UIC PASSENGER DEPARTMENT Passenger Activities at UIC

July 2021





CONTENTS

FOREWORD	3
PRESENTATION	4
UIC LEAFLETS & INTERNATIONAL RAILWAY SOLUTIONS	6
STRUCTURE OF THE UIC PASSENGER DEPARTMENT	7
ORGANISATION	8
GLOBAL PASSENGER FORUM	
HIGH-LEVEL PASSENGER MEETING	
RIC/A SPECIAL GROUP	
PASSENGER SERVICES GROUP	12
Strategic priorities and objectives	
Relationship with other bodies and partners	
PATRIC (audit)	
• MERITS	
OSDM Platform	
· PASSAGE	
Passenger Experts Subgroup	
Passenger Service Group IRSs	
INTERCITY & HIGH-SPEED SECTOR	
A comprehensive system allowing door-to-door transportation	
Intercity & High-Speed sector	
Statistics – database and high-speed world	23
 Alliance of Universities for High-Speed Rail: "Working together for mutual benefit" 	72
 High-Speed rail projects International Railway Solutions for High-Speed Rail 	
Night Trains Working Group	
Railways used by 90% of passengers in the world	
TOURISM OPPORTUNITIES FOR RAILWAYS (TOPRAIL)	
Fostering international cooperation regarding tourism by rail	
Tackling the challenges of rail tourism	
Activity	
STATION MANAGERS GLOBAL GROUP	
Organisation chart	
Strategic axes and objectives	
Station and Urban Design Working Group	
Facility Management and Operation Working Group	
Retail and Commercial Affairs Working Group	
Small Stations Working Group	
UIC nextstation conferences	
GLOSSARY	37

978-2-7461-3106-4

Warning

No part of this publication may be copied, reproduced or distributed by any means whatsoever, including electronic, except for private and individual use, without the express permission of the International Union of Railways (UIC). The same applies for translation, adaptation or transformation, arrangement or reproduction by any method or procedure whatsoever. The sole exceptions - noting the author's name and the source - are *"analyses and brief quotations justified by the critical, argumentative, educational, scientific or informative nature of the publication into which they are incorporated"* (Articles L 122-4 and L122-5 of the French Intellectual Property Code).

FOREWORD



François Davenne UIC Director General

Since the previous brochure in 2019, the UIC Passenger department has continued to address the current and future challenges facing passenger rail operators across the globe by supplying its members with unique technical support on issues impacting passenger productivity.

Passenger rail activity has been strongly affected by the Covid-19 crisis, and while the railways have continued to contribute to the growth of rail transport during the pandemic, the latter has revealed the urgent need for a change in mobility habits and for more investment in the railways within the next 10 years.

The post-Covid period is an opportunity with regard to climate change for policy makers and the financial sector to invest in areas such as high-speed rail and to finance transformational projects at regional and global level to achieve more efficiency in the short term. Projects to develop digitalisation, seamless interconnection with other modes and more capacity of existing infrastructures will drive a modal shift to rail and public transport, which is essential in order to achieve the Sustainable Development Goals (SDGs) and the Green Deal in Europe. These developments will also impact customer experience, with most passengers by 2030 being able to benefit from e-ticketing, multimodal travel information and seamless journeys.

This brochure covers the latest progress and developments in a number of key areas, notably OSDM (Open Sales & Distribution Model), multimodality, research and innovation, accessibility, the customer experience both onboard and in stations, sustainable rail tourism, new IRSs in passenger services and high-speed rail, not to mention the 7th UIC nextstation conference and the 11th UIC World Congress on High-Speed Rail planned for 2022.

These projects are testament to the priority our members attach to improving the efficiency of the passenger sector and highlight UIC's role as a solution-oriented forum for cooperation, dialogue and sharing best practice at both European and global level.

As the railway community recovers from the pandemic and prepares the "new normal" for rail travel, innovative solutions, a coordinated response and a clear vision of the future of railways will be vital to ensure that rail is ready for the mobility challenges ahead and can position itself as the backbone of tomorrow's sustainable transport paradigm, in which passenger rail will have a critical role to play.

PRESENTATION



Marc Guigon UIC Passenger Director

UIC is the worldwide organisation for the promotion of rail transport at a global level and the collaborative development of the railway system. It brings together some 200 members on all five continents, comprised of rail operators, infrastructure managers, railway service providers, etc. UIC maintains close cooperative links with all actors in the field of rail transport around the world, including manufacturers, railway associations, public authorities and stakeholders in other fields and sectors whose experiences may be beneficial to rail development. UIC's main tasks include understanding the business needs of the rail community, promoting railways worldwide, developing innovation programmes to identify solutions to these needs, and preparing and publishing a series of documents, known as International Railway Solutions (IRS), to facilitate the implementation of these innovative solutions.





GENERAL CONTEXT OF THE PASSENGER RAIL BUSINESS

Rail passenger transport accounts for 50% of all rail activity, 8% of overall passenger transport, 1% of passenger transport CO_2 emissions, less than 2% of passenger transport GHG emissions, and is believed to be the backbone of future mobility.

With the emergence of new technologies, changes in customer behaviour and choices regarding mobility, and the development of competition in the rail sector, railway undertakings and infrastructure managers are shifting towards a more customercentred approach when providing services, investing in innovation and research to offer more personalised and seamless journeys.

Against this background, the UIC Passenger Department acts as a lever to transform the railway business by offering sectoral technical solutions (IRS), opportunities for knowledge exchange, networking platforms and tools, and support for the whole rail sector: railway undertakings and infrastructure managers, but also decision makers, research centres, universities or Ticket Vendors, for all aspects related to rail passenger transport.

Work at the UIC in the field of rail passenger transport is guided by the members through their participation in the Global Passenger Forum, and is divided into five Sectors:

- Passenger Services Group,
- ↗ Intercity and High-Speed Committee,
- Commuter and Regional Train Services,
- オ Station Managers Global Group, and
- Tourism Opportunities for Railways,

and one Special Group: RIC/A (Agreements on the exchange and use of passenger cars and self-propelled units in international rail traffic).

UIC LEAFLETS & INTERNATIONAL RAILWAY SOLUTIONS

In a complex railway system, functional and operational aspects are essential and must be defined by the users: railway undertakings (RU) and infrastructure managers (IM).

Consequently, users must define their requirements and functional specifications before handing these over, where applicable, to standardisation organisations. This approach guarantees that RUs and IMs will ultimately obtain from the market the most appropriate products corresponding to their needs in terms of services and quality.

