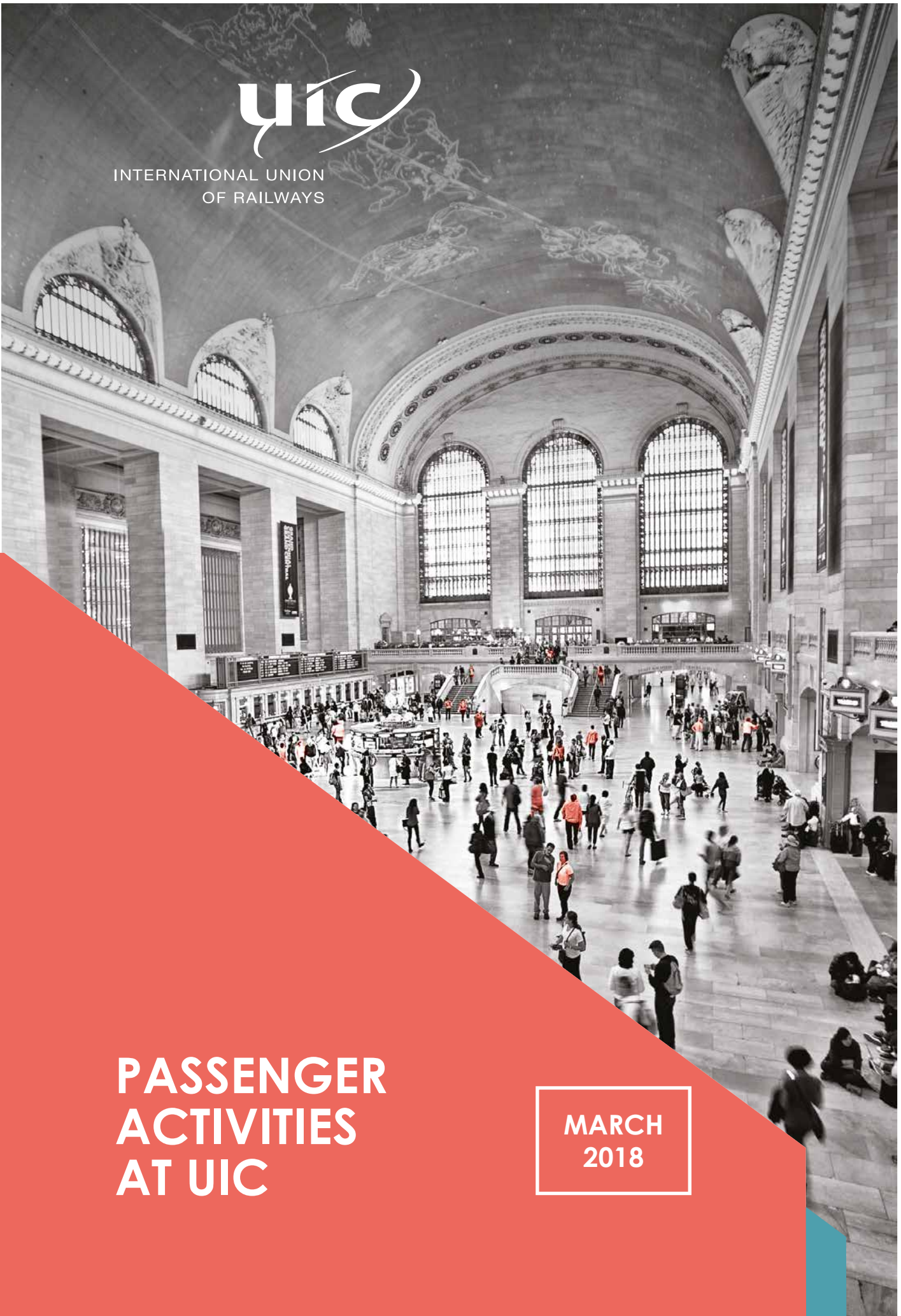




INTERNATIONAL UNION
OF RAILWAYS



PASSENGER ACTIVITIES AT UIC

MARCH
2018

Photographic contributions:
Special thanks to railway companies

March 2018

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FOREWORD

THE WORLD IS CHANGING RAPIDLY. RAILWAYS HAVE TO ADAPT TO NEW MARKET DEMANDS AND TO SEEING ONE ANOTHER HENCEFORTH AS "COMPETITORS". RAILWAY UNDERTAKINGS STILL NEED RELIABLE INFORMATION AND DATA ON TRAIN MOVEMENTS, STILL NEED TO DEVELOP THEIR TECHNOLOGICAL SKILLS AND REMAIN ABREAST OF SCIENTIFIC DEVELOPMENTS, AND STILL NEED STUDIES THEY CAN RELY ON TO DEMONSTRATE THE ADVANTAGES OF THE RAIL SECTOR.

In Europe, the liberalisation process and the new prospects opening up for rail are reshuffling the sector. New forms of cooperation are emerging and are heavily impacting working processes and relationships between railway undertakings. The **Passenger Forum and Department** of the International Union of Railways, UIC, seek to develop cooperation via projects of common interest. This would also interest members from regions other than Europe.

High speed/long distance and short distance/commuter services are best conceived of as "systems", the core structures of which combine a range of elements: some similar, some different. As such, each requires a specific strategic focus in order to achieve or maintain successful development in Europe and elsewhere in the world.

Stations represent a key element in passenger transport. For customers, they are the only "gateway" to railway systems. For railways, they are sometimes the key factor in attracting (or not attracting) customers. And, quite apart from their strategic value for railway systems and customers, stations represent an important business in their own right and play a vital role in urban development. Regional and commuter rail represent more than 95% of global passenger rail activity.

Most of all, railway undertakings will have to focus more than ever on the customer/passenger. Every aspect of the passenger's trip (obtaining information, purchasing tickets, enjoying station services and travelling onboard local, regional, intercity or high speed trains, etc.) can be improved, and all participating railways can join their efforts towards that goal in the various working groups of the **UIC Passenger Forum/ Department**.

