NAP Reference Architecture

This report defines one of the Views of the NAP Reference Architecture

11.02.2025

# Specifications and Requirements

The **Specifications and Requirements** document describes legal and technical specifications as well as recommendations and profiles used for the ITS Service in different Views. The specifications could be linked to different objects defining is technical or organizational parameters, its usage, interaction requirements behaviour etc.

The **Specifications and Requirements** is elaborated with respect of minimum functionality of two NAP types: **Metadata Directory** and **Data Platform.**



Figure: Specifications and Requirements

## Selected terms and definitions

**specification** detailed, precise description of the requirements, design, behaviour, or characteristics of a system, component, or process. Specifications are used to ensure that everyone involved in a project understands what is expected and to provide a basis for verifying that the final product meets the required standards.

## Legal specifications

Include legal documents such as EU delegated acts, which supplement or amend non-essential elements of existing legislation. These specifications ensure that laws remain relevant and effective, providing detailed legal requirements and updates.

### Directive (EU) 2016/2102 - Website Accessibility

*Date Modified: 30.01.2025 18:40:20, GUID: {0F8F6863-97AA-4c8f-916B-9E76E080D254}*

**Title**: Directive (EU) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies

**Reference**: Directive (EU) 2016/2102

**Type**: Legal Specification

**Full Name and Hyperlink**: [Directive (EU) 2016/2102](https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX:32016L2102)

**Contextual Use**: The Directive (EU) 2016/2102 aims to ensure that websites and mobile applications of public sector bodies are accessible to all users, particularly persons with disabilities. It sets out principles and techniques to be observed when designing, constructing, maintaining, and updating websites and mobile applications to make them more accessible. This directive supports the creation of a digital society where public sector information and services are available to everyone, enhancing inclusivity and equal access to information.

**Document Number**: 2016/2102

**Publication Date**: 2 December 2016

**Related Documents**:

* Commission Implementing Decision (EU) 2018/1523: Establishing a model accessibility statement
* Commission Implementing Decision (EU) 2018/2048: Establishing the monitoring methodology and arrangements for reporting by Member States

### Directive (EU) 2019/1024 - Open Data

*Date Modified: 30.01.2025 18:40:20, GUID: {A47BBEAA-7629-4fb8-A2B9-082D024A3B64}*

**Title**: Open Data Directive

**Reference**: Directive (EU) 2019/1024

**Type**: Legal Specification

**Full Name and Hyperlink**: [Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019](https://eur-lex.europa.eu/eli/dir/2019/1024/oj/eng/t_blank)

**Contextual Use**: Establishes a framework for the reuse of public sector information, promoting the availability of open data. Aims to boost the socioeconomic potential of public sector information by making it more accessible for startups, SMEs, and other entities. Encourages the use of dynamic data and datasets with high economic impact, fostering competition and transparency in the information market.

**Document Number**: 2019/1024

**Publication Date**: 20 June 2019

**Related Documents**:

* **Directive 2003/98/EC**: The previous directive on the reuse of public sector information, which the Open Data Directive recasts.
* **Directive 2013/37/EU**: Amended Directive 2003/98/EC before being repealed by the Open Data Directive.
* [**Regulation (EU) 2016/679**](https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng/t_blank): General Data Protection Regulation (GDPR), related to data protection and privacy.
* **Directive 96/9/EC**: Legal protection of databases.
* **Directive 2003/4/EC**: Public access to environmental information.
* **Directive 2007/2/EC**: Establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).

### Directive (EU) 2022/2555 - NIS2

*Date Modified: 30.01.2025 18:40:20, GUID: {4960CAB3-98F8-4f09-94E1-62AFA0954523}*

**Title**: NIS2 Directive

**Reference**: Directive (EU) 2022/2555

**Type**: Legal Specification

**Full Name and Hyperlink**: Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022

**Contextual Use**: Establishes measures for a high common level of cybersecurity across the Union. It aims to enhance the security of network and information systems for essential and important entities, ensuring the continuity of critical services and the resilience of the EU's digital infrastructure. The directive expands the scope of the original NIS Directive, introduces stricter security requirements, and enhances cooperation among member states.

