UIC

The worldwide railway organisation

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Symposium "20th anniversary of the Vilnius protocol: OTIF's achievements and prospects"
UIC, a long history at the service of member railways and international railway cooperation

1921
Intergovernmental (diplomatic) conference in Portorose, Italy

1922
Intergovernmental (diplomatic) conference in Portorose, Italy

October 1922
Constitutive Assembly of UIC (Paris): UIC Statutes adopted by 51 Railway administrations from 29 countries (Europe, Asia)

2018
200 Member railways from 95 countries

The only global rail representative body
# UIC members today

<table>
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<tr>
<th>200 members in 95 countries</th>
<th>3,000 billion passenger kilometres</th>
<th>10,000 billion tonnes kilometres</th>
<th>1 million kilometres of lines</th>
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<tbody>
<tr>
<td>7 million rail personnel</td>
<td>Cooperation with over 100 institutions</td>
<td>700 UIC Leaflets - New International Railway Solutions (IRS)</td>
<td>85 congresses, conferences, workshops</td>
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UIC in 2019

Plus a growing network of research bodies and universities
Synergies developed by UIC with leading institutions

ADB: Asian Development Bank
BSEC: Black Sea Economic Cooperation
EEC: Eurasian Economic Commission
ECO: Economic Cooperation Organisation
EIB: European Investment Bank
ESCAP: The Economic and Social Commission for Asia and the Pacific
FISAIC: Fédération Internationale des Sociétés Artistiques et Intellectuelles de Cheminots
ISO: International Organization for Standardization
OSJD: Organisation for Cooperation between railways
OTIF: Intergovernmental Organisation for International Carriage by Rail
UNECE: Economic Commission for Europe
UNIFE: Union des Industries Ferroviaires Européennes
USIC: International Railway Sports Association
UIC’s activity

Dialogue platform focusing on members’ challenges

- Sharing of best practices
- Exchanges of information
- Experiments, joint studies, POCs, etc.

International Railway Solutions

- Contributing to TSIs and standards
- Railway best practices
- Application guidelines
- Online tools and databases
- 356 UIC Leaflets
- 36 IRS to date

Training courses and conferences

- Courses on cutting-edge topics
- Conferences on areas of interest (Asset Management, GSMR, FRMCS, ETCS, civil engineering structures, railway tracks, etc.)

Working groups and joint projects

- Shared projects to address the strategy defined by the RSF members
- Internal and external working groups with railway members
Freight beyond Europe

- Market watch/studies
  - CCTT
  - ESCAP
  - ADB
  - ECO
  - etc

- Partnerships
  - e-Seals
  - Blockchain

Main Eurasian routes with track gauge (schematic)

Sources: Austrian Ministry for Transport, Innovation and Technology, RNE, press research, UNESCAP, Roland Berger
### Strategic focus areas

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<th>1. Promote rail transport globally</th>
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<td>- Strategic positioning</td>
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<td>- The fundamentals: safety, security, environment and innovation</td>
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<td>- Highlight and demonstrate the attractiveness of the railways</td>
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<td>- Partnership with relevant organisations (international and national)</td>
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<th>2. Further develop UIC as the technical platform to address members’ needs</th>
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<td>- Embody and convey a system-wide vision and technical positions</td>
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<td>- Up-to-date IRSs in line with stakeholders’ needs</td>
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<tr>
<td>- Produce specifications/guidelines</td>
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<td>- Leverage data and sharing of experience</td>
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<td>- Technical policies that serve members’ priorities</td>
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<td>- Monitor implementation and added value of UIC products</td>
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### Strategic focus areas

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<th>3 - Create innovation through projects</th>
<th>4 - Promote sustainable, carbon-free transport</th>
<th>5 - Efficient, transparent management for the benefit of our members</th>
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<tr>
<td>• Become a world forum for innovative projects</td>
<td>• Rail as the backbone of mobility</td>
<td>• Ethical and transparent governance</td>
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<td>• Further develop a shared innovation strategy</td>
<td>• Convey a multimodal vision shared with public transport and supply chain stakeholders</td>
<td>• Regular reporting and ongoing assessment of added value from activities</td>
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<td>• Put digital technologies at the centre of the rail system</td>
<td>• Develop innovative projects for better attracting green bonds</td>
<td>• Ongoing skills development</td>
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<td>• Contribute to accelerating the innovation cycle</td>
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<td>• Provide the Regions with a vehicle for project development</td>
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<td>• Support European and global innovation programmes for the benefit of the sector</td>
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United Nations

3 categories of participants at meetings and conferences in the UNFCCC & UNSG processes:
• representatives of Parties to the Convention and Observer States,
• members of the press and media,
• representatives of observer organizations.

Observer organisations categorised into 3 types:
• the United Nations System and its Specialised Agencies,
• intergovernmental organisations (IGOs),
• non-governmental organisations (NGOs).

UIC is an “admitted NGO”

• IGOs and NGOs can register delegates to events only when they have received observer status.
• A partnership agreement dedicated to the preparation of the COP is signed yearly with UITP and UNFCCC.
• UIC participates yearly to 3 side events during the COP and shares an exhibition stand with its partners (SLoCaT, UITP, ITDP, etc.)

Conferences on Climate change:
• UNFCCC = COPs, Regional Conferences on Climate (Bonn in June)
• UNSG = Climate Action Summit (September)

Ad Hoc expert meetings:
• UNCTAD = Ad Hoc expert meeting on Adaptation to Climate Change
Innovation will install Railway as the backbone of future decarbonised mobility worldwide

Improving connectivity has a strong meaning for the railway and for the public transport sector.

The requirements for low carbon emission transports are more and more stringent and will lead to improve the efficiency of the transport chain.

The evolution of digital applications and the advent of Artificial Intelligence have called for a clear prospect for automation in transport, that would change the whole industry. This evolution is to be appreciated into the wider perspective of sustainable development.

Undergoing technical development are creating enablers that will make this vision possible:

- **The first enabler is that railways are increasingly thinking and designing their services the same way data networks are designed and managed**

- **The second enabler is multi-modality relying on 5G technologies**. Big data management will make multimodality possible to an extent we cannot imagine now, provided that the technical bodies take all their responsibilities to implement a 5G data transmission backbone. To this end, UIC is working on the Future Railway Mobile Communication System that will abolish the boundaries between public transport and railway network.
The combination of those two processes will enable the creation of “digital twins” for the various networks.

Having the possibility to replicate our networks digitally will lead to a quantum leap in terms of efficiency and reliability.

Indeed, this technology will allow real time simulated based network management decisions which today implies a costly and lengthy coordination process.

It will improve reliability and capacity.

Using and interconnecting digital twins on each transport mode from door to door is certainly the way forward for a massive modal shift to public transport, while reducing drastically the need of investments in CO$_2$ emitting physical assets.
Stay in touch with UIC!

www.uic.org

#UICrail

Thank you for your kind attention.