It therefore seems necessary to orientate the scope of the Passenger Forum and to work within a structure built around five areas of competence or sectors:

- Intercity & High Speed
- Commuter and Regional Train Services
- Stations
- PSG
- Tourist Opportunities for Railways

Saint Pancras Rail Station, London



GENERAL CONTEXT OF THE PASSENGER RAIL BUSINESS



MISSION STATEMENT

OUR MISSION IS TO EXCEL IN THE PROVISION OF SERVICES FOR THOSE UIC MEMBERS WHO SEEK TO BENEFIT FROM OUR INTERNATIONAL EXPERTISE. OUR MAIN AIMS ARE TO PROMOTE RAIL ACROSS THE WORLD, PROVIDE STANDARDS, AND SUPPLY UIC MEMBERS WITH THE TOOLS THEY NEED TO GROW THEIR BUSINESS AND OFFER THEIR CUSTOMERS OPTIMUM SERVICE, ESPECIALLY FOR INTERNATIONAL TRANSPORT.

Of course, UIC members also develop their own systems in line with their own strategies. But they need to understand international issues in order to enhance interoperability between them. At the UIC Passenger Department we provide platforms, congresses, training sessions, advice, and shared tools for use by our members.

Our work is based on what has been developed in the past, what is currently being developed to share best practices, and what we imagine are the issues of the future.

Passenger rail represents 50% of global railway business

ACCORDINGLY, UNDER THE UIC MANDATE, PASSENGER DEPARTMENT ACTIVITIES ARE ORGANISED SUCH AS TO SUPPLY MEMBERS WITH TOOLS TO DEVELOP ANY PASSENGER-RELATED LINE OF BUSINESS.

Work takes place based on four main principles:

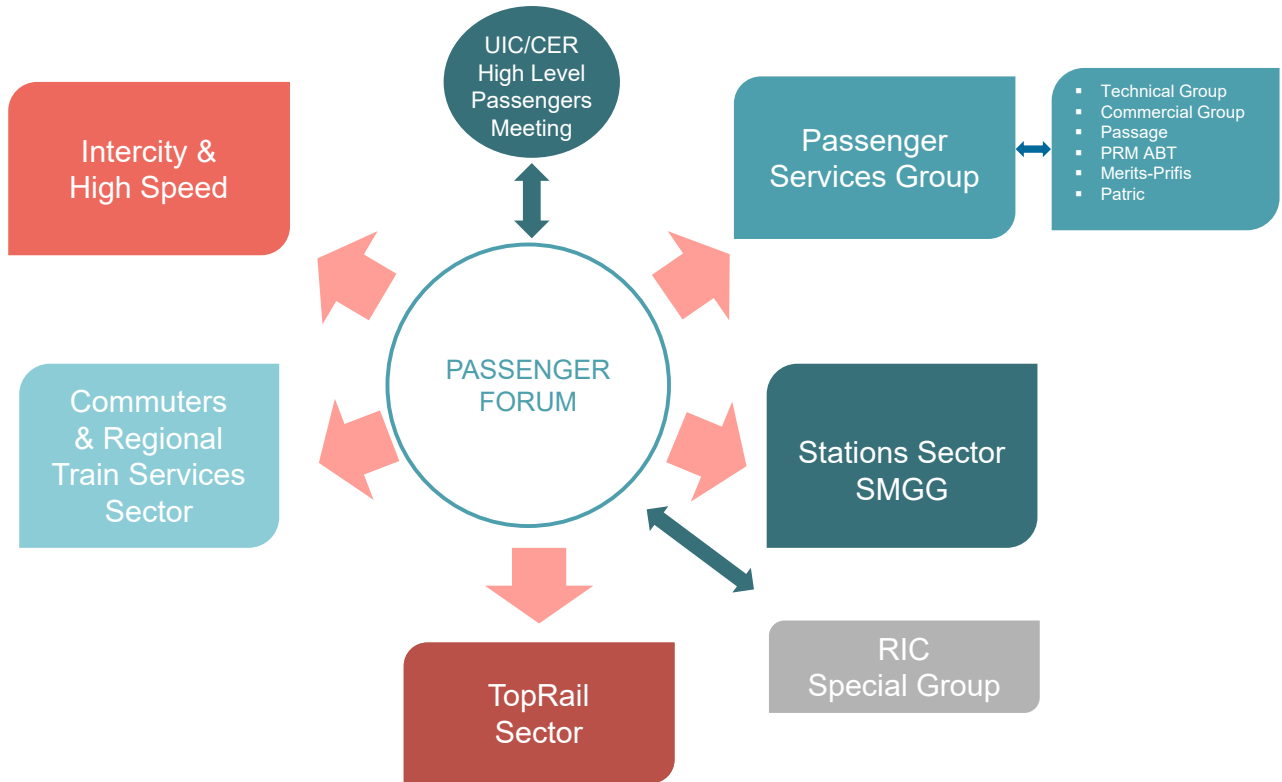
- Global approach
- Open to any UIC member
- Consideration of any possible approach interesting members
- Consensus-based; everything is to be defined by members

VISION

OUR VISION IS TO UNDERSTAND WHAT THE RAILWAY WORLD WILL LOOK LIKE IN THE NEXT 5 OR 10 YEARS, IN ORDER TO PLAN DETAILED JOINT PROJECTS FOR THE NEXT 3 OR 4 YEARS, IN LINE WITH THE EXPECTATIONS OF THE FUTURE. THE WORLD IS CHANGING VERY FAST, AND SOME OF THE MAIN DRIVERS AND KEY WORDS WILL BE: DIGITALISATION, COMPETITION, COOPERATION, NON-DISCRIMINATION, SUSTAINABILITY, NETWORKING, BEST PRACTICES, ETC.

The UIC Passenger Department is organised such as to meet UIC members' expectations, with ad hoc working groups, training sessions and congresses.