UIC is committed to:

- Fostering cooperation between its members to define requirements and functional specifications;
- Ensuring the link with standardisation organisations (CEN-CENELEC, ETSI, ISO, IEC¹) so that they study the technical impacts of these requirements and specifications and then define manufacturing standards ensuring interoperability between existing and future 'technical building blocks';

- Facilitating the convergence of operational rules between RUs and IMs; and
- Publishing test specifications and maintenance frameworks on behalf of RUs and IMs.

By using UIC's requirements and specifications, standardisation organisations get the direct benefit of global influence. Consequently, it is essential that crossreference schemes for documents are established between these organisations and UIC, and even extended to documents produced by other sector stakeholders, such as (non-exhaustively) OSJD², ERA³ or OTIF⁴. This is the simplest way to ensure consistency and to avoid potential overlaps or gaps between these essential documents.

UIC's documentation assets can take multiple forms: technical and research reports, guidelines, technical specifications, and IRSs (International Railway Solutions), which benefit directly from the legacy of the well-known UIC leaflets as part of a global migration programme, with a systematic five-year review of each IRS.



All these publications are available on the UIC Railway Technical Publication website: <u>www.shop-etf.com</u>.



CEN and CENELEC are business catalysts in Europe, removing trade barriers for European industry and consumers. Their
mission is to foster the European economy in global trading, the welfare of European citizens and the environment. Through
their services, they provide platforms for the development of European standards and other technical specifications.
ETSI is a regional standards body (recognised by European Standards Organizations (ESO)) dealing with telecommunications,
broadcasting and other electronic communications networks and services.
ISO – International Standardization Organization.

IEC – International Standards and Conformity Assessment for electrical technologies – European standards

^{2.} Organisation for Cooperation of Railways

^{3.} European Union Agency for Railways

^{4.} Organisation intergouvernementale pour les transports internationaux ferroviaires

STRUCTURE OF THE UIC PASSENGER DEPARTMENT



ORGANISATION



GLOBAL PASSENGER FORUM



Manel Villalante i Llauradó

Chairman of the Global Passenger Forum Director General of Development and Strategy of Renfe



The UIC Global Passenger Forum was set up so that members all over the world could jointly adopt a global approach to UIC Passenger activity, encompassing the five passenger sectors (Intercity and High-Speed, Commuter and Regional Trains, Stations, Passenger Services Group and TopRail) and relevant projects, and discuss and set common priorities, strategies and directives, eventually to be coordinated with other forums and platforms where appropriate.

The purpose of the UIC Global Passenger Forum is to:

- Set out a global and strategic vision for UIC Passenger activities, and establish guidelines and priority lines of work;
- Transversely coordinate and supervise Passenger-related work conducted by the five groups and committees;
- Collect results and deliverables from the different activities and projects undertaken, with a view to disseminating outcomes as widely as possible among members, within the scope of the applicable intellectual property rights;
- Select and endorse candidates put forward for the positions of chair or other roles within the groups and committees, to be ratified by the UIC General Assembly in accordance with UIC Statutes;
- Coordinate with the Rail System Forum and other platforms, such as Digitalisation, Standardisation, RICG⁵, Safety, etc., on key issues relating to Passenger activity;
- Promote and facilitate meetings with other organisations relevant to passenger transport, such as UITP⁶, CIT⁷, OSJD⁸, CER⁹, RNE¹⁰, Association of American Railroads (AAR), etc.
- Integrate and coordinate, in a coherent and consistent way, activities and projects relating to passenger transport developed at the regional level of UIC. Recommend that the General Assembly approve cross-regional projects and activities adopted by the various groups and committees under the Passenger Global Forum.

8. Organisation for Cooperation of Railways

^{5.} Research and Innovation Coordination Group

^{6.} International Union of Public Transport

^{7.} International Rail Transport Committee

^{9.} Community of European Railway and Infrastructure Companies

^{10.} RailNetEurope

HIGH-LEVEL PASSENGER MEETING

The High-Level Passenger Meeting (HLPM), co-organised by UIC and CER, is an event aimed at European Passenger CEOs to discuss strategic topics relating to the challenges faced by the European railways.

This meeting brings top managers from Passenger railway companies across Europe together for discussions on important rail passenger transport policy issues. The purpose of this meeting is to review key questions about European railway passenger policy, and to address the technical and political challenges facing passenger transport in the future. During the last HLPM on 2 October 2020, the focus was on the development of the OSDM (Open Sales and Distribution Model), as per the resolution from the previous HLPM. One standard had been developed, comprising two parts: OSDM Platform and OSDM Online. Other topics were also discussed, such as support for companies during the Covid-19 pandemic, the start of the International Rail Passenger Platform, and the opportunities for flight substitution via rail in Europe.

The next HLPM will be held on 8 October 2021 in Paris, and Passenger CEOs will discuss strategic subjects, including distribution, the 'New Normal' and new services.



RIC/A SPECIAL GROUP



The RIC/A¹¹ Special Group and its Secretariat, which is attached to the UIC Passenger Department, administers the RIC and RIA Agreements. These agreements govern the exchange and use of coaches and selfpropelled units in international traffic, subject of the RIC since 1922. These agreements, which take the form of a multilateral contract, describe the responsibilities of the actors involved (RUs and keepers) in the said exchange and must be continuously adapted to allow the reciprocal use of passenger coaches or self-propelled units in international traffic. To ensure this, experts draw up amendments, which are put to the vote at the General Assembly of the RIC/A. The agreements, updated by any new amendments, are published and enter into force each January. Access is limited to RIC and RIA members only.

To facilitate the exchange of passenger trains, RUs apply the ATI Agreement (also administered within RIC/A). This agreement between RUs (RIC members) allows for the delivery of trains so that this rolling stock may be waived for the technical acceptance examination. This advantage is based on the membership of an RU (accepted by its exchange partners) and the assessment of the quality management system (QMS), making it possible to determine the level of quality per member compared to the trains exchanged. The QMS is an integral part of the RIC and RIA Agreements and is based on ISO 2859. This QMS is stipulated by Regulation (EU) 2018/762 and Directive (EU) 2016/798¹² to comply with safety rules. With the aim of integrating the digitised technology of the QMS, RUs are gradually developing the implementation of common software from the year 2020. This implementation strategy offers the following benefits:

- A representative overview of the level of quality achieved by an RU or a vehicle keeper for the entire fleet exchanged under RIC or RIA rules
- Compliance with the control process defined in the QMS, as the controller is supported on identical software
- Identical inventory report and display of results, common to all members
- Timely notification to all members in case of serious defects on vehicles

The software testing phase carried out by a few RUs shows that the application is working properly. The validation of the test phase will make it possible to define the necessary software adjustments. After the test phase and on the contractual basis of UIC and the provider of this service from the ÖBB, the generalisation of this software to all members of the RIC/A SG can be developed. The goal is that this generalisation will start for the next schedule change in December 2021.

