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# Digital rail ticketing under the new Telematics TSI: Towards seamless **interoperable ticketing**



*Commission Implementing Regulation (EU) 2026/253 of 6 February 2026 on a **technical specification relating to the telematics subsystem of the rail system in the European Union for interoperability of data sharing in rail transport (TEL TSI)***

Previous situation

2 March 2026

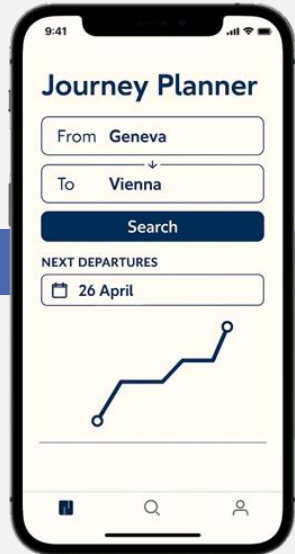
- **TAF TSI on freight services** (Regulation (EU) N.1305 / 2014)
- **TAP TSI on passenger services** (Regulation (EU) No 454/2011, as last amended in 2019)

10 February 2026

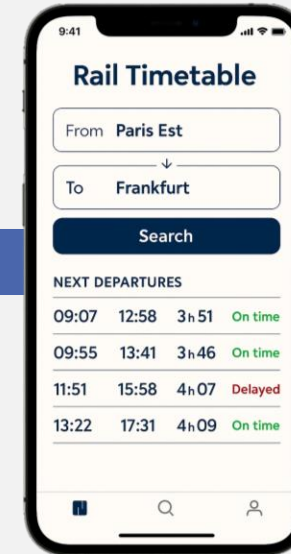
**Telematics Applications TSI**  
published in the Official  
Journal of the European  
Union

**Telematics Applications TSI**  
Enters into force



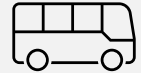
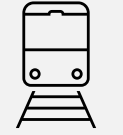


Passenger Information System



- Timetable
  - Journey planning
  - Real time information

- Ticketing:
  - Tariff structure, validity, services
  - PRM Assistance
  - Availability and reservations
  - Reimbursements and compensations



## European governance

### Common to freight & Passenger

Capacity management

Train preparation

Traffic management

### Passenger specific

Passenger information

Ticketing

### Freight specific

Electronic consignment  
note (eCN)

Freight wagon  
movements

# A European governance for ticketing data

## Rail as backbone of multimodal mobility

*Multimodal data specifications by design → rail integration*

### RAIL INTEGRATION OF THE EUROPEAN MOBILITY DATA ARCHITECTURE

- EU-wide multimodal travel information services enabling the development of single digital booking and ticketing through multimodal digital mobility services and associated rail passenger rights
  - Reinforced role of **National Access Points**
  - **Mandated adoption of multimodal European standards** (data formats: NeTEx and SIRI ; Transmodel-based APIs)
  - **Multimodal connection times between access nodes**, including for person with reduced mobility and transport of bicycles

## Harnessing the power of interoperable data sharing in the Single European Railway Area

*Non-discriminatory availability of interoperable data → effective access to the rail market*

- **ERA as European system authority for the interoperability of data sharing**
- Integrated enforcement mechanism (cleaning-up of local data requirements, national contact points, **deadlines, compliance and monitoring scheme**, data access for authorities) supporting follow-up actions by relevant **enforcement bodies** (national safety authorities, rail market regulatory bodies, and other national enforcement bodies and competent authorities)
- Scaling-up **innovation** through EU funded projects



### Application of horizontal Union rules

- Data Act
- Data Governance Act
- Cyber Resilience Act
- NIS2 Directive
- eIDAS Regulation



### Integration in the ecosystem of European mobility data spaces (EMDS)

- ERA ontology as the building block for rail
- Integration and management of operational data models and code lists through the ERA ontology



### Data opening for businesses and citizens alike

#### Business-to-business data sharing

- From peer-to-peer message exchange
- To open data access via common European APIs and web-UIs

#### Public data

- Open-source and innovative passenger services for citizens



### Once-only principle

- Consistency of data sharing for common processes between passenger & freight services
- Real-time passenger information based on established common operational processes
- Single source of topology and infrastructure description from operation to distribution
- Rail operationalisation of EU-wide multimodal travel information services
- Enabling the use of data for the safety of rail operations and digital operational communications

## Interoperable data sharing in passenger rail transport

Legally required  
availability of interoperable data

- Reference data
- Timetable
- Connection times
- Conditions of carriage, incl. accessibility of trains
- Accessibility of stations
- Real-time and forecast train traffic
- Train composition & platform information
- Historic record