STRUCTURE OF THE UIC PASSENGER DEPARTMENT



OUR TEAM



Marc Guigon
Director



Béatrix Perrot
Assistant



Fabrice Setta
Advisor



Vanessa Pérez
Advisor



Josef Fazik
Advisor



Juhyung Lee
Advisor

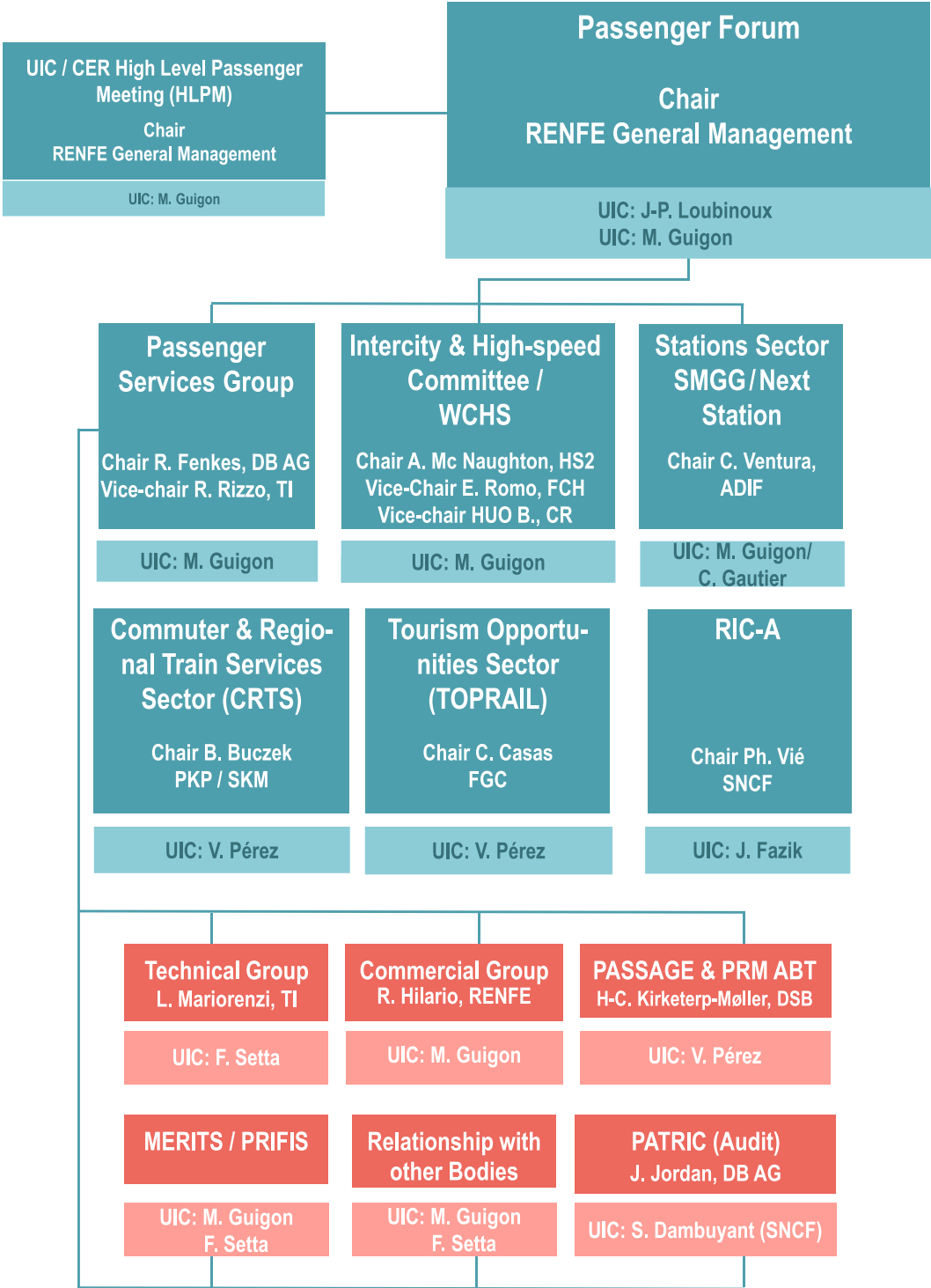


Kenzo Fujita
Advisor



Clément Gautier
Advisor

ORGANISATION





Rutger Fenkes
Chairman

PASSENGER SERVICES GROUP



COMMERCIAL GROUP

You can find all
UIC Leaflets at
www.shop-ef.com

Creating and maintaining the framework for commercial cooperation between railway undertakings in an international context.

The Commercial Group creates and maintains the framework conditions of mutual trust for international tariff cooperation between railway undertakings. The work of the Commercial Group takes place in two main fields, depending on the different ticket types the member companies offer:

1. **NRT: Non-Integrated Reservation Tickets:** for those companies whose tickets do not include a reservation, allowing passengers to board any train between two stations within a given validity period.

The NRT Group has two subgroups:

- 1.1. **EWT: East West Tariff Committee:** this committee aims to organise tariffs and accounting between Eastern and Western European countries, given the differences in the systems.
- 1.2. **Night Trains Group:** this group shares information and establishes the necessary conditions for the traffic of international night trains.

2. **IRT: Integrated Reservation Tickets:** for those companies whose tickets state which train and date the passenger must travel on.

Most companies in Europe combine both systems of ticketing, depending on the rail service.

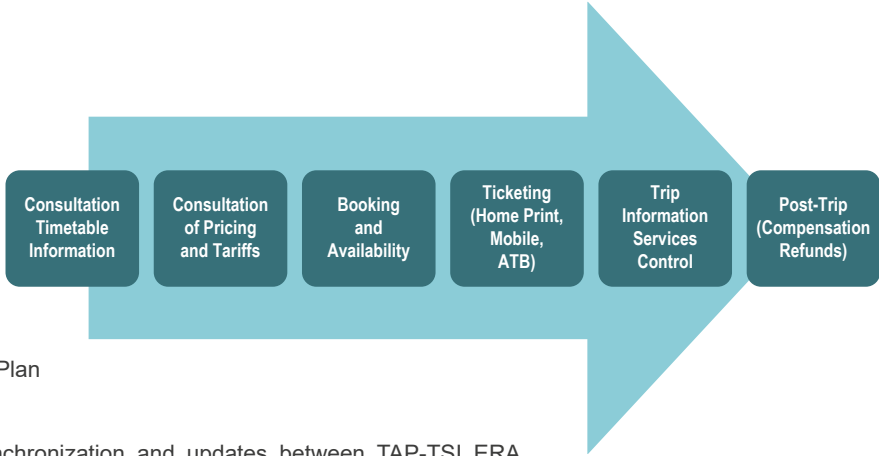
Publication: both groups, along with the NRT subgroups, have updated **UIC Leaflet 106**, which is the key document underpinning their work.

TECHNICAL GROUP

Developing IT systems for ticketing & distribution in Europe.