**Document Number**: 2022/2555

**Publication Date**: 14 December 2022

**Related Documents**:

* **Directive (EU) 2016/1148**: The original NIS Directive, which NIS2 replaces.
* **Regulation (EU) No 910/2014**: eIDAS Regulation, related to electronic identification and trust services.
* **Directive (EU) 2018/1972**: European Electronic Communications Code, related to electronic communications networks and services.

### Directive (EU) 2023/2661 - ITS (recast)

*Date Modified: 30.01.2025 18:40:20, GUID: {4FEB9792-F5AB-4f30-A299-4A2EB59732D5}*

**Title**: Directive (EU) 2023/2661

**Reference**: Directive (EU) 2023/2661

**Type**: Legal Specification

**Full Name and Hyperlink**: [Directive (EU) 2023/2661 of the European Parliament and of the Council of 22 November 2023](https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32023L2661)

**Contextual Use**: Amends Directive 2010/40/EU to enhance the framework for the deployment of Intelligent Transport Systems (ITS) in road transport and interfaces with other transport modes. Aims to achieve connected and automated multimodal mobility, contributing to efficient, safe, sustainable, smart, and resilient mobility. Supports the Sustainable and Smart Mobility Strategy by ensuring ITS applications enable seamless integration with other transport modes, improving efficiency and accessibility.

**Document Number**: 2023/2661

**Publication Date**: 22 November 2023

**Related Documents**:

* [**Directive 2010/40/EU**](https://eur-lex.europa.eu/eli/dir/2010/40/oj/eng/t_blank): Establishes the initial framework for the deployment of Intelligent Transport Systems in road transport and interfaces with other modes of transport.
* **Commission Delegated Regulation (EU) 2017/1926**: Concerns the accessibility of dynamic datasets and multimodal digital service providers.
* **Commission Delegated Regulation (EU) 2022/1012**: Provides information services concerning safe and secure parking places for trucks and commercial vehicles.
* **Commission Delegated Regulation (EU) No 885/2013**: Supplements Directive 2010/40/EU with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles.
* **Commission Delegated Regulation (EU) No 886/2013**: Supplements Directive 2010/40/EU with regard to data and procedures for the provision of road safety-related minimum universal traffic information free of charge to users.
* **Commission Delegated Regulation (EU) 2015/962**: Supplements Directive 2010/40/EU with regard to the provision of EU-wide real-time traffic information services.
* **Commission Delegated Regulation (EU) 2019/1745**: Supplements Directive 2010/40/EU regarding the provision of cooperative intelligent transport systems (C-ITS).
* **Commission Delegated Regulation (EU) 2022/670**: Supplements Directive 2010/40/EU regarding the provision of information services for safe and secure parking places for trucks and commercial vehicles (repealing Regulation (EU) No 885/2013).

### Regulation (EU) 2016/679 - GDPR

*Date Modified: 11.02.2025 15:03:34, GUID: {B5E9322B-D985-449e-A4A9-D740A3AEF211}*

**Title**: General Data Protection Regulation (GDPR)

**Reference**: Regulation (EU) 2016/679

**Type**: Legal Specification

**Full Name and Hyperlink**: [Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016](https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng/t_blank)

**Contextual Use**: The GDPR establishes a framework for the protection of natural persons with regard to the processing of personal data and the free movement of such data. It aims to enhance individuals' control over their personal information and simplify regulations for international business. The regulation applies to data controllers and processors within the EU, as well as those outside the EU who process personal data of individuals within the EU.

