UIC technical solutions to facilitate international passenger traffic

Workshop on International Rail Passenger Traffic on the route East-West.

UN ECE, Geneva, 22 November 2016

by Jerzy Wisniewski, UIC Fundamental Values Department Director
UIC – International Union of Railways, who we are and what we do
UIC - A long history
at the service of member railways
and international railway cooperation

1921  Intergovernmental (diplomatic) conference in Portorose, Italy

1922  Intergovernmental conference in Genoa, Italy

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

2016  240 Member railways on 5 continents
UIC today

- **240** Members in 95 countries
- **3,000** billion passenger kilometres
- **10,000** billion tonnes kilometres
- **1** million kilometres of lines
- **7** million rail personnel
- Cooperation with over **100** institutions
- **700** UIC Leaflets (international railway standards)
- **85** congresses, conferences, workshops
UIC, its missions

Promoting the development of rail transport at world level, in order to meet challenges of mobility and sustainable development

Key Challenges in terms of

- Innovation
- Standardisation
- Transmission
- Dissemination
- Strategic Advice
UIC ORGANISATION STRUCTURE

PASSENGER
Stations
Commercial & Services
High Speed & Conventional

FREIGHT

RAIL SYSTEM
Signaling
Rolling Stock
Infrastructure

FUNDAMENTAL VALUES
Safety
Security
Environment
Expertise Development

Communications, Institutional Relations, HR and Social, Finance
UIC Global Cooperation Issues
serving the entire Railway community

> Sustainable Development
> Safety and Security
> Freight / Intercontinental corridors
> **Passengers** – HS, Conventional rail, Stations, Commercial & Services (**Ticketing**)  
> Railway Signalling and Control Command
> Standardisation (UIC Leaflets, IRS)
UIC’s core mission – Railway Harmonisation
Synergies developed by UIC with leading institutions

UIC
Consultative status to UN, ECOSOC

UIC DG Member of HL- Adv Group
to UN SG on Sustainable Transport
UIC activity in ticketing
Rail Customer Experience Lifecycle

- Consultation Timetable Information
- Consultation of Pricing and Tariffs
- Booking and Availability
- Ticketing (Home Print, Mobile, ATB)
- Trip Information Services Control
- Post-Trip (Compensation Refunds)
Rail Customer Experience Lifecycle

> Today customer wants to travel from A to B

> RUs have to provide the right information at each steps of the lifecycle

> Distribution systems have to respond to the very high customer expectations

> RUs want to gain market shares and takeover customers from the other transport modes

> HOW UIC is supporting his members
Customer Experience Lifecycle

- Consultation of Timetable Information
- Consultation of Pricing and Tariffs
- Booking and Availability
- Ticketing (Home Print, Mobile, ATB)
- Trip Information Services Control
- Post-Trip (Compensation Refunds)
Consultation of Timetable Information
Rail Customer Experience Lifecycle

- Consultation Timetable Information
- Consultation of Pricing and Tariffs
- Booking and Availability
- Ticketing (Home Print, Mobile, ATB)
- Trip Information Services Control
- Post-Trip (Compensation Refunds)
Consultation of Pricing and Tariffs
Rail Customer Experience Lifecycle

Consultation
Timetable
Information

Consultation
of Pricing
and Tariffs

Booking
and
Availability

Ticketing
(Home
Print,
Mobile,
ATB)

Trip
Information
Services
Control

Post-Trip
(Compensation
Refunds)
UIC Passenger Forum – ticketing activity structure
**Passengers Technical groups**

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP-MD</td>
<td>• Hermes interface for reservation system, 918-1&lt;br&gt;• Passengers with reduced mobility messages, 918-6</td>
</tr>
<tr>
<td>REG (Reservations Group)</td>
<td>• Code list for reservation message. Leaflet 918</td>
</tr>
<tr>
<td>TAG-TLG (Ticket layout group)</td>
<td>• Layout for electronically issued transport documents on secured paper, 918-2</td>
</tr>
<tr>
<td>TAG-TSG (Ticketing security group)</td>
<td>• International Rail Ticket for Home Printing, 918-3&lt;br&gt;• Data exchange for ticket check and after sales operations with electronic information, 918-4</td>
</tr>
</tbody>
</table>
Connecting the reservation systems

The RUs reservation systems are connected via the Hermes network, the messages and content that is used to communicate are managed and developed by the TAP MD and TEAM working groups.
Hermes Network

> Hermes has been around since 1970’s connection Europe’s railways.