^{11.} Regolamento Internazionale delle Carrozze / dei Treni Automotori

^{12.} https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0762



PASSENGER SERVICES GROUP

PASSENGER SERVICES GROUP



The Passenger Services Group plays a fundamental management and coordination role for all Passenger activities related to technical and commercial issues, including those areas concerning tariff conditions and technical standards and interfaces for European/international sales and systems.

Beyond these two main branches, included in the Passenger Experts Subgroup (PES), the PSG also addresses the management of MERITS (a unique database for the mutual exchange of data on timetables and stations between RUs) and issues related to tools and assistance for PRMs (Persons with Reduced Mobility – PASSAGE activities). Audit activity for the monitoring of the proper implementation offinancial standards by RUs is also supervised through the contribution of the PATRIC¹³ working group.

^{13.} Passenger Accounts and Ticketing Rules Inspection Committee

STRATEGIC PRIORITIES AND OBJECTIVES

Distribution: The PSG is actively involved in the commercial and distribution domains, with the aim of consolidating existing cooperation and further improving current initiatives. Follow-up and implementation of OSDM will be part of the PSG agenda.

Commercialisation of MERITS database: The PSG, through the MERITS Steering Board, analyses the MERITS evolution and other developments.

New projects will be focused on innovation and multimodality: Continuation of innovation workshops, and the Air+Rail and Door2Door projects, together with two other projects:

- Next generation revenue sharing
- "Day of travel" to support passengers in the event of delays and disruptions

Global Passenger Forum (GPF): The following PSG priorities have been endorsed by the GPF:

- OSDM implementation
- ↗ MERITS enhancement
- Multimodality with urban and air transportation (Door2Door and Air+Rail projects)
- Development of e-ticketing (Electronic Ticket Control Database [ETCD])
- Innovation workshops

RELATIONSHIP WITH OTHER BODIES AND PARTNERS

The PSG is actively working with the European Union Agency for Railways (EUAR) for the synchronisation of UIC IRS with EUAR TAP-TSI Technical Documents as part of the UIC - EUAR¹⁴ Technical Agreement.

- OSJD: joint management of OSJD/UIC IRSs and leaflets
- PSG also works closely with CER concerning TAP-TSI[™] regulations and

relations with the European Union Agency for Railways

- CIT is also a partner to highlight and solve legal issues like ticket layout, GDPR, Passenger Claims conference, PRR¹⁶, etc.
- Multimodality is a core objective of PSG so there is close cooperation with UITP, IATA¹⁷ and STA for the intermodal projects Door2Door and Air+Rail



14. European Union Agency for Railways.

^{15.} Telematics Applications for Passenger-Technical Specification for interoperability.

^{16.} Passenger Rights and regulations.

^{17.} International Air Transport Association.

PATRIC (AUDIT)



Fabrice Setta

Passenger Accounts and Ticketing Rules Inspection Committee

The cross-distribution of domestic and international tickets is based on multilateral agreements provided by UIC IRS 90918-1, IRS 90918-8, IRS 90918-9, UIC Leaflet 301 (accounting) and the Special Conditions of International Carriage (SCIC) for different types of ticket. However, these transactions are not always underpinned by automated data exchange with the vendor system. Therefore, the accounts kept for certain types of ticket are based on the subsequent upload of sales data sets into international accounting systems in accordance with UIC Leaflet 301. In this context, the carriers trust that the revenue from the sale of tickets to which ticket issuers are entitled will be correctly calculated and allocated to them. Moreover, they rely on the relevant conditions of carriage and tariffs being correctly applied and the agreed measures on revenue securing being duly implemented. To ensure that the revenue resulting from such sale is being correctly apportioned, intermittent audits are carried out by the PATRIC Steering Board in accordance with the regulatory framework set out in UIC Leaflet 120. These audits must take account of the evolving competitive environment in their execution.

MERITS

Multiple East-West Railway Integrated Timetable Storage

MERITS is a single database that contains the timetable and station data of a large number of railway companies, which is integrated and reproduced three times 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 a single source of data, thereby doing away with large volumes of multilateral exchanges.

The MERITS timetable data consists of:

- **7** Train schedules and services
- ↗ Location database
- MCTs (Minimum Connecting Times)

Use of MERITS data

MERITS integrated data is used to ensure broad coverage of railway undertaking timetable data, including domestic and international trains, for the following purposes:

- ↗ Customer information
- ↗ Journey planning
- ↗ Ticket booking
- Feeding mobile applications

UIC licenses the MERITS integrated data to third parties.

For more information and subscription:

uic.org/merits-database www.shop-etf.com/en/merits



OSDM PLATFORM

 

OSDM Platform (formerly PRIFIS)

In 2020, UIC completed the procurement process for the implementation of the PRIFIS replacement tool and the design of the new related specification called Open Sales and Distribution Model (OSDM).

The OSDM Platform replaces the former PRIFIS international tariff distribution tool, a shared database containing prices and tariffs for non-reservation tickets.



twice a year. The OSDM Platform is a Software as a Service (SaaS) cloud-based solution. Its architecture enables the ongoing introduction of future UIC services relating to the distribution of tariff and price data. The technical components of the solution are deployed in a fully virtual, enterprise-grade cloud environment.



15

PASSAGE



Accessibility Group of Experts

The PASSAGE Group of Experts has become the major reference in railway accessibility in the European railways. Its objectives are to create and safeguard professional exchange among the railways to identify the work to be done at national and transnational level and potential solutions concerning accessibility issues.

The PASSAGE group holds three meetings per year. In these meetings, the results of the activities of the group are reported and the latest news on accessibility from each company is discussed. During the meetings there is also an update on the performance of the UIC PRM-ABT (Assistance Booking Tool), which was created to provide assistance services to international passengers by connecting twenty PRM call centres.

All the best practice information was collected and published in UIC Leaflet 145, which provides a guide for the provision of accessibility services in railway companies and is periodically updated by members. It is now about to be updated and transformed into IRS 10145.



UIC Rail Accessibility Day

In 2021, PASSAGE members have decided to organise their first workshop as part of the European Year of Rail to discuss the challenges of accessibility with the most important stakeholders of the railway community.

Under the motto #YesWeCare #YesRailCares, the Rail Accessibility Day will raise awareness of the importance of inclusion for the future of sustainable mobility, with rail as the backbone, without leaving anyone out.

