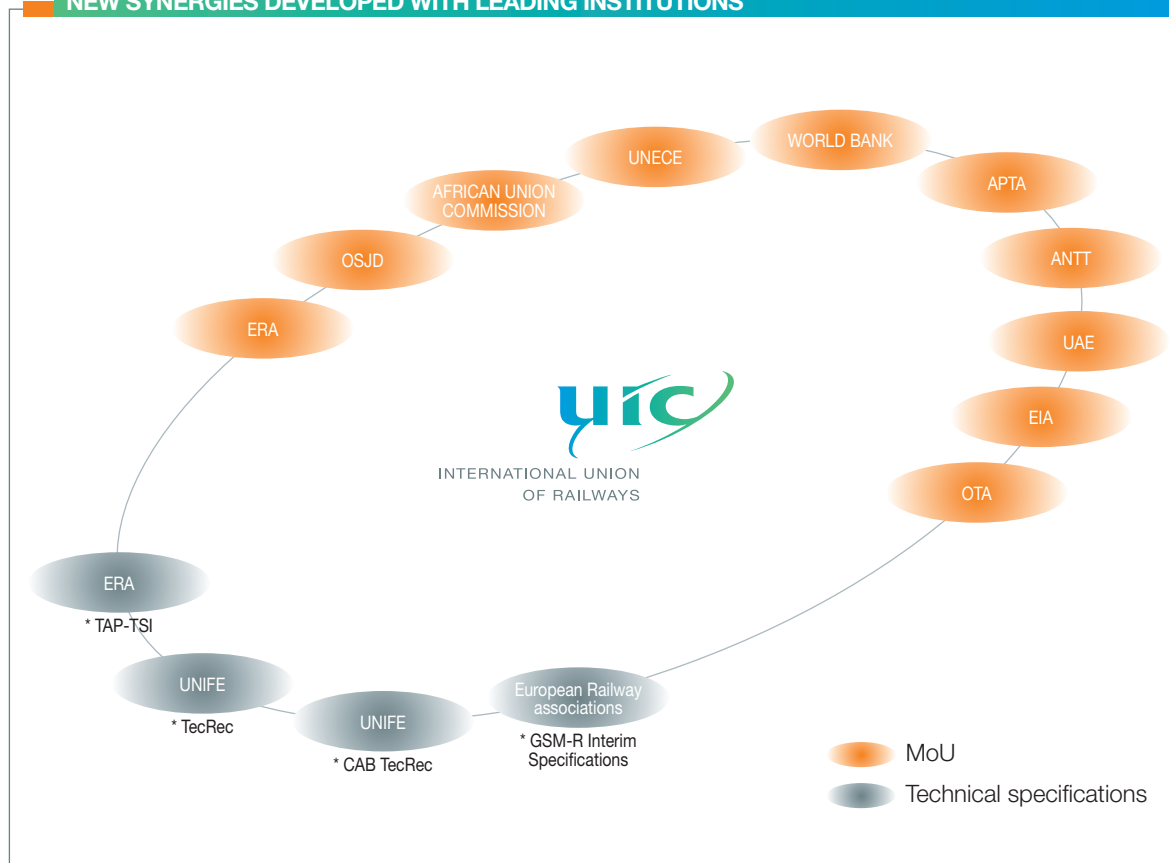


Memoranda of Understanding signed in 2010

18



NEW SYNERGIES DEVELOPED WITH LEADING INSTITUTIONS



UIC was established following two intergovernmental conferences: the international conference of Portorose (Italy) in 1921 and that of Genoa in 1922. At this latter conference, government representatives called for the creation of “a permanent rail administration conference for the standardisation and improvement of conditions with regards to railway building and operations, especially in view of international traffic”. The UIC constitutive conference was held in 1922. UIC’s current mission focuses on developing all forms of cooperation between railway companies and promoting rail transport across the world.

In order to achieve these goals UIC has developed close cooperation links with a number of international organisations and institutions with competence in transport and railway issues. UIC has had consultative status to the United Nations on railway matters since 1949; it maintains and develops synergies with all major stakeholders from the international scene, among them specialised UN bodies (UNEP, UNFCCC) and regional commissions (UNECE, UNESCAP, UNESCWA), NATO (under discussion and preparation), OECD and ITF, OTIF, the World Bank and many regional institutions, etc. In 2010 and 2011 various Memoranda of Understanding and technical agreements were concluded with these institutions.

- NATO, North Atlantic Treaty Organisation
- OECD, Organisation for Economic Cooperation and Development
- ITF, International Transport Forum
- OTIF, Intergovernmental Organisation for International Carriage by Rail
- UNEP, United Nations Environment Programme
- UNFCCC, United Nations Framework Convention on Climate Change
- UNECE, United Nations Economic Commission for Europe
- UNESCAP, United Nations Economic and Social Commission for Asia and the Pacific
- UNESCWA, United Nations Economic and Social Commission for Western Asia



Memoranda of Understanding signed in 2010 in the institutional field

MoU with the World Bank, 11 February 2010, Washington, USA



- Share knowledge and information
- UIC can support the World Bank's economic growth strategy using its wealth of experience and expertise thanks to Member contributions and ongoing activities
- Synergies between the two organisations can be increased through UIC placing stronger focus on activities related to energy efficiency and sustainability, and by tailoring its work to the needs of regions worldwide

MoU with the American Public Transportation Association (APTA), 8 February 2010, Washington, USA



- Share information covering the planning and building of high speed rail systems

MoU with the Agencia Nacional de Transportes Terrestres (ANTT) of the Federal Republic of Brazil, 9 March 2010, Sao Paulo, Brazil



- Focus on R&D, high speed rail, freight, standards and regulations, information systems and data exchange
- Develop cooperation on matters of railway interoperability and station development
- UIC backs the development of a high-performance and competitive railway system in Brazil

MoU with the United Nations Economic Commission for Europe (UNECE), 26 May 2010, Prague, Czech Republic



- Strengthen cooperation to integrate and develop the European transport of goods and passengers by rail
- Share information and knowledge, each body to participate in the other's events on international legislation, technical interoperability, cross-border management, priority corridors, access, international security and rail safety

MoU with African Union Commission (AUC), 18-19 March 2010, Addis-Abeba, Ethiopia



- Strengthen cooperation on the basis of the 2007 AUC/UIC MoU
- Union of African Railways (UAR) to play a key role in the implementation of specific projects in collaboration with UIC

Memorandum of Understanding signed in 2010 in the technical field

MoU with the Organisation for Cooperation among Railways (OSJD), March 2010, Warsaw, Poland



- Strengthen cooperation through joint participation in working groups, studies and conferences
- Forge fresh ties in view of future importance of railways in Eastern Europe/Asia

MoU with the United Arab Emirates (UAE) signed together with the association of the European Rail Industry (UNIFE), 21 September 2010, Berlin, Germany



United Arab Emirates



- Foster collaboration and share information on railway standards, railway regulations, safety, R&D and organisation of seminars
- National Transport Authority (NTA) to potentially become a UIC Member

MoU with the Open Travel Alliance (OTA), September 2010



- Cross-participation in working groups possible
- UIC to help define a set of generic electronic messages with a view to making its own messages a worldwide standard



MoU with the European Railway Agency (ERA) on GSM-R specifications, 5 October 2010, Lille, France



- Strengthen cooperation on GSM-R specifications
- Develop GSM-R specifications both on European level (in line with EU railway legislation) and on global level
- Focus on closing existing gaps, resolving implementation issues, whilst taking account of technological progress and the development of public standards for mobile telecommunication services

Technical Specifications signed in 2010

22



The Technical international cooperation level is structured around four main fields:

- Rail System
- Passengers, with an international focus on high speed
- Freight
- Fundamental Values including Research, Sustainable Development, Safety, Security and Expertise Development

In 2010, UIC signed contracts and published various technical specifications.

TELEMATICS



UIC signed a contract for the “TAP TSI” ERA Technical Documents relating to Passenger Telematics with the European Railway Agency, 18 December 2009, Lille (France)

- Aim of the TAP TSI is to strengthen the market position of interoperable rail transport services and create clear, transparent rules for all players in the rail passenger sector
- Content of TAP TSI largely based on existing UIC Leaflets
- UIC and ERA to ensure that existing UIC Leaflets remain synchronised with ERA technical documents to ensure Members’ automatic compliance with the TAP TSI requirements covered by the Leaflets

ENERGY CONSUMPTION



UIC and UNIFE publish the first Technical Recommendation (TecRec) on the measurement and calculation of energy consumption for railway vehicles, March 2010, Paris

- Result of the RailEnergy project coordinated by UNIFE in collaboration with UIC
- Aim of the TecRec is to determine the energy performance of specific rolling stock in given operating conditions
- Provides a framework enabling energy performance values for trains and locomotives to be benchmarked, with a view to improving the energy efficiency of railway vehicles
- Format same as for ENs, facilitating future transfer to CEN/CENELEC standards

RAIL RADIO SYTEM



UIC publishes two new interim specifications to improve the use of GSM-R, the dedicated rail radio system for voice and data communication, August 2010, Paris

- The two new interim GSM-R specifications contain new (strictly optional) features designed to improve and facilitate the use of GSM-R
- Both documents agreed upon by ERA, CER, EIM, UNIFE and GSM-R IG in July 2010

ROLLING STOCK/DRIVER’S DESK



UIC and UNIFE publish the CAB Technical Recommendation (TecRec) on Driver-Machine Interfaces in the scope of TSI High Speed and Conventional Rail, June 2010, Paris

- Aim of driver’s cab requirements is to ensure the unrestricted, safe and efficient operation of rolling stock across the European railway network
- Requirements provide a framework for designing cab functions and driver-machine interfaces appropriate to the intended operating purpose of the rolling stock
- Format same as for ENs, facilitating future transfer to CEN/CENELEC standards

Cooperation and partnerships with intergovernmental organisations

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Be an Ecopassenger



The Train to Copenhagen campaign, organised under the umbrella of UIC in December 2009, provided a unique opportunity for close partnership with international institutions such as UNEP and WWF

The UIC Declaration on Sustainable Mobility and Transport was signed by 45 Railways



UIC owes its status as a prominent association to its global standing, credentials, expertise and technical excellence. A number of international bodies value the relations they foster with UIC to tackle the most pressing concerns in railway development, particularly at the beginning of the 21st century.

UIC has had consultative status to the United Nations (ECOSOC, Economic and Social Council) since 1949.

UIC ACTIONS WITHIN THE UN FRAMEWORK

UIC has a strong tradition of working on sustainability issues, both in supporting Members to improve their sustainability performance as well as communicating on sector level towards external key stakeholders in order to boost the development of sustainable transport systems. For years now, UIC has been developing strong and long-term cooperation ties with key international organisations and influential stakeholders to support and strengthen the messages on the railways' contribution to climate change and sustainable development.

Concretely, the strategic partnerships consist of several activities and projects. For example, the United Nations Environment Programme (UNEP) supported the first UIC Global Rail Position Paper on climate change. This contributed to put rail's emission reduction potential in a global context. Moreover, UIC has been an active participant in the COP (Conference of the Parties) for many years, including the organisation of official side events and the international campaign Train to Copenhagen – organised together with UNEP and WWF, since enabling ties with the UN body to be consolidated.

UIC future actions are in line with this as key processes are taking place along with others at the United Nations Climate Change Conference (UNFCCC) and the United Nations Commission for Sustainable Development (CSD). CSD is a high-level forum on sustainable development created in 1992 by the UN General Assembly to ensure effective follow-up to UNCED, the UN Conference on Environment and Development held in Rio de Janeiro in 1992. It reviews progress and monitors and reports on implementation of Agenda 21, the Barbados Programme of Action (BPOA) and the Johannesburg Plan of Implementation (JPOI) at national, regional and international levels. The Commission meets annually, in New York, in a two-year cycle of review and policy.

On this occasion a special event was held on 11 May 2011 in New York at which ministers and UN delegates from several countries were present. This event served in particular as an opportunity to present the UIC Declaration on Sustainable Mobility and Transport, prepared and coordinated by the UIC Sustainable Development team and agreed upon by a large number of railways: 45 to date.



PARTICIPATION IN OECD ACTIVITIES



In November 2010 UIC was invited to participate in activities themed around transport development as part of work carried out by the OECD, during which the organisation was able to highlight the development of major freight corridors between Europe and Asia on the East-West and North-South axes. The work is based on a logical need for modal complementarity between long and heavy trains on the major axes, players across logistics platforms and road transport. Several areas of work were highlighted during this meeting, in particular the work carried out by UIC and UNECE on the main Europe-Asia corridors and the work to standardise legal and commercial documents, currently led in partnership with OTIF and CIT.



From left to right:
Mr Jean-Pierre Loubinoux, UIC Director-General,
Mr Ján Kubiš, UNECE Executive Secretary
and UN Deputy Secretary General,
and Mrs Eva Molnar, UNECE Director of Transport Division



UIC brings the rail sector's input to important conferences such as the International Transport Forum (ITF), held every year in Leipzig, Germany



INVOLVEMENT IN ITF/OECD ACTIVITIES: PARTICIPATION IN THE INTERNATIONAL TRANSPORT FORUM



UIC participates every year in the International Transport Forum (ITF) organised by ITF/OECD. In May 2010, over 800 decision-makers from 52 Member countries attended the 2010 edition in Leipzig, Germany dedicated to “Transport and Innovation: Unleashing the potential!” to debate the role of innovation in global transport. The broad interest that UIC Members have expressed for this kind of exchange platform was evidenced by UIC’s participation in the Forum and by discussions held through the participation of UIC’s Director-General on the panel “Getting down to business: Partnerships for a more innovative transport system”. During this Forum, Mr Jean-Pierre Loubinoux and Dr. Volker Kefer, Board Member of Deutsche Bahn’s Technology and Services, successfully launched the innovative web application “EcoTransIT World”.

UIC PARTICIPATES IN THE COUNCIL OF COOPERATION FOR TRANSSIBERIAN TRANSPORTATION (CCTT) ACTIVITIES



International cooperation to develop the Transsiberian corridor as the main transport axis between Europe and Asia was the key topic addressed by Jean-Pierre Loubinoux, UIC Director-General, in his speech at the board meeting of the Council of Cooperation for Transsiberian Transportation held in October 2010 in Bratislava. In essence, UIC, CCTT and OSJD represent organisations that are able to influence the process of increasing the volume of freight transport along the Transsiberian line. They can achieve this by cooperating to find solutions to bottlenecks, such as implementing electronic invoicing and container backloads, and addressing border crossing procedures and legal issues. As some Members belong to both CCTT and UIC, and as the Transsiberian is one of the many corridors already being studied by UIC, both organisations intend to reinforce their cooperation over the coming years to improve efficiency, save time and reduce spending.

UIC PARTICIPATES IN THE NATO AD HOC WORKING GROUP OF TRANSPORT EXPERTS



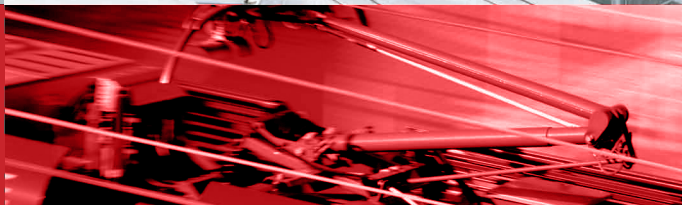
A meeting held in Riga in November 2010 aimed to prepare proposals to submit to the NATO Transport Group on the necessary action to be taken to make NATO Rail Technical Standards compatible with the 1520 mm gauge. As the main railway undertakers carrying NATO cargo and operating on a 1520 mm gauge, the Baltic States are keenest for the project to be a success. Taking into account UIC’s profile and its relations with many international institutions, UIC was considered to have the relevant competence as an organisation to assist NATO and to coordinate such actions under discussion and preparation.



Mr Mukul Saran Mathur,
Head UIC Asia Delhi office



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UIC PARTICIPATES IN THE UNESCAP COMMITTEE ON TRANSPORT AND EXPERT GROUP MEETING



An important approach to promoting sustainable and inclusive development for the Asia-Pacific region is to link transport infrastructure – thereby allowing countries to easily move goods by rail or road – and create much-needed social and economic opportunities. The United Nation's Economic and Social Commission for Asia and the Pacific (UNESCAP) convened the second session of the Committee on Transport in November 2010 in Bangkok to focus on this issue.

The committee reviewed the progress of the Asian Highway and the Trans-Asian Railway Network projects and addressed the issues about integrating the networks, enhancing

capacity, improving efficiency and supporting regional integration. On the occasion the committee also considered the possibility of the Intergovernmental Agreement on Dry Ports along the Asian Highway and Trans-Asian Railway Network, as proposed by the Regional Expert Group.

Participants representing 32 governments and 11 organisations participated in the session. UIC stressed the importance of integrating the regional rail network and the need to develop inland container terminals. Contributions were also made for the development of the intergovernmental agreement on dry ports.

UIC PARTICIPATES IN THE OSCE-BACKED MEETING OF EURO-ASIAN TRANSPORT LINKS EXPERT GROUP



The Euro-Asian Transport Links Expert Group of the Organisation for Security and Cooperation in Europe (OSCE), held in Tashkent in November 2010, aimed to improve the coordination of transport development across the Eurasian region. Participants from 10 countries and representatives of international organisations took part in this Euro-Asian Transport Links Expert Group meeting organised by Uzbekistan's Ministry of Foreign Economic Relations, Investment and Trade and the United Nations Economic Commission for Europe (UNECE) to advance dialogue on transport facilitation and security in the region. UIC's Director-General presented UIC as the association of all the railway undertakings around the world, essentially acting as a technical Platform and promoting the development of rail transport through three kinds of activities:

- Managing study projects in the fields of freight, passenger, systems integration, interoperability, etc.
- Developing global issues in terms of security, safety, sustainability, standardisation and freight corridors
- Working with financial and official institutions such as the World Bank, Asian Development Bank, European Investment Bank, as well as the United Nations – where UIC has had observer status since 1949 – and more particularly UNECE and OSCE

As part of studies already carried out on facilitating links between Europe and Asia through the North-South Corridors and the Silk Road, UIC also works on matters such as capacity development, gauge interchange issues, logistical hubs and port hinterland traffic.

UIC ENJOYS REPRESENTATIVE STATUS AT OTIF (INTERGOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL)



Acknowledged as a representative organisation by OTIF (Intergovernmental Organisation for International Carriage by Rail) since the latter's creation in May 1985, UIC participated fully in the revision of COTIF and more particularly in the work resulting in the Vilnius Protocol, which entered into force on 1 July 2006.

Until the Protocol, which amends the COTIF (Convention of 9 May 1980), was signed on 3 June 1999, the aim of this intergovernmental organisation had been to develop the uniform systems of law governing the carriage of passengers and freight in international through traffic by rail. These regimes have been in existence for decades and are otherwise known as the CIV and CIM Uniform Rules (Contracts for the international carriage of passengers and goods by rail).

Headquartered in Bern, OTIF currently comprises 45 Member States. At present, the Uniform Rules created by OTIF are applicable to international carriage by rail on around 250,000 km of railway lines and the complementary carriage of freight and passengers on several thousand kilometres of shipping lines, inland waterways and road.

UIC is responsible in particular for implementing the CUV appendices (Contracts for the Use of Vehicles) and the APTU technical annexes (Validation of technical standards and the adoption of uniform technical prescriptions applicable to railway material) and ATMF (Procedure for the technical admission of railway vehicles and other railway material used in international traffic).

Regional Activities



The UIC Regional Assembly Africa, chaired since 2010 by Mr Mohammed Khlie from ONCF, agreed on an Action Plan for UIC Africa



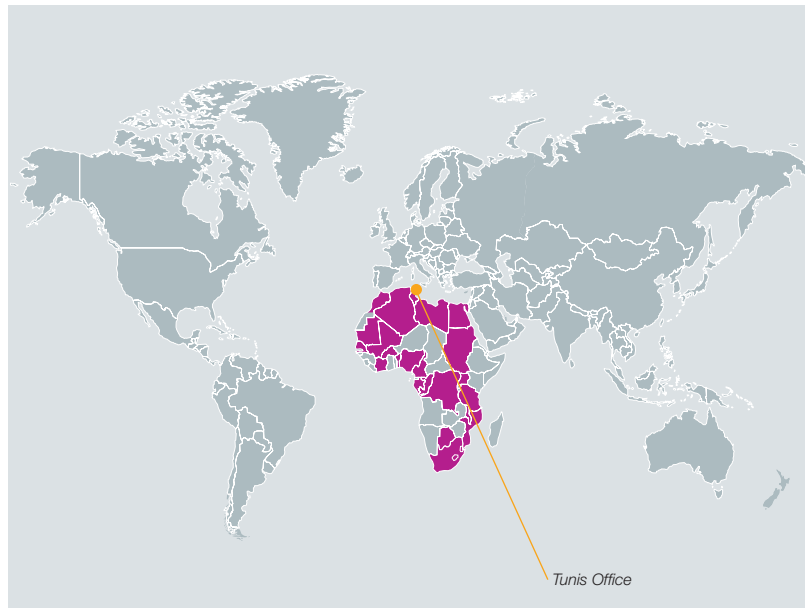
INTERNATIONAL UNION
OF RAILWAYS

AFRICA

The African Region

The UIC African Regional Assembly as a regional cooperation body aims to play a decisive role in joining the efforts of all African railways towards modernising and expanding their networks, and progressively integrating the African rail transport system whilst gaining increasing support from political, economic and financial decision-makers in these developments.

Following the African Regional Assembly meeting in Tripoli, Libya, and further to the course of action set out by Mr Mohammed Khlie, the new Chairman of the UIC African Region and Chief Executive of Moroccan National Railways (ONCF), a working group met on 14 and 15 October 2010 in Tunis. Attended by Mr Jean-Pierre Lehman, UIC Coordinator for Africa, and representatives of UIC Africa's chair railway ONCF as well as Tunisian Railways (SNCF), the group's aim was to draft a short-term action plan for this UIC region and to submit this plan to the UIC Executive Board for Africa scheduled for 13 November 2010 in Tunis.





The UIC Regional Assembly for Africa, comprising railway companies from African countries, is chaired by Mohammed Khlie, Chief Executive of Moroccan National Railways (ONCF).

Activities are coordinated and supported by the UIC Regional Office for Africa based in Tunis and led by Mokhtar Essadok from SCNFT, Tunisian Railways.

UIC Paris Headquarters support cooperation activities in the African region through the Regional Coordinator Jean-Pierre Lehman and the UIC technical Departments whenever needed.

The UIC Regional Assembly for Africa met twice in 2010: on 27 July in Tripoli and on 10 November in Tunis.

The African Region

The proposed short-term action plan for the UIC African Region included:

- Organisational start-up and in particular opening the UIC Regional Office for Africa in Tunis
- Financial framework (in particular the financial procedure for running the Tunis office, improving the situation with regard to member fees and drafting the UIC Africa budget for 2011)
- Preparing the working themes of the UIC Executive Board for Africa, whilst taking into account previous UIC work which resulted in the development of a "Vision 2025 for Africa"
- Cooperation initiatives: the action plan makes provision for cooperation with other UIC regions (seminar on stress), international organisations with relevant competence in the African Region, the African Union, the European Union (TAIEX programme), the African Union of Railways (AUR) and financial institutions – primarily the African Development Bank

UIC AFRICAN REGIONAL OFFICE INAUGURATED IN TUNIS

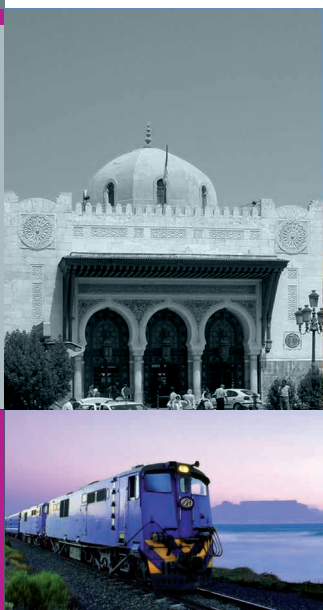
Prior to the meeting of the UIC Executive Board for Africa on 13 November 2010, the Headquarters of the UIC Regional Office for Africa were inaugurated on 12 November in Tunis with Mr Mohammad Khlie, Chairman of the UIC African Region and Chief Executive of ONCF, Mr Mohamed Nejib Fitouri, President and Chief Executive of Tunisian Railways (SNCFT) and Chairman of the Union of African Railways (UAR), Mr Naffati El Ghoul, Secretary-General of UAR, Mr Jean-Pierre Loubinoux, UIC Director-General and Mr Jean-Pierre Lehman, UIC Coordinator for Africa.

The Tunis office, similar to the UIC regional offices already in operation in Delhi for Asia and in Tehran for the Middle-East, will be working under the course of action set out by the Regional Assembly (composed of UIC African Member railways) and Assembly Chairman Mr Mohammed Khlie. The UIC Regional Office benefits from the organisational and logistic support of the Tunisian Railways and is managed by Mr Mokhtar Essadok from



Inauguration of the UIC Africa Regional Office in Tunis

SNCFT. Its main task will consist in overseeing the implementation and follow-up of the action plan of the UIC African Region and encouraging the development of cooperative links between African Members and with international bodies.



Mr Jean-Pierre Loubinoux, UIC Director-General and H.E. Dr. Elham M.A Ibrahim, AU Commissioner for Infrastructure and Energy, signing the "Aide Memoire" between African Union and UIC in Addis-Abeba, Ethiopia, in March 2010



UIC MEETS THE AFRICAN UNION COMMISSION (AUC) IN ADDIS-ABEBA

A UIC delegation composed of Mr Jean-Pierre Loubinoux, Director-General, and Mr Jean-Pierre Lehman, UIC Coordinator for Africa, visited the African Union Commission (AUC) in Addis-Abeba, Ethiopia, from 18 to 19 March 2010, and held discussions with H.E. Dr Elham M.A. Ibrahim, AU Commissioner for Infrastructure and Energy, on strengthening cooperation in railway transport development within the framework of the Memorandum of Understanding signed by the AUC and UIC in April 2007.

At the meeting the AU Commissioner for Infrastructure and Energy was accompanied by officials of the Union of African Railways (UAR) including Mr Naffati Elghul, Secretary-General, and Ms Cleopatra Shiceka, General Counsel, as well as senior staff of the AUC Department of Infrastructure and Energy: Mr David Kajange, Head of Transport and Tourism Division and Dr Maurice Niaty-Mouamba, Infrastructure and Transport Consultant.