The UIC Technical Group is in charge of collecting UIC railway undertakings' commercial and regulatory requirements and translating these into technical standards and interfaces for European international sales and distribution systems. The group is currently the main driver behind a new Three-Year Strategic Plan within the Passenger Services Group.

Publication: It is tasked with ensuring synchronization and updates between TAP-TSI ERA Technical Documents under the existing "ERA-UIC Technical Agreement".



TAP-MD

Telematics Applications for Passenger Maintenance and Development

TAP-MD manages the data exchange specifications for passenger rail distribution. This includes data exchange to cover the entire process from timetable information enquiries through to on-train ticket inspection.

Publication: UIC Leaflet 918-8 and 918-9.

REG

Reservation Expert Group

This group is tasked with maintaining and developing the European standard for reservation messages (developed over the past 40 years) by working to replace the exchange of binary messages by XML messages across Europe, as well as developing graphical reservation interfaces, E-ticketing and including security information in reservation messages.

Publication: UIC Leaflet 918-1 for reservation messages.



TAG

Ticketing Action Group

The TAG defines fulfilment methods for passenger rail transport contracts. It has two active sub-groups: the TLG (Ticket Layout Group), which has defined rail ticket layouts for CIT paper, blank paper (print-at-home tickets) and on-screen display formats, and the TSG (Ticket Security Group), which has defined security features within the ticket to prevent fraud.

Publications: ticketing **UIC Leaflets 918.2, 918.3** and **918.8**.



Ticket according to UIC standards:

- UIC Leaflet 918.2 Ticket Layout
- UIC Leaflet 920.1 Company Code
- UIC Leaflet 920.2 Location Code
- UIC Leaflet 419.1 Train Number

Classification of Tickets

> Generally divided per sales channel and/or media



Mobile Rail Ticket



RCT2 Paper Rail Ticket



Chipcard



Home-print Rail Ticket

It is possible to find UIC tickets standards in every railway ticket.



TSG

Ticket Security Group

This group deals with the security features for international rail tickets.

Rail tickets can be protected by Security in Paper (security background, defined by CIT), Security in Data (most often a 2D barcode), Security in System (reference to a contract on a server) or a combination of two or more of the above.

The Public Key Management Website is used to exchange public keys to ensure that barcodes are not counterfeited.

Publication: **UIC Leaflet 918.3** for Barcodes

Aztec:



PDF-417:



QR code:
(not used in international Rail Ticketing)



Barcodes used on Rail Tickets according to Leaflet 918.3

PATRIC

Passenger Accounts and Ticketing Rules Inspection Committee

PATRIC establishes the process for the auditing of UIC members' distribution systems, application of tariffs, and account-keeping in international passenger traffic, including payment and clearing processes.

The results of the audits and the organisation of work is done by the PATRIC Steering Board, which, according to **UIC Leaflet 120**, works to create the appropriate framework to develop this kind of activity.

MERITS

Multiple East-West Railway Integrated Timetable Storage

MERITS is a single database containing the timetable data of many railway companies which are integrated and reproduced twice a week. MERITS is designed to allow each railway company to have rapid access to all the data needed to produce timetables, and to operate with one single source of data, thereby doing away with the large number of multilateral exchanges.

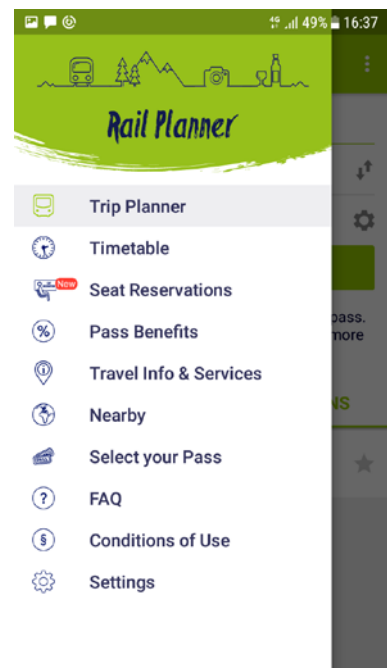
The MERITS timetable data consist of:

- Schedules and services of trains,
- Location database,
- MCT's (minimum connection times)

USE OF MERITS DATA

MERITS integrated data are used to have a large coverage of railway undertaking timetable data including domestic and international trains

- For customer information
- For journey planning
- For booking ticket
- To feed mobile applications



Example of MERITS data in the InterRail & Eurail mobile application

PASSAGE

PRM European Group of Experts

Passenger Accessibility Solutions Support and Action Group of Experts

The PASSAGE Group of Experts has become the go-to body for railway accessibility among the European railways. Its objectives are to create and safeguard professional exchange among the railways in order to identify the work needed at national and transnational level and potential solutions concerning accessibility issues.

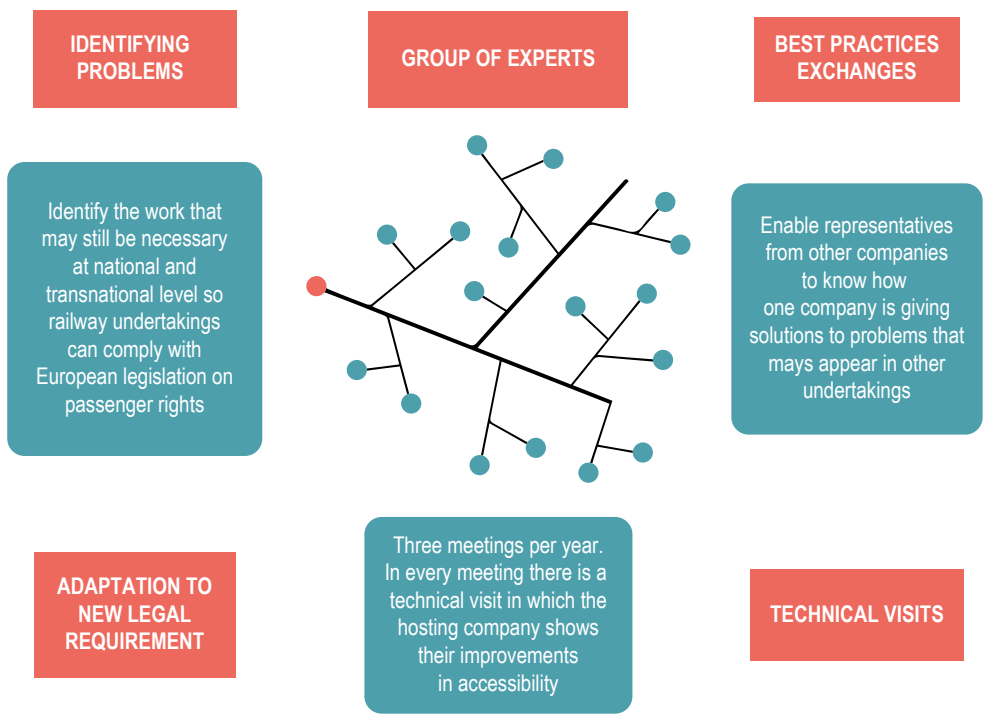


The PASSAGE group holds three meetings per year, at which the results of the group's activities are reported and each company's latest news on accessibility discussed.