**Document Number**: 2016/679

**Publication Date**: 27 April 2016

**Related Documents**:

* **Directive 95/46/EC**: The previous Data Protection Directive, which GDPR supersedes.
* **Commission Proposal COM/2012/010 final – 2012/0010 (COD)**: The preparative text for GDPR.
* **UK GDPR**: The United Kingdom's version of GDPR post-Brexit.
* **California Consumer Privacy Act (CCPA)**: A similar regulation in California inspired by GDPR.

### Regulation (EU) 2017/1926 - MMTIS

*Date Modified: 11.02.2025 15:03:40, GUID: {9A0AAF44-DAED-4b89-81B3-12DD2B666F55}*

**Title**: Commission Delegated Regulation (EU) 2017/1926

**Reference**: Commission Delegated Regulation (EU) 2017/1926

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) 2017/1926 of 31 May 2017](https://eur-lex.europa.eu/eli/reg_del/2017/1926/oj/eng/t_blank)

**Contextual Use**: Supplements Directive 2010/40/EU with regard to the provision of EU-wide multimodal travel information services. It aims to ensure that multimodal travel information services are accurate and available across the EU, enhancing the efficiency and convenience of travel for users by providing comprehensive and reliable travel information.

**Document Number**: 2017/1926

**Publication Date**: 31 May 2017

**Related Documents**: none

### Regulation (EU) 2018/1724 - Data Governance Act

*Date Modified: 30.01.2025 18:40:20, GUID: {D1B1A8B6-6DE4-472d-A2FB-9F182A84E0D8}*

**Title**: Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012

**Reference**: Regulation (EU) 2018/1724

**Type**: Legal Specification

**Full Name and Hyperlink**: [Regulation (EU) 2018/1724](https://eur-lex.europa.eu/eli/reg/2018/1724/oj)

**Contextual Use**: Regulation (EU) 2018/1724 establishes a single digital gateway to provide access to information, procedures, and assistance and problem-solving services. It aims to facilitate the exercise of rights derived from Union law by citizens and businesses in the internal market. The regulation sets out rules for the establishment and operation of the gateway, ensuring high-quality information and efficient procedures. It also includes provisions for the implementation of the 'once-only' principle and the collection of user feedback to improve the internal market.

**Document Number**: 2018/1724

**Publication Date**: 21 November 2018

**Related Documents**:

* [Regulation (EU) No 1024/2012](https://eur-lex.europa.eu/eli/reg/2018/1724/t_blank)

### Regulation (EU) 2018/1724 - Single Digital Gateway

*Date Modified: 30.01.2025 18:40:20, GUID: {7FE3EFFF-05E1-4d46-83EE-48FE16A10E46}*

**Title**: Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012

**Reference**: Regulation (EU) 2018/1724

**Type**: Legal Specification

**Full Name and Hyperlink**: [Regulation (EU) 2018/1724](https://eur-lex.europa.eu/eli/reg/2018/1724/oj)

**Contextual Use**: Regulation (EU) 2018/1724 establishes a single digital gateway to provide access to information, procedures, and assistance and problem-solving services. It aims to facilitate the exercise of rights derived from Union law by citizens and businesses in the internal market. The regulation sets out rules for the establishment and operation of the gateway, ensuring high-quality information and efficient procedures. It also includes provisions for the implementation of the 'once-only' principle and the collection of user feedback to improve the internal market.

**Document Number**: 2018/1724

**Publication Date**: 21 November 2018

**Related Documents**:

* Regulation (EU) No 1024/2012

### Regulation (EU) 2019/1745 - AFIR

*Date Modified: 30.01.2025 18:40:20, GUID: {DB87F41B-D741-4d90-81E5-426639E31216}*

**Title**: Commission Delegated Regulation (EU) 2019/1745

**Reference**: Commission Delegated Regulation (EU) 2019/1745

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) 2019/1745 of 13 August 2019](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R1745/t_blank)

**Contextual Use**: Supplements and amends Directive 2014/94/EU regarding recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels, hydrogen supply for road transport, and natural gas supply for road and waterborne transport. It aims to ensure the interoperability and standardization of alternative fuels infrastructure across the EU, promoting the use of cleaner energy sources in transport.