The AUC and UIC discussed key issues relating to their cooperation focusing on the following areas:

- Presentation of UIC structure, missions and activities, with a view to raising the number of UIC-sponsored projects in Africa
- Africa's railway agenda: the presentation referred to a series of important Declarations and Recommendations which set out the policy and strategic framework for future railway developments. The presentation underscored the focus of the AUC in promoting and facilitating railway transport development within an integrated transport system on the African continent based on model suitability and complementarity
- The Vision 2025 for Railway Development in Africa: in this context, the AUC expressed its gratitude to UIC for the development of the "Vision 2025 for Railway Development in Africa" as a key policy in defining the long-term strategic framework policy for the development of rail transport in Africa

- The AUC/UIC Memorandum of Understanding: the two parties agreed to strengthen the cooperation on the basis of the 2007 AUC/UIC MoU. To that end, it was agreed that the Union of African Railways (UAR), as the specialist technical agency of the AU in railway matters, would have a key role in the implementation of specific projects in cooperation with UIC
- UAR/UIC cooperation: a proposal was made for the UAR to acquire UIC Member status in order to strengthen Africa's participation in support of smaller African railways. UIC agreed to initiate the process that would see UAR becoming a UIC Member alongside some major African national Members

The UIC Director-General expressed gratitude to Dr Elham M.A. Ibrahim and her staff for the warm welcome in Addis-Abeba as well as for the productive meetings which enabled the main goals to be achieved. He reiterated UIC's commitment in providing the necessary technical support to the African Union Commission and its technical arm, the Union of African Railways (UAR), in their endeavour to strengthen railway support in Africa.



TO LEARN MORE

AFRICAN section
of the UIC website:
www.uic.org/africa/



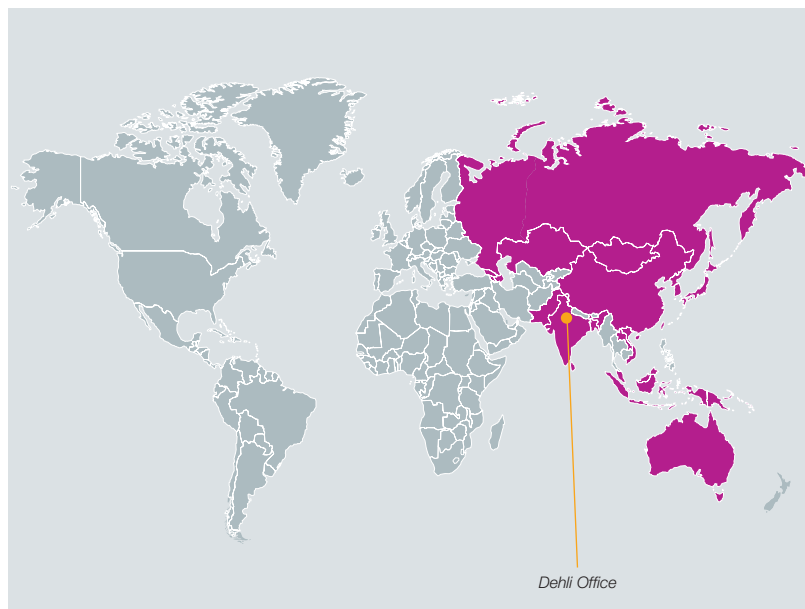
ASIA

The Asian Region

Concerning the Asian Region, one of the main aims in 2010 was to find an operating method that was sustainable and in line with both the UIC calendar and with the development of the technical Departments' Forums and Platforms. Despite tight budgetary constraints, this enabled actions to be launched which involved both Asian Region members as well as UIC as a whole through a number of institutional partnerships in this region.

The commitment of both the larger and smaller Asian Members to UIC's activities was materialised through their participation in the Forums and Platforms, and in particular in the Rail System Forum steering committee. This commitment is set to continue throughout 2011 in the other technical areas.

Significant operational communications work was carried out to keep all Members in the region informed of project progress and budgets. Members were thus involved as early as possible and throughout the course of the activity undertaken at UIC, particularly using new technical support in the shape of web conferencing.



Concerning the strategic decisions taken by the Asian Regional Assembly in 2010, mention can be made of the renewal of the Asian Executive Board and its representatives on the UIC Executive Board, and the acceptance of the joint budget enabling vital projects to be undertaken in 2011.

This action resulted in the various seminars held in the region (seminar on security and high speed in Mumbai, signalling in Tokyo, deregulation and training networks in Uiwang, etc.), strongly backed by the Delhi office and the representative office in Tashkent. Following these actions, initiatives to re-launch bilateral and multilateral collaborative activities were approved, particularly in the areas of security and information-sharing on the subject of international corridors. Similarly, the projects on containerisation, the design of railway sleepers, collaborative work with OSJD as well as the study on stations either started or ended in 2010.

Finally, the Asian Region plays a significant role in UIC's institutional relations through the FIATA,

UNESCAP, ASEAN, NATO, CCTT, UNECE and OSJD congresses at which the region has been present. The work to canvass and actively seek contacts has not been neglected, with actions targeting Australia and Central Asia to boost the involvement of Members and attract new entrants.

These actions lay the groundwork for 2011, a year set to be filled with more ambitious projects – more in terms of quality than quantity – by addressing Asia-specific subject matters. 2011 will see more systematic operational communications on a day-to-day basis thanks to a dedicated, expanded Internet section that provides real-time updates.



The UIC Regional Assembly for Asia, comprising railway companies from Asian countries, is chaired by Huh Joon-Young, CEO of Korail (Korea) and vice-chaired by Askar Mamin, President of Kazakhstan Railways.

Activities are coordinated and supported by the UIC Regional Office for Asia based in Delhi, led by Mukul Saran Mathur, as well as the UIC Regional Representative Office in Tashkent, led by Irina Petrunina.

UIC Paris Headquarters support cooperation activities in the Asian region through the Regional Coordinator Vincent Vu and the UIC technical departments whenever needed.

The UIC Regional Assembly for Asia met twice in 2010: on 9 June in Tokyo and 5 December in Beijing. At the same time, four UIC Asia web conferences were held as the background for the preparation of the statutory meetings, and technical and detailed review of Asian projects.





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A meeting of the UIC Asian Regional Assembly held in Beijing, China

The Asian Region

10th UIC ASIAN REGIONAL ASSEMBLY: A COMMON AND SHARED STRATEGY SET OUT IN BEIJING

The 10th Asian Regional Assembly took place on 5 December 2010 in Beijing, alongside the UIC General Assembly and UIC HIGH SPEED 2010. At the invitation of the Chinese Ministry of Railways (MoR), a high turnout of Members came to take stock of the actions planned for 2010 and prepare the plan for 2011. On this occasion, it was confirmed that the mandates of Korail CEO Huh Joon-Young as Regional Chairman and KTZ President Askar Mamin as Regional Vice-Chairman would be renewed. The mandates of the heads of JR East, IR, Korail and MoR for Asia, RZD for Russia, QR for Oceania and KTZ for Central Asia were also renewed following a unanimous decision.

Despite financial difficulties in 2010, the planned activities were successfully conducted within a balanced budget framework; some of these activities are to conclude in 2011. On the other hand, clear funding methods for activities in 2011 have been decided and will enable an ambitious programme of strategic action in the common interest to be launched (centring on training, signalling and safety, security, freight, etc.).

These activities will be complemented by actions carried out individually by various Members in conjunction with other Members in Europe (high speed, signalling, rolling stock), all of which will be supported by the UIC technical Departments, Platforms and Forums, thus helping boost international cooperation.

In this regard, the Asian Regional Assembly has appointed its four representatives to the Rail System Forum Steering Committee, who will be tasked with feeding the Asian perspective into work to develop the forum's strategic course of action.

Finally, this assembly also served as an occasion to preview the actions foreseen for 2012 and, at the same time as launching the 2011 action plan, to initiate the preparation process for the next plan.



UIC PARTICIPATES IN THE SUB REGIONAL TRANSPORT FORUM ORGANISED BY THE ASIAN DEVELOPMENT BANK

UIC was invited by the Asian Development Bank to the Sub Regional Transport Forum of the Greater Mekong Subregion (GMS) countries in Nanning, China on 2 – 4 December 2010. The meeting was attended by representatives from China, Cambodia, Thailand, Vietnam, Laos and Myanmar as well as representatives from ADB, UIC and UNESCAP among others. The meeting was inaugurated by Mr Pan Wei, Director-General of Guangxi Transport Department. UIC was represented by Jean-Pierre Loubinoux, Director-General of UIC and Mukul Saran Mathur, Head of UIC Asia New Delhi office.

The GMS cooperation is an initiative of ADB aiming at regional cooperation and economic development. One of the priority actions of the region is to develop connections via a rail network system by 2020. This will require an agreement on common technical standards, harmonisation of procedures, building missing links and supporting the network by establishing

a GMS rail coordination office. ADB is preparing technical assistance for the preparation of a business and operating plan for the coordination office and has sought the expert opinion of UIC on the issue.

UIC was requested to share its experience on global rail development issues, its focus areas and development of UIC's regional functioning. Mr Loubinoux reported on UIC's role in rail development, the work carried out by the different UIC Departments and explained UIC's growing partnership with international institutions including banks. He also emphasised the need for a strong contractual relationship between UIC and the Asian Development Bank for assisting in the bank's technical review of rail projects and also sharing with its members the lending plan of other banks. Mr Mathur emphasised the need to adopt common axle load standards, maximum moving dimensions and the wagon leasing market for the GMS region.

The Memorandum of cooperation between OSJD and UIC for 2010-2015 is signed by Tadeusz Szozda, Chairman of the OSJD Committee, and Jean-Pierre Loubinoux, UIC Director General



The Asian Region

GROWTH OF ASIAN AND EURASIAN FREIGHT LINKS: COOPERATION ESTABLISHED BETWEEN UIC AND OSJD

There are currently no continuous rail links between Asia and Europe via Central Asia. Thus, all rail freight travelling from China across the Eurasian Land Bridge must pass through Russia at some point. As transport is a crucial factor not only between Asia and Europe but around the world, improving Eurasian transport links to enable the development of mutual economic growth is becoming a necessity.

On 17 February 2010, UIC and OSJD formalised their joint work programme for 2011-2015 in Warsaw. The programme continues and builds on the cooperation agreement signed on 23 March 2010 by the two organisations. At a time of growing Asian and Eurasian freight links, this work aims to facilitate technical and commercial interoperability as well as the exchange of data between the two continents.

UIC has given priority to two projects it wishes to develop very shortly: pooling technical and operational data along various Eurasian rail routes and the "Automatic Track Changeover Systems"

project. These topics, like all the activities and seminars featured on the programme, should benefit all the Members of both organisations. Furthermore, UIC showed particular interest in sharing and developing its knowledge of the recommendations and standards issued by OSJD to its governments and Members.

This meeting was also an opportunity to promote the activities underway in the UIC Freight Department (IMPORT and ICOMOD projects) and in the Asian Region to both Members of UIC and OSJD and to other participants.

With regard to the ICOMOD project on Intercontinental Container Traffic, UIC will analyse which markets are the most attractive for rail transport via the land bridge and how they will evolve in the coming years given the rapid development of industry in mainland China (e.g. Chongqing). Attention will be drawn to the question of how the modal choice will be addressed by shippers and forwarders.

The International Railway Training Centre for UIC Asia (IRaTCA), based in Korea, is open to all UIC Asian Railways for training programmes and activities



INTERNATIONAL RAILWAY TRAINING CENTRE FOR UIC ASIA (IRATCA): SUCCESSFUL 2010 TRAINING COURSE

The 2010 training course of the International Railway Training Center for UIC Asia (IRaTCA) and the third Asian Network of Training Centers (ANTC) seminar took place from 7 to 13 November 2010 in Uilwang and Suwon, on the outskirts of Seoul in Korea. Members from Vietnam, India, Mongolia, Bangladesh, Cambodia, Laos, and of course Korea stated their interest in this session, this year dealing with the subject of “Green Growth”; a topic which was strongly backed by our Korean colleagues in the context of their development programme which should enable the region to become one of the five most developed in the world by 2025.

There were around twenty participants including speakers from Japan and France and also participants from Uzbekistan and Nepal and representatives from operators and governmental authorities, all discussing different rail projects in their countries and the recognition of environmental sustainability matters. Inaugurated by Mr Huh Joon-Young, CEO of Korail and Chairman of UIC Asia, the highly detailed presentations enabled experiences

to be shared between countries which already have high speed services, those whose needs are developing rapidly and those whose new projects form part of a phase of international infrastructure developments. This opportunity was taken to remind participants that railways were responding to increasing mobility needs in our societies whilst respecting criteria for harmonious social and economic progress. Furthermore the large professional, financial and intergovernmental institutions increasingly have a fundamental role to play in a century in which railway infrastructure is crossing ever more borders. At the same time educational networking is to be expanded by working with the ENRTC, the European equivalent of ANTC. This event clearly illustrates UIC’s current priorities bringing together the growing significance of the regions, recognition of environmental concerns and training needs. The next meeting has already been organised for 2011 in Ulan Bator where the Mongolian railway authorities will organise the fourth training session, open to all UIC Asia Members.

The International Railway Training Centre for UIC Asia (IRaTCA) is an initiative which was created in 2007 by the Asian region to organise general training sessions and promote educational benchmarking between members. Chaired by Korail, vice-chaired by Vietnam Railways and financed by Members of UIC Asia, IRaTCA is expected to become established as a permanent activity of the region.

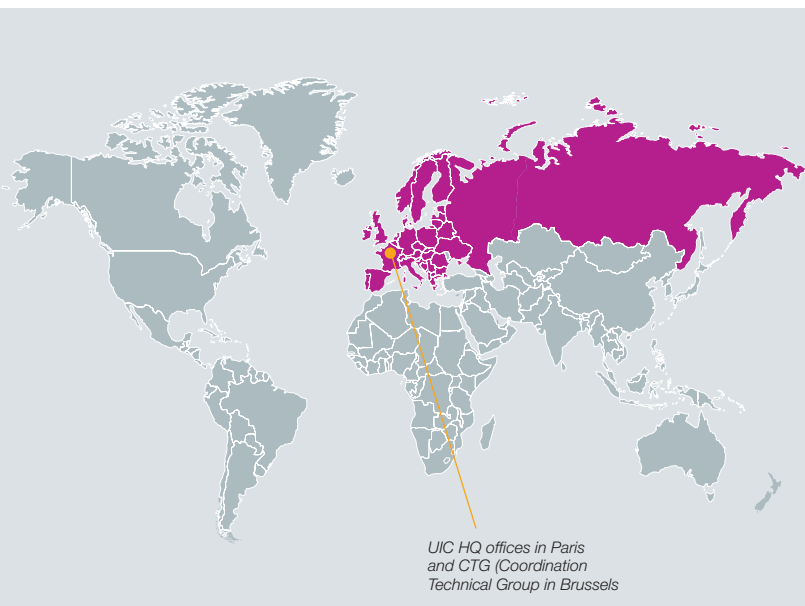
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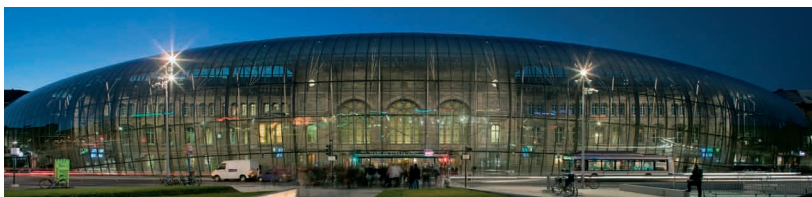


INTERNATIONAL UNION
OF RAILWAYS

EUROPE



*UIC HQ offices in Paris
and CTG (Coordination
Technical Group in Brussels)*



The European Region

The European region comprises over 115 Member companies from 39 countries (including Russia and Turkey), amounting to some 350,000 kilometres of rail network serving more than 500 million citizens across Europe and accounts for approximately 65% of all the UIC Member companies.

The rail network has evolved over the years as a result of excellent cooperation between the rail operators to the point where there are many services operating between the networks of Member companies, thereby contributing to the creation of a European rail network.

In addition to each railway company's specific business objectives (new high speed lines, new links for freight and intermodal traffic), the effects of the European Union's rail policy can be felt, supporting in particular the creation of Trans-European Transport Networks (TEN-T) and priority freight corridors and placing heavy emphasis on improving interoperability (technical, operational and commercial). The future potential for long distance rail services is also becoming increasingly apparent – particularly for freight – linking Europe with neighbouring countries (notably in Asia), and even with more distant regions (Euro-Asian corridors running as far as the Far East).

UIC's role is mainly to work on the technical and operational aspects of the European railway system in the context of successful cooperative ventures with all the railway players involved at European level (CER, EIM, UNIFE, UIP, UIRR, UITP, ERFA, EPTTOLA as well as ERA) under conditions governed by specific technical agreements.

The programme of work in 2010 revolved around a significant number of technical and research-related projects and studies in all fields of railway activity which equated to a multi-million euro portfolio. Many of the project teams in place to develop and deliver these projects are drawn from Member companies within the European region. A large part of these projects also involve representatives of the railway supply industry (generally involving our colleagues at UNIFE). Deliverables range from technical project reports through to the development of standards and other user-friendly tools (serving Member companies or the customers of those companies).

- CER, Community of European Railways
- EIM, European Rail Infrastructure Managers
- UNIFE, Union of European Railway Industries
- UIP, International Union of Private Wagons
- UIRR, International Union of Combined Rail/Road Transport
- UITP, International Association of Public Transport
- ERFA, European Rail Freight Association
- EPTTOLA, European Passenger Train and Traction Operating Lessors' Association
- ERA, European Railway Agency



Mr Guillaume Pepy,
Chairman of the UIC
Regional Assembly
for Europe (RAE)

The UIC Regional Assembly for Europe, comprising 115 railway companies, is chaired by Mr Guillaume Pepy, SNCF President (French National Railways). The Vice-Chairmen are Dr Rüdiger Grube, Chairman of the Board and CEO of Deutsche Bahn AG (German Railways), Mr Mauro Moretti, Chief Executive of the Ferrovie dello Stato FS (Italian Railways) and Mr Hubert du Mesnil, President of Réseau Ferré de France RFF (French railway infrastructure manager).

Activities are coordinated by Simon Fletcher (UIC Regional Coordinator, Europe) based in Brussels.

UIC Headquarters in Paris support cooperation activities in the European region through the UIC technical departments whenever needed.

The UIC Regional Assembly for Europe met twice in Paris in 2010: on 6 May and on 1 December.



Meetings of the UIC
Regional Assembly for Europe,
chaired by Mr Guillaume Pepy,
President of SNCF

DETERMINING MEMBERS' NEEDS FOR FUTURE ACTIVITIES

In order to ensure that future projects focus on the issues essential to the business needs of the Members, the European Region developed a questionnaire which established a number of core questions, the responses to which highlighted three core threads:

■ System performance

(better performance = better competitiveness of the sector)

- Enhancing system capacity (flexibility)
- Reducing the cost of operating and maintaining infrastructure (quality of infrastructure)
- Understanding and learning from regional good practice and variations

■ Sustainability

- Rail – its environmental and societal impact
- Researching sustainable sources of energy
- Managing the effects on the rail system workforce of a population that is living longer

■ Operations

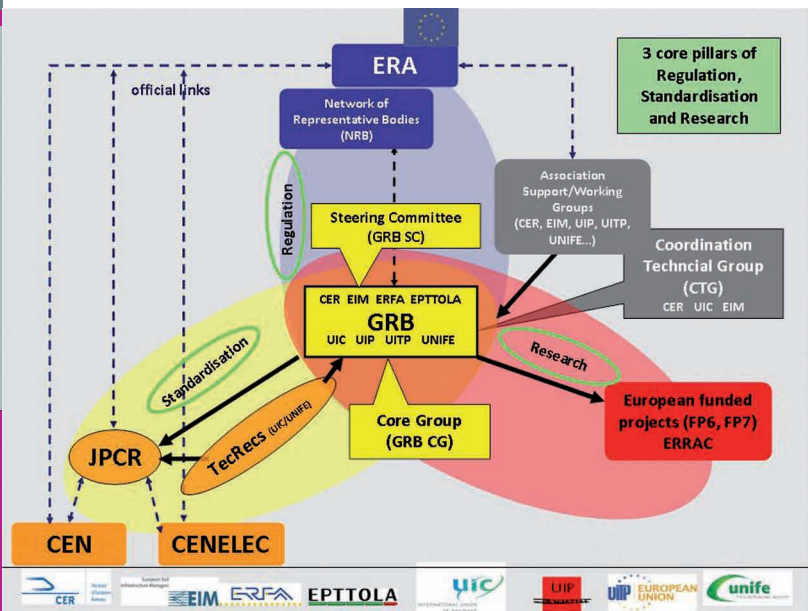
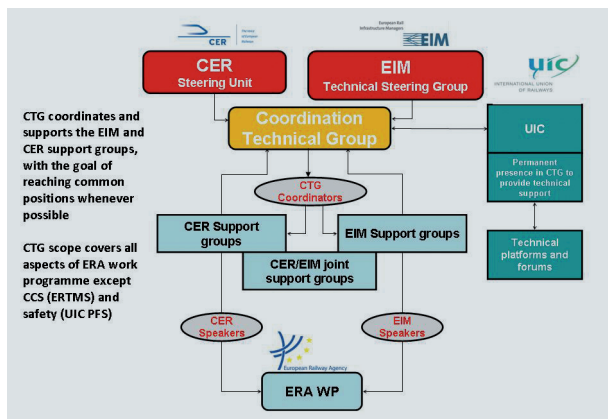
- Understanding the operational interfaces (interoperability)
- Developing future rail technical strategy (innovation)

In order to translate these into a longer-term vision and concrete lines of action for the European Members (but with transferable potential in other regions), a specific Task Force was set up with the remit to:

- Develop the core findings of the Regional Assembly Europe questionnaire
- Prepare a regional vision that will help the Platforms and forums to determine on what subject areas they should be focussing
- Consider the issues related to the opt-in process
- Determine why certain items, despite being considered as activities essential for development, are failing to attract the right level of funds



CTG structure and key components



The GRB framework and interfaces

The European Region

RELATIONS WITH OTHER RAILWAY ORGANISATIONS

■ The GRB (Group of Representative Bodies): a mechanism for coordination and technical cooperation work with other railway associations in Europe

■ The CTG (Coordination Technical Group): a framework within which the CER, EIM and UIC work in a collaborative manner to coordinate the manner in which the key rail operating companies (infrastructure managers and railway undertakings) respond to the requirements of ERA's Work Programme

The Group of Representative Bodies (GRB) is a grouping of railway associations in Europe with the role of supporting, in a transverse way, the rail sector's input to the European Railway Agency (ERA) work programme and its effect on safety and interoperability.

The Coordination Technical Group (CTG) has established itself over the course of 2010 and is working well into its second year of existence. The important task is to maximise resources, to avoid unnecessary duplication and to optimise the interface with the European Railway Agency (ERA).

Furthermore it plays a role in developing the activities associated with research and standardisation and therefore has links with European standardisation and research bodies and processes. GRB is chaired by Mr Andy Doherty, EIM, with secretariat provided by Bernard von Wullerstorff, UNIFE, for the plenary meetings and Simon Fletcher, UIC, for the core group.

The UIC held a 200.000 € contingency for CTG in 2010 which was used on two projects (Electromagnetic Compatibility testing and development of the project submission for the work to develop the TAP SEDP). A major task in 2011 will be influencing the Extension of Scope of the Technical Specifications (TSIs).

Mr Simon Fletcher,
UIC Regional Coordinator for Europe



The TAP SEDP will set out the path towards implementation of the TAP TSI.

The TAP TSI is based on Interoperability Directive 2008/57 and Regulation (EC) No 1371/2007 on rail passengers' rights and obligations (PRR), the European Railway Agency (ERA) has drafted the TAP TSI (Telematics Applications for Passenger Services – Technical Specifications for Interoperability). UIC has been asked on behalf of the European rail sector representatives (CER and EIM) to deliver phase 1 of the TAP TSI project.

The purpose of the TAP TSI is to define Europe-wide procedures and interfaces between all types of railway sector players (passengers, railway undertakings, infrastructure managers, station managers, local authorities, tour operators and ticket vendors). It will contribute to an interoperable and cost-efficient information exchange system for Europe that enables the provision of high quality journey information and ticket issuing to passengers in a cost effective manner.

EUROPEAN PROJECTS INVOLVING UIC IN 2010

The following major projects were concluded/developed in 2010:

- “INNOTRACK”, track maintenance, concluded in 2010 with high potential for cost benefit to the sector – phase II (to disseminate the findings) is now being delivered and will be instrumental in supporting members in implementing the outcome of this highly beneficial project
- “INESS” (ongoing) is related to a standardised approach to signalling systems
- “CREAM” (concluded in 2010) dealt with the improvement of rail freight services on the Rotterdam/Antwerp – Istanbul corridor
- “Railenergy” (also ended in 2010) developed tools for the calculation and evaluation of energy consumption for the rail system
- “Protectrail” (security of the rail system) was launched

RESEARCH

In the field of Research there was a thorough review of the way research is coordinated within UIC resulting in a new Chairman being appointed for the Research Coordination Group (RCG).

The core focus for the European Commission is on the development of freight transport and the links with other regions, especially Asia, giving maximum potential for the development of multi-regional projects.

The European Rail Research Advisory Council (ERRAC) is advising the European Commission on research priorities – UIC is leading this activity in collaboration with colleagues at UNIFE.





The European Region

STANDARDISATION

Standardisation is one of the most important aspects in developing an efficient, effective and safe rail system. Well written standards support better system performance and better competitiveness of the sector and support system flexibility and development. UIC is working closely with manufacturers and standardisation bodies (CEN, CENELEC, ETSI and ISO) to ensure maximum input and output and to ensure above all that the business needs of the rail operators (infrastructure managers and railway undertakings) are reflected in the work undertaken by these bodies.

■ **Technical Recommendations (TecRecs)**

UIC has considerable experience in this area through the production of standards (UIC Leaflets) and it is upon this basis that UNIFE and UIC have agreed to work together in the field of voluntary rail standardisation and have decided to jointly publish a series of standards called Technical Recommendations (TecRecs).