- *Tariff subject to contractual provisions*

EU-IDs

Location IDs  
Organisation IDs



Serialisation

European  
standards and  
common profiles

NeTEx & SIRI formats

Data space

via National  
Access Points

Transmodel-based API  
for availability &  
reservation

Conditions

Standard open  
licences

Creative Common (CC)  
4.0 licence suite



Harmonised  
ticket formats, incl.  
security elements

# Travel information services

Data sharing supports the fulfilment of Articles 9 and 10 of rail passenger rights Regulation (EU) 2021/782 to inform passengers before the trip (e.g. shortest travel time, train delays)

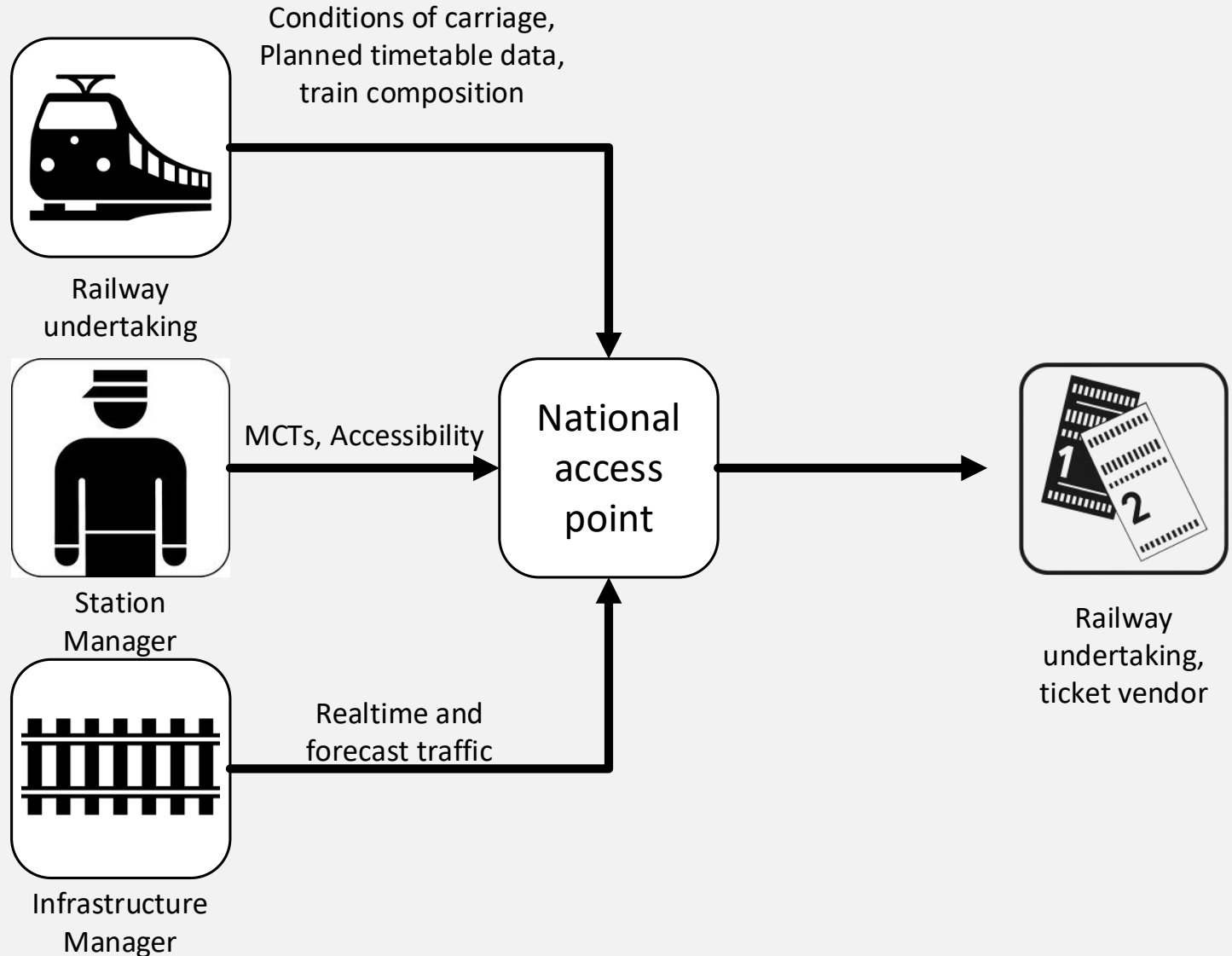
Data to be shared in **NeTEx format** for:

- Planned timetable
- Minimum connection times (MCT)
- Accessibility
- Train composition

publicly and free of charge under an open-source licence (CC BY-NC-ND 4.0)

Tariff data (products) to be shared in NeTEx format on a contractual basis, under an open-source license (CC BY-ND 4.0)