**Document Number**: 2019/1745

**Publication Date**: 13 August 2019

**Related Documents**:

* **Directive 2014/94/EU**: Deployment of alternative fuels infrastructure.
* **Commission Delegated Regulation (EU) 2018/674**: Previous regulation on recharging points for L-category motor vehicles, shore-side electricity supply, hydrogen supply, and natural gas supply, repealed by Regulation (EU) 2019/1745.
* **Regulation (EU) No 1025/2012**: European standardization.

### Regulation (EU) 2022/1012 - truck parking

*Date Modified: 30.01.2025 18:40:20, GUID: {D0AB059E-6514-4d0b-A2CB-278A0D5D5922}*

**Title**: Commission Delegated Regulation (EU) 2022/1012

**Reference**: Commission Delegated Regulation (EU) 2022/1012

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) 2022/1012 of 7 April 2022](https://eur-lex.europa.eu/eli/reg_del/2022/1012/oj/eng/t_blank)

**Contextual Use**: Supplements Regulation (EC) No 561/2006 with regard to the establishment of standards detailing the level of service and security of safe and secure parking areas and to the procedures for their certification. It aims to ensure that road transport drivers have access to safe and secure parking areas with appropriate facilities, enhancing their safety and well-being during rest periods.

**Document Number**: 2022/1012

**Publication Date**: 7 April 2022

**Related Documents**: none

### Regulation (EU) 2022/670 - RTTI (recast)

*Date Modified: 30.01.2025 18:40:20, GUID: {4DC0BF48-4C3D-4352-AC06-151C3D8DE95D}*

**Title**: Commission Delegated Regulation (EU) 2022/670

**Reference**: Commission Delegated Regulation (EU) 2022/670

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) 2022/670 of 2 February 2022](https://eur-lex.europa.eu/eli/reg_del/2022/670/oj/eng/t_blank)

**Contextual Use**: Supplements Directive 2010/40/EU regarding the provision of EU-wide real-time traffic information services. It aims to improve the accessibility, exchange, re-use, and update of data required for high-quality and continuous real-time traffic information services across the Union. This regulation ensures compatibility, interoperability, and continuity for the deployment and operational use of Intelligent Transport Systems (ITS).

**Document Number**: 2022/670

**Publication Date**: 2 February 2022

**Related Documents**: none

### Regulation (EU) 2023/1804 - AFIR

*Date Modified: 30.01.2025 18:40:20, GUID: {0FF49A13-ACA1-4574-BC6C-56ECA1698F91}*

**Title**: Regulation (EU) 2023/1804 on the deployment of alternative fuels infrastructure

**Reference**: AFIR

**Type**: Legal Specification

**Full Name and Hyperlink**: [Regulation (EU) 2023/1804](https://transport.ec.europa.eu/transport-themes/clean-transport/alternative-fuels-sustainable-mobility-europe/alternative-fuels-infrastructure_en)

**Contextual Use**: The Regulation (EU) 2023/1804 on the deployment of alternative fuels infrastructure sets mandatory national targets for EU Member States to deploy publicly accessible alternative fuels infrastructure, particularly for electricity and hydrogen, for road vehicles, vessels moored at the quayside, and stationary aircraft. It includes common rules for user information, data provision, and payment requirements, and mandates the Commission to adopt delegated acts to ensure interoperability of infrastructure by mandating technical specifications based on European standards. This regulation supports the transition towards more sustainable modes of transport and aims to decarbonize the transport sector across the EU.

**Document Number**: 2023/1804

**Publication Date**: 13 September 2023

**Related Documents**:

* **Directive 2014/94/EU**: Previous directive on the deployment of alternative fuels infrastructure, repealed by Regulation (EU) 2023/1804.
* **Regulation (EU) 2018/2001**: Sets a market share target for renewables in transport fuels.
* **Regulation (EU) 2019/631**: CO2 emission performance standards for new passenger cars and light-duty vehicles.
* **Regulation (EU) 2019/1242**: CO2 emission performance standards for certain new heavy-duty vehicles.