> Hitrail is owned by the railways and manages connectivity and services on behalf of its members and customers

> It offers an exclusive private VPN and secure low cost internet services

> With a single connection it interconnects RUs IMs and other players solely in the railway arena
Hitrail existing Hermes VPN

Channels:
- MQ
- WS
- FTP
- HTTP
- SMTP
- etc.

Formats:
- UIC V1
- UIC V2
- Edifact
- XML
- GIV010
- LFA22
- etc.
European Coverage of existing Hermes VPN
Message formats & code lists

> UIC leaflet 918 & 918.1 specify in detail the messages format and the functional rules to interpret the data

> Availability request & reply including price information

> Booking request & reply
Today’s trends in booking and availability

> New modern interfaces have been defined for reservation (xml)

> Increasing Web / Mobile Sales

> Mix of sales channels:
  • Mobile phone and internet are / will be the leading sales channel
  • Almost every railway provides these channels
  • Some railways make more than 80% of sales via these channels
  • Some railways have replaced domestic tickets by home printed tickets completely
Today’s trends in booking and availability

Extended Customer Rights

> Customer rights in case of delays have been extended:
  • New messages have been defined to handle the expected higher number of compensation payments in the future
  • New messages have been defined to handle the expected higher number of compensation payments in the future in case of IRTs
  • Compensation has to be paid in almost any case of delay

> Customer rights for passengers with reduced mobility:
  • A new specification was made to defined to exchange booking requests for PRMs between railways
Classification of Tickets

> Generally divided per sales channel and/or media

> RCT2 or RCCST (with or without barcode)
**SiP**: Security in Paper

> Home-print
**SiD**: Security in Data

> Paperless
**SiS**: Security in System

> Chipcard
**SiS or SiD**
PRISM project: project to make compatible ticket specifications around Europe

> The primary objective is to make sure there are tested and proven versions of the following specifications:
  mobile ticket display format and behaviour
  mobile ticket barcode and security model
  validation data exchange formats
  interoperable service level requirements

> In addition, there needs to be:
  a Good Practice guide for interoperable mobile ticketing

> Target project completion is mid 2017
PRISM Pilot projects

> There are three candidate pilots:
  NS, SNCF and Thalys
  HZPP, OBB and SZ
  DSB and SJ

> Each pilot participant is already involved in mobile app ticketing

> There is a close working arrangement with the TLG, TSG and TAP-MD groups
Customer Experience Lifecycle

- Consultation of Timetable Information
- Consultation of Pricing and Tariffs
- Booking and Availability
- Ticketing (Home Print, Mobile, ATB)
- Trip Information Services Control
- Post-Trip (Compensation Refunds)
Ticketing by UIC

> Information on board
> Specific information for specific customers (PRMs)
> Services offered on board

> Control: controllers in each company should be able to recognize all tickets used by on board customers
  - need for collaboration between the issuer and the ticket control organization of the company
Customer Experience Lifecycle

- Consultation of Timetable Information
- Consultation of Pricing and Tariffs
- Booking and Availability
- Ticketing (Home Print, Mobile, ATB)
- Trip Information Services Control
- Post-Trip (Compensation Refunds)
UIC Audit Team PATRIC:

Aim of the activity: Auditing cross-distribution and accounting processes of tickets in passenger transport

- Correct application of international tariffs, UIC leaflets and CIT regulations for international passenger transport
- Securing the revenues
- Improvement of the accounting process and quality of distribution and accounting systems
- Knowledge transfer concerning UIC standards and CIT rules
- 8 Railway undertakings audited every year
UIC Audit actions

- Paper
- Ticket blanks
- Stock control
  - Production/storage/delivery
- Travel Agency terminal
- GDS terminal
- Checks in Station/TA (tickets, guides, ...)
- Station term/ATM
- Network
- Checks on IT
  - Security policy
  - Data updates
  - Network/transactions
  - ...
- Printing/Fulfilment
- Issued ticket (Ele/Man)
- Distribution system
- Sales data
- Accounting system
  - Timetables
  - Tariffs & Fares
  - Reservations
  - Reports
  - Back office
  - Intl share (301)
  - Reports
  - BCC (311)
  - Refunds
  - ...
- Stock management
- Checks on board/Checks in systems (361)
- Customer
- Travel
- Payment

ALL CRUCIAL SECTORS ARE CHECKED
■ ■ ■ Thank you for your kind attention

Mail: casado@uic.org