During the meetings, there is also an update about the performance of the **PRM- ABT** (Assistance Booking Tool), which was created to provide assistance services to international passengers through the connection of their PRM centres.

Publications: All the best practice information has been collected in **UIC Leaflet 145**, which provides guidance for the provision of accessibility services in railway companies and which is periodically updated by members.

Benchmarking Work





SPECIAL GROUP RIC/A

Regolamento Internazionale delle Carrozze/ dei treni Automotori

Since 1922, the RIC/A agreement has governed the exchange and use of coaches and self-propelled units in international traffic.

The RIC and RIA Agreements are administered by the RIC/A Special Group and by the Bureau which is part of UIC.

Both describe the operation of the system and the responsibilities of the relevant actors (RUs and keepers) and are continuously adapted to enable the reciprocal use of passenger cars or self-propelled units in international traffic.

The Agreements need to keep in step with the ever-evolving railway environment. To ensure that they do, RIC and RIA experts in working groups reporting to the RIC/A SG suggest amendments, which are put to a vote at the RIC or RIA General Assembly and are published as a new amended text of the Agreements, which enter into force each January.



*Philippe Vié
Chairman*



Andrew McNaughton
Chairman

HIGH SPEED



HIGH SPEED RAIL (HSR) ENCOMPASSES A COMPLEX REALITY INVOLVING MANY TECHNICAL ASPECTS SUCH AS INFRASTRUCTURE, ROLLING STOCK AND OPERATIONS, AS WELL AS STRATEGIC AND CROSS-SECTOR ISSUES INCLUDING HUMAN, FINANCIAL, COMMERCIAL, AND MANAGERIAL FACTORS.

High Speed Rail has proven to be a very flexible and attractive system which lends itself to various circumstances, contexts and cultures. Therefore, HSR is a rapidly expanding new transport mode often described as the transport mode of the future.

The UIC High Speed Committee regularly conducts studies and research requested by one or more members. All such output is posted on the UIC website and is freely accessible.

Learn more from the dedicated High Speed brochure

TRAINING ON HIGH SPEED SYSTEMS

Once a year, UIC organises a 2-level training programme for rail managers. The programme starts with level 1 in Paris and is followed by level 2 in Madrid. Level 1 aims to give participants an overview of all the aspects of HSR. It is a unique opportunity to obtain a summary overview of all the technical, commercial, economic and financial aspects of HSR. Level 2 is based on a case study supported by a calculation tool which helps participants make the right strategic choices for a planned high speed line.



The transport mode of the future

MAIN OBJECTIVES

- Coordinate the high speed activities of UIC members and solve common problems
- Contribute to the ("logical") development of high speed rail systems around the world

The aim of this committee is to promote the development of efficient, integrated rail systems under ideal conditions for UIC members, customers and society, at a particularly historic moment where high speed is developing at an impressive pace around the world.

ACTIVITIES

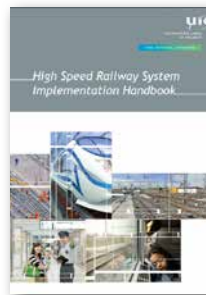
- Exchange of best practices
- Databases: lines, rolling stock, traffic, etc
- World HSR maps
- "Benchmarking" and other working parties
- Studies & reports and surveys
- Standardisation Platform

Publications: see the UIC High Speed Library and Database

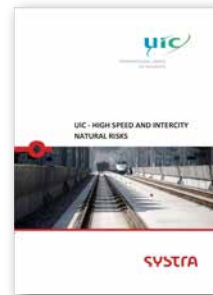
<https://uic.org/highspeed>



High speed and the city



High Speed Railway System Implementation Handbook



UIC - High Speed and Intercity Natural Risks

HIGH SPEED CONGRESS

The UIC World Congress on High Speed Rail is renowned worldwide as the most prominent and large-scale global event on high speed rail. Every two years, the congress addresses strategic issues linked to the national and international development of high speed rail systems.

UIC and Turkish State Railways TCDD will be holding the **10th World Congress on High Speed Rail from 8 to 11 May 2018 in Ankara, Republic of Turkey.** The main theme of the Congress is "Sharing knowledge for sustainable and competitive operations".

www.uic-highspeed2018.com




10th UIC World Congress on High Speed Rail
8 - 11 MAY 2018 ANKARA TURKEY
uic-highspeed2017.com

Sharing Knowledge for Sustainable and Competitive Operations





Carlos Ventura
Chairman

STATIONS



SMGG: STATION MANAGERS GLOBAL GROUP

The UIC Station Managers Global Group (SMGG) aims to exchange best practices between actors and experts all around the world, organise events, carry out studies, and standardise interoperability subjects.