### Regulation (EU) No 1305/2014 (TAF TSI)

*Date Modified: 30.01.2025 18:40:20, GUID: {1C65E621-1EED-47c9-AD18-66A51CC0A9F4}*

**Title**: Commission Implementing Regulation (EU) No 1305/2014 (TAF TSI)

**Reference**: TAF TSI

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Implementing Regulation (EU) No 1305/2014 (TAF TSI)](https://eur-lex.europa.eu/eli/reg/2014/1305/oj/eng/t_blank)

**Contextual Use**: The Commission Implementing Regulation (EU) No 1305/2014 on the technical specification for interoperability (TSI) relates to the telematics applications for the freight subsystem of the rail system in the European Union. It aims to ensure seamless information exchange across the European rail system by defining procedures and interfaces for freight services, including real-time monitoring, marshalling, allocation, reservation, payment, invoicing, and management of connections with other transport modes. This regulation facilitates interoperability and consistency across different platforms, enhancing the efficiency and accuracy of freight transport information exchange.

**Document Number**: 1305/2014

**Publication Date**: 11 December 2014

**Related Documents**:

* Replacing: [Commission Implementing Regulation (EU) No 62/2006](https://eur-lex.europa.eu/eli/reg/2006/62/oj/eng/t_blank)

### Regulation (EU) No 454/2011 (TAP TSI)

*Date Modified: 30.01.2025 18:40:20, GUID: {1D4FBC58-0459-48fd-82D8-411F6693B4A7}*

**Title**: Commission Implementing Regulation (EU) No 454/2011 (TAP TSI)

**Reference**: TAP TSI

**Type**: Legal Specification

**Full Name and Hyperlink**: Commission Implementing Regulation (EU) No 454/2011 (TAP TSI)

**Contextual Use**: The Commission Implementing Regulation (EU) No 454/2011 on the technical specification for interoperability (TSI) relates to the telematics applications for passenger services subsystem of the trans-European rail system. It aims to ensure seamless information exchange across the European rail system by defining procedures and interfaces for passenger services, including systems providing passengers with information before and during the journey, reservation and payment systems, luggage management, and management of connections between trains and with other modes of transport. This regulation facilitates interoperability and consistency across different platforms, enhancing the efficiency and accuracy of passenger transport information exchange.

**Document Number**: 454/2011

**Publication Date**: 5 May 2011

**Related Documents**: None

### Regulation (EU) No 885/2013 - SSTP

*Date Modified: 11.02.2025 15:04:16, GUID: {1C6BB576-3649-41fd-BF57-B029DC1A37E4}*

**Title**: Commission Delegated Regulation (EU) No 885/2013

**Reference**: Commission Delegated Regulation (EU) No 885/2013

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) No 885/2013 of 15 May 2013](https://eur-lex.europa.eu/eli/reg_del/2013/885/oj/eng/t_blank)

**Contextual Use**: Supplements Directive 2010/40/EU with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles. It aims to optimize the use of parking places and facilitate decisions by drivers or transport companies about when and where to park through the deployment of information services.

**Document Number**: 885/2013

**Publication Date**: 15 May 2013

**Related Documents**: None

### Regulation (EU) No 886/2013 - SRTI

*Date Modified: 11.02.2025 15:04:24, GUID: {4B31C570-BDB3-4ccd-A917-C3680106BA2A}*

**Title**: Commission Delegated Regulation (EU) No 886/2013

**Reference**: Commission Delegated Regulation (EU) No 886/2013

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) No 886/2013 of 15 May 2013](https://eur-lex.europa.eu/eli/reg_del/2013/886/oj/eng/t_blank)

**Contextual Use**: Supplements Directive 2010/40/EU with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users. It aims to ensure compatibility, interoperability, and continuity for the deployment and operational use of Intelligent Transport Systems (ITS) for road safety.