A TecRec is a UIC/UNIFE standard of which the primary field of application will be the European rolling stock domain and its interfaces with other

subsystems, and is the preferred solution by both partners for, in particular:

- Product and interface standards such as standardisation of component interfaces
- Publication of results of common research programmes
- Acceleration and better influence over European standardisation work

Pending the publication of a European Norm (EN), a TecRec will serve as a common comprehensive standard, approved by UIC and UNIFE and therefore recognised as a voluntary sector standard aimed at speeding up the standardisation process and thereby improving the competitiveness of the European railway system. They are produced in the same format as an EN with the express objective of offering them to CEN/GENELEC or ETSI for quick conversion into an EN.

The general hierarchy within which a TecRec sits is in order of prevalence:

- EN elaborated by CEN/GENELEC
- TecRec elaborated by UIC and UNIFE
- Standards elaborated by UIC (Leaflets)

Two Technical Recommendations (TecRecs) published in 2010

- TecRec 100_001 Specification and verification of energy consumption for railway rolling stock and
- TecRec 100_002 Driver Machine Interfaces in the scope of TSI High Speed and Conventional Rail

Technical Recommendations (TecRecs) proposed in 2011

- Rolling Stock (100)
 - TecRec 100_004 Brake indicators
 - TecRec 100_005 Air Supply
- Track (200)
 - TecRec 200_001 Rail Retrofilling Management
 - TecRec 200_002 Rail Grades Selection
- Energy (400)
 - TecRec 400_001 Specification for reversible DC substations

■ Technical Developments

GSM-R Specifications

GSM-R is a vital component of ERTMS, the bearer for voice applications as well as for ETCS Level 2 and above.

The GSM-R specifications are the basis for the correct operation of the system and are proven to be interoperable.

At the start of 2011, 60,000 km of lines were equipped and operated with GSM-R in 11 countries, and approximately another 15,000 km will be implemented by 2016.

GSM-R specifications have several levels:

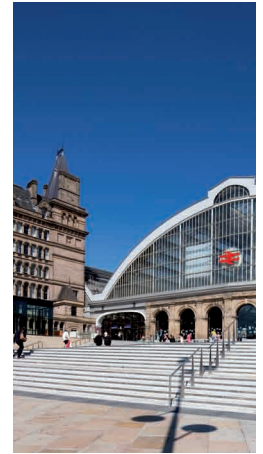
- 1- EIRENE Specifications – today FRS 7.1 and SRS 15.1
- 2- EIRENE Detailed Specifications (former MORANE Specifications)

They are maintained by UIC Working Groups, with a process involving CER and EIM at certain key stages of the Change Request Process.

GSM-R is also based on the GSM and ASCI standards, developed within ETSI, and UIC also participates in the ETSI Change Request process.

TO LEARN MORE

EUROPEAN section
of the UIC website:
www.uic.org/europe/



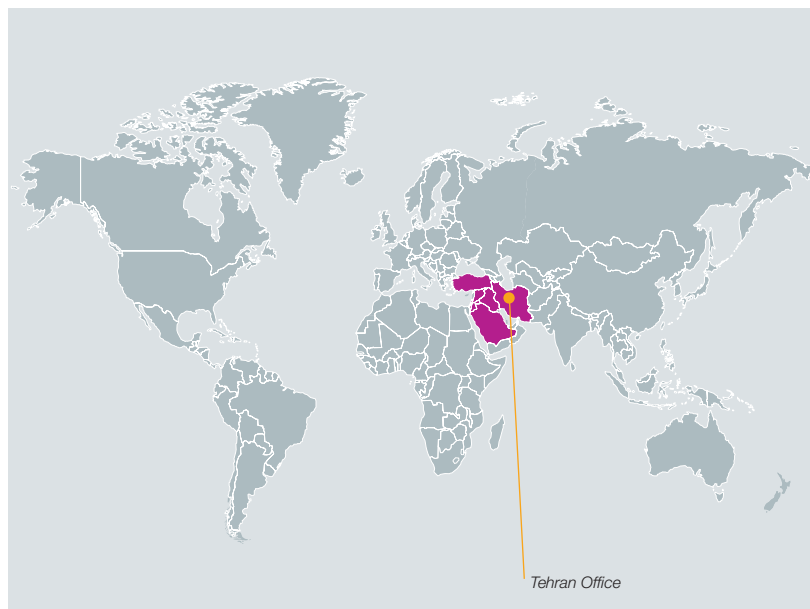


During 2010 the meetings of the UIC Regional Assembly for Middle East (RAME) were held in Tehran and Istanbul



INTERNATIONAL UNION OF RAILWAYS

MIDDLE-EAST



The Middle-East Region

The Middle-East is one of the regions with the most promising future for rail transportation. Examples of this include the ambitious plan for developing high speed in Turkey, projects in Iran, Syria, Saudi Arabia and the projects of the Emirates and Gulf Cooperation Council (GCC), not to mention reopening connections between all these countries and creating long-distance corridors linking the Middle-East to Asia and Europe.

Starting from very different situations, political backgrounds and technical development levels, the railways from the Middle-Eastern region will all contribute to creating a regional railway network tailor-made to respond to people's expectations and the economic needs of the region. Increasing interconnection between railway projects and the prospect of developing international passenger or freight services across several countries draw attention to the need to strengthen railway cooperation, harmonise standards and operating rules – in a word increase interoperability – and integrate railways into a modern international mobility and logistics system.

In the technical cooperation field, railways from the Middle-East identified priorities and expressed common needs with strong expectations concerning support in the shape of UIC expertise. Priority issues are railway safety, infrastructure assessment and maintenance, and railway operations in desert areas with extreme conditions (temperatures, sand).

The UIC Regional Assembly for the Middle-East (RAME) was set up in 2007 with the aim of:

- Promoting the development of rail transport in the Middle-Eastern region as an effective, sustainable transport mode
- Presenting a vision for an interconnected rail transport system shared by all Members from the region
- Encouraging synergies and cooperation between Member railways at regional level, particularly in the technical, operational, commercial and educational fields

- Gaining support from public authorities, national governments, regional and international organisations, and financial institutions to back the strategic vision of an interconnected rail transport system
- Creating new business opportunities by encouraging partnerships between railways and intermodal operators, shipping lines, ports, and various investors from the public sector



The UIC Regional Assembly for the Middle-East, comprising railway companies from 8 Middle-Eastern countries, has been chaired since its establishment in 2007 by Mr Süleyman Karaman, President and Director-General of Turkish State Railways (TCDD). The Vice-Chairman is Mr Ali Abdol Saheb-Mohammadi, Vice Minister for Road and Transportation of the Islamic Republic of Iran and RAI (Iranian Railways) President.

Activities are coordinated and supported by the UIC Middle-East Office based in Tehran at Iranian Railways Headquarters and led by Mr Abbas Nazari, Director-General of International Affairs at Iranian Railways.

UIC Paris Headquarters support cooperation activities in the Middle-Eastern region through the Regional Coordinator Paul Véron and the UIC technical Departments whenever needed.

The UIC Regional Assembly for the Middle-East met twice in 2010: on 30 May in Tehran and on 23 November in Istanbul.



The inauguration of the UIC Middle-East Regional Office in Tehran



The Middle-East Region

PROMOTING THE VISION OF A COMPETITIVE, INTERCONNECTED RAIL TRANSPORT SYSTEM FOR THE MIDDLE-EAST

A strategic priority for the UIC Regional Assembly for the Middle-East is to publicise the vision of a future interconnected rail transport system serving the population and the economy of the entire region.

The objective is to gain full support from the public authorities of Middle-Eastern countries (governmental bodies), from international organisations with competence in transport issues (support in the form of international agreements) as well as from financial institutions (regional banks) and private investors.

This is part of UIC's role to promote rail transport worldwide.

A 1st High-Level Conference on "Railway Projects and Perspectives in the Middle-East – Towards a Competitive, Interconnected Rail Transport System" was scheduled in 2011 with the objective to review all railway projects in the region with a view to coherent regional development.

In this context, fruitful cooperation should be developed between the UIC Regional Assembly for the Middle-East and the Arab Union of Railways (AUR) chaired by Mr Georges Mokabari, Director-General of Syrian State Railways (CFS) and UIC RAME Members. As an example of this, a UIC RAME workshop will be held in 2011 in Syria, on the future cooperation between sea, ports and rail ("Logistics, Wet and Dry Ports").



UIC Regional Assembly for Middle-East held its 8th Meeting in Istanbul on 23 November 2010



THE UIC MIDDLE-EAST OFFICE BECOMES OPERATIONAL IN 2010

In 2010 the UIC Middle-East Regional Office moved to the headquarters of Iranian Railways (RAI). The office's main mission is to prepare and follow up on decisions taken by the Regional Assembly, oversee the implementation of the UIC Middle-East Action Plan and propose projects or new initiatives to the Regional Assembly.

In 2010 the Office, led by Mr Abbas Nazari and manned by representatives from the RAI International Affairs Department, worked in particular on the Definition of the Programme of Work based on the UIC Middle-East Action Plan, on identifying railway experts from the different Member Railways (experts for rail safety, security, infrastructure maintenance, etc.), improving communications between the Members and creating a UIC Middle-East Regional Website accessible under the "regional sections" of the UIC corporate website www.uic.org/middle-east/

The UIC Middle-East Regional Office based in Tehran also concentrated its work on attracting new Members from the Middle-Eastern area to UIC, preparing agreements or memoranda of understanding (MoUs) with international organisations such as ECO, UNESCAP and UNESCWA, particularly in connection with rail corridor development.

In addition the UIC Middle-East Regional Office contributed to the organisation of two successful UIC Middle-East technical seminars in 2010: the 2nd Educational Seminar on Railway Safety (4-5 May, Tehran) and the Infrastructure Maintenance – Asset Management Seminar (19-20 September in Amman, Jordan).

1st OIL RAIL CONFERENCE: A PROMISING MARKET FOR RAIL TRANSPORTATION (TEHRAN, SEPTEMBER 2011)

At the initiative of Iranian oil transport company NirooRail Transportation, the 1st international Oil Rail Conference is planned to be held in Tehran, Iran, in September 2011. It will provide an initial opportunity to exchange information and best practice on all aspects connected to the transport of oil, gas and petrochemical products by rail. This conference, prepared in close cooperation with the UIC Freight Department, should focus on the following issues connected to oil rail transport: technology, operations, safety and security, regulations and legal framework, marketing. One main objective is to shift a higher proportion of oil transport from road to rail. This is particularly relevant for the Middle-Eastern region – comprising major oil producers – where rail has only 6% of the market share (compared to road transport or pipe lines).



The UIC Middle-East Action Plan includes activities which focus on the region's specific needs, such as the International Oil Rail Conference



The Middle-East Region

UIC RAME 2nd EDUCATIONAL SEMINAR ON RAIL SAFETY: DEVELOPING A SAFETY DATABASE AND A SAFETY PHILOSOPHY (TEHRAN, MAY 2010)

The 2nd Educational Seminar on Railway Safety was held on 4-5 May 2010 and organised in close cooperation with the University of Science and Technology of Tehran, Iran. It followed the 1st UIC/RAI Workshop on Railway Safety (connected with a Workshop on Railway Construction, Maintenance and Operations in Desert Conditions also held in Tehran on 28-29 January 2008). 100 participants including railway experts, researchers and university representatives from Iran, Turkey, Syria, Saudi Arabia and Iraq attended the seminar.

Rail safety has been identified as a key issue for Middle-Eastern railways and given high priority in the UIC Middle-East Action Plan. The main objectives of this seminar prepared by the UIC Rail Safety Unit – Mr Peter Gerhardt and Mrs Meryem Belhaj – in liaison with Member experts

from the French Railways (SNCF), the German Eisenbahn-Bundesamt (EBA) and Iranian Railways are as follows:

- Develop a Safety Database for the Middle-Eastern railways based on the methodology already developed within UIC (mainly by European railways) for the UIC Safety Database
- Exchange on next steps towards the setting up of a Safety Philosophy and later a Safety Management System (SMS) within Middle-Eastern railway companies
- Produce deliverables (e.g. publication of guidelines, recommendations) with the technical support of the UIC Rail Safety Unit



UIC RAME INFRASTRUCTURE MAINTENANCE – ASSET MANAGEMENT SEMINAR: A NEED TO OPTIMISE INFRASTRUCTURE COSTS (AMMAN, SEPTEMBER 2010)

The UIC RAME Seminar on Infrastructure Maintenance – Asset Management was held on 19-20 September in Amman, Jordan, at the invitation of Aqaba Railway Corporation (ARC) with the participation of 60 railway managers and experts, researchers and academics from Jordan, Iran, Saudi Arabia, Syria, Turkey and Italy as well as UIC representatives. The seminar was opened by Jordan's Minister of Transport Mr Alaa A. Batayneh – who presented the ambitious plan to construct 950 km of railway lines in his country – and ARC Director-General Eng Hussein Krishan.

The technical content of the seminar was presented on behalf of UIC by Mr Teodor Gradinariu, Mr Björn Paulsson and Dr Anders Ekberg from Chalmers University, Sweden.

The presentations and subsequent discussions focused on Asset Management (Asset management strategy, the PA 55 standard for asset management, locating assets), Innotrack (a summary of results, optimum track geometry durability, under sleeper pads, under ballast mats), inspection, measurement, monitoring, bridges and structures (sustainable bridges, masonry bridges, inspection assessment, rehabilitation, strengthening), benchmarking (line comparison, regional lines and high capacity areas, Lasting Infrastructure Cost Benchmarking (LICB).

As part of the conclusions, Middle-Eastern railways are invited to play an active role in UIC technical projects dedicated to infrastructure maintenance. At the proposal of Jordan Railways a new workshop on vehicle/infrastructure interactions in desert regions (with extreme temperatures, sand) will be held in 2011.

TO LEARN MORE

MIDDLE-EAST section
of the UIC website:
www.uic.org/middle-east/

TECHNICAL ACTIVITIES

Passengers & High Speed



48号窗口发售十日内动车组列车车票

31号窗口为旅客投诉处理窗口 29号窗口为退票窗口

31号窗口为旅客投诉处理



Mr Ignacio Barron, Director
of UIC Passenger
and High Speed Department



High speed rail is a very complex system comprising a number of state-of-the-art elements (track layout, civil works, station location and type, rolling stock from a technical as well as a customer point of view, marketing, financing, legal aspects, environment, etc.).

On the other hand, high speed rail is a highly beneficial transport system for customers and society. The design of such a system is not unique and must be adapted to each particular case and country.

From a global point of view it is a key element for interurban passenger transport in the future due to capacity, its environmental-friendliness and safety.

The expected development of high speed rail at global level in the coming years is remarkable: in the next 15 years the new dedicated high speed network will be four times the length of the existing one (built during the last 43 years). Furthermore, industrial development (for example, more than 5,000 trains sets expected to be produced in the next 20 years) and the financial requirements will raise the profile of high speed railways.

The UIC projects and activities concerning high speed aim to promote the development of high speed rail systems under ideal conditions for UIC Members, customers and society, at a time when high speed is developing at an impressive pace around the world.

- For UIC Members who operate high speed systems, provide help in their relationship with authorities, industry, etc.
- For UIC Members whose high speed developments are not yet in operation but are under construction or being planned, including certain players (authorities, consultants, etc.), provide guidelines to implement such rail systems under ideal conditions
- For society, to contribute towards a better understanding of what high speed rail systems are about and represent, which is much more than simply “a train going faster than another”

There are two types of UIC activity regarding high speed rail systems:

- Activities giving input, information, experiences, etc. (studies, statistics, etc.) useful to UIC Members, both those with and without high speed operations
- Activities using that information for the specific benefit of UIC Members (training, world congresses, specific cooperation plans, technical workshops, etc.)

HIGH SPEED DEFINITIONS AND REQUIREMENTS

High speed signifies operations of at least 250 km/h. But in fact it is the performance as perceived by customers in terms of travel time, frequency and comfort that is really important. Operating at high speed requires:

Special trains

High speed operations require “train sets” instead of conventional trains (locomotives and coaches), because of the power-to-weight ratio and various other technical reasons such as aerodynamic conditions, reliability and safety.

Special dedicated lines

Conventional lines, even with major upgrades, are unable to operate at more than 200-220 km/h. The layout parameters must be able to sustain high operating speeds.

Special signalling system

One particular aspect of the operating conditions is the signalling system. Lineside signals are no longer useable at more than 200 km/h. In-cab signalling is absolutely necessary for high speed operations.

UIC fosters partnerships with transport organisations with a view to promoting high speed rail



UIC AND THE AMERICAN PUBLIC TRANSPORTATION ASSOCIATION (APTA) FORM A NEW PARTNERSHIP

In February 2010, US Federal Railroad Administrator Joseph Szabo and US Federal Railroad Deputy Administrator Karen Rae were keynote speakers at the Regional Seminars on High Speed Rail organised under the new APTA/UIC partnership. APTA, the leading voice for bus and rail transport in North America, and UIC developed an initial series of three regional seminars to provide US decision-makers with the information needed to implement high speed rail.

The seminars, entitled "International Practicum on Implementing High Speed Rail in the United States," were held in February in Washington, Chicago and Los Angeles within a few days of each other. These were the first set of seminars developed under a new partnership signed in December 2009 between APTA and UIC. The programmes featured practitioners from high speed rail systems around the world and focused on best practice and lessons learned from European and Asian systems.

Experts from Spain, Germany, Japan, Korea, Italy and France shared their experience and knowledge, with US-based speakers providing

appropriate context for application in the North American operating environment. The seminars are designed for local decision-makers and practitioners, including executive and senior transport managers, strategy experts, chief engineers, economists and stakeholder organisations who must understand the issues they will face as their regions develop high speed rail.

Jean-Pierre Loubinoux, UIC Director-General, said "UIC is delighted to cooperate in organising these seminars and to develop jointly-run activities with APTA as the development of high speed is one of the cornerstones of UIC's activities and an area which is set to present real industrial, technological, financial and social challenges for railway companies and manufacturers. This initiative is fully in line with UIC's worldwide scope and we hope that the international rail experience acquired by UIC over the years, thanks to the excellent cooperation with and among its Members, can contribute to the development of the railway mode in the USA and in other regions of the world".

UIC HIGHSPEED 2010 organised in Beijing, December 2010

THE 7th WORLD CONGRESS ON HIGH SPEED RAIL SUCCESSFULLY FULFILLED ITS TARGETS

In December 2010, Beijing was the world capital of high speed rail on the occasion of UIC HIGHSPEED 2010 organised by UIC and the Ministry of Railways (MoR) of the People's Republic of China and the Chinese Academy of Railway Sciences (CARS). 2,700 participants from all over the world, government representatives including 20 ministers and vice-ministers, ambassadors, international organisations, railways including 50 CEOs and directors from railway companies across 26 countries, the supply industry and research institutes attended this congress.

Across the world, 14,400 km of lines are in operation and 10,000 are under construction. At the end of 2010, more than 1,750 high speed trains (HST) were operated in 13 countries on three continents at commercial speeds ranging from 250 to 350 km/h. Jean-Pierre Loubinoux, UIC Director-General, reiterated the fact that 18 billion travellers have been using high speed rail since the 1960s, a figure which is set to more than triple by 2025.

UIC Chairman Yoshio Ishida taking the floor at the opening of the 8th World Congress on High Speed Rail, organised in cooperation with the Chinese Ministry of Railways in Beijing



All speakers acknowledged the far reaching impact of the UIC HIGHSPEED conference since its first edition in 1992, and more generally the role of UIC in facilitating railway development through worldwide exchange on technical matters, experience and enhancing cooperation between Members on all main railway issues. They further highlighted the advantages of high speed for economic recovery, sustainable growth and social development and in securing public welfare. High speed rail is considered as a major part of the current trend in world railway development as a means to face current and future mobility challenges whilst ensuring a high level of performance, safety, environmental friendliness and cost.

The 7th UIC HIGHSPEED conference has shown that:

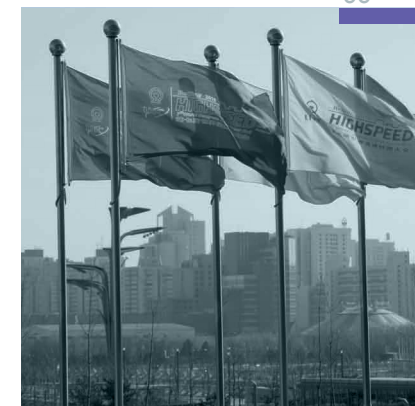
- High speed has become a recognised mode of transport at world level
- High speed has a great future because high speed means: safety, sustainability, capacity, land planning, economic growth, creation of jobs and better complementarity with other transport modes

- High speed is a complex system requiring the control of various phases: planning, construction, operation, maintenance and integration
- High speed can best bring its added value as part of a transport master scheme including upgrading conventional rail networks in order to extend the benefits of high speed rail to more regions and cities
- The excellent control of wheel and rail technology has not yet reached its limits in terms of speed, capacity, services and urban integration
- Building a high speed world system means benefits for the next generation. The future will thus bring more in the way of achievements and developments. These further steps will require efforts on the part of operations as well as investment in research and innovation

UIC HIGHSPEED 2010 was organised alongside the 9th edition of the “Modern Railways” international exhibition that was officially opened on 6 December. 150 companies representing the world supply industry and railway companies showed more than 25,000 visitors the enormous business potential of high speed rail.

UIC HIGHSPEED 2010 was the first edition to be held outside Europe, highlighting the fact that high speed is currently developing at an impressive pace around the world.

Jean-Pierre Loubinoux announced that the 8th edition of UIC HIGHSPEED will take place in July 2012 in the United States. Mr Bill Millar, President of the American Public Transportation Association (APTA), added that he was very pleased that the USA would host a conference exploring all aspects of high speed rail. All organising partners including American rail operator Amtrak, the Association of American Railroads (AAR) and the Federal Railroad Administration of the US Department of Transportation (FRA), all of whom are UIC Members, look forward to welcoming participants to the United States.





1st Workshop on Global Standards for High Speed Rail Systems organised by the European Railway Agency and UIC



The development of high speed railways around the world is characterised by two important trends. On the one hand, high speed is undergoing major expansion all over the world, both in terms of the construction of new lines and the development of new industrial products and technological achievements, etc. On the other hand, globalisation of everything relating to transport, industry, business and knowledge is leaving its mark on the relationship between countries and presenting the rail sector all with a real challenge.

Within this context, high speed rail, like any other rail system, has always required a complete and detailed set of standards not only regarding technical and operational aspects but also commercial, environmental, safety, security and legal matters, etc.

The required standards have traditionally been developed at national level (or even within each railway) but more recently, due to the emergence of continental and transcontinental networks and given the global dimension of many of the components of any rail system, it has become necessary to adopt a set of common standards, procedures and rules, etc.

The many different bodies at global level (authorities, associations, etc.) have produced a long list of documents (mandatory or recommended) to be taken into account, for both existing and recently implemented railway systems.

The European Railway Agency (ERA) and UIC have proposed in 2010 to organise a joint discussion session focusing on the creation of a global framework for technical and operational standards for high speed rail systems, with the aim of explaining, outlining and clarifying the status and the purpose of the different levels of railway regulatory texts.

This event, taking the form of an educational workshop on high speed rail standards, was held at UIC Headquarters in Paris on 15 October 2010, and was attended by the different players involved in the design, development, approval and application of various rail standards and regulations.

The programme focused in particular on:

- The need for and objectives of the railway standards
- The different levels of responsibility and commitment
- The type and level of standard: technical (infrastructure, rolling stock, operations, etc.), commercial, legal, industrial, etc.
- The players involved in the railway standardisation process: design, development, approval and application
- The future of international (European, global) railway standards

UIC brochure: “High speed rail: Fast track to sustainable mobility”

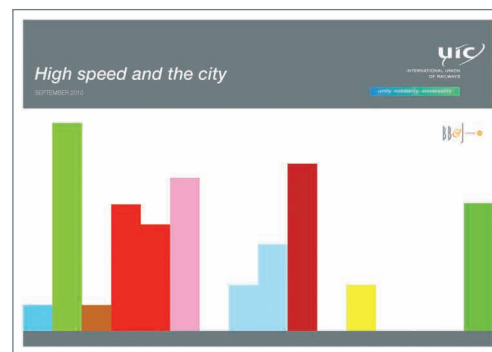
Against the backdrop of the UIC World Congress on High Speed Rail held in Beijing in December 2010, a new UIC brochure entitled “High speed rail: Fast track to sustainable mobility” was published in English. A special Chinese edition was also prepared for the Congress by Chinese Railways.

This brochure, published every two years, will be the UIC High Speed reference document for 2011 and 2012. It is intended to shed some light on the principles and possibilities of high speed rail, with a view to a better and more logical development. The document, developed in close

cooperation with the UIC High Speed Plenary Members Committee, takes into account the comments received from Members.



New UIC Study “High Speed and the City”



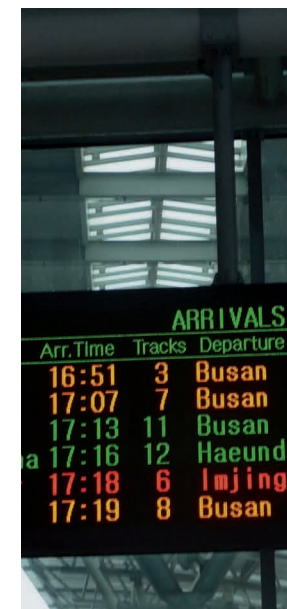
During the UIC HIGHSPEED world congress in Beijing the new UIC study “High Speed and the City”, launched at the initiative of the UIC Passenger/High Speed Department, and carried out with the support of the UIC High Speed Plenary committee, was presented for the first time.

The station, as the interface between the city (society) and high speed rail, is a very important and strategic point for all players involved: passengers, railway undertakings, infrastructure and station managers, and the city itself. It is generally located at the core of densely populated cities and offers good intermodality with urban

modes. Other important issues are the location and function of the station (dead-end stations or through stations) and the high capacity and volume of passengers using the station as well as the saturation effects. Furthermore, the shorter travel times offered by high speed rail services generate more demanding expectations from customers in stations, in particular in terms of waiting time and quality of services, etc.