STRATEGIC OBJECTIVES

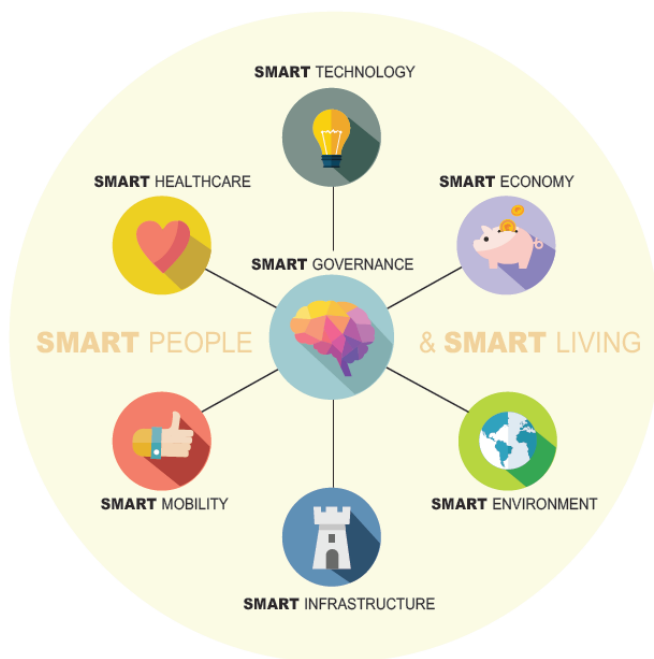
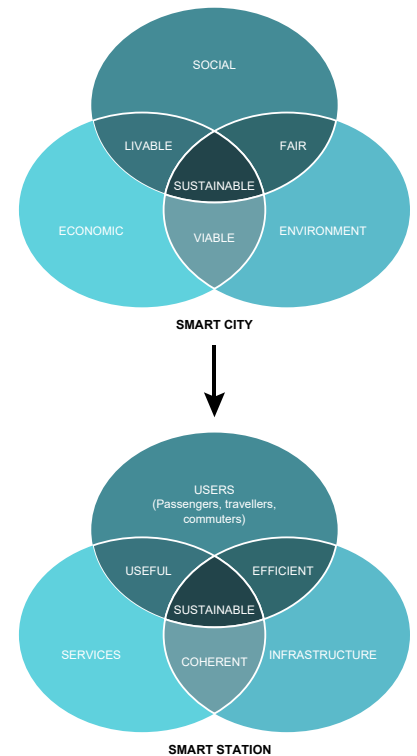
1. Improve the skills of high level station managers by networking and exchanging best practices, taking into account the new global requirements of the railway business;
2. Improve the functionality of stations as a very important and strategic element of the "railway product" for station users: digitalisation, information, accessibility;
3. Improve the relationship between the railways and the city: architecture, integrating station activities into the city, intermobility, security, sustainability;
4. Governance (who decides what) and financing models (who pays for what) for stations.
5. Promote universal standards to make international travellers' journeys easier.
6. Continue promoting the concept of smart stations across the world.

From smart cities to smart stations – but what does "smart stations" mean? It means developing the station as a living place, making stations more attractive, pleasant and efficient for passengers, customers, citizens and station managers alike. This concept is composed of three main topics: smart management, smart infrastructure and smart mobility. That is why SMGG addresses all the strategic issues related to the creation, development and management of stations.

The UIC Passenger Department is an incubator for new station-related projects

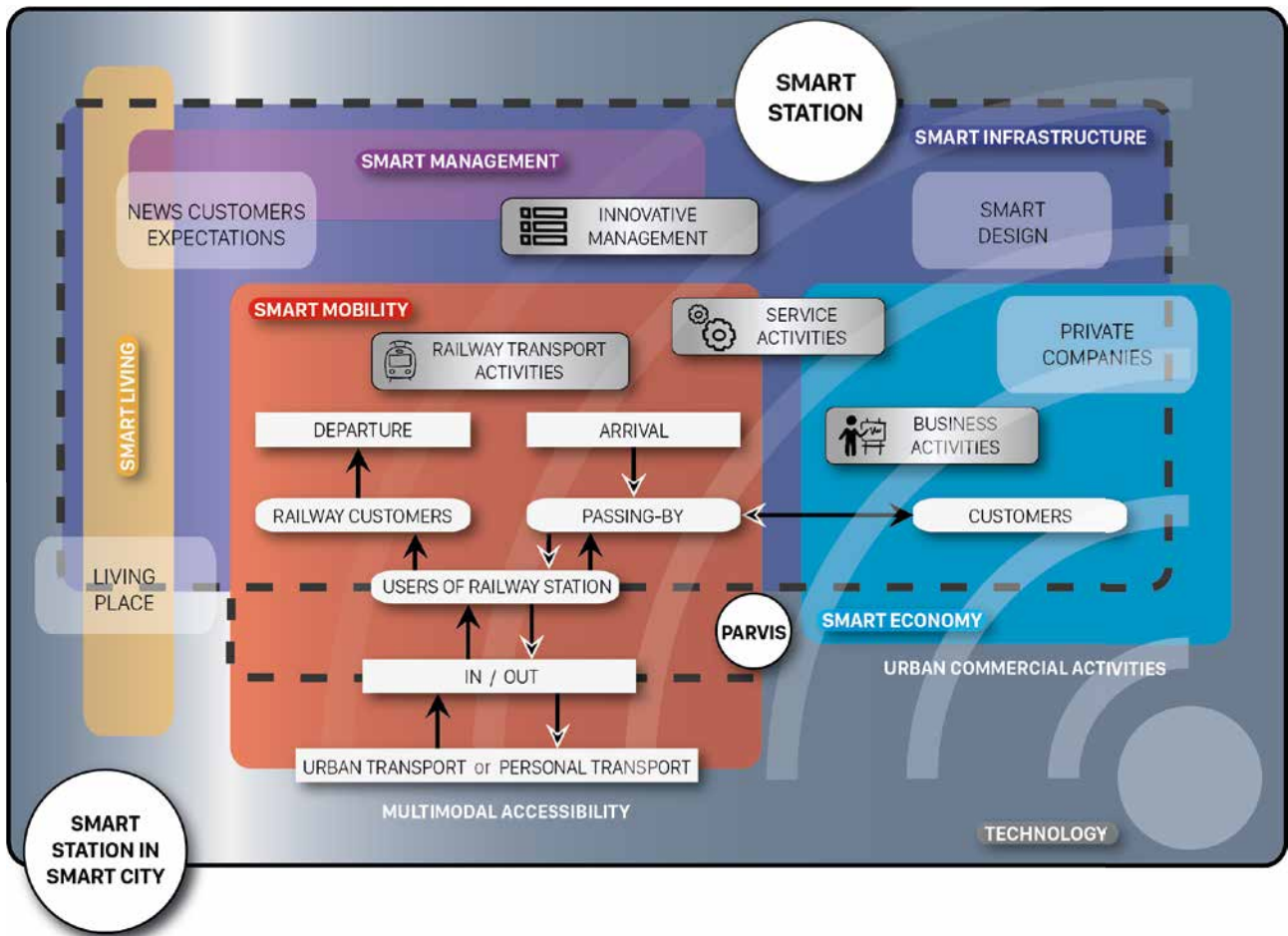
WHETHER FOR SHORT OR LONG DISTANCES, FOR REGIONAL, MASS TRANSIT OR HIGH SPEED TRAVEL, THE TRANSPORT OF PASSENGERS BY RAIL IS AN ACTIVITY WITH A BRIGHT OUTLOOK FOR THE FUTURE. AMONG ALL THE ASPECTS NECESSARY TO DEVELOP PASSENGER TRANSPORT (TECHNOLOGY, MARKETING, TICKETING, FINANCING, ETC.), THE COMMON POINT FOR RAIL COMPANIES, CUSTOMERS AND SOCIETY IS RAILWAY STATIONS.