**Document Number**: 886/2013

**Publication Date**: 15 May 2013

**Related Documents**: None

### Superseded documents

In this folder are placed obsolete specifications or requirements for a reference.

#### Directive 2010/EU/40 - ITS

*Date Modified: 30.01.2025 18:11:51, GUID: {16A6F191-FEAD-43db-A673-B04711F39783}*

**Title**: ITS Directive 2010/40/EU

**Reference**: [ITS Directive 2010/40/EU](https://eur-lex.europa.eu/eli/dir/2010/40/oj/eng/t_blank)

**Type**: Legal Specification

**Full Name and Hyperlink**: [Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010](https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32010L0040)

**Contextual Use**: The ITS Directive 2010/40/EU establishes a framework for the deployment of Intelligent Transport Systems (ITS) in the field of road transport and for interfaces with other modes of transport. It aims to ensure interoperability and continuity of ITS services across the EU. The directive obligates member states to exchange traffic and travel information data and make them available via National Access Points (NAPs), facilitating the provision of real-time traffic information, multimodal travel information, and other ITS services. This enhances road safety, traffic efficiency, and environmental sustainability across the EU.

**Document Number**: 2010/40/EU

**Publication Date**: 7 July 2010

**Related Documents**:

* **Commission Delegated Regulation (EU) No 885/2013**: Supplementing Directive 2010/40/EU with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles. [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)
* **Commission Delegated Regulation (EU) No 886/2013**: Supplementing Directive 2010/40/EU with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users. [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)
* **Commission Delegated Regulation (EU) 2015/962**: Supplementing Directive 2010/40/EU with regard to the provision of EU-wide real-time traffic information services. [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)
* **Commission Delegated Regulation (EU) 2017/1926**: Supplementing Directive 2010/40/EU regarding the provision of EU-wide multimodal travel information services. [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)
* **Commission Delegated Regulation (EU) 2019/1745**: Supplementing Directive 2010/40/EU regarding the provision of cooperative intelligent transport systems (C-ITS). [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)
* **Commission Delegated Regulation (EU) 2022/670**: Supplementing Directive 2010/40/EU regarding the provision of EU-wide real-time traffic information services (repealing Regulation (EU) No **2015/962**). [Link](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0813/t_blank)

#### Regulation (EU) 2015/962 - RTTI

*Date Modified: 30.01.2025 18:10:05, GUID: {E17DBCA6-2A0E-44f6-9672-EC178E2081F6}*

**Title**: Commission Delegated Regulation (EU) 2015/962

**Reference**: Commission Delegated Regulation (EU) 2015/962

**Type**: Legal Specification

**Full Name and Hyperlink**: [Commission Delegated Regulation (EU) 2015/962 of 18 December 2014](https://eur-lex.europa.eu/eli/reg_del/2015/962/oj/eng/t_blank)

**Contextual Use**: Supplements Directive 2010/40/EU with regard to the provision of EU-wide real-time traffic information services. It aims to improve the accessibility, exchange, re-use, and update of road and traffic data required for high-quality and continuous real-time traffic information services across the Union. This regulation ensures compatibility, interoperability, and continuity for the deployment and operational use of Intelligent Transport Systems (ITS).

**Document Number**: 2015/962

**Publication Date**: 18 December 2014

## Profiles

Datex II provides a set of Recommended Reference Profiles (RRPs) and Recommended Service Profiles (RSPs). While the RRPs establish minimum set of data-elements required to provide the information meant by the specific data categories in the specific delegated regulation (SRTI, RRTI and MMTIS), the RSPs support harmonised uses cases for the provision of data from the road operator’s point of view.

NeTEx, also a recommended profile – European Passenger Information Profile (EPIP), which is part of the CENT/TNS 16614 Standard and used for the following use cases:

* Provision of data for journey planners
* Provision of data to a path mapping software tool on an (interactive) map
* Provision of timetable printout data
* Provision of station information

In addition to these general profiles (RRPs and RSPs for Datex II and the EPIP for NeTEx), some MS build their own national profiles related those 2 Standards and SIRI as well.