The general objective of the study was to benchmark various cases worldwide so as to understand the pros and cons of various schemes to increase accessibility and capacity for high speed stations. In doing so, the type of high speed station (dead-end or through) was considered, the various cases analysed from a passenger/city/operator/infrastructure manager standpoint, a range of criteria proposed to identify contexts where a shift from dead-end to through stations would be advantageous, and the benefits of such investments elucidated, etc.

The UIC study examines the case of following high speed rail stations: Barcelona, Berlin, London, Madrid, New York, Paris, Rome, Ankara, Beijing, Seoul, Taipei, Tokyo.





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UIC Annual High Speed Training Seminar

UIC GIVES ITS MEMBERS THE OPPORTUNITY TO EXCHANGE AND LEARN MORE ABOUT HIGH SPEED

An annual Training Session on High Speed Systems is organised every year in June by UIC. The 2010 edition was held from 28 June to 2 July 2010 at UIC Headquarters for the 7th consecutive year.

Representatives from Brazil, Norway, China, Korea, Japan, Switzerland, France, Sweden, Poland, Italy and Portugal were very involved and took part in full and fruitful debate with speakers during the sessions. Over the course of the week participants were able to explore and develop particular issues with the speakers and with each other.

The training session ended with a technical visit, which took place in Madrid. The extension work of the Atocha station was presented in detail by ADIF. The visit continued with a tour of the tunnel linking the two stations of Atocha and Chamartin.

Passengers

For the UIC Passenger Forum 2010 was a year of transition, with activity focusing on the follow-up of a number of projects aiming to optimise business conditions for UIC Members and their customers, by taking into account the effects of globalisation and communication technologies for passenger transport. These projects include MERITS-PRIFIS (European Railways Integrated Timetable – Price and Fare Information), the work to prepare Technical specifications for Interoperability (STI) for Telematic Applications for Passengers TAP, with the groups TAP-MD (maintenance and development) and TAP-NT (new ticketing), as well as cooperation in the groups “Technical”, “Commercial” and “Production”.

A new and promising development consists in extending the scope and mission of the Station Managers' Group (SMG) to take into account the new global requirements of the railway business and the strategic role devoted to station development within the railways. The stations role covers an increasing number of objectives: offer an interface with rail passenger services and be an intermodal hub, become a profitable

business unit for its owner, offer services to citizens (including other than rail passengers) and contribute to urban development, etc.

In order to extend and improve benchmark opportunities, the group has now been reconfigured as the Station Managers' Global Group (SMGG) that will be able to focus on regional concerns (e.g. issues of station management in Europe) as well as encourage sharing of experience and best practice at world level.

“Next Station”, the 3rd international conference on railway stations jointly organised by SNCB-Holding and UIC on 17-18 March 2011 in Brussels, provided an excellent opportunity to address and exchange on all strategic and operational issues connected with the development, construction and management of railway stations.



TO LEARN MORE

www.uic.org/highspeed/

www.uic.org/passenger/

TECHNICAL ACTIVITIES

Freight





Mr Ferdinand Schmidt,
Rail Cargo Austria,
Chairman of the UIC
Freight Forum



High Level
Freight Meeting
in Vienna in 2010



If economic recovery at world level was accompanied by a resumption of transport including freight, 2010 was marked by a number of important milestones and events in rail freight which bode well for the future.

Rail's situation is getting better worldwide, clocking up market shares of up 40% and more (that is the case in China, India, Australia, South Africa and the United States). Rail freight transport is also enjoying good growth prospects in Europe, with overall demand for transport continuing to rise and structural congestion phenomena emerging on roads and motorways.

Further growth in rail freight will however depend on the ability of companies to invest in infrastructure and to increase their efficiency and to provide optimum responses to their customers' requirements: through the quality, simplicity and transparency of their services, pricing (in particular in international traffic), information systems harnessing the potential of electronic commerce and development of partnerships between operators and customers for special transport operations.

Freight Forum covers 7 Domains with 9 Groups.
Members lead work as Forum and Group Chairmen
 Chairman – Ferdinand Schmidt - CEO Rail Cargo Austria

Single Wagon Load	Combined Traffic	Freight Forwarders	Wagon Users	Information Technology	Quality Management	Freight Operations
RAIL IFC	OTC Interunit	Contact Group	SG Wagon Users	SG IT Rail Data	SG Quality	SG Operations
G. Ferk SCHENKER	E. Peetermans B	C. Bileau SXF	E. Peetermans B	R. Wilke SCHENKER	H. Pfeiffer Rail Cargo Austria	H. Fikar Rail Cargo Austria
<ul style="list-style-type: none"> European product Reliability and transparency Commercial aspects of cooperation 	<ul style="list-style-type: none"> DIOMIS Market Issues US-EIT Joint activities with LIRR (operators) in Interunit 	<ul style="list-style-type: none"> Exchange with Freight Forwarders Market Place Seminars (conferences) 	<ul style="list-style-type: none"> GUJ Joint Committee Fest of RW Commercial Model Use of wagons (CMU) 	<ul style="list-style-type: none"> TAF TSI RU Cluster RICS + Hermes (GRU) ISR-ORFELUS eRail Freight 	<ul style="list-style-type: none"> Dangerous goods Management systems Business Excellence 	<ul style="list-style-type: none"> Handover process optimisation Coordination with infra-structure Supply chain security OPE TSI

The UIC activities in this field are steered via the UIC Freight Forum, which has two plenary sessions per year and several steering committee meetings. It covers seven areas: Single Wagonload, Combined Traffic, Freight Forwarders, Wagon Users, Information Technology, Quality Management and Freight Operations.

On another level, UIC and CER organise a High Level Freight Meeting (HLFM) each year in May as a meeting point for the large majority of European rail freight CEOs to discuss major challenges from all perspectives, be it political, technical or strategic. Among the key points discussed in 2010, participants addressed the consequences of the crisis, how to respond to the noise reduction challenge and how to put in place different strategies to restructure wagonload and opportunities arising from the Eurovignette regulation.



Mr Oliver Sellnick,
Director of UIC Freight
Department

In 2011, UIC's freight activities will proceed in four major directions. The first one will involve attracting new Members to UIC. The membership base will be extended to new freight players in Europe that have emerged in the context of liberalisation since 2007.

The second challenge will consist in broadening the geographical scope of freight: for a long time, UIC freight projects and activities were steered exclusively by European Members. Since 2010, growing interest from Members of other UIC Regions has been noticed. By way of example, the UIC Director-General and Director of Freight visited representatives of Japan Railways' Freight Division in June 2010 and began discussions on freight issues. In this context, and taking into account the growing interest of various Members worldwide, UIC will seek to boost the involvement of additional key freight players in projects throughout 2011.

Integrating rail into logistics will represent the third objective: UIC seeks to establish platforms for exchange between Members and partners in logistic solutions such as customers, freight forwarders, intermodal operators, harbours and terminal operators. Full dialogue such as this is

meant to anchor rail freight firmly as a backbone in transport chains.

The fourth objective involves developing partnerships around global freight. UIC has entered into partnerships with the Organisation for the Collaboration between Railways (OSJD) and the Coordinating Council on Transsiberian Transportation (CCTT) to promote rail solutions connecting Europe and Asia. Preparatory discussions are being held with the United Nations Economic Commission for Europe (UNECE). UIC will be the main partner in the JERID International Rail Freight Conference (the leading European provider of data, information and information systems in rail freight transport) in Prague from 23 – 25 March 2011.

Key project highlights in 2011 will include the communication of results of the IMPORT and ICOMOD projects around mid-2011 as well as the launch of the second version of the Rail Freight Portal (www.railfreightportal.com), the internet tool created by UIC and its Members to contribute to change the perception of freight. This new tool is highly appreciated by UIC Members and cooperating partners.

Wagonload: "Xrail" alliance signed between 7 freight railways



The Xrail alliance for successfully
developing wagonload was signed
between seven freight railways



With an annual freight volume of around 100 billion tonne km, wagonload accounts for approximately 50% of Europe's total rail market.

Wagonload transport is a crucial supply chain element for Europe's predominantly mid-sized and geographically dispersed industry and agriculture. But most European railway undertakings are losing money with their wagonload activities. Closing down this business segment does not appear to be a valid option, since wagonload is connected with Full

Combined Traffic: UIC DIOMIS project successfully completed

Train Load business and Intermodal traffic via operations, i.e. provides feeder and repositioning services for the latter.

On 28 February 2010, UIC's five-year effort to support European wagonload was crowned with the signing of the Xrail alliance agreement by seven UIC Members. Prior to that, the European Commission had given the alliance the green light. By mid-2010 the UIC special group Xrail was closed and the project team migrated to Xrail S.A. in Brussels. UIC had been particularly active in developing and promoting a competitive European wagonload product.

Xrail is a mutual commitment to production standards leading to a reliability of at least 90%, transparency about the shipment and a short response-time to customer requests of maximum three days. UIC managed the project on behalf of the group including e.g. the project strategy, the tender and contracting for external support (McKinsey), the management of the consultants' team, regular steering boards with the top management of participating railways, the hiring of a railway team replacing the consultant, the piloting of the Xrail concept in real life, the development of the software suite for schedules and monitoring. Rigorous route cause analysis has been key to the success of Xrail to improve production quality of project partners to meet the high Xrail standards.

www.xrail.eu



Combined transport, considered as the intermodal transport where the major part of the European journey is by rail, inland waterways or sea – any initial and/or final legs carried out by road are as short as possible according to the United Nations Economic Commission for Europe (UNECE) – is managed at UIC through the Combined Traffic Group (CTG). This group is a special group with 17 UIC Members working on all issues of common interest to promote combined traffic. The CTG also cooperates with the association of intermodal road/rail operators (UIRR) via the common platform INTERUNIT.

In 2010, the project for Developing Infrastructure and Operating Models for Modal Shift (DIOMIS) produced its last report, the "Evolution of intermodal rail/road traffic in Central and Eastern European Countries by 2020".

The series of DIOMIS projects has been continued with IMPORT (Improving the Productivity of Rail Intermodal Transport) project. Based on the premise that:

- Capacity is constrained by numerous bottle necks
- Combined traffic suffers from many interfaces and some duplication along the transport chain
- The volatile nature of combined transport impedes an optimal resource allocation and few players in the market reach break-even



The project seeks to identify levers to industrialise combined traffic and to improve coordination along the value chain.

Results will be presented by mid-2011. The project also includes an Asian module reviewing the transferability of results to selected Asian markets (see also Asian Region, page 38).

<http://diomis.uic.org>

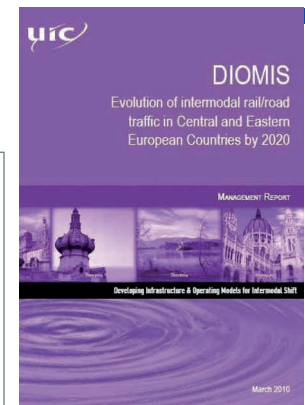
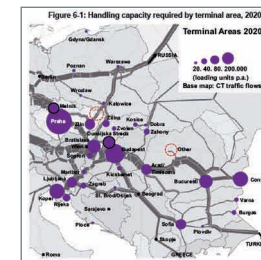
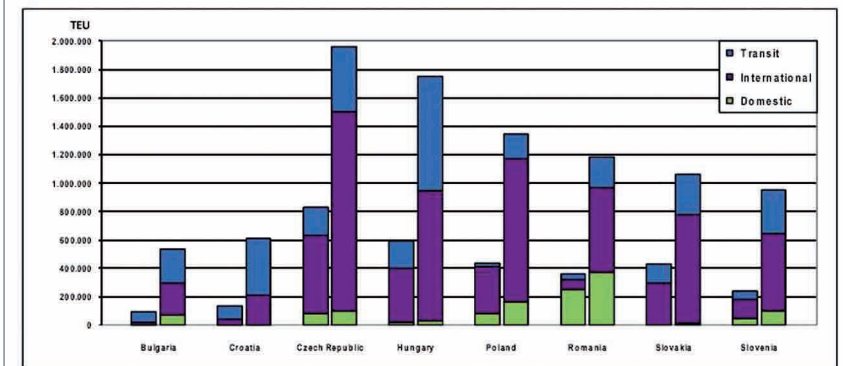


Figure 4-1: Unaccompanied intermodal traffic volume (TEU) in CEE Countries, 2007/2020





UIC/FIATA “Market Place Seminar”: a platform for exchange with freight forwarders and customers

The UIC/FIATA Seminar is a regular event which aims to create opportunities for increased cooperation and business development within the rail sector by offering a common platform for railway undertakings, freight forwarders and customers. It is an excellent occasion for the European rail logistics professionals to learn more about business opportunities and requirements for doing rail business in this region and to expand their business network.

Following the success of the two previous seminars hosted in Prague (2008) and Istanbul (2009), which focused on rail's attractiveness and competitiveness in the Eastern and Southeast European market, the seminar turned the spotlight in 2010 on France and Spain.

This 3rd edition, which was held on 2 and 3 November 2010, focused on the French-Iberian rail link – Fostering European Connectivity and addressed the following:

- Hinterland development of Barcelona port
- Consequences of the new UIC line and the French/Spanish border issue
- Short sea shipping: competition or a complementary solution for rail freight business
- Relationship between freight forwarders and harbours: examples of best practice

Participants from 15 countries attended this 3rd edition. The seminar was backed by RENFE, Spanish State Railways, Fret SNCF, French Railways, as well as the Port of Barcelona.

The next Market Place Seminar will be held on 27 – 28 October 2011 in Hamburg.

www.marketplaceseminar.org

Regular updates of the GCU to facilitate cross-border wagon exchange

The UIC railway undertakings are also major wagon keepers. Together, they own about 500,000 freight wagons of a total of about 700,000 in Europe which are registered with the General Contract of Use (GCU). The business of wagon keeper is one of their key activities.

The UIC Study Group “Wagon Users” is a UIC working group composed of freight operators with a view to ensuring interoperability, availability and facilitation of the exchange of freight wagons in Europe, and to improve their economic use.

The Study Group “Wagon Users” is a common professional Platform where otherwise competing railway undertakings cooperate on technical, operational and legal issues of common interest facilitating the use of freight rolling stock. Price negotiations are excluded from the cooperation in this group.

All amendments for the General Contract of Use are prepared here before they are submitted to the GCU Joint Committee including UIP and ERFA.

The work of the SG Wagon Users in 2010 included a strong contribution to the joint sector

proposal which was submitted to the European Railway Agency (ERA) and the National Security Agencies (NSAs) for enhancing railway safety with harmonised criteria for inspecting wheel sets and axles.

The group also played an important role in defining the sectors’ interim proposal for the period until the Safety Directive will have been fully implemented by the NSAs, so that railway undertakings can be granted safety certificates during that time.

On 2 February 2011, representatives from ERFA (European Rail Freight Association) and UIP (International Union of Private Wagons) participated for the first time in the UIC working group session called “Technical Inspection”. This working group writes down, updates or proposes modifications to the rules and prescriptions to be fulfilled by wagons at the handover point between freight railways. The output and deliverables of this group are mainly included in Annex 11 of the GCU: General Contract of Use for wagons.

So far the three associations ERFA, UIC and UIP are working closer together to regularly update the GCU and to continue to provide the best service to the parties and the railway sector.



Information Technology: how to improve quality and efficiency of railway freight



The UIC IT Study Group (dealing with information technology in the railway freight field) is an active working body of the UIC Freight Forum bringing together most of the railway undertakings to share information, discuss new IT solutions and improve existing applications regarding the supply chains and transport systems.

The UIC E-Rail Freight project continued to support railway undertakings implementing paperless transport processes. DB Schenker Rail, Rail Cargo Austria, SNCF and SNCB Logistics are at an advanced stage in applying the functional requirements prepared by the project to enable paperless transportation. The project continues work to cover combined traffic, dangerous goods and exceptional shipments.

The UIC IT Study Group continued organising the Freight Telematics TAF TSI railway undertaking Cluster. In this framework, railway undertakings review in eleven working groups how the TAF TSI regulation can be implemented and where change requests need to be prepared. Most of these working groups are run together with RNE (RailNetEurope), an association set up by a majority of European Rail Infrastructure Managers and Allocation Bodies to enable fast and easy access to European rail, as well as to increase the quality and efficiency of international rail traffic, one of them with ERFA (European Rail Freight Association) and another one with UIP (International Union of Private Wagons).

Rail Freight Portal: a tool launched by UIC and its Members to change the perception of freight and bring freight players closer through a successful website

The www.railfreightportal.com was designed as a communications tool to create a positive image of the sector, building on the remarkable progress made by the railway companies in response to the logistics needs of their customers. It was launched in October 2009 and has attracted considerable web traffic since then, with more than 65,000 visitors since its launch. Its rich content is due to the particular dynamism of UIC freight railways which contribute regularly to update the website with data, statistics, interviews, and “success stories”.

The portal addresses a varied audience, including rail freight customers, media, researchers, associations and anybody interested in rail freight issues.

In 2010, the focus was placed on detailed reports of selected freight railways and their market innovations. Among them were the successful results and experiences of UIC Members such

as BLS Cargo, CFL Cargo, DB Schenker Rail, Rail Cargo Austria, RZD, SBB Cargo, Slovenian Railways, SNCB Logistics and Trenitalia via the section “Topic of the month”.

Building on these railway profiles, the booklet “Trends in European Rail Freight and selected railways strategies” was published in mid-2010.



2nd UIC Global Rail Freight Conference



The 2nd Global Rail Freight Conference was jointly organised by UIC and the Russian Railways (RZD) in Saint Petersburg on 6 – 7 July 2010. Under the patronage of the United Nations and in cooperation with a large number of international organisations, the conference attracted 300 participants from 30 countries and 5 continents.

UIC GRFC Conferences have become a worldwide reference for rail freight and logistics conferences. Following the success of the 2007 edition in New Delhi (which dealt with customers' viewpoints, the importance of regional cooperation, operational financing and the role of technology), the 2010 GRFC Conference marked the second edition by bringing together all players and decision-makers to address key topics such as how the global recession is affecting rail opportunities or the benefits for customers in having rail as a base in their global supply chain.

The 2012 edition will be held in Shanghai, China.



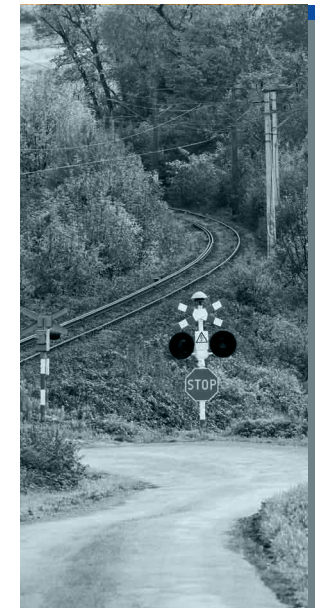
Global Team of Experts (GTE): promotion of intercontinental and transcontinental rail traffic

The Global Team of Experts (GTE) promotes intercontinental and transcontinental rail traffic. Members of the group represent rail and non-rail key stakeholders (railway undertakings, freight forwarders, rail associations, potential customers, shipping lines and others). The GTE serves as a platform for exchange among all stakeholders, and to initiate and steer projects promoting long-distance rail traffic.

- The first GTE in 2010 – organised during the 2nd Global Rail Freight Conference – dealt with legal harmonisation and conditions for the success of land bridges between Europe and Asia
- The second GTE meeting – organised alongside the CCTT's 21st plenary session in Bratislava – focused on the corridor work of OSJD and concrete examples of successful and sustainable transport solutions between Asia and Europe

TO LEARN MORE

<http://grfc.uic.org/>



TECHNICAL ACTIVITIES

Fundamental Values

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Mr Moha Khaddour from Moroccan Railways ONCF (on the right) succeeds Mr Tadeusz Kaczmarek (on the left) from the Polish Railways, PKP/PLK as the new Chairman of the UIC Security Platform

SECURITY



Following events that have impacted the railways – and thereby their users – in recent years, in particular terrorist and malicious acts, it has become essential for the rail sector to speak as one on topics directly affecting its business, even if these primarily come under the remit of national authorities within a general framework established by the European and international institutions.

It is against this backdrop that the UIC Security Platform was created by the Executive Board in June 2006 as the single UIC body authorised to develop and voice the rail sector's analysis of and stance on matters concerning the security of persons, goods and equipment. In June 2010, a new Chairman was appointed for this body: Mr Moha Khaddour from Moroccan Railways (ONCF), succeeding Mr Tadeusz Kaczmarek of Polish Railways (PKP/PLK). Mr Lubomir Hradisky of Slovak Railways (ZSSK) was appointed Vice-Chairman.

In 2010, a three-pronged strategy was pursued in this area: forming institutional partnerships, empowering the bodies through which this strategy was enacted, and preparing future actions to help better protect railway operations for the carriage of both passengers and freight. In this area perhaps even more than in other parts

of the rail system, it would also seem extremely important for the railways to share common values in the area of security, and to draw on the experiences of UIC Members to enhance the security level of each Member railway in an interoperable and coherent manner.

The particular focus of all the actions undertaken in 2010 in this area was on:

- Supporting the drafting of a strategic proposal, seeking to serve society and UIC Member railway companies
- Dissemination of knowledge and experience
- Safeguarding railway networks
- Promoting a culture of security and prevention
- Developing arguments in favour of security investment
- Boosting the capacity to act on the issue of security on a global, regional, national and local level

The various working groups have developed their activity by extending their geographical reach and being the source of ideas and proposals vis-à-vis institutional partners, notably with regard to security on international freight corridors, border crossings, new technologies, involvement of human factors and European strategy, etc.

SECURITY

Developing institutional partnerships

Railway companies are increasingly taking a business-oriented approach to security, developing it in partnership with national authorities within a strong, coherent, international framework. With this in mind, the priorities in 2010 consisted of developing links between security and safety and in particular improving the security of high speed systems, thus meaning that demands for high-quality passenger services would continue to be met. These priorities were developed within various working groups and through security events organised by UIC such as the 2010 World Security Congress (Istanbul, June 2010), the seminar “Security challenges and high speed development” (Mumbai, October 2010) and participation in the 7th World Congress on High Speed Rail (Beijing, December 2010).

(See also Passengers and High Speed, pages 54-55 and Asian Region, page 35).

World Congress in Istanbul: “Security, a key component of the railway business”



The UIC World Security Congress organised in June 2010 in Istanbul attracted over 200 delegates from 30 countries to address the theme of “Security, a key component of the railway business”

This congress, organised in collaboration between UIC and Turkish Railways (TCDD), experienced a record turnout: over 200 delegates from 30 countries attended to address the general theme of “Security, a key component of the railway business”.

The presentations and the final declaration adopted during this congress attested to the need for cooperation and firm partnerships between all the players involved – both on national and international level – to effectively tackle security issues. The exchanges led to the conclusion that it was vital to expend more energy, time and resources addressing security issues, alongside traditional railway activities, in order to avoid exposing citizens, customers and staff to interruptions to operations, threats and occasionally dangerous situations in the course of their daily business. All the speakers underlined the importance of maintaining a high

level of security, as this has a significant impact on operations, quality of service, commercial and financial results, and ultimately on the image of railway transport as a whole.

This congress is set to be continued as an international seminar, dedicated in particular to security technologies, to be held in Rome in September 2011 at the invitation of Italian Railways (FS SpA), and the 2012 World Security Congress is to be held in Slovakia in spring 2012, organised in collaboration with Slovak Railways (ZSSK).

The presentations from this congress are available on the UIC website under the “Security” section.

Research for security: preparing next- generation solutions —

Since tomorrow’s solutions cannot only be developed using those of today, particular focus was placed in 2010 on research efforts. For instance, the four-year Protectrail project, whose aim is to develop an integrated system to ensure greater protection of the railways and trains by reducing security disparities between the various European railway systems, was successfully launched on 6 October 2010.

The UIC Security Unit, which is in charge of the day-to-day coordination of all UIC Security activities and projects, also coordinated the draft response submitted for the Reustrail project on “Suicides and trespass on railway property” under the European Commission’s FP7 research programme (7th Framework Programme).

This preparation of future actions also involves forming and consolidating existing specialist partnerships, such as for example those established with the European agency FRONTEX (on the issue of border crossings), the United Nations Economic Commission for Europe (UNECE), the Organisation for Security and Cooperation in Europe (OSCE) and NATO, etc.



SECURITY

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A seminar on "High Speed, Safety and Security" was organised together with Indian Railways (IR) in October 2010 in Mumbai, India

Security, a key factor in the development of high speed rail

The impressive development of high speed rail systems around the world deserves particular attention with regard to security challenges.

UIC is clearly aware of these issues and intends to meet the needs and expectations connected with this mode of transport (quality of service, sustainability, investment volumes). In this light, UIC organised the first workshop on "High speed, safety and security" in collaboration with Moroccan Railways (ONCF) in March 2009 in Marrakech following significant work and preliminary discussions. Following the success of the 2009 seminar, a second seminar on "High speed, safety and security" was organised in October 2010 in Mumbai, India. This was organised together with Indian Railways (IR) and thanks to the involvement of the UIC Asian Regional Assembly.

The topics explored during this seminar included:

- An overview of railway safety and security
- Specific needs of high speed rail systems to be taken into consideration (particularly the differences compared to conventional networks, operations, financing at local, regional and national level or through PPPs, cost structures, investment issues and relations with authorities/governments)
- The link which must be made between on-track security and specific problems relating to high speed: tunnels, training, approval, maintenance, etc.

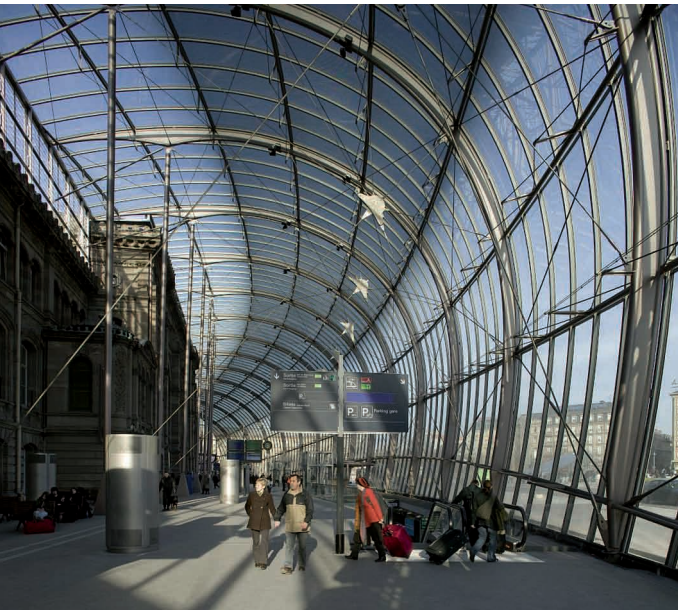
The conclusions of this seminar were subsequently presented during the 7th world Congress on High Speed Rail in Beijing in December 2010.