It will focus on supporting our most vulnerable customers, restoring confidence in rail travel for everyone, ensuring a seamless and safe journey for all, and using digitalisation to foster autonomy.



PASSENGER EXPERTS SUBGROUP





The Passenger Experts Subgroup (PES) is the umbrella body for the PSG's commercial and technical activities maintaining international distribution cooperation between UIC members. The PES transforms commercial and regulatory requirements into technical standards and interfaces for international sales and distribution systems.

The activities of the working groups within the PES focus on ticket layout and security, reservations, NRT¹⁸ and IRT¹⁹ tariff models for day and night trains, tariffs between Eastern and Western European countries, and the preparation and maintenance of the related international standards (IRS). The Special Conditions of International Carriage are issued by PES subgroups: Sales Process Group (SPG) and East West Tariff (EWT). Since 2020, the OSDM Executive Committee and the OSDM Technical Working Group introduced under the umbrella of PES, have been tasked with preparing the OSDM Application Programming Interface (API) implementation by UIC members and third parties (ticket vendors, GDs²⁰, OTAs²¹ and IT providers).

Based on the business needs of PSG members as expressed by the SPG and subgroups, the PES also ensures the correct implementation, maintenance and evolution of the related UIC IT systems such as eTCD²², Public Key Management Website (PKMW), the Persons with Reduced Mobility Assistance Booking Tool (PRM-ABT), and the OSDM Platform (formerly PRIFIS).

^{18.} Non Reservation Ticket.

^{19.} Integrated Reservation Ticket.

^{20.} Global Distribution System.

^{21.} Online Travel Agency.

^{22.} E-Tiket Control Database.

OSDM Executive Committee (OSDM EC)

This group steers the OSDM specification and implementation. It defines the priorities and strategic developments of OSDM. It prioritises the backlog based on the value

OSDM Working Group (OSDM WG)

This technical group designs and implements improvements to the OSDM standard. It is thus responsible for translating the functional specifications identified by the SPG/PES and ETT²³ into a technical specification document.

for the railway customer and the railway sector as a whole. The committee is a fair representation of the parties involved, comprising railways, distributors and others.

To ensure focus, the work in progress should not be larger than seven items. The working group takes special care not to break existing implementations, thus securing investments made by all parties.

Website:

unioninternationalcheminsdefer.github.io/ OSDM/organization

Sales Progress Group (SPG)

The three subgroups within the SPG focus on: Non-Integrated Reservation Tickets (NRT), Integrated Reservation Tickets (IRT), and Night Trains (NT).

The subgroups create and maintain a framework of mutual trust for international tariff cooperation between railway undertakings.

East West Tariff (EWT)

This committee aims to organise tariffs and accounting between Eastern and Western European countries, given the differences in the systems, and aims to:

Ensure through-ticketing for passengers between railway undertakings which apply the CIV²⁴ Uniform Rules and those which apply the Convention for International Passenger Transport SMPS²⁵;



They aim to harmonise the conditions of carriage and sales and contribute to the drafting of the Special Conditions of International Carriage (SCIC). The groups also collaborate with UIC PSG technical groups on the development of specifications and IT solutions for each commercial unit.



- Achieve substantial harmonisation of the conditions of carriage and of sale thereby providing a suitable response to the increasingly competitive market environment; and
- Draft recommendations for the SCIC²⁶-EWT as well as provisions for the issuing of tickets and accounting. In doing so it is necessary to consider updates made to the GCC²⁷-CIV/PRR and the SMPS.

^{23.} Eu Travel Tech.

^{24.} Contract of International Carriage of Passengers by Rail.

^{25.} Agreement on International Passenger Traffic.

^{26.} Special Conditions of International Carriage.

^{27.} General Conditions of Carriage.

Passenger Services Solutions (PSS)

The Passenger Services Solutions oversees the development and maintenance of specifications for data exchange for the distribution of international rail tickets. The specifications for data exchange cover timetable enquiries, reservations, ticket inspection, etc.

In particular, the PSS maintains the specifications for the reservation interfaces (IRS 90918-1), the new specification for control data exchange (IRS 90918-4), and specifications for the booking of PRM assistance (IRS 90918-6).

Ticket Security Group (TSG)

This group deals with the security features of 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.

In 2018, TSG developed the Flexible Content Barcode (FCB) to allow multiple legs and passengers to be embedded in one unique FCB Barcode.



IRS 90918-4 will be updated to accommodate changes with the new OSDM IRS 90918-10. The PSS provides support to the new OSDM group during IRS alignment processes.

The group works closely with the TLG and TSG groups and the commercial units to translate their requirements into solutions specific to each unit (IRT, NRT, NT and EWT). The PSS also coordinates with the ERA on the synchronisation of UIC IRSs with the TAP-TSI TD (Telematics Applications for Passengers – Technical Specifications for Interoperability Technical Documents).



Kurt De Vriendt (subcontracted company)

In 2021, TSG developed the new FCB with an elliptic curve encryption mechanism and a new double encryption to allow the inmotion barcode on screen. The public key management website is used to exchange public keys to enable ticket inspection on trains and to ensure that barcodes are not counterfeited.

Website: railpublickey.uic.org





Ticket Layout Group (TLG)

The Ticket Layout Group defines rail ticket layouts on CIT²⁸ paper, blank paper (printat-home tickets) and on-screen display formats, and aims to:

- Facilitate information and best practices exchange on rail ticketing between railways;
- Discuss different fulfilment types, automatic vending machines, ticket paper, e-tickets, etc.;
- Support members in the development of new ticketing and use of UIC standards;

Integration of Intermodal Transport Projects

Better integration for door-to-door journeys (UIC D2D)

Integration between rail and other surface transportation services, such as local public transportation, buses, car sharing and bikes, is beneficial for all parties involved.

For rail companies, the main benefits include improving customer service, additional passenger volumes, encouraging modal shift, new ancillary revenue sources and the opportunity to evolve from a pure transport operator to a mobility service provider.

The project will enable rail companies to offer door-to-door journey packages through digitally-enabled ticketing, journey management and validation systems, and will leverage the growing adoption of account-based ticketing by transport providers.

Moreover, the project has defined guidelines and formats for the exchange of real-time data, including train tracking.

29. Ticket Layout Group



- IRS 90918-8 and ERA TAP-TSI Technical Document B11; and
 Provide source code and IT applications
- for the fulfilment or inspection of railway tickets.

In 2021, because of the new business possibilities offered by the FCB, TLG²⁹ developed the new Universal Rail Ticket (URT) layout to display all kinds of rail tickets on one piece of blank paper or on screen.



