UIC EURO ASIAN ACTIVITY 2011~2012

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UIC: the International Union of Railways

- Created in 1922, NGO Ecosoc
- 200 members on all continents
- Members are:
  - Railways
  - Rail operators
  - Infrastructure managers
  - Railway service providers
  - Public transport companies
- Public or private railway companies
UIC Mission

Promoting the development of rail transport at world level, in order to meet challenges of mobility and sustainable development.
UIC’s role

- Know-how
- Technical and operational expertise
- Technical solutions
- Regulations, standards
- Best practices

- Exchange platforms
- Innovation: new ideas, new concepts
- Protecting member railways’ common interests
- Support policies of development of key infrastructure projects

- Specifications
- Standards
- Interfaces
- Studies
- Interoperability for international rail corridors

- Forums
- Seminars
- Conferences
- Congresses:
  - WCRR
  - UIC HIGHSPEED
  - Global Rail Freight Conference
  - ERTMS, NextStation
Contribution to European Networks and Masterplans - European high speed network 2020

Source: UIC
Worldwide ETCS and GSM-R Implementations / Projects
Synopsis and International Statistics (public)

NETWORK
TRANSPORT STOCK
STAFF
OPERATION
PASSENGER TRAFFIC
FREIGHT TRAFFIC
FINANCIAL RESULTS
ENERGY
ACCIDENTS
FERRIES
HIGH-SPEED
FIVE YEARLY TABLES
First trends 2011:  SLOWING DOWN RECOVERY IN PASSENGERS
   (half increase compared to 2010 jump to 3.5%)
   CONTINUING FREIGHT RECOVERY AS 2010
   (continuing 2010 recovery trend, but still under 2008)

THE ECONOMY IS STILL RECOVERING BUT NOT AT ITS BEST
Passenger-kilometers Share in 2011

- Europe*: 22%
- Africa: 2%
- America: 1%
- Asia and Oceania: 75%

Europe*: including Turkey and

- Passengers activity has never drawn back but slowed down from +7% until 2008 to **hardly up to 3% until today**
- **Far and Central Asia** are the main actors (India and China)
- **But Europe and Russia are also participating** to this trend, at a slower pace
. Europe is gaining Freight traffic (and market share), esp. Ukraine (>+10%)
. Leader is RUSSIA: 1/4 of whole World Freight traffic, +8% in 2010, +5,7% in 2011
. Confirmed positive trend for Central Asia (incl. Kazakhstan + 4.5%, Mongolia + 11%), then other European, like in 2010
. REST OF ASIA also increasing, including 70 % from China + 4.5% (after sagging in 2010)
. But SAG in TURKEY after high increase 2010.
Length of lines remain stable but Asia is increasing due to China new HS among others. Europe is closing down some lines.
FOR THE FIRST TIME in 2011
- CHINA is 3rd rank in HS traffic
- More HS Passengers traffic in Asia than in Europe
Advantages for a huge modal shift to rail thanks to:
. safety, green, high speed and urban rail systems, longer-distance trips,

Becoming a very different railway:
. Reliable, affordable and attractive services, seamless and safe mobility network.
. High quality services will stimulate the popular support that can help underpin public investment.

. An increasing inter-modal environment, integrated transport system, with rail as its backbone,

. Cost transparency in more competitive economies.
HOW TO

Achieving substantial market share by

- **Attractiveness**: Value for Money, Capacity, Consistency, Connectivity

- **Sustainable development** – Environment & Energy, Optimised Life Cycle Assessment, Silence, 0 CO$^2$-Nox-PM10
- **Safety and security** – Performance, People, Certified Process
- **Resilience** – High reliability (R&D), degraded mode mangmt
- **Leadership** – within the sector, of the sector as a mode and by Europe as a region in the global context (barriers, education)
- **Funding** – Securing Investment, ...
The goals for rail of the EU Commission’s 2011 Transport White Paper:

*By 2050 rail should substantially expand its modal share over medium and long distances for both passenger and freight, based on a dense network connected to all core airports and sea-ports, a major expansion of the high-speed network, and the deployment of ERTMS and of a European multimodal information, management and payment system.*

. Current **EUROPE: 6% share of the passenger market**, only around **16%** of the inland freight market (road transport 70%) , **8,000 km HS lines for 100 million HS pass/y**

An economic contributor: **1 M staff, 10 000’s companies-€ 80 Billion** industry

. Growth in transport demand by 2050:

=> **freight > + 80% and passenger > + 50%, € 1.5 trillion in infrastructure (-> 2030)**

=> Major urban centers **free of C0² emission and -70% GHG**

=> + 50% up to annual **€ 200 billion/y congestion**

=> Increase in freight moved by **rail x8 and in passenger travel x 12**, HS Rail becoming credible up to 4 hours travel time, 1000 km travel distance.
EUROPE & ASIA

> The Asian railway system faces various internal challenges

> The Euro-Asian routes are hampered by:

  political challenges (liberalization, opening of the markets),
  logistical,
  management and infrastructure challenges:
  . Track standards,
  . Missing links,
  . Inland terminal structures and lack of well-functioning intermodal systems

> Perception of security and security standards are a fundamental issue until 2025.
TECHNICAL COOPERATIONS IN EURO-ASIA RAIL TRANSPORT LINK

I. Cooperation in the field of transport policy.

- Scientific technical and economic information on the basis of modern information technologies, shared know-how and intelligence;

- Statistics on container shipping by rail in the foreign traffic using the Trans-Siberian main line, benchmarking other modes;

- Mutual participation as guests at corresponding meetings of the higher directing bodies of partner organizations.
II. Cooperation in the field of international transport corridor (ITC)

1. Based on the ITC development group of expert
   - Freight transportation as part of solid container and contrailer trains in Eurasian traffic collaboratively
   - Alleviating crossing of borders
   - Making up competitive through rates
   - Cooperation regarding UIC project implementation in the sphere of development of Eurasian transport connections

2. Based on UIC security platform
   - Increasing Security on international freight corridor
III. International cooperation in the sphere of innovations.