This issue will be the focus of additional developments during the seminar jointly organised by UIC and Moroccan Railways (ONCF) held in Ifrane, Morocco in April 2011.

TO LEARN MORE

www.uic-org/security/

Mr Alexander Notoicky,
 ÖBB (Austrian Railways),
 Chairman of the UIC
 Expertise Development Platform



EXPERTISE DEVELOPMENT

www.railtraining.org:
 a cooperation tool
 targeted at rail training
 providers

Railway companies are continually confronted with important challenges such as market changes, technological innovations and new commercial frameworks that will affect the competencies and skills of railway personnel required to meet these challenges. Human resources directors and training providers have the challenging task of providing services enabling rail companies to keep up-to-date with these issues by meeting the current and future training needs of all railway employees.

The UIC International Rail Training Community is a community of training providers, whose core objective is to enhance the effective working of the different regional railway training markets, hence enhancing workforce development through sharing best practice in rail training across the entire industry.

The community's active professional dialogue will guarantee competitiveness within the rail training sector.

The UIC website for the International Rail Training Community was successfully launched in 2010. It is currently being populated with current members' details and offers interested parties the option to join.

It aims to promote the activities of the regional networks, in particular the exchange of staff across regions for personal and professional development within the area of training and development, as well as the exchange of expertise.



EXPERTISE DEVELOPMENT

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Benchmarking and best practice



Regional networks which are part of the International Rail Training Community are drawn from the railway training organisations and companies to ensure that training professionals and technical experts participate in their activities.

Through permanent benchmarking activity and sharing best practice, the community is aiming at continuous learning and improvement, based on regular professional dialogue between training experts.

Benchmarking between training practices and methodologies is an opportunity for training centres to learn and adapt best practice to their own systems. It will ultimately aim at improving the quality of training, hence the competitiveness of railway companies.

The comparative study on railway training provision in Europe which focused on three safety critical job positions: train driver, signaller/traffic controller, signal and interlocking technician has been delivered.

The research, commissioned from the University of Würzburg by UIC, involved 18 different railway training providers in 11 countries.

Results of the study were presented during the First World Congress on Rail Training on 6-8 April 2011 in Madrid.

E-learning activity: developing new training and educational tools

The UIC training community is also involved in the promotion of e-learning through various activities: workshops, best practice guides, “easy-to-use tools” (flash interface, competence standards for e-learning practitioners, decision-making tools for IT based learning) e-learning courses (e.g. e-trainers, ERTMS).

A best practice guide on developing safety e-learning for staff working on tracks has been published.



Staff development: identifying new training needs



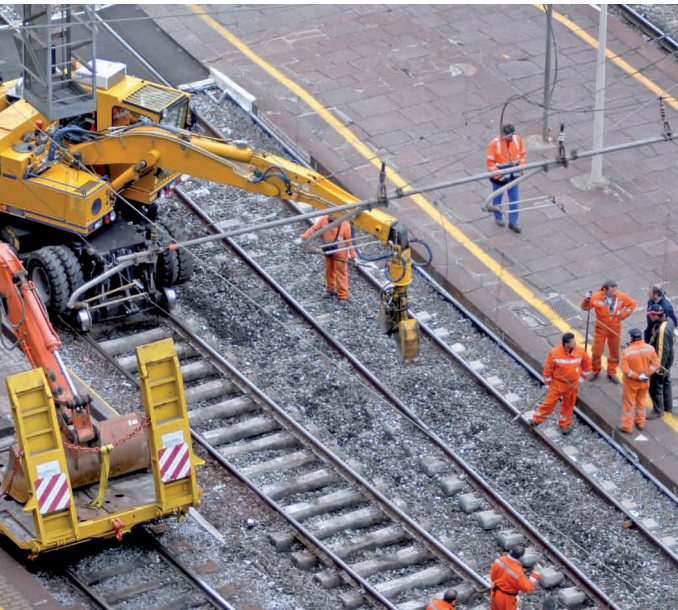
A training needs survey was conducted with all Members in 2010.

A training plan for 2011 has subsequently been developed. Training sessions planned in 2011 – 2012:

- Signalling and railway safety (6-8 July 2011)
- Asset management (17-19 October 2011)
- Future use of standards for rolling stock (2012)
- E-learning module on rail energy efficiency (autumn 2011)

TO LEARN MORE

www.uic.org/siafi/



SAFETY

Safety is one of the railways' main assets compared to other transport modes. UIC and its Members are therefore working together to maintain and further improve safety levels. Safety is one of the transverse units within the "Fundamental Values Department" at UIC Headquarters.

The UIC Safety Platform provides a forum for sharing information and experience among the Safety Directors of UIC Members to identify risks posing threats to the safety of the rail system and to develop solutions. As Members may be railway undertakings as well as infrastructure managers or integrated railway companies, safety is a transverse subject, involving all potential players of various interfaces. A large part of the work results is relevant to all UIC Members. The UIC Safety Unit also supports seminars dedicated to railway safety issues in different regions (Asia, Middle-East for example).



*Mr Jean-Michel Richard,
SNCF (French Railways),
Chairman of the UIC
Safety Platform*

The UIC Safety Platform, chaired by Mr Jean-Michel Richard (SNCF) pursued its 2010 activities in the following five core areas:

- Safety Management System
- Occupational Health and Safety
- International Rail Safety Network
- Human Factors
- Safety Performance

SAFETY

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Support to safety groups of the European Railway Agency

The common UIC SSMG/CER Safety Support Group drafts position papers and proposals for the speakers in the working groups of the European Railway Agency (ERA) on various issues such as “Common Safety Methods” (CSM), in particular “Risk Acceptance Criteria” (RAC) and “Assessment bodies” (AB), Certification of “Entities in Charge of Maintenance” (ECM), “Safety Certification” and “CSM for Monitoring”.

There is also regular information exchange on ERA-related safety topics with experts of ILGGRI (International Liaison Group of Governmental Railway Inspectorates) – an informal group of representatives of “National Safety Authorities” (NSA).

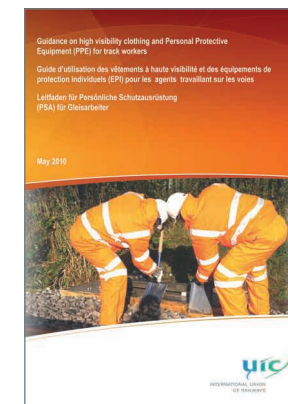
Human factors/Occupational health and safety

The 2010 activities relating to occupational health, safety and human factors focused on the following themes:

- Study on the contribution of psychology to the safety of rail operations
- Study on local management safety checks
- Guidance on high visibility clothing and “Personal Protective Equipment” (PPE) for track workers
- Managing psychologically traumatic incidents and preventing post-traumatic stress (to be published in 2011)

A dissemination workshop of these results and further items in the area of human factors took place in Paris at UIC HQ on 18 and 19 May 2011.

The special project “Organisational and human aspects of safety at border crossings” is completed. The results were presented at this seminar. The aim of this project was to identify, observe and analyse the specific human behaviour brought about by crossing borders (technological, regulatory, linguistic, cultural, national) and to develop recommendations and useful resources.



UIC Safety Database

In 2010 the UIC Safety Unit took over responsibility of the UIC Safety Database (SDB) from the Infrastructure Department. The Safety Database Activity Report 2010 includes statistics about 2,300 significant accidents of 21 European Members in 2009.

More than 80% were caused by third parties, mostly trespassing and accidents at level crossings, the road/rail interface. This year's report has been changed in some ways from previous years, with more attention given to the distinction between accidents caused internally within the railway system and accidents caused externally. The public version of this report is available on the UIC website <http://safetydb.uic.org/spip.php?article2>

The UIC Safety Database can be used by Members to compare statistics and trends across Europe, and to identify particular risks or successes.

There are initiatives within other regions, especially Asia and the Middle-East, to establish similar Safety Databases, using the same principles as in Europe.

(See also the Middle-East Region, page 50)

“Act safely at level crossings”: improving safety at road/rail interfaces

At the initiative of ELCF (European Level Crossing Forum), chaired by Mr Alan Davies (RSSB) and UIC playing the role of secretariat, a successful “International Level Crossing Awareness Day” (ILCAD) – coordinated by UIC – was held on 22 June 2010 in 40 countries across five continents. The joint message for the coordinated campaign was “Act safely at level crossings”.

This campaign focused on educational measures and the promotion of safe behaviour at and around level crossings – the road/rail interface. This partnership initiative has been developed in conjunction with the road safety unit of the European Commission. Accidents at level crossings are caused mostly by road users and pedestrians.

More information can be found on the dedicated website <http://www.ilcad.org>.

It has been agreed that this action will continue each year in June. In 2011 it will take place on 9 June.



The second EU Workshop on level crossing safety coorganised with UIC took place on 16 March 2011 in Tallinn, Estonia, hosted by the Estonian Railways and Operation Lifesaver Estonia (OLE) following an international conference attended by 150 participants on 15 March 2011.

SAFETY

Railway safety, a global issue



The 11th Global Level Crossing Symposium (Tokyo, 26 – 29 October 2010) was hosted by JR East in Japan and supported by UIC. It attracted 100 participants and 46 organisations from 16 countries. The main theme was “Towards further improvement of level crossing safety – coordinated approach and individual efforts”. The 12th Symposium will take place in October 2012 in London.

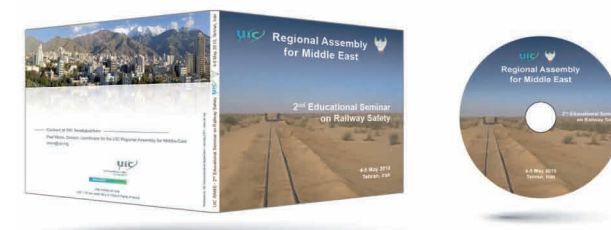
<http://www.levelcrossing.net>

The 20th International Railway Safety Conference (IRSC) took place from 3–8 October 2010 in Hong Kong. 100 participants from 22 countries joined this worldwide railway safety event, including experts from rail undertakings, infrastructure managers, safety regulators, as well as railway accident investigation agencies, rail unions and suppliers. The 21st IRSC will take place on 16 – 21 October 2011 in Melbourne.

<http://irsc2011.org>



The 2nd UIC RAME Educational Seminar on Railway Safety was held on 4 – 5 May 2010 in Tehran, as one of the important activities outlined in the Action Plan for the Middle-East Region. It was prepared in close cooperation between the UIC Safety Unit and several UIC Members such as SNCF and German railway authorities, and the Regional Office based in Tehran. This seminar was attended by around 100 participants, among them railway experts, researchers and university representatives from Iran, Turkey, Syria, Saudi Arabia and Iraq.



TO LEARN MORE

www.uic.org/safety/



SUSTAINABLE DEVELOPMENT



*Mr. Joachim Kettner,
DB, Chairman of the UIC
Environment, Energy
and Sustainability Platform*

Transport plays a vital role within a global economy. An efficient transport system is of crucial importance for the competitiveness of the economy and the mobility of citizens. It not only brings enormous benefits to society but also engenders enormous costs. At the first World Summit on Sustainable Development (WSSD) in 1992 in Rio, transport was pointed out as a key area in order to achieve sustainable development and to reduce the effects of climate change. Transport is indeed responsible for 22% of CO₂ emissions worldwide. In recent years, awareness of transport's impact on the environment (energy consumption, CO₂ emissions and local

pollution etc.) has increased enormously. Today transport patterns are far from being sustainable as transport is the only sector with increasing greenhouse gas emissions.

Transport therefore needs special attention in relation to combating climate change and promoting sustainable development.

UIC has a strong tradition of working on sustainability issues, both in supporting Members in improving their sustainability performance, as well as communicating on a sector level towards external stakeholders in order to support development of sustainable transport systems.

In this context, the year 2010 has been both challenging and successful for the UIC Sustainable Development team.

Two main achievements have been the launch of the UIC Declaration on Sustainable Mobility and Transport and the European long-term environmental strategy for 2030 and beyond.

SUSTAINABLE DEVELOPMENT

UIC Declaration on Sustainable Mobility and Transport

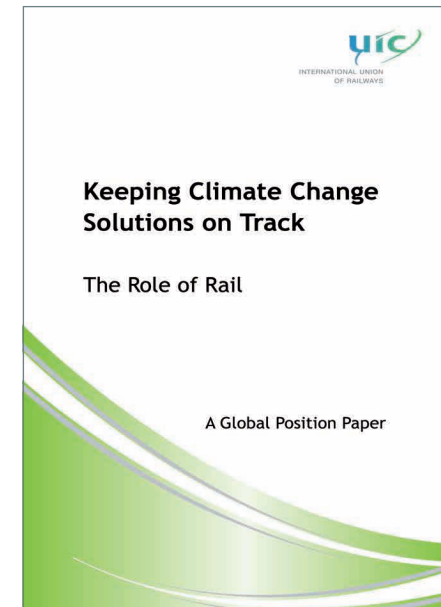
Launched in October 2010, the UIC Declaration on Sustainable Mobility and Transport lists the most important sustainable development goals for the global railway sector. By signing it, Member railways are making a public commitment to work towards these objectives and provide progress reports.

The Declaration provides UIC Members with a credible tool for external communication towards key stakeholders in order to present UIC Members as responsible, forward-looking and innovative business leaders – as well as a tool for internal awareness-raising and for continuous improvements to the rail sector's sustainability performance. The Declaration is supported by the United Nations Environment Programme (UNEP) and Global Compact and is in line with the Global Reporting Initiative (GRI).

After having been supported by the UIC General Assembly in June 2010, the first UIC Member to sign the UIC Declaration on Sustainable Mobility and Transport was Swiss Federal Railways (SBB). 45 Railways have signed the Declaration in the meantime.

UIC will promote the UIC Declaration on Sustainable Mobility and Transport with dedicated media and website communication as well as conferences in 2010 and 2011. A high level event promoting the sustainability approach of the rail sector took place at the UN Commission for Sustainable Development (CSD) on 11 May 2011 in New York.

In order to support and strengthen the messages on the railways' contribution to climate change and sustainable development UIC has been developing cooperative ties with key international organisations and institutions. Working together with influential stakeholders emphasises and highlights the different aspects of the role that rail plays and can play in the development of sustainable transport systems.



Building strategic partnerships

The global agenda on climate change and sustainable development is led by international organisations and institutions. This includes the development of strategies and policies, as well as the mechanisms and instruments needed to achieve the defined objectives.

Currently, key processes are underway within, among others, the United Nations Climate Change Conference (UNFCCC, United Nations Framework Convention on Climate Changes) and the United Nations Commission for Sustainable Development (UN CSD).

The presence of the rail sector in these processes is essential to ensure that rail's significant role in fulfilling the objectives of the climate change combat and achieving sustainable development are being taken into account.

More concretely, the strategic partnerships consist of several activities. For example, in order to focus attention on the neutral approach of the UIC web tools to compare the emissions performance of different transport modes, the

European Environment Agency (EEA) has been given a mentoring role while UNEP, the United Nations Environment Programme, consulted and supported the first UIC global rail position paper on climate change. The objective of the position paper is to promote rail's role as a solution to the global climate change challenge and gives an overview of the climate change challenge in connection to transport and the framework conditions set out by the UNFCCC. The target audience is the participants of the COP meetings, including the policy and decision-makers and their support teams.

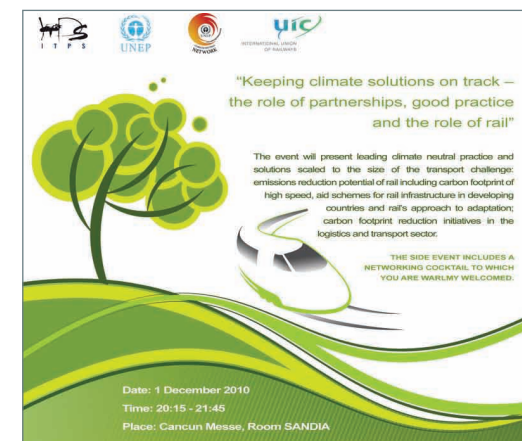
UIC has had consultative status to the United Nations (ECOSOC, Economic and Social Council) since 1949. This gives UIC among others the possibility to be accredited and actively participate in the Conference of the Parties (COP) that takes place every year. In 2010, UIC promoted the role of rail as part of the solution to climate change at the United Nations Climate Change Conference (COP16) in Cancun, Mexico.

UIC at COP16 in Cancun: rail transport, part of the solution

In cooperation with UNEP and ITPS (Institution for Transport Policy Studies), a successful joint side event was organised on 1 December 2010 under the theme "Keeping climate solutions on track – the role of partnerships, good practice and rail". The event presented leading climate neutral practice and solutions scaled to the size of the transport challenge: rail's emissions reduction potential; funding schemes for rail infrastructure in developing countries and rail's approach to adaptation; carbon footprint reduction initiatives in the logistics and transport sector and other solutions in different areas of transport (air, road, ship, etc.).

In addition to this side event, UIC also participated on 5 December 2010 in the transport panel of the World Climate Summit, supported among others by Siemens and CNN and bringing together panelists from various transport sectors to discuss the future of sustainable transport systems.

The future of sustainable transport systems was also the motto of the 2010 edition of the UIC Sustainability Conference held in Madrid.



SUSTAINABLE DEVELOPMENT

11th UIC Sustainability Conference: “Railways: Mobility for a sustainable future”



UIC Director-General Jean-Pierre Loubinoux during the 11th UIC Sustainability Conference in Madrid in June 2010



The 11th edition of the UIC Sustainability Conference was organised by UIC together with Spanish Railways (RENFE) in Madrid in June 2010, under the motto “Railways: Mobility for a sustainable future”. The 300 participants who attended the conference shared best practice and helped influence where rail should go in future sustainable transport systems, introducing new and sustainable ways of life and business.

The conference welcomed Teófilo Serrano Beltrán, President of RENFE, Yoshio Ishida, Chairman of UIC and Vice-Chairman of JR-East, Jean-Pierre Loubinoux, Director-General of UIC and Concepción Gutiérrez, Spanish Secretary of State for Transport.

UNEP, represented by Kamala Ernest, gave an insight into transport from a UN perspective, while Joachim Kettner, Chairman of the UIC Environment, Energy & Sustainability Platform (DB AG), presented the rail strategy towards a strengthened sustainability performance. Furthermore, the session “The role of rail in future transport scenarios” gave an external view of rail’s role in the future from the standpoint of, among others, Peder Jensen at the European Environment Agency.

UIC SUSTAINABILITY AWARDS 2011

The 11th UIC Sustainability Conference also welcomed the second edition of the UIC Sustainability Awards Ceremony. The aim of these awards is to put the spotlight on and reward excellence to ground breaking projects and the significant efforts made within the rail sector to continuously improve its sustainability performance.

The winners of the UIC Sustainability Awards 2010 were:

■ First Prize

Swiss Federal Railways for SBB’s involvement in sustainable mobility: “taking the next steps”. The project includes a strategy of responsible business by bringing sustainability considerations into SBB’s strategic development and organisation.

■ Second Prize

DB Schenker Rail and Deutsche Bahn Passenger Transport for “CO₂-free products of Deutsche Bahn - Eco Plus” and “bahn.corporate Eco Plus”. The project allows customers, both passenger and freight, to show their green credentials and demonstrate that DB behaves responsibly by choosing green energy with verified calculations.

■ Third Prize

Norwegian Railways for the project “Energy measurement and management in NSB”. NSB developed a tool that provides direct contact with the energy consumption onboard trains which allows detailed energy efficiency management.

■ Special Jury Prize

Bulgarian Rail Infrastructure Manager for “Railway activities on biodiversity conservation and protection of habitats”. An original project to handle stork nests in a multi-stakeholder approach.

UIC also develops tools for its Members. One of them is EcoTransIT, which is extending its outreach and becoming global.



“EcoTransIT”: a useful tool to select sustainable freight transport

EcoTransIT is recognised as a highly credible and scientific tool for freight and logistics transportation in general and is now ready for adaptation to fulfil the needs at company level (i.e. meeting the needs of a freight and logistics provider with specific company level data). Furthermore, EcoTransIT can meet crucial needs such as reliable communication, requirements for green accounting and reduction of the customer’s carbon footprint – while keeping EcoTransIT simple and sophisticated.

The global version of the online calculator was successfully launched at the International Transport Forum (ITF) in Leipzig in May 2010. Later in the year, UIC and the seven EcoTransIT consortium Members organised the 1st EcoTransIT Stakeholder Workshop on 5 October 2010 at UIC Headquarters in Paris and welcomed 100 participants from 50 European logistics companies, shippers, and scientific and non-governmental organisations. The overall objective of the workshop was thus to encourage the alliance of forces and the creation of synergies to develop a standard sector methodology for calculating emissions from logistics and freight transport.

Supported by UNEP, the European Environment Agency (EEA) and the EU project SuperGREEN, the workshop emphasised various aspects of the importance of measuring carbon footprinting and provided a platform to facilitate dialogue between the freight and logistics sector as a whole on how best to support “greening” logistics.

EcoTransIT World is available at www.ecotransit.org



Adapting Railway Infrastructure to Climate Change (ARISCC)

On 19 and 20 October 2010, UIC organised a workshop at UIC Headquarters in Paris to share the latest findings of the UIC project ARISCC, to discuss the next steps and to “touch base” with the UIC activity “Winter and Railways” to ensure maximum synergies between the two workstreams (see also Rail System, page 108).

The objective of the ARISCC project is to prepare rail infrastructure for when “today’s extreme weather becomes tomorrow’s normal weather”. The background for the ARISCC project is that railways have an extremely long life span and are built to withstand natural hazards. However, as the number and volume of incidents caused by extreme weather events increase in the future, pressure on the rail system’s capacity will rise together with sector costs. If the right measures are taken at the right time, the risk will be tolerable.

Participants from UIC Members, EIM and CER, as well as the railway supply industry, were brought together for a two-day workshop programme structured around the following three R’s: Readiness, Robustness and Recovery of extreme weather events.

SUSTAINABLE DEVELOPMENT

Railway freight noise reduction: improving acceptance of rail transport

The 6th annual UIC workshop on railway freight noise reduction, held on 23 November 2010 at UIC Headquarters in Paris, was attended by 60 participants. The main aim of the workshop was to report on the progress in terms of incentives for silent freight vehicles at European level and concerning LL composite brake block homologation. The conference was rounded off with additional talks on proximity issues in Canada, a description of the current UIC projects, an update on railway vibrations and a description of the STARDAMP (Standardisation of damping technologies for the reduction of railway noise) project.

The EU has undertaken several studies over the past few years concerning incentives. The method of choice for the EU is Noise Differentiated Track Access Charging (NDTAC).

As part of the recast of the first railway package the EU is amending Directive 2001/14/EC to allow NDTAC. An expert group will propose practical solutions for their implementation. The railway sector has reservations concerning the implementation of NDTAC and therefore suggests there should be a level playing field between road and rail and that NDTAC should not weaken the railway sector.

Progress in LL-block homologation: several working groups at UIC are looking at the issue of composite brake blocks, including brake block contours and position, winter properties, light-weight brake rigging as well as attending regular composite brake user meetings. The EuropeTrain will start operations on 6 December 2010 and will allow extensive testing of LL-blocks, in particular new contours and brake block positions.

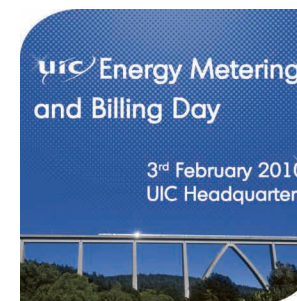


Energy Efficiency: UIC Energy Metering & Billing Day shows progress in implementation of metering systems

On 3 February 100 participants discussed the implementation of energy metering and billing systems for traction units on the UIC Energy Metering and Billing Day at UIC Headquarters in Paris.

The UIC Energy Metering and Billing Day formed the concluding event for the UIC Energy Billing Project, which over the last few years has developed standard business processes and established a traction energy settlement framework for railway undertakings and infrastructure managers for cross border traffic in Europe.

The results are published in UIC Leaflet 930. Together with the standardisation of metering equipment done by CENELEC, this will enable railway undertakings to pay their electric energy according to the actual consumption.



Long-term environmental strategy

MOVING TOWARDS SUSTAINABLE MOBILITY: APPROVAL OF EUROPEAN RAIL SECTOR STRATEGY

The long-term strategy outlining how the rail sector can reduce its environmental impact "Moving towards Sustainable Mobility: European Rail Sector Strategy 2030 and beyond", was approved during the UIC Regional Assembly for Europe on 1 December 2010 at UIC Headquarters in Paris.

The strategy, which is a joint UIC/CER paper, has been developed to provide a medium and long-term plan for the rail sector that fits in with wider environmental and policy goals.

The strategy suggests how the rail sector should be performing in environmental terms in the medium (2030) and long (2050) term in four areas: CO₂ reduction, energy efficiency, reduction of exhaust emissions (nitrogen oxides and particulate matter), and noise. It builds on the existing commitment made by CER Members in 2008 to reduce CO₂ emissions from rail traction by 30%. The new CO₂ reductions target is that by 2030, European Railways are to cut their average specific CO₂ emissions caused by railway operations by 50% compared to 1990, the base year.

The strategy is voluntary, and there will be no targets imposed on individual Members. However, Members are expected to accept the need to ensure their future plans follow its aims. UIC and CER will also be developing monitoring processes to ensure that progress is being made to achieve the objectives, and that a series of road maps allow for the development of more detailed work and activity plans to ensure progress takes place.

www.uic-org/environment/

Polluted soils: creating awareness at top management level for sustainable land use

The polluted soils and remediation network was created in 2007, as the issue came to the fore in the light of the proposed European Directive establishing a framework for the protection of soil and amending Directive 2004/35/EC.

An initial project was conducted in 2008 to establish a report based on a survey among UIC's EU railway Members on the pollution and remediation of soils.

The UIC Soil Network proposed to describe the state of the art concerning the soil pollution on railway properties and its remediation in Europe. The main objective of the research is to contribute to the harmonisation of the approach towards polluted railway properties within the European Union.