Stations are a key factor in all passenger transport for railways and citizens alike. Apart from their strategic value for railway systems and customers, stations are an important commercial, economic and social business asset and are an essential part of urban development.



SMART CITY MODEL

<p>SMART GOVERNANCE</p> <ul style="list-style-type: none"> Public and local services Transparent governance Innovative management Smart facilities management Efficient crowd management Participation in decision making and public life 	<p>SMART TECHNOLOGY</p> <p>SMART Accessibility</p> <ul style="list-style-type: none"> Mobile apps Accessibility of the information Internet of things Big data & cloud <p>SMART Protection</p> <ul style="list-style-type: none"> Adaptability Cybersecurity Protection of private information Security & Privacy
<p>SMART ECONOMY</p> <ul style="list-style-type: none"> Innovative spirit Ability to transform Entrepreneurships and news business models Collaborative activities International embeddedness Economic image and trademarks 	<p>SMART ENVIRONMENT</p> <ul style="list-style-type: none"> Land revitalization Reducing pollution Environmental benefits Environmental protection Open space conservation Sustainable resource management
<p>SMART INFRASTRUCTURE</p> <p>SMART Building</p> <ul style="list-style-type: none"> Smart design Smart furniture High performance building Intelligent & Inclusive <p>SMART Grid</p> <ul style="list-style-type: none"> Micro grid Smart facilities Grid of telecommunication, energy, water, wind, garbage, ... 	<p>SMART MOBILITY</p> <ul style="list-style-type: none"> New payment methods Intermodalities, multimodalities Solutions for integrated mobility No barrier for people with reduced mobility Local, regional and international accessibility
<p>SMART HEALTHCARE</p> <ul style="list-style-type: none"> Facilities safety Individual safety Social function Social cohesion and interaction Availability of rescue services Health conditions and welfare 	<p>SMART PEOPLE AND LIVING</p> <ul style="list-style-type: none"> Cosmopolitanism Improvement of customers and users' experiences Participation in public life New services for customers and users Flexibility and ethnic plurality Entertainment activities, cultural facilities and touristic attractivity



NEXTSTATION CONFERENCE

ONE OF SMGG'S FLAGSHIP ACTIONS IS THE ORGANISATION OF THE NEXTSTATION CONFERENCE, A GLOBAL FORUM FOR PROFESSIONALS, LOCAL AUTHORITIES, RESEARCHERS OR ANYONE ELSE INTERESTED IN THE VARIOUS ASPECTS OF STATION-RELATED CHALLENGES, SUCH AS SECURITY, INTEGRATION INTO THE CITY, INTERMODAL CONNECTIONS, SUSTAINABILITY, INFORMATION, BUSINESS AND CUSTOMER SERVICE, ETC.

Every two years, leading decision-makers from railways, transport and urban planning participate in the NEXTSTATION Conference.

Following the success of the five last editions, the 7th UIC NEXTSTATION will be held in Yazd, Iran in 2019.

UIC NEXTSTATION website incorporating all the speeches from the speakers at previous events:

www-pp.nextstation.org

www.nextstation2017.com/programme



Smart Stations in Smart Cities

6TH INTERNATIONAL CONFERENCE ON RAILWAY STATIONS
Madrid 2017





PUBLICATIONS



Handbook on Smart Station; best practices around the concept of smart management, smart infrastructure and smart mobility.



Security at stations: management of public places and intermodal security, feeling of security, design impacts, training.



Sustainable stations: summarising best practices in several countries, proposing recommendations for achieving sustainability goals.

UIC Leaflet 140 – Accessibility to stations in Europe;

UIC Leaflet 180 – Classification of Rail Passenger Stations;

UIC IRS 10181 – In-station information: traveller assistance at stations, including the use of modern technologies such as interactive screens, smartphones, technologies for people with disabilities (visually impaired, hard of hearing, etc.);

CRTS



Bartłomiej Buczek
Chairman



PARTNERS

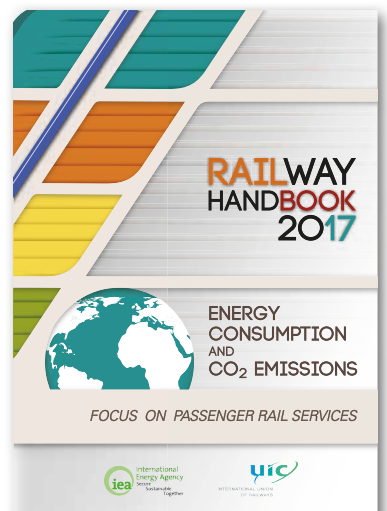


CONSEQUENTLY, IT IS INCREASINGLY NECESSARY FOR ALL INVOLVED TO BE FAMILIAR WITH THE MANY ASPECTS AND IMPLICATIONS OF COMMUTER AND REGIONAL TRAIN SERVICES (BOTH POSITIVE AND NEGATIVE) IN ORDER TO BE ABLE TO TAKE INFORMED DECISIONS ON THE DEVELOPMENT OF TRANSPORT SYSTEMS IN GENERAL AND THE RAILWAYS IN PARTICULAR.

The purpose of the Commuter and Regional Train Systems (CRTS) group is to obtain a continuous best-practice overview of operating passenger railways in regional and metropolitan areas, how to manage huge passenger flows and satisfy customer expectations, and how to manage cross-border services.