### DATEX II Recommended Reference Profiles

*Date Modified: 11.02.2025 15:04:51, GUID: {0284859D-C83B-423b-909A-05291C3F0B08}*

Recommended Reference Profiles ([RRP's](https://docs.datex2.eu/recommended-profiles/rrp/)) give a harmonised interpretation of the data categories in the Delegated Regulations A, B, C and E of the EU ITS-Directive 2010/40.

This concerns the following Delegated Regulations:

* Delegated Regulation 886/2013 (SRTI, Action C)
* Delegated Regulation 962/2015 (RTTI, Action B)
* Delegated Regulation 1926/2017 (MTIS, action A)

### EIP Recommended Service Profiles

*Date Modified: 30.01.2025 18:41:06, GUID: {3D7BA083-1874-45c0-9B49-E81F3F261DF9}*

The **EIP Recommended Service Profiles** aim to update and harmonize service descriptions for Intelligent Transport Systems (ITS) in Europe. This effort incorporates the latest advancements in digitalization and Cooperative Intelligent Transport Systems (C-ITS), as well as insights from best practices and EU EIP activities.

Key goals include:

* **Modernizing service descriptions** to reflect current technologies and regulatory contexts.
* **Simplifying information** to make it more accessible and understandable.
* **Eliminating redundancies** by merging separate documents into a comprehensive guide.

The profiles, developed jointly by the EU EIP and DATEX II PSA, are available for free and provide guidance on data sharing for ITS services. They describe interfaces for communication between systems and vehicles, ensuring compliance with European regulations and standards like DATEX II.

You can get the Recommended Service Profiles at the [DATEX II webtool](https://webtool.datex2.eu/wizard/t_blank).

* [Forecast and Realtime Event Information](https://docs.datex2.eu/recommended-profiles/rsp/forecastandrtti/)
* [Traffic Condition and Travel Time Information](https://docs.datex2.eu/recommended-profiles/rsp/trafficconditition/)
* [Speed Limit Information](https://docs.datex2.eu/recommended-profiles/rsp/speedlimitinformation/)
* [Road Weather Information](https://docs.datex2.eu/recommended-profiles/rsp/roadweatherinformation/)
* [Multi-Modal Traveller Information](https://docs.datex2.eu/recommended-profiles/rsp/multimodal/)
* [Dynamic Lane Management](https://docs.datex2.eu/recommended-profiles/rsp/dynamiclanemanagement/)
* [Variable Speed Limits](https://docs.datex2.eu/recommended-profiles/rsp/variablespeedlimits/)
* [Ramp Metering](https://docs.datex2.eu/recommended-profiles/rsp/rampmetering/)
* [Hard shoulder Running](https://docs.datex2.eu/recommended-profiles/rsp/hardshoulderrunning/)
* [Incident Warning and Management](https://docs.datex2.eu/recommended-profiles/rsp/incidentwarningandmanagement/)
* [HGV Overtaking Ban](https://docs.datex2.eu/recommended-profiles/rsp/hgvovertakingban/)
* [Traffic Management for Corridors and Networks](https://docs.datex2.eu/recommended-profiles/rsp/trafficmanagementcorridors/)
* [Intelligent and Secure Truck Parking](https://docs.datex2.eu/recommended-profiles/rsp/intelligentsecuretruckparking/)

### EPIP Profile

*Date Modified: 30.01.2025 18:41:06, GUID: {483C3636-0B3E-4cf4-BCA0-788C9923AF24}*