UIC commissioned Dutch foundation SBNS to investigate and describe the status quo of railway-related soil pollution in the Member States of the European Union. This study was based on a questionnaire sent to UIC's European Members.



On 14 and 15 October 2010, the UIC Expert Network on polluted soils and remediation organised a two-day seminar in Riga, Latvia, hosted by Latvian Railways. 50 participants from different European railways were welcomed by Mr Maris Riekstins, Director of Development at LDZ.

One of the main objectives of the meeting in Riga was to draw attention to the impact that soil pollution might have, not only on train operations, but also on the corporate financial position and reputation in society.

The UIC Sustainable Development Team has also been able to take a step back and think strategically about forward strategy. Together with UIC's partner CER, the team has forged agreement among European railways to establish firm targets and commitments to reduce CO₂, air pollution and noise. The next, even more challenging, step is to deliver these commitments, and to see whether such an approach can be developed for the global railway community.



A new UIC brochure entitled "Rail and Sustainable Development" highlights the advantages of rail transport for economy and society

*Mr Christophe Chéron,
SNCF (French Railways),
Chairman of the Research
Coordination Group (RCG)*



RESEARCH COORDINATION

Rail transport is a future-oriented global industry striving to offer an even more attractive, affordable, safe, clean, competitive and reliable transport mode, and provide its customers with services which are well-positioned within and interlinked with other modes of the global transport system.

The demand for transport worldwide is steadily growing and since rail is recognised as being an environmentally-friendly “green” form of travel, it would ideally be the preferred mode of transport in the system. However, with growing demand and growing transport volumes, rail transport is lagging behind. Therefore, the rail sector must ensure – through research and innovation – that this mode of transport born in the 19th century can cope with future challenges.

Innovating and harmonising products and technologies is a necessity for the rail market to deploy all its potential and to deliver cost-effective services for its customers.

Supporting the efforts of its Members and their needs to resolve operational questions and

problems through benchmarking, carrying out studies and engaging in research, development and innovation and developing common standards is regarded as an essential remit for the UIC.



Research ranges from collecting information and good practice to developing new knowledge and technologies and demonstrating the feasibility of its results. Research can be carried out through internal projects or by taking part in external projects such as those funded by the European Commission's (EC) Framework Programme, which in FP7 has roughly 500 million Euros available for rail research co-funding. The EC Framework Programme is open to participation by all UIC global members and for many, the same funding principles as for those from the EU Member States are valid.

The participation of UIC and its European Members in ERRAC (the European Rail

IRRB, a global structure linking key players in international rail research

Research Advisory Council) enables them to exert significant influence on the advice given by ERRAC to the European Commission in the drafting of its Work Programme and in the rail research topics open for funding in the Call for Proposals of the Framework Programme. UIC is therefore exerting greater influence on the development of the future rail system, its planned innovations and new standards.

Taking into account the specificities and schedule of the “opt-in” process, developed within UIC, it is strongly recommended to work towards multi-annual research projects and strategy.

Following the recent UIC reorganisation, a new model of coordination was designed to meet the association’s overall goals for better efficiency with improved consolidation, administration and technical processes, integration, economy and a global perspective of integrating and enhancing global knowledge. In line with the perception of the importance of research and development within the UIC, two new Statutory bodies were relaunched in 2010: the IRRB, the International Rail Research Board, and the RCG, the European Research Coordination Group.



The International Rail Research Board (IRRB) organised two official meetings in 2010, in Saint Petersburg and in Paris. In the meantime work has progressed steadily.

Mr Boris Lapidus, Director-General of JSCo Railway Research Institute “VNIIZht”, Chairman of the Unified Scientific Council of JSCo “Russian Railways (RZD)” was appointed Chairman of IRRB in December 2010 during the UIC General Assembly held in Beijing, due to his experience and leading role in the coordination of the railway research programmes in Russia.

Based on the new Terms of Reference and three strong pillars of action, a work programme has been developed and many activities are underway. These pillars of action deal with:

- Gathering and exchanging information on rail research projects and studies, Members’ and regions’ research strategies, test facilities, research institutes, details on specialised researchers and funding sources. This action also includes cooperation and sharing

information with the WCRR, the world reference for railway research, and setting up the UIC Research Portal interlinking global Members’ rail research databases

- Developing the assessment of the knowledge available and Members’ needs to establish and promote processes for identification and ranking of critically important issues, to identify the needs for standardisation and to check where the UIC Leaflets need to be updated to become voluntary global railway standards. Another mission consists in drafting an annually updated research strategy in close cooperation with UIC Departments, Statutory bodies and UIC regions.

The IRRB will additionally initiate and stimulate UIC studies and collaborative research projects among its Members based on the principle of a “variable geometry”

- Identifying how results from research undertaken can be made available and used towards solving problems and innovating in various aspects of the railway system. IRRB will also recommend ways of disseminating results in coordination with the WCRR management bodies

*Boris Lapidus,
Director General of JSCo
Railway Research Institute
“VNIIZht”, was appointed
Chairman of IRRB*



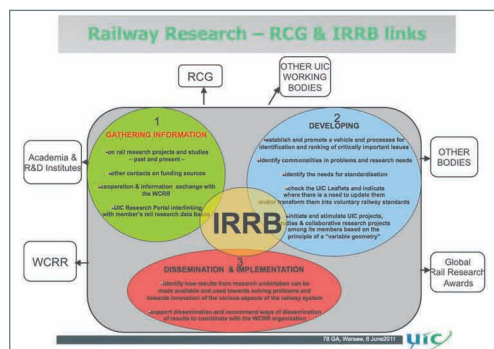
RESEARCH COORDINATION

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The UIC Research Portal, which is an essential tool for an efficient benchmark and cooperation policy, will be made available to the UIC Members and the global rail community on the occasion of the WCCR 2011 to be held in Lille, France, in May 2011. The UIC, as a founding Member and permanent organisation partner, is represented in the WCCR Organising (ORG) and Executive (EXE) Committees.

Furthermore, the IRRB will foster stronger cooperative ties with important global research providers and will stimulate technical development and innovation in the rail sector through the initiation of the UIC Global Railway Awards.



ERRAC is the European Rail Research Advisory Council where all European rail stakeholders such as operators, infra-managers, supply industry, research providers, user groups and EU Member States and Associated States coordinate and plan the future of the European railway system.

The main activity of ERRAC during 2010 was to draft the European Rail Research Roadmap for the coming years – focusing on delivery by 2030. The ERRAC Roadmap is coordinated by the UIC Fundamental Values Department and supported by the Rail System Department, while the Research Coordination Group (RCG) links UIC Members' needs to the input given to ERRAC, as well as the Roadmap process.

In addition to the management of the project, the dissemination and a work package which evaluates the implementation of results of past EU funded railway research projects, there are five "strategic" work packages with substantial influence from UIC and its Members. Four of

ERRAC Roadmap: UIC as a coordinator

these five strategic work packages, addressing environmental issues and greening, long-distance passenger and freight transport, intermodality issues, safety, security and competitiveness of the railway system (several Rail System issues), are either led or co-led by UIC Members.

In June 2010 the ERRAC Roadmap project published its first rail research roadmap. It was presented to the European Commission as well as to the rail community during the International Innotrains trade fair held in September 2010 in Berlin.

www.errac.org



Just like the IRRB, the RCG (Research Coordination Group) became an official UIC Statutory body in 2010.

The RCG aims to:

- Effectively support UIC European Members in their effort to coordinate EU research activities and UIC's input towards ERRAC
- Coordinate and propose common annual UIC research priorities (reporting to the European Management Committee/Regional Assembly for Europe on the draft research priorities for multi-annual planning)
- Exchange information on Members' research programmes and national projects
- Effectively interface with worldwide UIC research activities (e.g. IRRB)

Rail research activities within UIC have been developed taking into account the following issues:

- Efficient cross-sector coordination with all UIC Departments, Statutory bodies and UIC regions to collect and coordinate all research priorities and needs for standardisation
- The development of a central and high level consensus on the research needs and priorities of UIC Members and the development of a UIC multi-annual research strategy

- Clear and well coordinated input into the ERRAC process

A number of EU funded projects in which UIC and its Members are involved cover for example the following topics:

Projects run in 2010

- ERRAC Roadmap: Designing the "Route-map" (priorities and planning) for future rail research in Europe: Defines ERRAC input into EC Framework Programme
- SKILLRAIL: Education and Training for high skilled jobs in the railway sector
- EURAXLES: Reducing the risk of axle failure
- CleanER-D: Clean Diesel Engines
- RIVAS: Abatement of Railway Induced Vibration
- TRIOTRAIN: Wheel/rail interface; aerodynamics; catenary/pantograph
- INNOTRACK: Reduction of infrastructure maintenance costs and LCC by around 30%
- INFRAGUIDER: Assessment of the environmental impact of railway infrastructure
- RAILENERGY: Energy efficiency technologies and operations (recently ended)



RESEARCH COORDINATION

The RAIENERGY project

The Railenergy project, aiming to increase the energy efficiency of integrated railway systems by investigating and validating solutions ranging from the introduction of innovative traction technologies, components and layouts to the development of rolling stock, operation and infrastructure management strategies, delivered a comprehensive catalogue of technical recommendations. The final outcome of the Railenergy project confirms that an average relative energy savings of more than 7% can be reached.

This collaborative rail research project contributed to European standardisation and provides technical recommendations for the procurement of rolling stock/infrastructure components and fleet refurbishment/infrastructure upgrade. The Railenergy website offers the “Railenergy Calculator” designed to support management decisions regarding the implementation of new technologies or operational measures in terms of their energy, CO₂ and economic performance. The Railenergy project is a good example of successfully linking research, standardisation and procurement.

All detailed information about the Railenergy project and its results can be found in Rail System, page 104 and on the official Railenergy website www.railenergy.eu.

PROJECTS RECENTLY BEGUN OR ABOUT TO BEGIN AND PROPOSALS PREPARED IN 2010

The UIC process of research coordination and input given to the ERRAC process in advising the European Commission has led to the publication of a number of important research topics in the 3rd call for Proposals of the EC 7th Framework Programme. UIC has contributed towards the drafting and is a partner in the main EC funded projects on rail from the 3rd call for which the evaluation and negotiation process with the European Commission has been positive:

- AUTOMAIN: Optimisation of Maintenance, Allocation and Inspection of Track
- MARATHON: Fast implementation of technologies, operations and business practices (longer and heavier trains, better service and lower cost)
- SPECTRUM: Increasing freight competitiveness in low density, high value market
- SUSTRAIL: Sustainable and competitive freight transport by reducing maintenance and costs
- PROTECTRAIL: Security in railway areas, risk management, new technology, joint procedures (see also Security, page 71)
- RIVAS: Abatement of Railway Induced Vibration

Most of these have started their work or are about to start.

Also in 2010, active work was carried out for the preparation of project proposals for the 4th call of the Framework Programme for EU funded research. UIC will be a partner – and in some cases even the project coordinator for the following successfully evaluated proposals:

- MAINLINE: MAINTenance, renewaL and Improvement of rail transport iNfrastructure to reduce Economic and environmental impacts – UIC project coordinator
- D-RAIL: Reducing derailment of freight trains – UIC project coordinator
- RESTRAIL: Reduction of suicides and trespasses on railway property – UIC project coordinator
- EUREMCO: Electro Magnetic Compatibility (EMC)
- TRA: European Sustainable Transport Research Conference – introducing Rail Research

These projects are set to begin towards the second half of 2011. Considerable effort will be carried out by the UIC Fundamental Values Department together with the UIC Rail System Department to inform UIC Members about the content and deliverables of all above-mentioned projects and gather comments, suggestions and feedback from related UIC experts to be considered during the running of the projects.



INFRAGUIDER: guidelines to assess the environmental impact of railway infrastructure



Fully accomplishing its mission as the designated partner in charge of the InfraGuidER consortium's dissemination activity, UIC succeeded in effectively bringing together a diverse range of participants from Europe and beyond (e.g. the European Commission, procurement directors, senior purchasers, maintenance process managers, R&D specialists, environmental advisors, etc.).

For two years, the work has involved exchanging views, know-how and implementing a solution tool-box ranging from solid transparent methodology for innovative eco-procurement processes, recommendations and guidelines for the introduction/enhancement of environmental management schemes (based on ISO 14000 series) for railway infrastructure managers, to material accounting and decision support expertise. Overall they represent environmental specifications for railway infrastructure, including a recommended set of indicators and some reference requirement values.

The InfraGuidER project, with the involvement of Central, North and Eastern European infrastructure managers, academia and the supply industry, has led to a mature ambitious proposal for improving "business as usual" tendering processes by integrating it with new eco-procurement criteria. One of the main outcomes is that policy priorities should be placed in the following order: "Prevent and limit", followed by "Management and control" and finally "Remediation". This sequence should be assumed considering that the respective order of magnitude cost increases tenfold from the first to the last. The challenge remains to broadly adopt such policy whilst maintaining economic and social competitiveness.

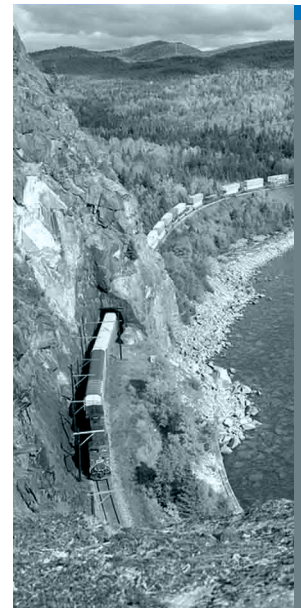
New criteria were designed in the proposed network materials procurement methodology, aiming at minimising material life cycle-related risks such as the negative impact of climate change, natural resources depletion and hazardous substances handling. It is time to rethink policy and processes, phase-out selected materials, set up environmental management scheme reviews, use the best available technologies, maintain better collaborative links with the supply industry, promote R&D and compound solution patterns! Simple business changes could constitute low hanging fruits.

InfraGuidER partners also benefited along the way from some inspiring external contributors as the new procurement scheme set up by Dutch infrastructure manager ProRail – "CO₂ performance ladder" – which is being implemented by tender practitioners, applying award advantages to virtuous suppliers and the Norwegian infrastructure manager's (JBV) valuable business experience in procurement.

A dynamic and inclusive approach in tackling issues has enabled the InfraGuidER partners to successfully deliver a tool-box for railway infrastructure managers, supporting them in decision-making, and keeping the railway sector green, strong and competitive.

The InfraGuidER project constitutes a stimulus for further European harmonisation in railway infrastructure material procurement and management, enhancing rail's current environmental performance.

www.infraguider.eu



TECHNICAL ACTIVITIES
Rail System

92



UIC TECHNICAL COOPERATION BODIES			
PASSENGERS	FREIGHT	RAIL SYSTEM	FUNDAMENTAL VALUES
CER / UIC High Level Passenger Meeting	CER / UIC High Level Freight Meeting	UIC Rail System Forum	
UIC Passenger Forum	UIC Freight Forum		
High Speed Plenary Committee	CTG Combined Transport Group with INTERUNIT (UIRR)	Track and Structures Sector	Environment, Energy and Sustainability Platform
Station Managers Global Group -SMGG	Special Groups Wagonload -Xrail -IFC	Train Dynamics and Running Gear Sector	Safety Platform
Commercial Group	Special Group RAILDATA	Operations and Control, Command and Signalling Sector	Security Platform
Technical Group	TAF TSI -Deployment -CCG	Energy Management Sector	Expertise Development Platform
	Use of Wagons -RIV -GCU Joint Committee (UIP, ERFA)	Rolling Stock Sector	International Railway Research Board (IRRB)
	GTE Intercontinental Freight Corridors		Research Coordination Group (RCG)

One of the major organisational measures put in place following the reorganisation of UIC was the merging of all components of the rail technology and operations system into a single Forum and Department, which until then had been run as separate bodies (Infrastructure and ERTMS, Technology and Research).

Consequently, the new UIC Rail System Forum, backed by a reorganised department, addresses all the decisive issues in railway technology operations and their interfaces as a coherent whole.

Five main areas of activity have been defined within the Rail System Department (RSD) and constitute the following sectors:

- Track and Structures
- Train Dynamics and Running Gear
- Control, Command, Signalling and Operations (CCS & OP)
- Energy Management
- Rolling Stock

Furthermore, cross-sector cooperation is encouraged in all the key areas influencing the performance of the rail system, whether it be with

the UIC Passenger and Freight Departments or the areas of environment, energy, sustainable development, safety and security or research.

The Forum's activities are giving rise to new regional and multi-regional projects which can be tailored to specific regional needs, whilst benefiting from the technical support of UIC experts.

The main objectives consist in:

- Promoting and developing, through the UIC Rail System Forum, a global rail system in order to meet future demands
- Providing the technical and operational preconditions for railway undertakings and infrastructure managers, successfully competing with other modes of transport worldwide

In 2010, the Rail System Forum completed two basis documents, the Terms of Reference (ToR) and the first draft of the "RSF Outlook & Vision" to be approved in 2011.



The UIC, in full synergy with its Members and its partners, is committed more than ever to making rail transport the most efficient, safe and sustainable mode of transport, attractive for customers and well accepted by citizens who are increasingly sensitive to environmental issues.

In this context UIC as the international technical cooperation Platform, manages a number of complex projects on behalf of the European and worldwide railway community, aiming to bring the railways the full benefits of performance, competitiveness and sustainability improvements. UIC's technical work and expertise support the action of political railway associations towards the European institutions, the Commission and ERA (European Railway Agency).

In the domain of the Rail System, the Forum promotes technical cooperation between its Members to improve the railway operations and services provided for their customers, whilst not interfering with their commercial and managerial autonomy. It also strives to maintain and develop interoperability of the rail system and strengthen its competitiveness. The global aims of the Rail System Forum are as follows:

- Create new potential for the railways
- Ensure efficiency and quality in production/ operations
- Improve availability of the means of production
- Optimise the Life Cycle Cost (Maintenance, Renewals and Operations)

Three main pillars have been identified within the Rail System Forum's core business:

- Standardisation
- Research and Development (R&D)
- Benchmarking and Deployment

The Rail System Forum (RSF) is the decision-making body governing the activities of RSD.

The Forum meets its objectives by:

- Preparing proposals for bodies responsible for establishing standards and specifications
- Acting as a technical body for the Community of European Railway and Infrastructure Companies (CER), the European Infrastructure Managers Association (EIM), ERA and other railway trade associations
- Executing and managing projects and activities, including research and development and economic questions, as far as necessary for technical issues
- Ensuring Members are provided with services in their common interest and that services in line with its purpose are provided against payment for third parties. Part of this activity is benchmarking
- Promoting exchanges of information and experience

The Forum also:

- Defines, together with the other Forums, the rules for the interface between the infrastructure managers and the operators, in particular in the areas of safety and operations
- Proposes projects and activities to be carried out in the interests of its Members
- Adapts projects carried out in Europe to the needs of Members worldwide

First UIC Rail System Forum Plenary inception meeting held in Paris

On 26 October 2010, the newly appointed Chairman of the Rail System Forum (RSF) Zbigniew Szafranski (PKP/PLK) opened the first Rail System Forum Plenary Session meeting by welcoming 40 UIC Members from Europe, China and Russia. The Rail System Forum is now the largest technical body within UIC and covers the entire technical part of the rail system.



Mr Emilio Maestrini, UIC Director of the Rail System Department

Emilio Maestrini, UIC Director of the Rail System Department, reported on the most important projects and activities in 2010 such as the dissemination of results of Railenergy, I N N O T R A C K (Innovative Track Systems) progress of INESS (INtegrated European Signalling

System) and the EuropeTrain project aiming at reducing noise emissions from freight wagons.

The RSF Terms of Reference were approved unanimously by all Members of the RSF Plenary Session. This document forms the basis for all RSF internal processes and clearly describes the interfaces with other bodies and Platforms. It will enable an efficient and structured workflow.



Zbigniew Szafranski presented the final and approved membership of the RSF Steering Board with its 5 sector Chairmen:

- Andy Doherty, NetworkRail, for the Track and Structures sector
- Michele Mario Elia, RFI, for the CCS and Operations sector
- Pierre-Etienne Gautier, SNCF, for the Train-Track Interaction sector
- Joachim Mayer, DB AG, for the Rolling Stock sector
- Emilio Maestrini, UIC, has been appointed interim Chairman of the RSF Energy sector

All sectors briefly presented the main activities of their sector, their standardisation efforts and outlook for the forthcoming period.

A draft of the RSF “Outlook & Vision” document was presented at this 1st RSF Plenary meeting. The document is a roadmap for work in the Rail System Forum and provides initial ideas on how to address the challenges the railway sector will face in the coming decades. The RSF Plenary Session underlined the fact that this Strategic programme will need to be completed iteratively with input from all sectors. The “RSF Outlook & Vision” document will be available in late 2011.



“RSF Outlook & Vision”: defining the way ahead

The “RSF Outlook & Vision” document is a roadmap with a long-term horizon for the development of rail system. It enables an easy assessment to be made of all future activities and the setting up of annual work programmes. The main target groups are the Programme Managers, the Steering Committees, the RCG Chairman, the RCG/ERRAC Interface Managers as well as all Members of the UIC Rail System Forum.

The Rail System Forum is tasked with supporting all UIC bodies dealing with technological development and research, system related transversal matters such as safety and environment – in order to develop an integrated rail system. The sector contributes to the holistic development of the rail system and enhances its competitiveness with other modes of transport.

The “RSF Outlook & Vision” has identified the following mega trends and challenges for the socio-economic, ecological and technical development in Europe until the year 2020:

- Transport
- People
- Environment
- Politics

With people and the economy changing quickly, the Railways have to find the right answers to comply with the needs of tomorrow’s passengers and customers. Based on this, eight strategic goals have been set to identify the framework for finding concrete answers to the future socio-economic, ecological and technical challenges in tomorrow’s Europe.

- Driving the global system
- Environment
- Economics
- Capacity
- Safety
- Security
- Service
- Human Resources and Know-How

This programme is not supposed to compete with other platforms’ strategies but to be regarded as a supporting part of a common UIC strategy paper to address tomorrow’s challenges. It will be in line with the global strategy of the railway community. This working paper will trigger the necessary discussion with other UIC bodies and the railway community.



2nd UIC International Conference on Traffic Management and Train Control-Command and Signalling Systems in Tokyo



The UIC Global Conference on "Control Command and Signalling systems" held in Tokyo in June 2010 was inaugurated by Mr Yoshio Ishida, UIC Chairman

More than 200 representatives from the railways, supply industry, research centres, national authorities and leading institutions met in Tokyo, Japan, on 7 – 9 June (with a technical visit in Sendai closing the conference), to discuss and take stock of progress in railway signalling, control-command and telecommunications at global level. All the players involved in these key areas are continuing their efforts to establish common core functionality within the near future.

Following a successful 1st conference held in Istanbul in October 2008 at the invitation of Turkish Railways (TCDD), this 2nd edition held in Tokyo gave experts the opportunity to continue to share information and experiences, as well as to find possible answers to enable a converging base functionality to be established in the future.

More than 20 countries were represented at this 2nd edition, among them the USA, Korea, Kazakhstan, Russia, Iran, Japan, Finland,

France, Latvia, Italy, Poland, Belgium, UK and Sweden, showing significant interest in this area of the railways. The conference was jointly organised by UIC and East Japan Railways (JR East) which hosted the conference close to Tokyo's Central Railway Station, at the invitation of Mr Yoshio Ishida, Vice Chairman of JR East and UIC Chairman. "It is no coincidence that this 2nd edition is held in Asia, insofar as it's certainly nowadays one of the most dynamic areas, based on rapid expansion in high speed rail, technical achievements in signalling systems and information systems" said Mr Jean-Pierre Loubinoux, UIC Director-General. As an illustration of the huge activity in this part of the world, railways transported 14 billion passengers in 2007 in the Tokyo area, and 5.5 billion by JR East, with approximately 17 million of these passengers using JR East every day. Taking into account the various advantages and potential of the railways, Jean-Pierre Loubinoux added that "the railways bridging people from the Atlantic to the Pacific is no longer a dream but a reality".



2nd UIC International Conference on Traffic Management and Train Control-Command and Signalling Systems in Tokyo

Mr Yoshio Ishida welcomed the participants and looked back to three years ago when the conference was first established, reminding participants that it was the Executive Board in Delhi in March 2007 which mandated him to lead an initiative to establish the basis for the migration to a global train control system with a long-term view. Mr Ishida underlined the importance of this legitimate global initiative in order to develop safer, more reliable and more comfortable railways, underlining that this issue was not easy to achieve. But continuous efforts by all players to improve it would surely lead to railways having a consistent advantage over other transport modes.

Jean-Pierre Loubinoux reminded participants that “UIC initiates more than 200 projects of universal interest”, and among them those “confronted with rapid technological development where railways are not necessarily in a leading position, in other words automation, telecoms, IT, global navigation, etc.”. If the strategic issues have been identified –

convergence of core functionalities, identification of best practice, particularly in terms of Life Cycle Costs done with the help of the supply industry – modularity and flexibility of all solutions remain a necessity. For him, the keys to success are based on the need for more collaboration and bringing all players closer together. It is necessary to put together the “know-how”, to create the framework of unity and to link the work carried out in the railway signalling domain, taking into account the issues of leading world organisations, in reference to the recent international agreements or memoranda of understanding signed by UIC with the World Bank, UNECE and UNESCAP, etc. He concluded with a few words that could also have been used as the motto of the conference: “This convergence would be a good signal...for a good signalling conference”.

Several UIC experts took the floor during the conference, among them Mr Emilio Maestrini, UIC Director for the Rail System Department, Mr George Barbu, UIC expert on Global

Signalling, who moderated various sessions, Mr Dan Mandoc, Senior Advisor for GSM-R who delivered a presentation on train-ground radio-communication and Mr Cho Ho Kwon (UIC, Korail) who presented the “System architecture to converge traffic information”. CER Deputy Director Libor Lochman took the floor to present the overall European vision on train management and traffic control, interoperability-oriented TM&CCS, and underlined the “need for multimodal traffic control arrangements”.

This conference gave an insight into development trends, focusing on strategic issues and working towards more convergence. Various signalling systems were presented such as PTC (to be implemented in the USA), ATACS (Japan), ERTMS (implemented in Europe), GPS, EOT, ATC-ATS (“Automatic Train Stop” and “Automatic Train Control”) used for commuter lines in the Tokyo metropolitan area and to contribute to enhance safety and availability. The next edition is expected to take place in 2012 in the USA.

