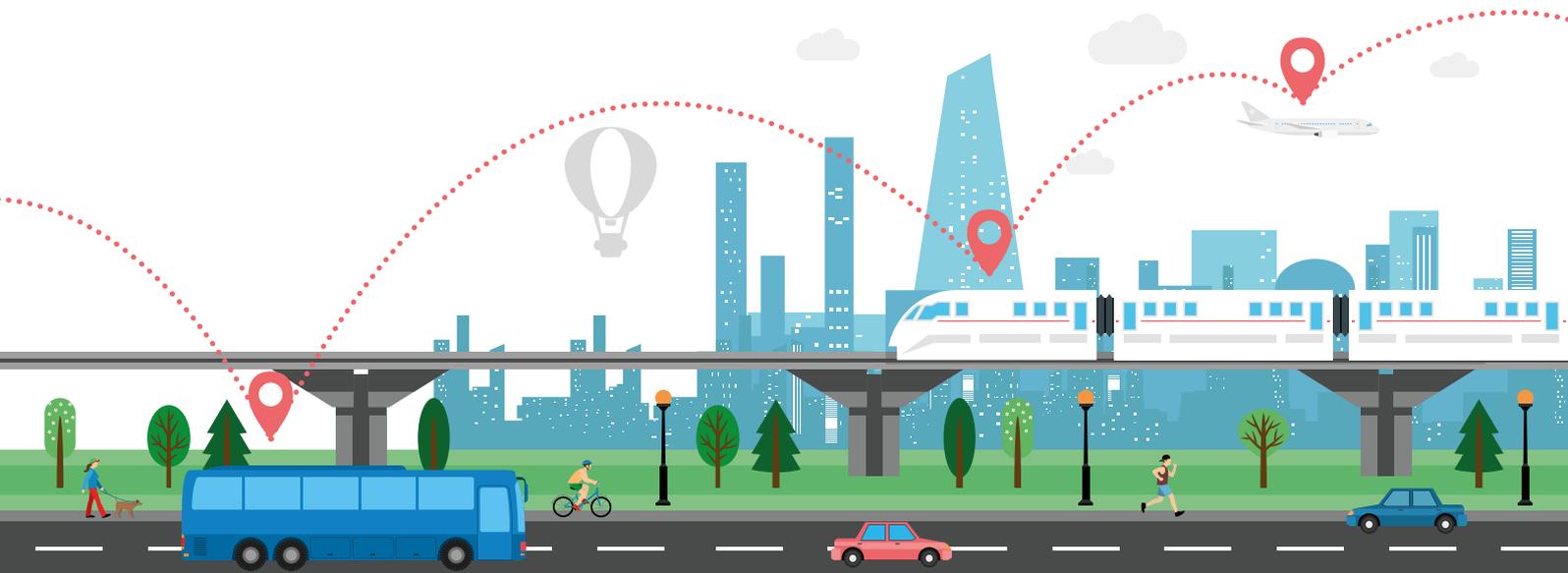# OSDM
Open Sales and Distribution Model

What is OSDM?

OSDM (Open Sales and Distribution Model) is the new Europe-wide B2B Sector Distribution Initiative (Railways and Ticket Vendors) seeking an Open IT- Specification for ticket sales, reservations, and price distribution, a project jointly managed by UIC (the International Union of Railways) and the FSM-Initiative, including railway companies, ticket vendors represented by EU Travel Tech and ECTAA (European Travel Agents' and Tour Operators' Association).

The standard is composed of two parts: **online distribution (fares, tariffs and reservation) and offline distribution (fares and tariffs).**

OSDM enables the sale of both online and offline tickets in the same interface.

For online distribution the new OSDM standard uses an API (Application Programming Interface), which will allow the distribution in real time of international travel tariffs and prices and seat reservations among railway companies' distribution systems and make train tickets available to third party vendors around the world.