Common distribution with air transportation (UIC AIR+RAIL)

Integration between rail and air transportation provides several benefits to rail operators, including access to a global network of online and traditional travel agents, additional international sales opportunities and an increased market share in ground mobility solutions connecting to airports.

Following the UIC-IATA MoU³⁰ in April 2020, the two organisations' retail experts are collaborating closely to define common standards for technology platforms enabling the distribution systems for multimodal tickets and new business models for intermodal transport solutions.

The project increases awareness and member knowledge about Air+Rail intermodal integration, removing or mitigating major technical barriers and providing technical guidance and standards to facilitate integration, as well as technical solutions to accelerate adoption.

^{28.} International Rail Transport Committee

^{30.} Memorandum of Understanding

The project facilitates the establishment of multiple partnerships between airlines and rail companies enabling airlines to offer Air+Rail journeys through any sales channel (website, mobile, GDS, OTA, etc.).

Innovation Platform

Each year, PSG organises a focus on innovation, as a specific working group within which all PSG members are invited to contribute to specific workshops on the following topics.

PASSENGER SERVICE GROUP IRSs

The IRSs on the Passenger Service Group are as follows:

IRS 90918-1: Electronic reservation of seats/ berths and electronic production of travel documents-Exchange of messages (HERMES)

IRS 90918-4: e-Ticket Exchange for Control will be updated with updates from the production tool users and OSDM standard

IRS 90918-6: Electronic reservation of assistance for persons with reduced mobility – Exchange of messages

IRS 90918-7: Compensation in case of train delay – Exchange of messages

IRS 90918-8: Layout for electronically issued rail passenger tickets will be updated with the new Universal Rail Ticket (URT) Format

IRS 90918-9: Digital Security Elements for rail passenger ticketing will be updated with the new DOSIPASS Flexible Barcode Content (FCB) definition

IRS 90918-10: Open Sales and Distribution Model (OSDM)



INTERCITY & HIGH-SPEED SECTOR



A COMPREHENSIVE SYSTEM ALLOWING DOOR-TO-DOOR TRANSPORTATION

Growing environmental awareness due to the pandemic has resulted in a shift in customer mobility habits and has revived demand for low-carbon transport alternatives such as long-distance rail travel. With more passengers choosing to travel sustainably, HSR (High-Speed Rail) is often described as the transport mode of the future for many reasons. High-speed trains also play a key role in achieving regional integration and helping to create socio-economically balanced societies at global level.

The current evolutionary trend of the world HSR network shows a very sharp increase in the length of the network in Asian countries. Development and implementation of highspeed lines are being studied in all regions worldwide.

End-to-end transportation is a must and intermodal service complementarity is also one of the factors in the operational and financial success of HSR.



High-speed rail combines many different elements which constitute a "whole, integrated system": an infrastructure for new lines designed for speeds of 250 km/h and above; upgraded existing lines for speeds of up to 200 or even 220 km/h, including interconnecting lines between high-speed sections; its rolling stock, especially designed specifically for train sets; telecommunications, signalling, operating conditions and equipment, etc. Technology is expected to have a major influence on infrastructure development over the next 20 years.

Since many high-speed trains are also compatible with the conventional network, the term "high-speed traffic" is also frequently used for the movements of such trains on conventional lines but at speeds lower than those allowed on high-speed infrastructure.

Over three billion passengers travel on highspeed trains each year. High-speed rail is continuing to develop around the world; there are now almost 56,000 km of lines in operation worldwide. In 30 years, this figure will have at least doubled.

Given the stronger demand for low-carbon transport alternatives such as long-distance rail travel, railway undertakings are launching, developing, or reviving night train services, with the aim of establishing new connections and enlarging the current night train network. This includes developing attractive services to meet the growing demands from passengers such as competitive travel times, comfort, good connectivity (thus fostering regional development between smaller cities and rural areas) as well as being more climate friendly.

INTERCITY & HIGH-SPEED SECTOR



This Committee brings together several UIC railway members who are either active in long distance or high-speed rail domains in their day-to-day operations or have identified it as a development objective.

Committee plenary meetings and onsite technical visits provide opportunities to exchange best practice and discuss common problems. The ICHSC therefore greatly benefits attendees, offering the chance to identify solutions to common issues, compare approaches, or develop a global vision.

STATISTICS – DATABASE AND HIGH-SPEED WORLD

Each year UIC produces an atlas providing an overview of high-speed lines in the world: those in commercial operation, under construction, currently under development, and planned in the medium or long term. Studies are also conducted within the framework of the Committee to deepen understanding of particular subjects specific to long-distance and high-speed fields.

The Committee offers a wealth of expertise to members through discussions, communication, studies and projects.

UIC makes this expertise available in several ways: by means of the high-speed database and maps, and by issuing reference documents and numerous publications.



The UIC High-Speed Rail Atlas is a unique document that provides very detailed information about all high-speed lines around the world, supplied and reviewed by UIC members..

ALLIANCE OF UNIVERSITIES FOR HIGH-SPEED RAIL: "WORKING TOGETHER FOR MUTUAL BENEFIT"

In the same spirit of openness and sharing, in 2015 UIC created a unique global alliance of universities, with a view to building a more universal, more useful programme of research. The purpose of the Alliance is to:

- Create synergies and share knowledge about research and innovation between the parties;
- Improve education in the field of highspeed rail;
- Exchange and disseminate information between universities and UIC members; and
- Develop and implement specific research programmes on the development of high-speed railways.

A dedicated Alliance page has been set up on the UIC website: <u>uic.org/high-speed-alliance</u>

HIGH-SPEED RAIL PROJECTS

ICHSC members may also decide to work jointly on specific High-Speed Rail (HSR) studies. Recent projects under finalisation include:

- A benchmark study aimed at anticipating the impact of autonomous road vehicles
- A study for a better understanding of travel cost evolution, looking at HSR marginal cost and value of time
- An innovative tool for decision-makers to understand and evaluate the operational efficiency of HSR, whether existing or planned
- A benchmark study on customer experience based on specific methods and tools for CX assessment

Several other projects, covering cooperation between air and HS rail, artificial intelligence applied to HS, and the 'New Normal' post Covid pandemic, are underway.

Training on High-Speed Systems (Level I and Level II)

UIC members send employees to seminars organised by UIC for training on high-speed. The content is based on the state of the art and is delivered by recognised experts in the field, with two levels. THSS Level I consists of a series of theoretical sessions and technical visits.

THSS Level II is more in-depth and makes use of the special tools developed by FFE.Further details are available on the UIC website: <u>events.uic.org/training-sessions-on-high-</u> <u>speed-rail-systems</u>. Bespoke sessions can be proposed for groups of sufficient size at the request of UIC members.