Railway radio communications system: UIC published study on “Future Railway Mobile Telecommunications Systems”

EUDDplus future European driver's desk: final conference in Paris

The EUDDplus (European Driver's Desk) project came to an end in 2010 and the final conference revealed the current results of the project, mainly concerning those obtained from the tests carried out at the Wildenrath test ring (Siemens test centre near Mönchengladbach in Germany). 17 European drivers tested the “PRIMA II” locomotive equipped with a driver's desk incorporating the latest developments in cab standardisation, according to UIC Leaflet 612. The test results were presented during the final conference and were of significant interest to the audience.

The ergonomics of the new driver's desk were presented with interesting comments from the drivers and ergonomists. The presentation of the results from the tests with an “eye-tracking” camera was very important to show the real movement of the driver's eyes when seeking a solution in the event of a problem.

The working groups on cab standardisation will incorporate the results of this study in the necessary revisions to current drafts (on work) of documents defining cab standards. This EUDDplus deliverable now presents a new important step in the process of cab standardisation work.

The Future Railway Mobile Telecommunications Systems Study is a UIC project to assess and shape the future of railway mobile communications over the next ten years and beyond. Participants in the study have included national railways, the supply industry and other telecommunications experts. One of the key objectives of the study is to identify suitable candidate technologies for railways to use after the obsolescence of GSM-R.

Mobile radio has evolved within the railways from analogue to digital telecommunications systems, offering seamless connectivity and functionalities, thus improving operations. Telecoms have introduced a new level of signalling excellence meeting very strong demands, where a reliable communications layer is essential for the transmission of very precise train movement authorities.

Through nationally integrated communications, information systems are built, from railway station to core management servers. The national railway networks are interconnected, and with the development of transit routes, a Europe-wide network is under construction.

Railways generally use off-the-shelf technologies and add applications to meet specific services and quality demands. In order to obtain the required result of properly functioning modified technology, railways must work together to agree on a set of basic concepts, which can then be introduced as standards, norms or specifications.

GSM-R is a successful example of this process: in 1992, railways selected technology which was readily available on the market (GSM-R is based on the GSM Standard). Today, over 68,000 km

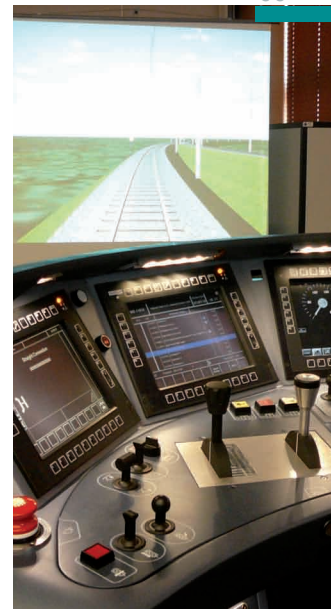
of lines are equipped and operate with GSM-R in Europe, and more km are in operation or under implementation abroad. Today GSM-R is the radio digital system, enforced by European law and a significant component of ERTMS.

When using a technology similar to public telecoms operators, it is vital to monitor technological trends and constantly keep up to date to avoid a system becoming obsolete and no longer supported.

The mobile telecommunications industry intends to migrate most existing technologies towards the Long Term Evolution (LTE) technology. Strong commitments have already been made by Suppliers and Public Mobile Operators regarding the implementation of LTE and the first set of implementations will take place in 2010/2011.

LTE is seen as the main candidate for the so-called 4G technology. It is considered to be a turning point for telecoms, since it affects all end-to-end components (core, backbone, radio network, terminals) – all components are migrating towards IP and a software defined network elements concept.

An assessment of the impact of new technology on GSM and therefore GSM-R was needed. UIC made the first step towards this objective by publishing a technical report in September 2009 on the potential for LTE to meet railway needs. It was presented at ERIG, the UIC ERTMS Platform and at the Infrastructure Forum. Since answers to vital questions were needed, a follow up study, “The Future Railways Mobile Telecommunications Systems Study” was started in 2010.



UIC publishes two new Interim Specifications to improve use of the GSM-R rail radio communications system

UIC has produced two new Interim GSM-R Specifications – the “EIRENE Functional Requirements Specification version 7.1” and the “EIRENE System Requirements Specification version 15.1. These specifications contain new features, which improve and facilitate the use of GSM-R, the dedicated rail radio communications system, and are considered strictly optional. This means they do not affect the EU Control Command and Signalling Technical Specifications for Interoperability (CCS-TSI). The GSM-R Specifications considered by the European TSI remain the EIRENE Functional Requirements Specification version 7 and the EIRENE System Requirements Specification version 15, part of TSI CCS – Annex A.

The EIRENE Interim Specifications were agreed upon with the European Railway Agency (ERA), the Community of European Railways and

Infrastructure Companies (CER), the European Rail Infrastructure Managers’ Association (EIM), the Association of European Rail Industry (UNIFE) and the GSM-R Industry Group (GSM-R IG). The specifications offer access to improved features such as Shunting, EIRENE Data Only Radio (EDOR) – only the FRS part – or Alerting of a Controller.

The unified railway radio communications system GSM-R has until now been rolled out over 65,000 km of track in Europe, and is also under implementation outside Europe (China, India, Australia, Saudi Arabia, Turkey, Algeria). It is expected that the roll-out of GSM-R in Europe will cover about 140,000 km by 2015.

They are available on the UIC website: <http://gsm-r.uic.org>

Economic Evaluation of the European Rail Traffic Management System (ERTMS): Results of the study “ERTMS Benchmark on Costs”

The deployment of the European Rail Traffic Management System (ERTMS) continues to be high on the agendas of almost all European and international organisations and associations in the railway business.

The current challenge is to migrate from around 20 different legacy control-command systems in Europe to a single solution – ERTMS. Key factors in facilitating the above-mentioned migration and implementation are the life cycle costs of this new automatic European control system. The railway sector has supported developments in the field of ERTMS from the outset, and has remained involved in the implementation of the system.

On this occasion, UIC presented some intermediate results of the study “UIC ERTMS Benchmark on Costs” in September 2010 that had been prepared by a dedicated UIC working group of 21 Members from 14 European countries starting in 2008. In total, 20 LCC cases in three different benchmark pools (ERTMS/ETCS Level 1 infrastructure, ERTMS/ETCS Level 2 infrastructure and ERTMS/ETCS On-board) have been examined. This workshop was an opportunity for major players (EC, ERA, CER, EIM, NoBos, UIC and UNIFE) to meet and discuss economic models, cost databases and data gathering, and to share their direct experience and activity outcomes on the subject around the same table.



ERTMS Regional

ERTMS Regional is a UIC project, started in 2001, to specify and prove the feasibility of ETCS application on regional and secondary lines. ERTMS Regional is an infrastructure-related application to supply low cost infrastructure for lines with low traffic (headways between trains > 15 minutes) and lower speeds ($V < 120$ km/h). ERTMS regional starts from the premise that the trains and locomotives which access the ERTMS Regional lines are fully equipped with the ETCS on board, compliant with the current standard SRS specification for interoperability (variant 2.3.0d). It also employs the pre-installed GSM-R along the line, as the standard train – traffic control centre (TCC) communication.

The low cost infrastructure is due to the absence of track-side train detection systems (track circuits, axle counters) and the application and use of simplified points control from the TCC to enable trains to pass in stations. The train's location is communicated to the TCC via the EUROBALISES positioning system and the onboard odometry, ensuring safe operations even in the absence of trackside train detection systems. Given the low traffic and lower speed, this system in operation fulfils the high level safety target.

Marshalling operations are controlled locally when isolating and protecting the marshalling area from scheduled services.

At this stage the following specifications are available:

- Functional Requirements Specification FRS version 3.08 / Jan 2010
- Operational Scenarios version 1.09 / Jan 2010
- Operational Rules version 1.0 / October 2009
- General Technical Requirements Specification GRS version 1.0 / Jan 2006
- RAMS Requirements version 1.0 / Jan 2006

The pilot application is running in Sweden, by Bombardier, on a Trafikverket regional line Between Malung and Borlänge. The pilot system design has been based on the UIC specifications and has implemented the specific TrV requirements and operational rules.

Currently, tests are rolling out to enable the verification and certification of the application prior to its commissioning in commercial operation. This is expected to happen in autumn 2011 or early 2012.

During the tests more railway companies could have the opportunity to meet the Swedish pilot team and have discussions on the application feasibility and potential supply.

The UIC is following the test results with the aim to update the specifications and build on this basis a strategy on the ERTMS Regional implementation in Europe when considering the interest and requirements of other railways.

UIC's forthcoming activities in this context are:

- Collecting feedback from the bilateral contacts – improving UIC FRS and ORS
- Organising deployment of test results – supporting the proof of feasibility and enlarging the supply opportunities
- Including open interface specifications at FFFIS level referring to the UIC proposed architecture supported by Bombardier
- Organising the ERTMS Regional final conference to validate the concept, specifications and applicability within the context of ERTMS/ETCS development (no later than May 2012)



INESS, a concept for ETCS-compatible interlockings



INESS (INtegrated European Signalling System) is currently the largest and most important project in the control-command and signalling domain.

INESS' overall objective is to help accelerate ETCS deployment by developing ERTMS/ETCS-compatible interlockings and win-win prerequisites in relation with the railway supply industry.

INESS is moreover a development and shared implementation of an interlocking concept which is capable of:

- Fulfilling the core interlocking requirements in Europe
- Being cost efficient
- Corresponding to the business criteria of users and suppliers
- Offering high modularity for implementation purposes
- Disposing of fully specified interfaces enabling wide interchangeability of modules produced by various suppliers, with particular focus on their application in an ERTMS/ETCS context.

Worth a total of €6 million, the project brings together 30 partners from the railways, the supply industry, academia and research bodies. UIC ensures the coordination of the project and also has a significant technical contribution.

The last two years of work in INESS have marked important progress:

- Clear and consistent definition of the project's focused workflow
- Validation by the railways of the generic requirements, based on the EURO-INTERLOCKING research
- Insertion of the specific ERTMS/ETCS functions and requirements for compatible interlockings
- Specification of the strategy for further verification of requirements via semi-formal methods
- Adoption of functional architecture and identification of significant interfaces, the priority for the full specification being the FFFIS (Form Fit Functional Interface Specification) of interlockings to ETCS Radio Block Centres
- Adoption of the strategy for using unified files and data formats for the system design

- Definition of the principles of the INESS business model

The work continues to:

- Specify, from a functional perspective, the reference architecture and relevant interfaces
- Specify data formats and data flow to be used in the suppliers' system design
- Verify the requirements via modelling when requirements are expressed in semi-formal language
- Develop testing and commissioning specifications and the formal, unified use of standard specifications for applying the safety case

The European Commission's Year-2 review in November 2010 stated the successful fulfilment of R&D objectives to date and may agree to a six-month extension of the project until March 2012.

www.iness.eu

Research/Rail Freight

CREAM project: successful implementation of operational and technical innovations for the South-Eastern European rail freight corridor



For four years, the work has involved developing and implementing concepts ranging from innovative telematic solutions to new rail services. At the end of 2010, with the project coming to an end, the partners delivered a comprehensive catalogue of technical and operational recommendations to a broad audience from all over Europe.

The CREAM project, with the involvement of central and south-eastern infrastructure managers, railway undertakings, carriers and shippers, has led to remarkable service and quality improvements. Although the rail freight sector had been challenged by the economic situation, increased transport volumes were achieved, resulting in a modal shift of 950 million tonne-kilometres in 2010. Altogether in the last four years 2.2 billion tonne-kilometres, corresponding to 115,000 truckloads, have been shifted to rail services. Based on the specifications of the Marco Polo Programme, the respective CO₂ savings are 145,000 tonnes and the external benefits come to around 44 million Euros.

The project partners formally signed a Management Commitment, in which they agree to follow and maintain a common quality management system to fix and ease internal and external processes, and clearly define interfaces.

One remarkable outcome is cutting the total travel time on the corridor e.g. on the Bosphorus Europe Express line connecting Ljubljana and Istanbul in 40 – 50 hours, with the train becoming faster than the truck. The CREAM project paved the way for further developments to the rail network to South-Eastern Europe. New connections are now in operation such as Antwerp to Sopron in Hungary as well as extensions of the existing corridor to Greece and a seamless multimodal service linking Turkish ports via ferry and rail shuttle to Germany.

New train concepts were put on track allowing freight trains to compete with road. In order to transport copper anodes between Bulgaria and the biggest copper manufacturer in Europe based in Belgium, rolling stock was changed and new loading schemes were developed. Simple but innovative changes turned out to be a success story.

The CREAM partners have been taking a holistic approach to freight transport services on the important South-Eastern corridor. All aspects of the railway business were taken into account. Border crossing procedures were analysed, the weak points identified and bottlenecks removed. Traction schemes involving multi-system locomotives were introduced. Other rolling stock

innovations such as a semi-trailer (floatrailer) developed to transport plate glass on rails and roads, and an easy system (ISU) to also load non-craneable semitrailers on conventional pocket wagons are to be highlighted. With operational measures and due to the implemented “string-of-pearls” concept, with terminals being managed like pearls on a string, freight trains have achieved a punctuality rate of 90%. This has been supported by innovative IT solutions for real-time tracking and tracing (Train Monitor System, NavMaster GPS-Devices).

This systematic and collaborative approach to meet the challenges has enabled the CREAM partners to ensure the freight sector on this corridor remains competitive and stays successful.





Railenergy project: working the switches for an energy efficient future

The large-scale collaborative rail research project Railenergy, targeted to increase energy efficiency of integrated railway systems by investigating and validating solutions ranging from the introduction of innovative traction technologies, components and layouts to the development of rolling stock, operation and infrastructure management strategies, provided its results with the final conference in November 2011, two European standards, a web-based calculation tool and a comprehensive website.

When the project was launched, the energy topic was not a priority on the political agenda. The consortium had a visionary idea of holistically improving the energy efficiency of the railway system. They aimed to maintain the sector's competitive advantages in relation to the other modes of transport and to ensure efficient and cost-effective movement of mass by reducing the specific energy in operation. The consortium therefore published a catalogue of energy saving methods and technologies including, among others, energy efficient driving and reversible direct current substations.

The final outcome of the Railenergy project confirms that an average relative energy saving of more than 7% can be achieved.

CONTRIBUTION TO EUROPEAN STANDARDISATION

One of the most important outcomes of Railenergy is the contribution to European standardisation, for instance the development of joint UIC/UNIFE Technical Recommendations. A Technical Recommendation (TecRec) is a joint UIC/UNIFE standard whose primary field of application is the European railway transportation sector, covering all interfaces and subsystems from vehicle to track.



TecRec 100_001 "Specification and verification of energy consumption for railway rolling stock"

Technical Recommendation 100_001 is applicable for the specification and verification of energy consumption of railway rolling stock. The criterion for the energy consumption of rolling stock is the total net energy consumed – either via the rail pantograph or from the fuel tank – over a predefined service profile, which is either taken from the future operation of the train, or according to a standardised typical profile valid for the specific service category of trains. This method secures directly comparable results by representing the real operation of a train.

The general purpose of this Technical Recommendation is to provide a comparative framework to evaluate energy performance values for train sets or locomotives on a common basis, thereby benchmarking and improving the energy efficiency of all types of rail vehicles. This recommendation is not suitable for comparison with other modes of transportation or for comparison between diesel and electric traction as it only deals with the energy consumption of the vehicle itself.

TecRec 100_001 will be transformed into a CENELEC Technical Specification (TS) at the end of 2011.

Draft TecRec 400_001 "Technical Specification for Reversible DC Substations"

The second Technical Recommendation developed is currently under revision with its publication foreseen for mid-2011. The standard will cover a complete set of functional requirements for 1500 V and 3000 V traction converters for more efficient recovery of braking energy in DC traction systems through reversible DC substations.

All UIC/UNIFE Technical Recommendations are downloadable free of charge from

www.tecrec-rail.org



RAILENERGY CALCULATOR

The Railenergy calculator is a web-based decision support tool for the European rail industry to align energy calculations, methodology and increase common understanding sector-wide. It is first and foremost a business-to-business screening tool for R&D, procurement and upgrade projects. The tool performs analysis and prediction of energy savings, CO₂ emissions and simplified life cycle costs.

The tool will help system integrators to assess technologies installed in future competitive rail vehicles and infrastructure components. Likewise, railway operators and infrastructure managers will benefit by being able to evaluate the operational, technical and strategic investment opportunities for energy efficiency solutions within procurement, leasing, operation and maintenance of railway systems.

The tool is available on the front page of the project website www.railenergy.eu

TECHNICAL AND OPERATIONAL RECOMMENDATIONS

The Railenergy recommendations have been developed and applied throughout the entire project. The recommendations are built on an approach which consists of three levels: a technical level, an operational level and finally an economic/strategic level. Collected data has been simulated, calculated and evaluated to finally be assessed strategically.

In the project four specific service types and energy supply types (DC, AC, high speed, and diesel rail services) were investigated.

An executive summary report can be found at www.railenergy.eu



How to measure & analyse energy in railway systems?

- Common simulation methodology
- UIC / UNIFE TecRec 100_001

How to compare & prioritise different measures?

- Cost-benefit & effectiveness
- Railenergy calculator
- Market readiness

How to define, browse & collect energy data?

- Railenergy KPIs
- Energy & CO₂ database



How to save energy costs?

- LCC screening
- In/out of service view

How to benchmark energy performance?

- Railenergy performance baseline
- Ranking of saving potentials
- Technology Assessment Reports
- Strategic Assessment Reports
- Practical check lists for professionals



Clean European Rail-Diesel: tackling the challenge of reducing diesel emissions

CleanER-D (Clean European Rail-Diesel) is a research project partly funded by the European Commission under the 7th Framework Programme that started in June 2009. This four-year project aims at developing, improving and integrating emissions reduction technologies for diesel locomotives and railcars.

In 2004, the European Commission amended the Non-Road Mobile Machinery Directive (NRMM). This amendment (2004/26/EC) placed railway engines in the scope of the Directive, from which it had been excluded until then. The change from stage IIIA to stage IIIB only three years after the implementation of IIIA as far as locomotives are concerned represents a major step in terms of engine and after-treatment technology. Due in particular to limitations of weight and space inherent to railway vehicles, advanced technical adaptations will be necessary. It has become clear that locomotive technology in particular will not be mature before exhaust gas requirements, according to stage IIIB, come into effect in 2012.

The CleanER-D project was launched to tackle the technical challenges that need to be solved in order to comply with this new emissions regulation. The quantitative target of the project is to achieve emissions levels within the limits established by the new European Directive 2004/26/EC and to be prepared for further regulations by evaluating the best possible innovative solutions. Hybrid technologies will also be evaluated for their contribution to the reduction of energy consumption and CO₂ emissions. The 26 consortium partners from all over Europe are working in close collaboration to achieve the goal of greening diesel vehicles.

The research work in the CleanER-D project is divided into several subprojects. A technical management team ensures a harmonised work flow between the subprojects and takes care of system integration.

The main goals of the project are to demonstrate the feasibility and the in-service reliability of diesel-powered rolling stock with engines compliant with the requirements of stage IIIB of the Non-Road Mobile Machinery Directive.

To ensure the success of the project target, three operational projects have been established. Two of them focus on re-powering existing diesel vehicles with a low emission engine. The re-powering exercise will be performed on a railcar and a locomotive.

A class 842 rail car operated by Czech Railways will be redesigned with two 242 kW TEDOM horizontal engines. The partners are confident that it will be a success due to the know-how of Czech Railways on railcar repowering; in an earlier project the state railways refurbished the class 842 rail car (an earlier version of the 843) with stage IIIA engines.

In the locomotive project, Deutsche Bahn provides its class 225 locomotive which will be refurbished with an MTU 1600 kW 12-cylinder engine. The locomotive interior will be completely dismantled and equipped with a brand new auxiliary system assembled around the engine in consideration of space and weight constraints.



The third demonstration project involves the installation of the new generation Caterpillar 16-cylinder engine of above 2000 kW into a newly designed Vossloh locomotive. The technical installation of this new engine into a new locomotive offers greater flexibility than the repowering schemes; nevertheless, the subproject partners will face challenges in mounting this powerful engine designed for heavy haul operations due to the weight restrictions associated with the locomotive's typical European four axle configuration. As a result of this demonstration project, the entire consortium will gain useful and verified technical information from a stage IIIB design compared with a stage IIIA system.

The European railway sector endeavours to meet new challenges such as increasing energy prices and stricter environmental frameworks set by the European Union. While rail is the most environmentally-friendly transport mode, diesel-powered vehicles – which still account for around 20% of European operations – remain the sector's weak point; special attention must be devoted to improve their emissions performance and to decrease their overall

negative environmental impact. These socio-economic and environmental aspects will be investigated in the sustainability subproject. The calculation of life cycle costs and the development of a methodology of cost/benefit analysis are core elements of this specific work. Finally, optimisation of technical solutions and possible trade-offs will be studied and identified.

The CleanER-D project comprises two scientific subprojects, aimed at enhancing the development of intelligent solutions to boost the compatibility of the railway sector in comparison with other modes of transport.

The state-of-the-art and innovative after-treatment technologies will be examined and the potential for further improvements evaluated. Recommendations for the most promising technologies will be summarised, providing comprehensive information for rolling stock manufacturers as well as railway operators. To ensure maximum exploitation, the partners will look outside the railway sector – review the achievements of other modes of transport and assess the transferability to the rail sector.

The hybridisation of diesel vehicles, currently the most promising medium-term technology in achieving prospective environmental requirements including CO₂ emissions reductions, is also taken into account in the CleanER-D project.

The Hybrid Solutions subproject is evaluating potentials for energy savings and for the reduction of emissions resulting from the implementation of different energy storage technologies. The investigations for hybridisation of a diesel-driven rail vehicle will lead to the most promising propulsion system architecture with an appropriate energy management, combined with a state-of-the-art energy storage system.

The main results expected from the CleanER-D project are the provision of a holistic vision of the future of diesel application to the railway sector and the presentation of two proven stage IIIB locomotives equipped with engines from two different manufacturers as well as a railcar powered by a forward-looking stage IIIB diesel engine.

www.cleaner-d.eu

UIC multi-regional projects: European-Asian project proposals at Rail System Forum

For the first time European experts will be working in close cooperation with Chinese experts on a selection of projects in the context of a Global Project Management system as part of the new UIC strategy outlined by UIC Director-General Jean-Pierre Loubinoux.

Four projects were presented at a working session of the Rail System Forum in June, covering topics from Infrastructure to Rolling Stock.

The projects comprise high speed rail turnout, high speed rail expansion joints, interconnecting gangways for coaches and diagnostics on passenger rolling stock (the latter two are in the form of UIC Leaflets). The Chinese Ministry of Railways has proposed to carry out these projects in direct cooperation with the UIC Passenger department and the Rail System Forum.

There are plans to involve universities in this Asian region proposal to ensure the results are highly interoperable, within European standards and in compliance with the safety criteria in Europe. A call for experts interested in taking part will be launched by the UIC Rail System Department for the development of these project proposals.



“Winter and Railways”: a UIC experience exchange platform

During the last winter seasons many railways were challenged by the weather conditions severely impacting their daily train operations and the availability of their railway infrastructure. The problem that occurred clearly shows that the railway system is sensitive to all kinds of winter conditions. Problems and impacts such as iced-up couplings, trains stuck in snow and frozen switches among others were reported by both train operation companies and infrastructure managers. New rolling stock and infrastructure components were often highly impacted, whereas old components and rolling stock proved more reliable.

UIC was requested by several Members of the Rail System Forum (RSF) to set up a “Winter and Railways” Experience Platform allowing Members to discuss the problems and challenges, and subsequently allowing good practice to be shared in order to be better prepared for future winter periods.

At the end of 2010 UIC established an online information Platform with good practice from and for its Members summarised in fact sheets and downloadable without restrictions.



The “Rolling Stock” sector terminated its activities and used the information collected to contribute to the revision of European Standard prEN 16251 “Railway application –

Environmental conditions – Design and test of rolling stock under severe conditions” via UIC Members.

UIC in cooperation with Swedish infrastructure manager Trafikverket organised a seminar on “Winter and Railways” in Stockholm on 3 May 2011. Various proposals to mitigate the consequences of the winter period were presented as well as the study identifying root causes and economic consequences of the winter period for railways. Manufacturers and suppliers of switches took an active part in the seminar. The seminar concluded with new proposals to improve the performance of switches and crossings during the winter period, to be further discussed together with the supply industry.



LICB – Lasting Infrastructure Cost Benchmarking at a new stage of development

UIC has been engaged in cost benchmarking activities together with a number of its Members for over fourteen years now, particularly in the area of Infrastructure Maintenance and Renewals. UIC’s LICB project has established an international cost comparison on renewal and maintenance of railway infrastructure with fourteen European railways currently involved. In order to preserve the value created by InfraCost, the initial project started in 1996, the “Lasting Infrastructure Cost Benchmarking” (LICB) was established in 2003 to guarantee a UIC-led platform for a continuous comparison and trend tracking.

In recent years, Members have identified the need for some “overhaul” of LICB to not only preserve the value created so far but also to revitalise and enhance the activity. A very ambitious work plan was established. The main issues relate to:

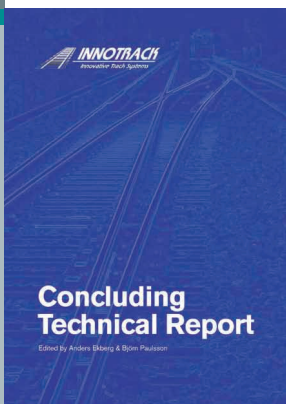
- The improvement of the methodology by assessing what needs to be done for a more specific comparison of line categories (e.g. main lines, high-speed lines) and to create a refined standardisation methodology of the railway costs, also taking into account the different stages in the infrastructure life cycle
- Optimisation of data processing – how information assessments and evaluations can be simplified and data quality (input and output) be improved

LICB participant Members are satisfied with the work carried out to date and hope to have a “reshape” cost benchmarking as soon as possible following the implementation of the new methodology and software.