Ex: Electronic documents & “Electronic train” project realization.

IV. Cooperation in the sphere of international education.

Development of educational programs and training of specialists
2010-2012 INTERNATIONAL COOPERATION FOR EURO-ASIAN CORRIDORS

An intense program of cooperation initiated and re-activated by UIC with the main railways pro, financial or inter-governmenetal bodies related to EATL
Starting an Institutional approach to the coherent development of corridors

**Infrastructure**
- Create transparency on existing capacities (terminals, routes)
- Calculate future infrastructure requirements
- Infrastructure project monitoring
- Unification of corridors classification

**Logistic**
- Develop concepts for optimal movement of wagons and containers
- Interaction FF-Operators-RU-IM
- Promoting track and tracing technologies
- Investigating potential for interaction with road transport

**Transport modeling**
- Develop and communicate a model rail price logic with time benefit
- Creation of throughput logic
- Create transparency on existing pricing and regulation
- Border crossing problems monitoring

**Marketing**
- Develop a marketing concept for development of Eurasian corridors
- Facilitate to the modal shift initiatives
- Improve the credibility for railways on intercontinental transportation

**Legal functioning**
- Harmonization of transportation
- Implementation of tolls for smoother border crossing procedures
- Eliminating the existing shortages regarding law and regulations

**Demand**
- Analyzes of demand on the railway service on intercontinental level
- Identifying the modal shift potential
- Interaction with FF
- Identification of market niches for railway transportation
- Connection of existing rail products benefits with real market requirements

Main principal: corridor = system
Current technical work to develop EATL 2011~2012 (1) with institutions AND members

• Standardised **Automatic Gauges Changeover systems 1435/1520** and further certification of freight wagons on 1435/1520

• International Corridor mapping on infrastructure and rolling-stock requirements (ERIM on European side) in order to improve **interoperability** and **safety**

• **Boarder crossing issues**
  • Harmonization of GNG (OSJD) and NHM (UIC)
  • Cooperation on DIUM (uniform distance table)
  • Harmonization of the exchange of wagons (legal aspects)
  • Implementation of CIM/SMGS Unified Consignment Note
Current technical work to develop EATL 2011~2012 (2) with institutions AND members

- Updating of joint **OSJD/UIC leaflets**
- **Coding** and Information
- **Financing** and inter-accounting

- **Terminology**: development of Rail Glossaries in many languages for common understanding (Russian as a new language since 2011)

- **Security** on corridors: cooperating with NATO TG-IST and involving CCTT into Steering Committee of UIC Security Platform, representing the interests of the concerned railways, in addition to the representatives of the UIC regions.
Focusing the status of AGCS Working Group

- Collection and analysis of relevant data and experience about cross borderer railways traffic in a view of application of AGCS

- Finding and recommendations on the availability of application of AGCS

- Share of best practices on application of AGCS

- Analysis of legal aspects and admission procedure for rolling stock with AGCS including certification

- Reporting on the results of research and analyses for examination by executive bodies of UIC and OSJD

Tender documents will be prepared by UIC and OSJD members. Consultant will be jointly selected after the call for the tender

MORE CONCERNED MEMBERS ARE INVITED TO JOIN as the aim is to set an international standard.
Status of activity on Euro-Asian Landbridge Mapping (RNE+ERTMS+PAN+OSJD corridors)

What is in common
- Type of mapping activity,
- GIS technology and (general) geographical scale
- Permanent line segmentation,
- Linear line referencing, dynamic line segmentation

What is different
- database structures
- data contents
- OSJD-UIC cooperation could focus on:
  - International data exchange and dissemination.
  - Harmonized description of lines
  - Terminal mapping /descriptions

What can be improved
INVolving Parties and FUNDS, especially from Asian part
UIC Sustainability Unit - Introduction

- **Cooperation with international organizations to advance sustainable transport and railways**
  UIC was very active in the Rio+20, is represented at the UNFCC COPs, participates in UNECE Adaptation Expert Group and works with UNEP

- **Publications and research on various sustainability and environment topics**
  Research topics include Noise, Energy Efficiency, Emissions, Climate Change Adaptation, Carbon Footprint of High Speed Rail and many more

- **Conferences, events and meetings**
  To share best practice and find solutions to common problems

- **Information, reports, meetings** – [www.uic.org/environment](http://www.uic.org/environment)
Highlights

> UIC Sustainability Conference: Venice, 25-27 October 2012

> UIC at Rio+20


> Global Sustainability Report
Thank you for your kind attention

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