11th World Congress on High-Speed Rail

The UIC World Congress on High-Speed Rail offers direct access to people and ideas, all gathered in a single location. It is globally renowned as the most prominent and largescale global event on highspeed rail.



Organised every two years, this Congress addresses strategic issues linked to the national and international development of high-speed rail systems. The 11th UIC World Congress on High-Speed Rail is cooperative achievement by UIC, China State Railway Group, Co., Ltd. (CR) and its affiliate China Academy of Railway Sciences Corporation Limited (CARS), in collaboration with all parties involved in high-speed rail around the world.

The UIC HIGHSPEED 2022, is a unique event mobilising policy makers, authorities, railway companies, suppliers, customers, research institutes, universities, etc. around the slogan **"Intelligent solutions for a new world"**.

The Congress is organised around three main blocks: sessions, an exhibition and technical visits. The venue is the National Railway Test Centre, from 28 June to 1 July 2022 in Beijing, with a new convention building, outdoor display tracks and over 10,000 m² of exhibition space. More than 100 exhibitors are expected.



INTERNATIONAL RAILWAY SOLUTIONS FOR HIGH-SPEED RAIL

The IRS High-Speed Working Group meets regularly up to eight times per year to produce new IRSs or to update/migrate UIC leaflets to become IRSs.

In a final step, the Global Passenger Forum approves the International Railway Solutions on high-speed developed by the working group. Once published, the IRSs serve as a benchmark for all stakeholders.

IRS 6066: Railway application – High-Speed – Dynamic integration tests and trial operation before revenue operation review: published in October 2020.

IRS 60680: Design of a High-Speed Railway – Infrastructure: launched for production in December 2020.

IRS 6068: Design of a High-Speed Railway – Signalling and Communication: launched for production in December 2020.

IRS 60682: Design of a High-Speed Railway – Energy: Draft 4.1, 7th edition, endorsed by GPF in April 2021.

IRS 60683: Design of a High-Speed Railway – Interfaces: approval is planned in first quarter 2022.

IRS 60660: Compatibility of High-Speed trains: started in 2021.

IRS 70734: Adaptation of safety installations to High-Speed: started in 2021.

NIGHT TRAINS WORKING GROUP

During the June 2021 plenary session of the UIC Intercity and High-Speed Committee, the ICHSC members decided on the creation of a Night Train Working Group Committee with the aim to meet the growing demands from passengers such as competitive travel times, comfort, good connectivity as well as being more climate friendly.

The aim is for night trains to play an important role in the post-pandemic world and significantly contribute to reduce transport emissions. In Europe, given the vision for 2030 of a network with 15 domestic overnight lines, the challenge for the working group is to work as a team and capture this market of approximately 10 million passengers per year, mostly shifted from planes and cars, also representing an important saving of CO_2 .



The main goals of this UIC Night Train Working Group are to:

- Build a partnership bringing together the night trains players
- Implement standards for coaches and sales systems
- Strengthen the economic situation of night trains
- Specify path fees/track access charges for night trains

In addition, the creation of this Working Group is an opportunity to share best practice and develop common projects and standards in the areas of rolling stock, operations, corridors, cross-border, business and economic models, and on-board services.



COMMUTER AND REGIONAL TRAIN SERVICES

RAILWAYS USED BY 90% OF PASSENGERS IN THE WORLD

It is often said that passengers represent half of the global railway business; it is also true that a very high percentage of those who take the train are travelling on commuter and regional systems.

These transport systems are well distributed around the world, and there are many common, and different, approaches, elements and characteristics: capacity, intermodality, accessibility, etc. However, one common aspect may be the existence of Public Service Obligation (PSO) contracts, which represent social requirements in the field of transportation and involve decision-makers, urban and land planners, authorities, etc.

Consequently, it is increasingly necessary for all agents involved to be familiar with the many aspects and implications of commuter and regional train services (both positive and negative) so they can make decisions on the development of transport systems in general, and the railways in particular, in full knowledge of the facts.

The purposes of the Commuter and Regional Train Services (CRTS) Working Group is to obtain a continuous best-practice overview of operating passenger railways in regional and metropolitan areas, to satisfy customer expectations, and to explore how best to manage huge passenger flows and crossborder services.

Given the importance of the subject, it cooperates closely with other UIC groups, entities such as the International Union of Public Transport (UITP) or the International Energy Agency (IEA), and with other UIC regions.



Future challenges of commuter regional mobility



Mobility as a Service (MaaS)



Personal Mobility Devices



New Services

Publications

Commuter and Regional Train Services Handbook

Over the course of the last three years, the UIC CRTS Working Group has developed a handbook providing an overview of best practices on commuter and regional train services around the world.

The priorities of this project were to provide an overview of sustainable CRTS best practices on a global scale, to focus on some regional specificities where relevant and to analyse future challenges in the sector.

Events

Since 2016, CRTS members have organised an annual three-day training programme which aims to examine all the elements of Commuter and Regional Train Services (CRTS), as well as all the different types, and to measure their impact impartially and objectively from political, social and economic standpoints.

In 2020, the group joined forces with the UIC Sustainable Unit to organise an online webinar entitled: "The opportunities for railways in digital platforms and the future of urban mobility services".

Partners



The Commuter and Regional Train Services Handbook is divided into five main chapters (Main principles, Safety and security, Ticketing, Legal issues and Customer communication) and



each chapter contains a description of the current situation in relevant countries and discusses future scenarios, i.e. ideas about development in the medium and long term.







TOURISM OPPORTUNITIES FOR RAILWAYS (TOPRAIL)



FOSTERING INTERNATIONAL COOPERATION REGARDING TOURISM BY RAIL

TopRail is a UIC group that actively promotes rail tourism 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 primary objective is to foster international cooperation on tourism by rail with the tourism sector.

TACKLING THE CHALLENGES OF RAIL TOURISM

By designing and creating a promotional platform (website) to promote rail tourism offers and services around the world. By setting up workshops, conferences and studies to analyse best practices and assess their portability and facilitating technical and commercial contacts between potential partners and the tourism industry.

ACTIVITY

Meetings

TopRail usually organises three internal meetings, one technical visit and one event/forum per year. Due to the Covid-19 pandemic, in-person meetings and events have not been possible, and the TopRail Forum 2020 was postponed. However, TopRail experts held double the number of online meetings to share, learn and support each other during the pandemic. During these meetings, members tracked the situation in different countries, especially in the summertime when leisure activities were allowed.



TopRail forums and events

The objective of TopRail forums and events 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 first TopRail Forum (held in Barcelona in 2018) and the second (held in Naples in 2019) addressed 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. These were intended to bring together all the stakeholders in order to raise awareness of this market potential and contribute to the growth of existing and new tourist offers.