Infrastructure/Railway Technology

INNOTRACK Concluding Technical Report: The importance of railways to potentially increase in future if emerging demands can be met



The INNOTRACK project (Innovative Track systems), launched in 2006, was a joint response by the major stakeholders in the rail sector – infrastructure managers, railway supply industry and research bodies – to further develop a cost-effective, high-performance track infrastructure by providing innovative solutions towards the significant reduction of both investment and maintenance related to infrastructure costs. UIC acted as a coordinator for this European project, divided into six related sub-projects.

Recently the railways have been facing new demands. Higher speeds and higher axle loads (often in combination), higher availability, fewer disturbances and reduced LCC are examples of the most predictable demands. At the same time, environmental demands and safety requirements must be fulfilled. Most railways also have many bottlenecks, at which the margin for disturbances is very slight. Thus the importance of railways will increase in the future if these emerging demands can be met.

The results of the INNOTRACK project will help the railways tackle these issues in the important area of track and substructure. This part represents 50 – 60% of the maintenance and renewal costs of a typical railway, which means

that INNOTRACK's output has a significant impact on the railways' overall cost reduction. All these demands and challenges correspond to specific realities in everyday railway operations.

The output of INNOTRACK is like a toolbox with many innovative solutions. Some of these are defined as "highlights". There are very technically oriented ones, while others are of a more general nature. INNOTRACK has shown for the first time that European track-related cost drivers and their root causes in the areas of substructure, track and switches and crossings are an international issue. Several implementation projects have therefore been proposed by UIC, since international cooperation is considered the most efficient way to address such issues.

141 technical deliverables constitute the complete results of the INNOTRACK project. To improve implementation, 16 deliverable guidelines have been produced. They focus on conclusions and practical applications so the results will be easier to implement. Clarity and straightforwardness are key concepts to this end. Of the deliverables there are also seven databases. Five of these are to be maintained by UIC.

The Concluding Technical Report is the "key" to achieving INNOTRACK's results. To further promote dissemination and implementation, several activities were proposed at the last INNOTRACK Steering Committee meeting and carried out by UIC. Five training courses focusing on assisting the implementation of the project results have been proposed concerning:

- Minimum action rules and maintenance limits
- Subgrade improvements
- Recommendations on switches and crossings
- Rail grade selection
- Life cycle cost (LCC) calculations

All public reports beyond 110 are available at www.innotrack.eu



EuropeTrain project

“EuropeTrain” is a test train that has been running across Europe since December as part of the ambitious “EuropeTrain” project monitored by UIC on behalf of the international railway community with the objective of reducing noise generated by freight wagons.

Reducing railway noise in freight traffic is at the top of the European institutions’ political agenda. Transport policy encourages stronger modal shift from road to rail to master the challenges of increasing freight transport and has thus planned the development of fast, reliable and interoperable international freight corridors across Europe. The issue of acceptance of growing rail freight transport by the public has become a vital issue.

It has been demonstrated that noise reduction at the source (the interaction between wheel and rail in the braking system) has the best cost/benefit ratio. It avoids high investments and maintenance costs for infrastructure managers as well as for public authorities.

This background led the international railway community (UIC in close liaison with its Members and all partner associations CER, EIM, UIP, etc.) to work intensively from 1997 on the programme “Noise reduction of freight wagons through composite brake blocks”. These technical activities and in-depth experiments resulted in the System approval of the so-called “K- brake blocks” in 2003. But although these homologated “K-blocks” are the solution of

the future for newly procured wagons, it is not economically viable to retrofit them to Europe’s entire freight wagon fleet (600,000 wagons in Europe).

Parallel studies in the framework of the noise reduction programme concluded that another type of composite brake block: the “LL-blocks” can meet the objectives of efficient and cost-effective noise reduction on existing freight trains but that “LL-blocks” need further improvements before being introduced in Europe on a large scale. It was also recognised that further tests are necessary to solve the problem of “equivalent conicity” (with various wear profiles) and better estimate the system’s LCC.

Important decisions were adopted at the UIC Regional Assembly for Europe in June 2009 to endorse the study to solve the problems of equivalent conicity through a better brake block shape, with a verification of the limit values. It was decided that the idea of speeding up and improving the LL-brake block testing in operation would be pursued through a so-called “Europe Train” test campaign.

In September 2009, 24 railways and the sector organisations UIC, CER and EIM signed the “Joint Resolution by the Chairmen of European Railways” to begin preparations for the “Europe Train”. Meanwhile 29 railways and a number of industry partners support the UIC “EuropeTrain” project.

The total campaign includes five “loops” covering very different geographical and climatic conditions, 16 runs and 200,000 km. The expected result is to have a recommendation for the use of existing, pre-homologated “LL- brake blocks” as a basis for the economically viable retrofitting of the majority of the existing freight wagon fleet.

“The UIC, in full synergy with its Members in the shape of DB and its partners, is committed more than ever to making rail transport the most efficient, safe and sustainable mode of transport, attractive for customers and well accepted by citizens who are increasingly sensitive to environmental issues” stated Jean-Pierre Loubinoux, UIC Director-General. In this context UIC, as the international technical cooperation platform, manages a number of complex projects on behalf of the European and worldwide railway community aiming to bring the railways the full benefits of sustainability improvements. UIC’s technical work and expertise support the action of political railway associations towards the European institutions, the Commission and ERA.

*From left to right:
Mr Johannes Gräber,
DB Systemtechnik,
Project Manager
of UIC “EuropeTrain” project,
Mr Jean-Pierre Loubinoux,
UIC Director-General,
Dr Karl-Friedrich Rausch,
Member of DB ML AG
Management Board,
and Mr Klaus-Dieter Scheurle,
State Secretary
for the German Federal
Ministry of Transport, Building
and Urban Development*



TO LEARN MORE

<http://europetrain.uic.org>

Support Services

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Finance and Information Technology

With the help of the Finance Department, the UIC management was able to fulfil a major objective in 2010, namely to establish a clear and transparent overview of the organisation's accounts.

All documentation relating to the Headquarters and project accounts, from budgets to reporting, were made more fit for purpose or improved, and a number of explanations were given on an individual basis, thus improving the general understanding of the terms and tools.

This action is set to continue in 2011 through ongoing efforts to simplify the relationship between UIC and its subsidiaries and the accounting operations necessary for the correct allocation of costs to the 300 cost centres, thus reducing the time it takes to produce the accounts necessary to run UIC at every level.

The Finance Department has worked in close collaboration with the Institutional Relations Department to reassess the financial situation of UIC Members and to take a hard line with regard to Members currently behind in their payment schedule.

Various actions relating to enhancing costs and revenue have had a positive impact, notably:

- Revision of telephone systems and stock to reduce costs
- Revision of maintenance contracts for the UIC building
- Marketing the room hire business

The UIC Finance Department was also involved in:

- The Finance Committee meetings, which is in charge of defining the rules of management of financial issues between the Members (transport revenue sharing, financial clearing, taxation issues, statistics coordination)

- The Audit and Budget Committee, which is in charge of stating its position on the UIC accounts before their submission to the UIC General Assembly

Among the numerous in-house actions aiming to improve support services for Members and above all for technical experts (managing business travel, reimbursement of expenses) and facilitate management by Directors (budgets and monitoring), following may be cited:

WIFI IN THE AREAS OPEN TO MEMBERS AND OUTSIDE VISITORS



WIFI access has been introduced in order to meet the need for Internet connections at all times and improve the visitor experience at UIC.

The WIFI system proved an instant success with UIC visitors and provides continued and reliable access.

RELATIONS WITH THE EUROPEAN COMMISSION



UIC has pursued its policy of offering its coordination services to manage EU technical projects.

Due to the calibre of management in previous years, confirmed by a very positive audit undertaken by the European Commission, UIC

has been able to propose some 15 projects to the Commission, some of which have already been rated above 13 (out of 15) and will probably become a reality in 2012 through various coordination roles entrusted to UIC and a considerable number of expert report and dissemination work packages.

INTRODUCTION OF A NEW REPORTING DOCUMENT ON PROJECT DISSEMINATION

In order to give access to all the Members concerned by the deliverables resulting from the numerous projects managed by UIC, an information document has been developed.

The document lists the products (leaflets, modelling tools, recommendations, tools) emanating from the projects and their status (reserved for financing Members or free access for all).

This document is released twice a year, giving information on planned action and outputs.

The Members thus have an overall view of a project from when it first appears (project sheet) to the end (output paper), which frames the project's life cycle and its annual reporting documents.

*Mrs Marie-Eve Lim,
Director of UIC Finance
Department*



*Mrs Magali Guyon, SNCF,
Chairperson of the UIC
Audit and Budget Committee*

Legal

The legal work carried out by UIC in 2010 was essentially focused on the support it was possible to provide for UIC working groups.

UIC LEGAL GROUP

The group, chaired by Mrs Marie-Ghislaine Hénuset (SNCB Holding, the Belgian railway) stimulates, directs, takes initiative and/or carries out UIC work. The main focuses of the group are:

- To provide advice for UIC working bodies on legal issues, to keep them informed and, if necessary, to participate in their meetings
- To defend the common interests of UIC Members in legal matters and in particular to monitor their legal proceedings
- To promote the exchange of technical information and experience between the legal staff of UIC Members

The group has authority over all legal matters in the international domain.

Two sectors are characterised by the following features:

- Convention regarding international rail transport (COTIF, Convention concerning International Carriage by Rail) (see also page 29)

Questions of international law linked to COTIF are monitored by the legal group when they

pertain to the application of the Uniform Rules concerning Contracts of Use of Vehicles in International Rail Traffic (CUV, Appendix D to the Convention) or the Uniform Rules concerning the Validation of Technical Standards and the Adoption of Uniform Technical Prescriptions applicable to Railway Material intended to be used in International Traffic (APTU, Appendix F to the Convention). In addition, the Uniform Rules concerning the Validation of Technical Standards and the Adoption of Uniform Technical Prescriptions applicable to Railway Material intended to be used in International Traffic (ATMF, Appendix G to the Convention) are also monitored by this group which keeps an eye on the situation.

■ European Union legislation

The group is above all available to CER (Community of the European Railways) and EIM (European Rail Infrastructure Managers) for the study of legal questions linked to EU legislation. The possibility the European Union joining COTIF, which would enable technical rail processes to be better harmonised both inside and outside the European Union, has also been discussed by the legal group.

THE UIC LEGAL DEPARTMENT

The UIC Legal Department provides technical support for UIC and its three subsidiaries. It

is, of course, responsible for drafting all legal documents relating to the life of the organisation particularly when statutory meetings are being held. Its expertise is structured around two main fields: advice and drafting legal documents.

■ Advice

The UIC Statutes and Internal Regulations provide the legal basis for the different legal consultations which are submitted each year by the organisation's working bodies.

In addition, during the preparation phase of the various Memoranda of Understandings (MoU) ratified by the UIC General Assembly with international partner organisations, the legal Department takes on the role of internationally recognised expert.

■ Drafting legal documents

The various contracts signed by UIC and its subsidiaries are prepared by the legal Department. In addition to traditional contracts, such as exist for all structures that interact with third parties (insurance companies, banks, suppliers and commercial clients), the Department has acquired a further competence regarding the monitoring of contracts for projects financed by the European Union in close collaboration with the financial Division.



Mr Jean-Pierre Lehman,
Director of UIC
Legal and Social Department



Mr Vincent Vu,
Director of UIC Institutional Relations
Department and UIC Regional
Coordinator for Asia

Institutional Relations

One of the initial tasks of the UIC Institutional Relations Department was to re-establish a close dialogue with its Members in order to obtain a clear overview of their individual situations within the association and to have an up-to-date understanding of their rights. Against this backdrop, UIC released a number of communications publications specifying the rights of the different Member categories. These were subsequently translated into the UIC working languages as well as Spanish and Russian.

This action is set to continue in 2011 by examining the possibilities for admission of other types of Member (institutions for instance) and exploring new potential partnerships. In this context, UIC is endeavouring to improve its welcome policy towards staff seconded from UIC Members for a specific period or mission and to create new services for Members such as the new Extranet as a potential cooperation space, as well as improving economic and statistics tools.

Against a background of developing railway cooperation within the 6 UIC regions, action to raise awareness among the heads of UIC technical Departments has been undertaken

at world level. The technical departments in particular have been boosted by the arrival of young engineers from Japan and Russia, who are tasked with bringing their experiences from these various regions.

In 2010, the work of the Institutional Relations Department also involved strengthening cooperative ties with major political, economic, financial and professional institutions, which have resulted in various cooperative agreements and partnerships being signed or renewed.

THE EXTRANET: A TOOL ENABLING COOPERATION BETWEEN UIC MEMBERS

Already used by experts for certain activities prior to 2010, the Extranet underwent an in-depth review last year, with a view to upgrading the tool to a new version.

As part of the review, the functions, access conditions for Members and access management were examined.

This tool is open to all UIC Members, their staff and technical experts, as well as UIC partners, who are involved in more than 30 workspaces.

This system is intended to create new opportunities for closer cooperation between all the UIC players at world level, in addition to the other latest means of communication such as video-conferencing.

DEVELOPMENT AND RESTRUCTURING OF THE UIC ECONOMICS AND STATISTICS UNIT



Mrs Snezana Markovic-Chesnais,
UIC Senior Advisor,
new Head of the UIC Statistics Unit

The appointment of an economist as the new head of the UIC Statistics Unit reflects the desire to re-establish a joined-up approach between all the existing databases and economic indicators, to help define a long-term economic strategy and vision for the railways, in

liaison with all the UIC Departments, and to better serve the Members and UIC Departments by making available all the necessary economic information.



Mr Paul Véron,
UIC Communications Director
and Regional Coordinator
for Middle-East



Communications

Concerning communications activities, the main challenges in 2010 were to define and disseminate a new image for a UIC which had been profoundly reshaped and modernised and which now better met the needs of its Members, themselves also affected by profound change. Working on the basis of the strategic priorities drawn up in April 2009 to guide the future course of UIC, the Communications Department's top priority was to develop a new identity befitting a "unified, united and universal" international professional association – a body of use to its Members, recognised as a Platform enabling cooperation and the sharing of expertise between railways and essential to all players in the rail transport sector.

With a view to improving transparency and the quality of the services rendered to Members, UIC identified as one of its priorities the further improvement of its information systems, in particular those enabling Members to keep abreast of the progress of the work conducted within the Forums, Platforms and other bodies.

Another challenge was to develop ways of communicating about UIC regional activities, in direct collaboration with the Heads of the Regional Assemblies (Europe, Africa, Asia, Middle-East, North America and, in future, Latin America). The establishment of a new level of regional railway cooperation represents one of the major innovations born of the statutes of March 2009.

External communications activities spring from one of UIC's main tasks as defined by the Statutes, namely to promote rail transport at global level, with particular focus on highlighting the railways' sustainable development credentials. To this end, the Communications Department has undertaken a number of initiatives under its own steam, as well as supporting all the UIC working bodies in their efforts to promote rail transport, notably via a host of congresses, conferences and other symposia.



UIC runs exhibition stands
at various international railway events;
here in Beijing for the UIC High Speed
World Congress



INTERNATIONAL UNION
OF RAILWAYS



NEW VISUAL IDENTITY AND GRAPHIC CHARTER

In order to project to the railway community and the outside world the image of a modern, efficient and dynamic UIC in touch with current challenges, it was decided to define early 2010 a new visual identity together with a simplified graphic charter.

The aim was to capitalise on the logo that had been used since 2003, which already enjoyed considerable recognition and standing in the transport world, and to adapt UIC's identity to the new norms and messages considered important in society today.

The new visual identity, which encompasses the three core values of unity, solidarity and universality, has been incorporated onto all UIC communications media, in accordance with the graphic charter. The new logo appears on UIC's signage, on all external communications media, exhibition stands, and increasingly on all the technical documents produced by UIC. These efforts go hand in hand with a desire to better protect, both legally and commercially, the "UIC brand" with regard to the results of technical

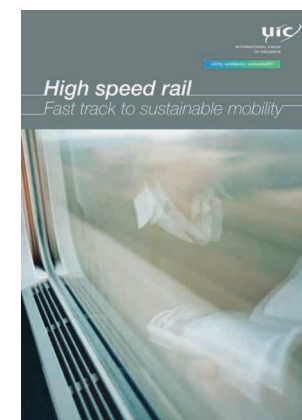
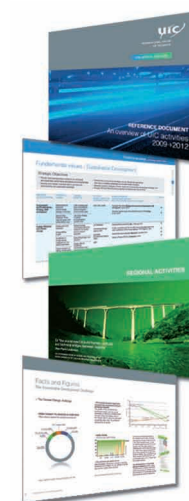
work published in the shape of UIC Leaflets, technical reports, etc., as these represent Members' shared intellectual property.

THE "REFERENCE DOCUMENT 2009-2012" PROVIDES AN OVERVIEW OF UIC'S ACTIVITIES

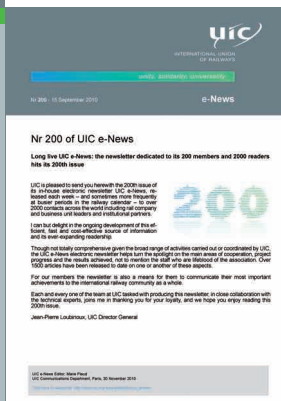
The various players involved in international railway cooperation – Heads of UIC study bodies, railway company experts, Headquarters staff – have often expressed the need for a reference document putting in perspective all the activities and projects led or coordinated by UIC. There was a stated desire to highlight the links between the projects (around 200 areas of cooperation) and UIC's tasks, and the specific responsibilities of UIC in relation to other associations within the sector.

The aim of the document was also to better inform the Members about the synergies between the various projects and between the various regions, to present the expected benefits of the projects and the timescale for their completion.

It is against this backdrop that the Communications Department carried out significant work during the course of 2010 to collect and collate information, directly collaborating with all of UIC's departments as well as study bodies and Member representatives. An initial draft was submitted to the Chief Executives at the General Assembly on 10 June in Tokyo. Having taken into account the feedback received, the final version was distributed on 6 December 2010 at the General Assembly in Beijing.



www.uic.org



Communications

INTERACTIVE INFORMATION TOOLS, INTERNET AND UIC E-NEWS

The new website www.uic.org receives 60,000 hits per month from 150 countries.

As regards the media the Communications Department uses to give its output a more interactive feel, 2010 was marked in particular by the revamped UIC corporate website. Ranked as the world's leading website in international railway cooperation, our online presence helps reinforce UIC's acknowledged standing. Since this recent change, the website **www.uic.org** – a true showcase updated daily by an active network of contributors – has been part of an ongoing process to develop and expand the content.

A new homepage offers visitors easy access to the latest functions, including:

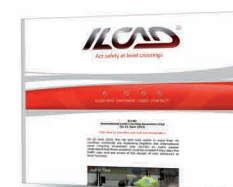
- Incorporation of UIC's new identity and design
- A "press-room" offering more documents: charts, photos, logos
- Improved tools aimed at UIC Members: list of projects, vademecum
- New use of keywords when navigating the site/linked content displayed



www.traintocopenhagen.org



www.railfreightportal.com



www.ilcad.org



www.railway-sustainability.org

- Greater prominence given to UIC news, events and products
- More interactive: several RSS feeds, sharing of social networks, newsletters

The UIC corporate website also enables visitors to access:

- All the products and services of UIC and those of its subsidiaries ETF, L&T and UIC
- All the online UIC databases and reference texts
- A range of dedicated sections focusing on UIC activities (technical and infrastructure, research, environment)
- Several thousand downloadable documents

Other sites developed by UIC have also had real success in 2010, notably those dedicated to current railway issues and themes and to UIC-coordinated projects UIC in areas such as the environment, freight and safety.

- <http://www.traintocopenhagen.org>
- <http://www.railfreightportal.com>
- <http://www.ilcad.org>
- <http://www.railway-sustainability.org>

In order to meet these increasing information needs, UIC is constantly developing its sites.

In particular, a number of sites are currently under development, including those dedicated to research, environment and sustainable development.

UIC E-NEWS

The weekly electronic newsletter focusing on UIC projects and activities: 2,500 readers across the world

The UIC electronic newsletter UIC e-News, released each week, reports on the status of UIC projects and activities from one week to the next. Launched in 2006, this publication underwent significant changes in 2010, the first of which was to bring it in line with the new visual identity. Another achievement was the launch of a fully online – and thus more reader-friendly – version featuring new functions.

The newsletter's readership – the Members, institutional partners, transport sector organisations and players from the economic and financial sectors – has expanded continuously over the course of the year. Over 1,700 articles covering all aspects of UIC, notably its technical expertise, have been released to

UIC promotes the advantages of rail transport to the international media. Jean-Pierre Loubinoux is here giving an interview to the Russian press during the Train to Copenhagen campaign



date. In September 2010, the Communications Department was pleased to publish the 200th issue of its newsletter.

MEDIA ACTIVITIES

The UIC Communications Department cultivates ongoing relations with specialist transport media around the world, as well as with transport correspondents from the general, economic and financial press. UIC is the international press's natural first port of call with regard to all the main topics of relevance to the railways: development of high speed and major freight corridors, railways and sustainable development, issues of safety and security, future technology and research.

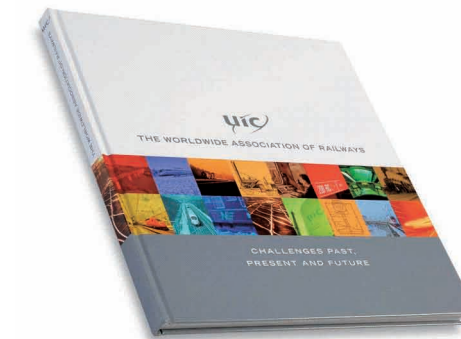
53 press releases were sent out in 2010, either by UIC individually or in collaboration with other institutions, to the 600 or so journalists and press agencies on our mailing list.

The Communications Department has also assisted the other departments and UIC project groups in helping organise large-scale events and in giving them a genuine international media presence. This was the case for the international

“Train to Copenhagen” campaign, the launch in 2010 of the X-Rail wagonload project, UIC's participation in the 3rd International Transport Forum (ITF) in Leipzig, the Global Rail Freight Conference in Saint Petersburg, and the 7th world high speed congress UIC HIGHSPPEED in Beijing.

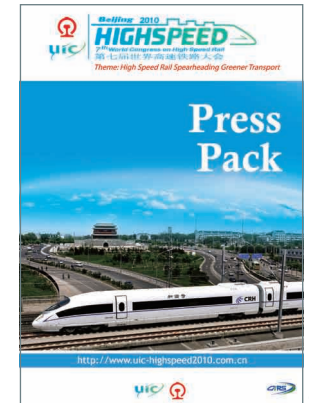
A BOOK HERALDING THE 90th ANNIVERSARY

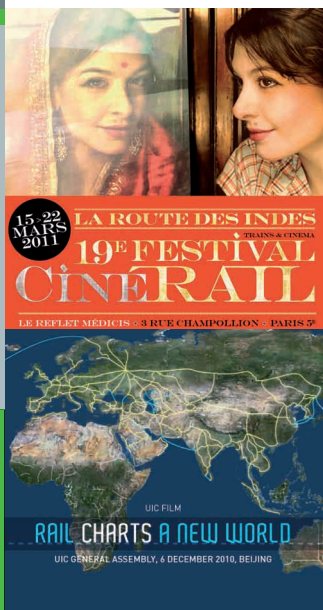
2010 saw the writing and distribution of a book entitled “UIC: the worldwide association of railways – challenges past, present and future”. This lavishly illustrated book, mainly authored by Mr André Lewin, former French Ambassador, former spokesman for the United Nations Secretary-General and current First Vice-President of the International Diplomatic Academy, tells the story of international railway cooperation and the establishment of UIC at the initiative of the national governments of the time, and describes the role played by our association throughout various periods in history: from the interwar period, the Cold War and the East-West divide, through to the age of globalised trade. The book also presents UIC's main achievements in seeking to serve the



international railway community as well as its current tasks, organisational structure and the main areas of cooperation between the railways today.

This book heralds the 90th anniversary of UIC, which will be celebrated in late 2011 (the conference of Portorose decided to form an international grouping of railways in 1921, while the UIC constitutive assembly was held in 1922). As part of these celebrations, a photo exhibition will be organised with the assistance of the Members.





Communications

AUDIOVISUAL ACTIVITIES

UIC commissioned two short films in 2010. The first was the opening film for the high speed congress in Beijing (December), which includes many images provided by Members. The second was the film “Rail Charts a New World”, produced for the opening of the General Assembly in Beijing, in which a live map shows the rail network of the future taking shape, its many branches connecting all the regions of the world.

From day one UIC has been one of the main organisers of the CineRail, “Train and Metro on film” festival, which hold its 19th edition from 15 to 22 March 2011 in Paris. This annual gathering enables communications professionals from railway companies to meet the public during screenings of films in which the world of trains, stations, and railway men and women take centre stage. Screenings shown at UIC furthermore enable professionals to share experiences on the effectiveness of audiovisuals in the areas of training, operations, business, safety and public awareness campaigns on (for example) security.

DOCUMENTATION ACTIVITIES

Throughout 2010, the Documentation Centre continued to add to the UIC international information database Raildoc, which is available online. This database helps capitalise on the knowledge produced by UIC and its various working groups. The Documentation Centre is thus helping to construct the corpus of UIC information.

In addition, the Documentation Centre coordinates cooperative projects between the documentation units (documentation centres, libraries and archives) of UIC Member railways within the Documentation Group. The June 2010 session of the Documentation Group’s annual meeting, hosted by Belgian Railways, was attended by representatives from 12 companies. The aim of this meeting was to establish an overview of the railway documentation units’ work and to share good practice from the various companies. The meeting also provided an opportunity to learn more about how the European Parliament is run and gave an insight into the major issues stemming from the common rail transport policy implemented by the European Commission.

The Documentation Centre is currently preparing to roll out a corporate picture library in order to make the most of UIC’s ample photographic collection and provide access to photographs relating to the world of railways and current developments therein, as well as coverage of various UIC-organised events.

To consult the Raildoc database:
<http://www.uic.org/cindocwebjsp/>

To consult the proceedings of the 2010 seminar:
<http://www.uic.org/etf/publication/>
 “Overview of the documentation centres, company libraries and archives of UIC Member companies”.

During this period of activity, UIC made every effort to develop a sustainable railway, for and together with all its Members, through 3 pillars, namely:

- Transparency
- Visibility
- Stability

We are now looking forward to new developments.



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