The standard is defined in IRS 90918-10 and provides a new open sales and distribution interface for the passenger transport sector as follows:
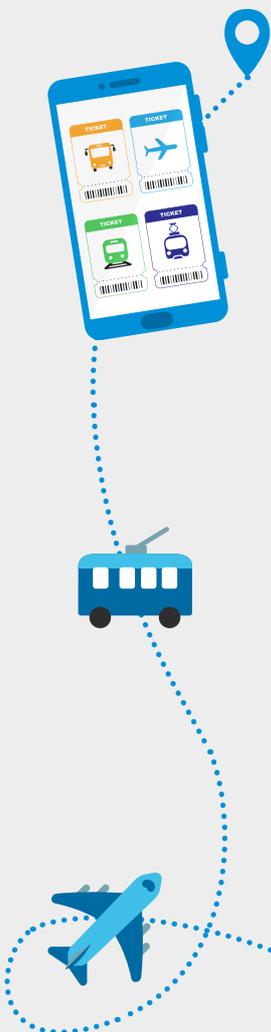- all fares including domestic ones (offline and online)
- interface for (multimodal) trip search (online) including bus or local transport ticketing
- interface for booking/reservation (online)
- after sales for booking/ticket reservations and ancillary services (offline and online)
- graphical seat reservation (online)

OSDM is prepared for multimodality extensions (MaaS).

The same technical OSDM JSON format used online is also used offline to exchange fares and tariffs for NRT (non-reservation tickets) trains between railways twice per year.
The OSDM platform, will replace the existing Price and Fare Information Storage (PRIFIS) international tariff distribution tool, a shared database containing prices and tariffs for non-yielded tickets.

To enable widespread take-up by railways, UIC has decided to publish the OSDM specification IRS 90918-10 in Apache 2.0 open licence on the GitHub website.

What is the aim of this standard and its online and offline implementations?

OSDM aims to simplify the booking process for railway customers and lower complexity and distribution costs for distributors and railway carriers.

By collaborating more closely with distributors using a single interface between the different actors (Distributors, Allocators, Carriers), the railway sector as a whole has taken a major step forward in simplifying ticket distribution for passengers, including through-ticketing, and in developing a consumer-driven, innovative and a competitive distribution solution based on transparency and sustainability.

Sqills, an IT distribution solution provider, announced its OSDM API implementation for May 2021.

What are the main benefits of this new OSDM model?

Railway customers will more easily be able to purchase rail and multimodal transport tickets across Europe at the most beneficial prices and tariff conditions. Thanks to OSDM's ability to provide a combination of fares, customers will be able to combine fares according to existing fare combinations as well as new fares and/or combination models.

Railway operators will be able to provide better services and attract new customers thanks to a combination of technical innovation and smart mobility solutions for seamless travel.

By streamlining the distribution process, the railway sector will benefit from reduced development and distribution costs.

Ticket vendors will benefit from improved connectivity in railway ticket distribution and be able to sell tickets using a simpler distribution model.

OSDM meets the market need for one-stop-shop distribution services and passenger expectations for through-ticketing, thus enabling increasingly seamless and sustainable travel across Europe.

How did the project originate?

OSDM results from the fusion of the new Tariff Model (nTM) and the Full Service Model (FSM) specifications.

The new Tariff Model (nTM) is a UIC project launched in April 2019 to develop a new tool based on new UIC harmonised tariff terms and conditions in order to offer customer-friendly and competitive prices for international travel, based on timetables.

The Full Service Model (FSM) is a rail distribution sector industry initiative launched in 2013 to develop an Open IT Specification between rail service providers and international distributors, including third party retailers in order to complement individual bilateral IT solutions between distributors and rail service providers.

FSM develops online interface specifications between rail distribution players (B2B) to improve travellers' access to rail tickets.

Following a commitment made by Passenger CEOs in 2019 to demonstrate tangible improvements for customers by establishing EU-wide through-ticketing systems, a decision was made in October 2019 to provide a common roadmap for the integration and development of two complementary distribution solutions (new Tariff Model and Full Service Model), taking into account through-ticketing and multimodality in April 2020. UIC and FSM signed a technical agreement to develop a single/integrated specification for complementary FSM and UIC nTM functional parts.

What is the current status of OSDM?

As an important first step, the OSDM working group validated the offline OSDM specification in October 2020, which can now be used by railways' distribution systems.

To replace PRIFIS, UIC awarded implementation of the new offline OSDM platform to Hitrail. The online part was approved in December 2020. UIC will deliver the offline OSDM platform for the 36 European railway partners in August 2021.

State-of-the-art technology

The OSDM platform will be provided as a Software as a Service (SaaS) cloud-based solution. Its architecture will enable the ongoing introduction of future UIC services related to the distribution of tariff and price data.

The technical components of the solution are deployed in a fully virtual, enterprise-grade cloud environment.

Who could be interested in using OSDM in the future?

- Railway operators
- Global Distribution Systems (GDS)
- Online Travel Agencies (OTA)
- Airline industry
- Other public transport modes

For further details on the OSDM specification, visit the GitHub website:

unioninternationalcheminsdefer.github.io/OSDM