In January 2020, a workshop on sustainable tourism and rail took place, during the International Tourism Trade Fair (FITUR) in Madrid, organised by TopRail in cooperation with Renfe and the European Tourism Association (ETOA). The workshop was attended by more than 60 people, including tour operators, railway undertakings and experts in sustainability.

In 2021, the European Year of Rail, TopRail members and the European Tourism Association (ETOA) have joined forces to present a one-day programme to promote rail travel in the context of leisure tourism for European citizens and inbound visitors. The initiative was composed of a one-hour open broadcast event at noon and a training programme in the afternoon.

As part of the European Year of Rail, UIC TopRail is organising a photo competition under the theme "My Secret Rail Spots".

The competition gives railway employees an opportunity to be ambassadors for their railways by sharing their favourite rail spots and inspiring passengers to hop on a train and get to know these places – once it becomes possible to travel again.





Publications

As 2017 was the UN International Year of Sustainable Tourism, TopRail members took the opportunity to publish the "TopRail Guidelines on Sustainable Tourism" which was reinforced by a Charter on Sustainable Tourism signed by the CEOs of TopRail members.

In 2018 and 2019, the group worked on "Guidelines on how to increase attractiveness for rail tourism" (published in March 2020), and in 2020 the focus was on "Benchmarking on new technologies for enhancing Digital Passenger Experience" to be published in 2021.

TopRail website: www.toprail.org









Partners













European project: RailtoLand

UIC TopRail is one of the partners of the Erasmus+ funded project, RailtoLand.

RailtoLand is led by the Polytechnic University of Madrid in collaboration with seven European partners from Spain, France, Italy and Portugal.

RailtoLand, a 35-month project, has three main priorities:

- Exploring the social and educational value of European cultural heritage.
- Providing open education and innovative practices in a digital era through a series of MOOCs aimed at providing students with the knowledge and tools to improve their understanding of the European landscape and its railway heritage.
- Tackling skills gaps and mismatches by closing the gap between the theoretical world offered to students and the essential practical experience required to fix concepts.

Website: <u>railtoland.eu</u>



European project: Modus

In the context of increasing environmental awareness, regulatory measures, capacity shortages across different modes, and the need for more seamless and hassle-free passenger journeys, the future evolution of European travellers' demand for mobility is still unknown, along with its potential impact on the European transport system. The optimisation and alignment of intermodal transport is therefore of utmost importance for the overall performance of the (future) European transport system, especially when it comes to providing a seamless and hasslefree journey for passengers and mitigating (air) capacity constraints.

The main objective of the project is the analysis of the performance of the overall transport system by considering the entire door-to-door journey holistically and assessing the role of air transport within an integrated, intermodal approach.

For this purpose, Modus identifies and assesses (future) drivers for passenger demand and supply of mobility in terms of their impact on passenger mode choice. This enables the development of multiple scenarios of future mobility paths, considering aspects such as new regulatory contexts to meet new environmental standards, and new transport operators' business models, covering a timeframe of 2040+.

Website: modus-project.eu

STATION MANAGERS GLOBAL GROUP



Whether for short or long distances, for regional, mass transit or high-speed travel, the transport of passengers by rail has a bright outlook. Among all the factors needed for the development of rail passenger transport (technology, marketing, ticketing, financing, etc.), the common point for rail companies, customers and society is railway stations.

The Station Managers Global Group aims to facilitate the exchange of best practices between actors and experts from around the world, to organise events, to launch studies and to standardise interoperability subjects. It is an incubator for new projects relating to stations.

Through the SMGG, UIC and its members are working to broaden the scope of railway station activities in order to offer greater added value for customers and cities.

То raise the awareness of station profitability, both in terms of experience and management, SMGG members took the decision to restructure the entire sector by creating Plenary sessions, a Steering Committee and four new technical working groups. This new sector structure will help members in their daily life, as well as enhance collaboration with other UIC Passenger Department sectors, such as the PASSAGE Group (for PRM issues), ICHSC, CRTS and the UIC Fundamental Values Department - Sustainability Unit & the UIC Rolling Stock Department – Infrastructure Sector.

This collaboration will establish very strong and positive future outcomes which will help members during their transition phase from simple train stations to sustainable and digitalised assets.

Fabrice Morenon, from SNCF Hubs and Connexions and SMGG Sector Chair, wants the SMGG to take off as the main international exchange platform for railway station experts: "The SMGG is a club for all UIC members, and we are counting on your future engagement."

Paul Van Doninck, from Jernhusen and Vice-Chair of the Sector, can only second what Fabrice Morenon says: "Station management is in our DNA, and we believe in cooperation as the key to our success."



ORGANISATION CHART



STRATEGIC AXES AND OBJECTIVES

The strategic vision is set up by the Plenary session of the SMGG and then reinforced by the technical support of the working

First priorities

Covid-19 analyses and the 'New Normal'

- Restoration of confidence and solving Covid-19 issues at train stations to guarantee efficient service and safety
- Impact on retail business and development of resiliency

Objectives

- Reduce the technical gap (in terms of IRS production) to other sectors
- Increase the quality of existing Technical Guidelines/IRS
- Increase the number and quality of studies driven by the Sector
- Increase the visibility of the Station Sector Network during international events

groups: Design, Facility Management and Operation, Retail and Commercial Affairs, and Small Stations.

- Promotion of train stations as intermodal hubs
- Sustainability development in terms of train station buildings (energy consumption)
- Digital transformation of stations and the data commercial aspect
- Increase the expertise, knowledge and know-how of members
- Make the UIC nextstation Conference the priority event for railway station issues and integrate the subjects of the working groups
- Cooperate with other stakeholders
- Increase cooperation and exchange of knowledge on key station management issues

STATION AND URBAN DESIGN WORKING GROUP

Missions

The foundation of an efficient train station depends on the system and smooth management of the asset supported by the design. Driven by a broad panel of different experts such as architects, station managers, structural engineers, landscapers and sustainable developers, the Station and Urban Design Working Group rethinks the way to build a station: a station as a rail asset, but also as a component of the city's infrastructure and part of the entire urban mobility network.

FACILITY MANAGEMENT AND OPERATION WORKING GROUP

Christophe Chevallier

However, the question of existing buildings is a very important issue, as heritage stations do not, for the most part, completely fulfil the requirements of passengers, station managers and sustainable development. Consequently, the challenge for the upcoming year will be the transition of train stations into a new digitalised and green model appropriate for regional expectations (responsive material, energy consumption, passive house, intermodality, urban integration, etc.)