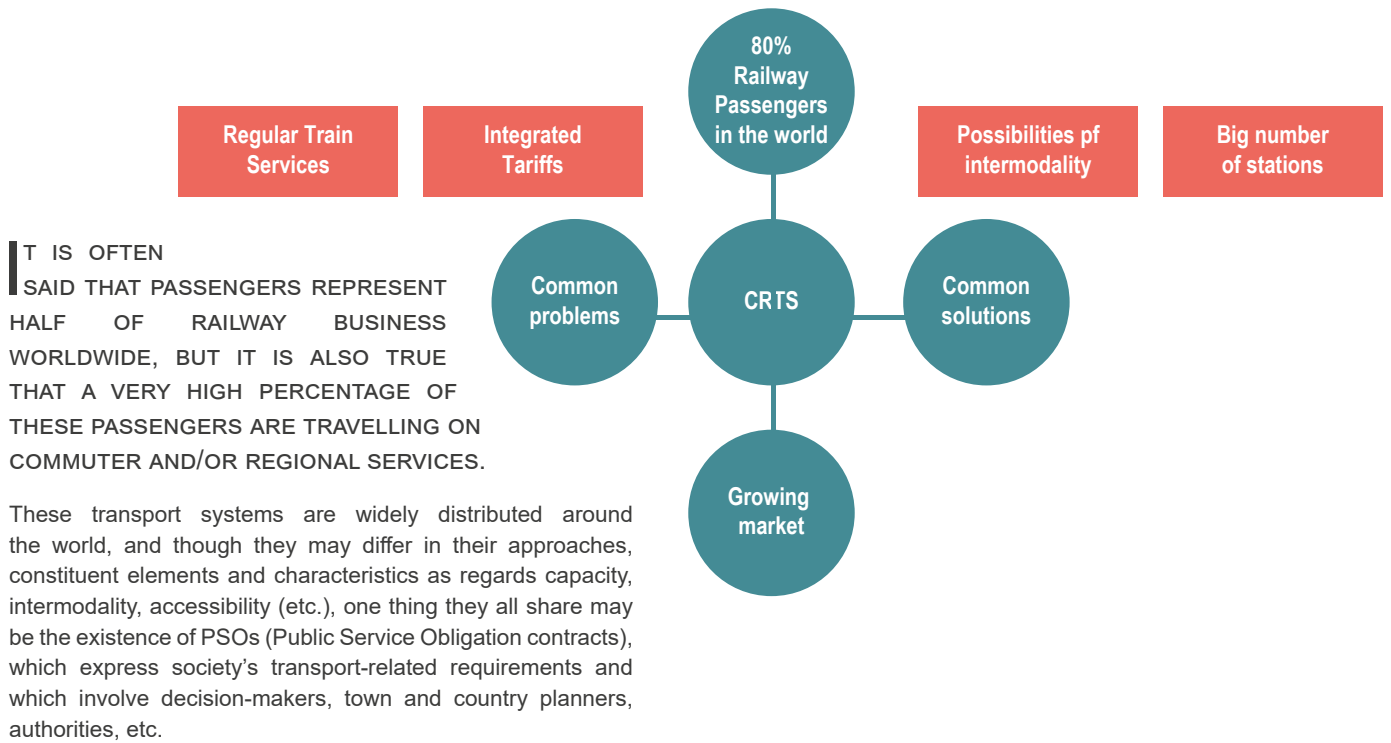
Given the importance of the subject, CRTS also cooperates with other UIC groups and other entities like the International Association of Public Transport, UITP, and the International Energy Agency, IEA, and with other UIC regions.

PUBLICATION



<https://uic.org/energy-and-co2-emissions>

The railway used by 80% of passengers in the world



CRTS TRAINING

UIC co-organised a three-day training programme, the aim of which was to examine all the elements comprising commuter and regional train systems and the various types of such systems in existence, and to measure their impact impartially and objectively from a political, social and economic standpoint.



TOPRAIL



Carles Casas
Chairman

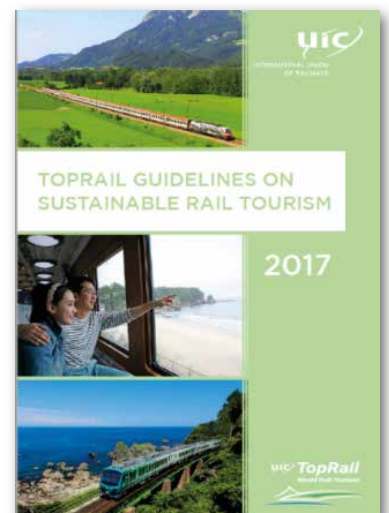


PARTNERS



PUBLICATIONS

TopRail members dedicated 2017, the International Year of Sustainable Tourism, to work on a set of Guidelines on Sustainable Tourism. This work was further bolstered by a Charter on Sustainable Tourism signed by the CEOs of TopRail members.



Fostering international cooperation regarding tourism by rail

IN THE CONTEXT OF STEADILY GROWING INTERNATIONAL TOURISM, TOPRAIL IS A UIC GROUP THAT ACTIVELY PROMOTES RAILWAY TOURISM PRODUCTS BY INCREASING THE VISIBILITY OF SERVICE OFFERINGS.

This is accomplished by providing a platform enabling close collaboration between stakeholders and their customers to encourage railway tourism opportunities.

TopRail's objective is to foster international cooperation on tourism by rail.

How to accomplish the challenge?



Designing and creating a promotional platform (website) facilitating technical and commercial contacts between potential partners and the local tourism industry.



Holding workshops and conferences and conducting studies to analyse best practices and assess their portability.

For more information,
see the TopRail website
www.toprail.org



1st TopRail Forum

The objective of the TopRail Forum is to bring together rail- or tourism-related industries, operators, institutions and customers to discuss business opportunities in the sector regarding tourism and railways.

The TopRail Forum will address key challenges and new tourism trends to provide an overview of the different dimensions of railway tourism projects and services from a sustainable point of view. It intends to bring together all the stakeholders in order to raise awareness of this market potential and contribute to the growth of new and existing tourist products.



INTERNATIONAL UNION
OF RAILWAYS

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This brochure is a publication of the INTERNATIONAL UNION OF RAILWAYS (UIC)

16 rue Jean Rey, F - 75015 PARIS

passenger@uic.org

Tel. : +33 (0) 1 44 49 21 28

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