Real time and forecast train traffic data to be shared publicly and free of charge, in SIRI format, under an open-source license (CC BY-SA 4.0)

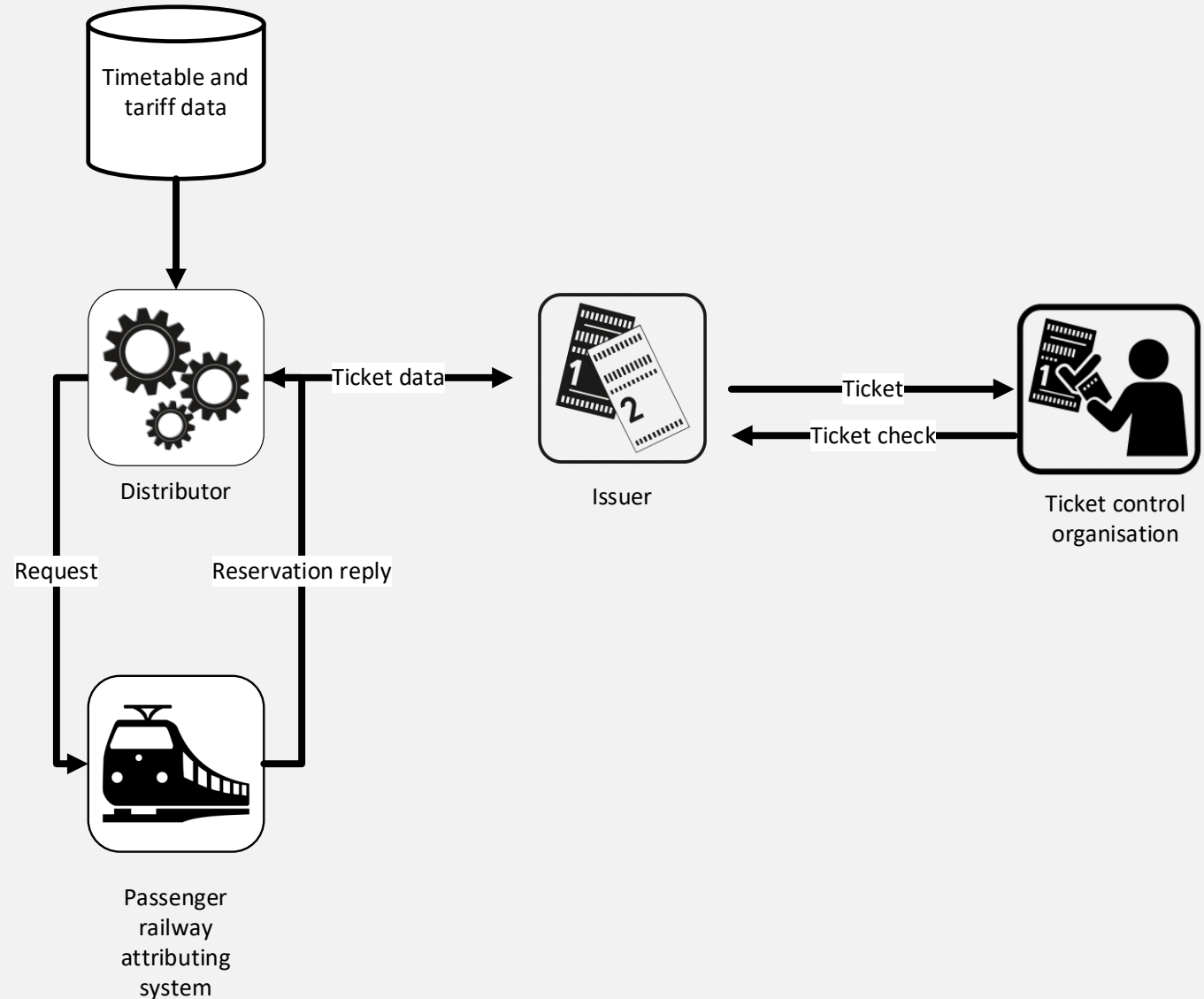


## Roles:

- Distributor: has the technical capacity to combine one or more rail products
- Issuer: has the technical capability to issues tickets on which the parties to the contract of carriage are indicated
- Retailer: sells the rail products