Missions

This working group has been set up to provide a platform for station managers to communicate, exchange best practices, ask questions and carry out common projects. Digitalisation of buildings will significantly facilitate the management and maintenance of these specific assets. Close collaboration with the Rail System Department – Operation Sector is vital to achieve this. Digitalisation will offer a new perspective on existing station management, for example, the predictive maintenance made possible



by big data is a revolution and will decrease the cost of station operation. The group also focuses on the experience of passengers and station users (vertical mobility equipment, outsourcing management, etc.), as the creation of a safe atmosphere is important due to the high degree of social interaction within a small space. The group's objective is clear: provide better support for the management of railway stations across the world, in every season and for specific events.



Ulrik Harms-Bauer

Maite Teresa Escolano Mena

RETAIL AND COMMERCIAL AFFAIRS WORKING GROUP

Missions

Covid-19 has had a considerable global impact on the rail sector and retail. With the dramatic decrease of rail passengers, retail and commercial activity at train stations almost completely stopped.

As a result and following the creation of this dedicated group, it is time to address this issue by developing new short- and long-term approaches to enhance the customer experience via new rail and non-rail related services.

SMALL STATIONS WORKING GROUP

Missions

Before any projects could be set up, it was necessary to provide a common definition and specify the requirements for improving the full life cycle of small stations in terms of planning, construction, maintenance, demolition or refurbishment. Small stations have a huge impact on railway operation. With their low passenger rates, keeping small stations open creates many issues for infrastructure managers, but is economically and socially vital for small cities. Our panel of experts must find a balance to create Our retail and commercial experts will push into a new way of thinking, for example, by developing new types of advertising campaigns via social media, extending the scope of tenants' profiles and attracting city

services to commuter train stations.

adif



resilience for every category of station size. At the same time, the Small Stations group is a wonderful platform for trialling initiatives and new ideas, as small stations have similar priorities to big stations (passenger and customer experience, asset management, costs, building life cycle, maintenance, etc.). Transition phases can be easily achieved in small stations which will generate experience and knowledge for bigger projects related to big stations.



UIC NEXTSTATION CONFERENCES

General context

Railway stations are usually considered from three perspectives: customer access to trains, business opportunities due to the high concentration of people every day, and interaction with the city and other transport modes. To boost progress and innovation, the UIC nextstation Conference is organised every two years by UIC, with the support of its members, and gathers together professionals, local authorities, researchers and other relevant stakeholders from around the world.

Following the success of the first six events held in Rome, Paris, Brussels, Moscow, Marrakech and Madrid, the 2019 event was organised by Iranian Railways. This 7th conference focused on how railways stations could boost cities. Over two days, more than 250 participants and 50 speakers exchanged ideas on the way train stations could positively impact the city. The programme covered station design, sustainable development, smart solutions, services and commercial activities, station management and financing, safety, security, mobility, accessibility, and door-to-door solutions.

UIC nextstation Conference 2022

In light of the on-going world health situation, UIC took the decision to postpone the 2021 UIC nextstation Conference to October 2022.

Website

UIC provides UIC members and UIC nextstation conference participants with a dedicated web platform containing the details of each event as it happens (travel information, registration procedure, promotional video, foreword by the UIC General Director, conference programme and information on technical visits).

In addition, to capitalise on the knowledge shared since the first conference in 2005 in Rome, UIC also offers a catalogue of all the presentations given by UIC nextstation speakers.

Website: nextstation.org

nextstation Handbooks





GLOSSARY

CER	Community of European Railway and Infrastructure Companies
СІТ	International Rail Transport Committee
CRTS	Commuter and Regional Train Services
D2D	Door-to-Door
ETCD	Electronic Ticket Control Database
EUAR/ERA	European Union Agency for Railways
EWT	East-West Tariff
GDPR	General Data Protection Regulation
GDS	Global Distribution System
GPF	Global Passenger Forum
HLPM	High-Level Passenger Meeting
HSR	High-Speed Rail
ΙΑΤΑ	International Air Transport Association
ICHSC	Intercity and High-Speed Committee
IEA	International Energy Agency
IRS	International Railway Solutions
IRT	Integrated Reservation Tickets
LTDRS	Long-Term Development of Railway Stations
MaaS	Mobility as a Service
MCTs	Minimum Connecting Times
MERITS	Multiple East-West Railway Integrated Timetable Storage
NRT	Non-Integrated Reservation Tickets
NT	Night Trains Tickets
OSDM	Open Sales and Distribution Model
OSJD	Organisation for Cooperation of Railways
ΟΤΑ	Online Travel Agency
PASSAGE	Passenger Accessibility Solutions Support and Action Group of Experts
PATRIC	Passenger Accounts and Ticketing Rules Inspection Committee
PES	Passenger Experts Subgroup
PKMW	Public Key Management Website
PRIFIS	Price and fare Information Storage
PRM	Person with Reduced Mobility
PRM-ABT	Person with Reduced Mobility Assistant Booking Tool
PSG	Passenger Services Group
PSO	Public Service Obligation
PSS	Passenger Services Solutions
QMS	Quality Management System
RIC/A	Regolamento Internazionale delle Carrozze / dei Treni Automotori
RICG	Research and Innovation Coordination Group
RNE	RailNetEurope
ROC	Railway Operating Community

RU	Railway Undertaking
SCIC	Special Conditions of International Carriage
SMGG	Station Managers Global Group
SPG	Sales Progress Group
SSO	Standards Setting Organisation
TAP-TSI	Technical Specification for Interoperability relating to the subsystem 'Telematics Applications for Passenger services' of the trans-European rail system
THSS	UIC Training on High-Speed Systems
TLG	Ticket Layout Group
TSG	Ticket Security Group
UIC	International Union of Railways
UITP	International Union of Public Transport
WCHSR	World Congress on High-Speed Rail
WG	Working Group
WP	Work Programme

uic.org/support-activities/terminology/#RailLexic



L'UIC est une association professionnelle certifiée pour engagement de qualité de services par AFNOR.

UIC is a professional association certified by AFNOR for its commitment to service quality.

INTERNATIONAL UNION OF RAILWAYS 16, rue Jean Rey - 75015 Paris - France Tel. +33 (0)1 44 49 20 20 Fax +33 (0)1 44 49 20 29 E-mail: info@uic.org

Published by: The UIC Passenger Department Director of publication: Marc Guigon Design & layout: Coralie Filippini & Ludovic Wattignies Coordinators: Helen Slaney & Cécile Gendrot Photo credit: Adobe Stock, UIC

ISBN: 978-2-7461-3106-4 Copyright deposit: July 2021