## Process:

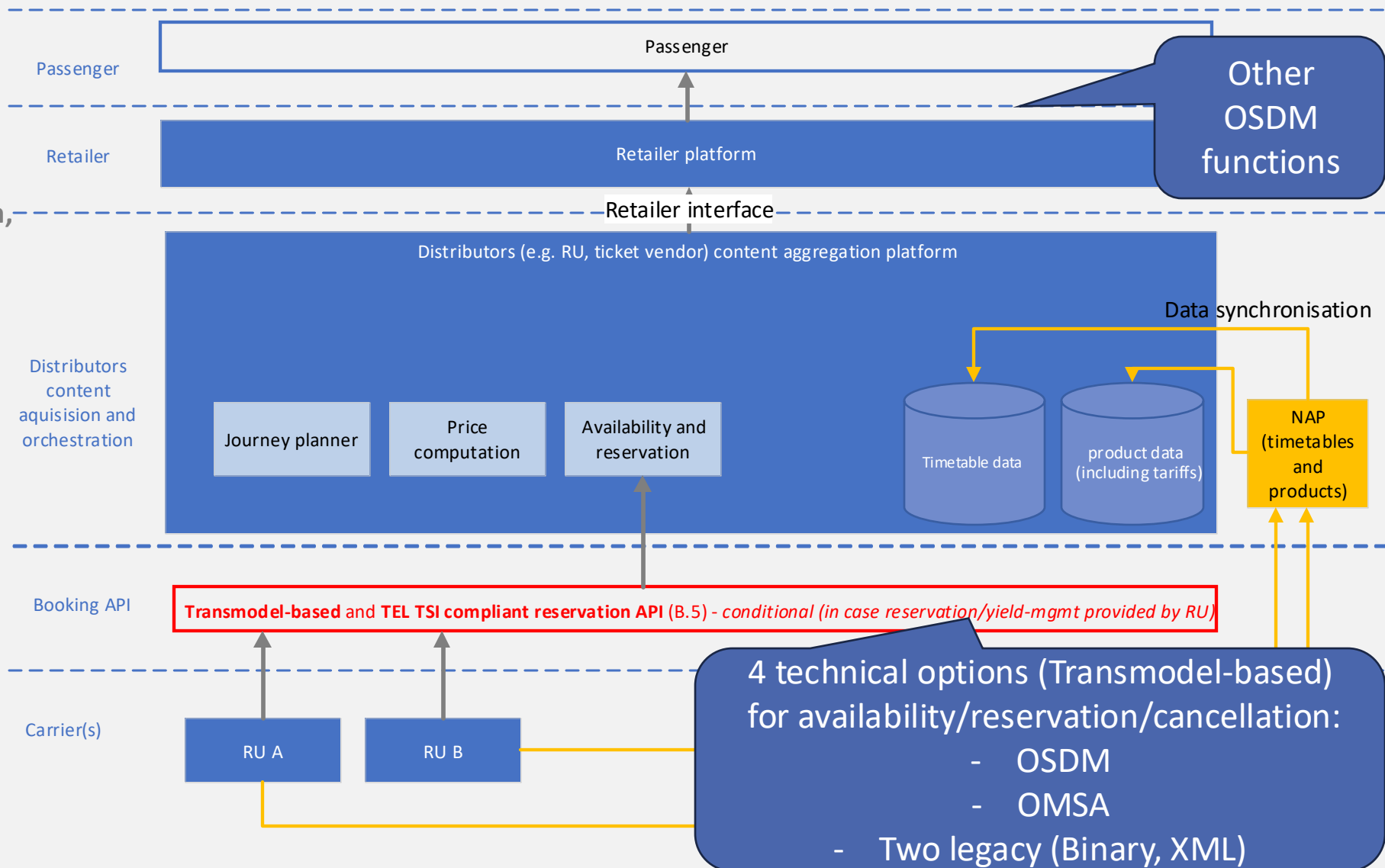
- Interactive communication between the parties involved in ticketing
- subject to contractual provisions
- interoperable and **Transmodel-based APIs** compliant with ERA Technical Document B.5 (TAP-legacy, OSDM, OMSA)



Relevant part of OSDM to ensure interoperability was adapted and integrated in the Telematics TSI as one **alternative booking interface** option:

- only for **availability, reservation, cancellation** functions
- based on data provision of timetable and tariff data in NeTEx format via NAPs
- subject to **compliance assessment**
- will be **replaced by upcoming CEN standard (EUDIT)** in 2028

Retailer functions (e.g. selling the ticket) not standardised



# A gradual and compliant implementation Passenger information & ticketing

**14 Dec. 2025**

- Passenger timetable data

**12 Dec. 2027**

- Connection times
- Passenger information in stations & on-board of trains

**10 June 2029**

- Availability & reservations

**13 Dec. 2026**

- Common reference data
- Condition of carriages, incl. accessibility of stations (ERSAD)
- Tickets format

**10 Dec. 2028**

- Passenger trains' running and forecast information
- Ticketing reference data
- Tariff data

**9 Dec. 2029**

- Passenger train composition
- Train ready & readiness forecast

# THANK YOU

Moving Europe towards a sustainable and safe railway system without frontiers.

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UNION  
AGENCY  
FOR RAILWAYS



European  
Commission