The profile contains information such as details of used services, details of the objects used in an exchange, details on the options proposed by the standard, details on optional elements. NeTEx profiles are available to facilitate the implementation of the standard and to improve interoperability by focusing only on the elements that are needed and to fill small gaps voluntarily left by the standard to enable customisation. The European Passenger information profile (EPIP – NeTEx Part 4)6 is a profile focusing on minimum information required to be exchanged to feed passenger information systems (stop displays, mobile applications, journey planners etc.) based on DR MMTIS 2017/1926. The European Passenger Information Accessibility Profile (EPIAP- NeTEx Part 6)7 focuses on the accessibility facilities in stops, stations, vehicles (e.g., ramps, lifts, escalators etc.) for static data, according to MMTIS DR requirements. The respective real time data for both profiles are included in SIRI. The European profiles aim to facilitate the implementation of NeTEx but also to be the basis for the specification of national or local profiles, ensuring interoperability between countries and regions. The EU profiles consider also the existing national profiles, whenever exist, to focus on the common needs between countries and to adopt best approaches.

### IDACS Recommended Service Profiles

*Date Modified: 30.01.2025 18:41:06, GUID: {87698942-37BC-4e11-ABA4-EA4038A0791C}*

IDACS Recommended Service Profiles

Introduction

In the course of the Programme Support Action (PSA) “Data collection related to recharging/refuelling points for alternative fuels and the unique identification codes related to e-Mobility actors” that was subsequently given the name IDACS, or “ID and Data Collection for Sustainable fuels in Europe”, the 15 member states of the consortium mandatorily have to collect data related to alternative fuels infrastructures, namely electric charging points and hydrogen refuelling stations (HRS) as part of activity 2. Other alternative fuels, such as CNG, LNG, LPG and highly-blended biofuels can be covered optionally.

As data collection mandatorily has to take place via the National Access Points (NAP) as defined in directive 2010/40/EU on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport, it is the aim of these profiles to give guidance on how this can be achieved.

### UVARBox

*Date Modified: 30.01.2025 18:41:06, GUID: {C5FEBBBE-152B-47a6-8892-5C453997CEBA}*

UVARBox

UVARBox digitized five types of UVARs for which five profiles are available as RSP in the . The five UVAR types are: - low emission zones - limited traffic zones - pedestrian zones - congestion charging - parking zones

As these profiles are based on un unstable version of DATEX II Traffic Regulations users have to be aware of non-interoperable changes are expected in a stable future v3 release of TrafficRegulation and ControlledZone.

[UVARBox website](https://uvarbox.eu//t_blank)

## Recommendations

**Recommendation**: Provide guidelines or best practices that are not mandatory but are suggested to achieve optimal performance, compliance, or quality. These can include industry standards, advisory notes, or expert recommendations.

### Proposal Usability

*Date Modified: 11.02.2025 15:09:28, GUID: {FCEC8243-9F60-43ec-8978-F5EF5F50D1F3}*

TODO, what does this recommendation specify?

### Proposal User Registration

*Date Modified: 11.02.2025 15:09:36, GUID: {7C7859F2-12C2-47f5-A8E5-1EECCC1BE25D}*

TODO, what does this recommendation specify?

## Technical specifications

**Technical specifications are used to specify:**

**Performance**: Outline the required performance metrics, such as speed, capacity, and reliability. They strictly define the measurable criteria that the system must meet, without specifying the functions or design details.

**Technical**: Provide detailed technical information, including materials, dimensions, and manufacturing processes. They focus exclusively on the technical aspects and physical characteristics of the system or component.

**Design**: Detail the design aspects, including drawings, schematics, and design principles. They concentrate on the visual and structural design elements, without specifying the technical details or performance metrics.

**Interface**: Define how different systems or components will interact with each other, including communication protocols and data formats. They focus on the interaction and integration points, without detailing the functions, performance, or design aspects.

### DATEX II

*Date Modified: 11.02.2025 15:08:08, GUID: {F9A9AFD3-AF4D-4391-9AE4-2FB290C7C9F9}*

**Reference**: [CEN/TS 16157](https://datex2.eu/specifications//t_blank)

**Type**: Technical Specification

**Full Name and Hyperlink**: DATEX II [CEN/TS 16157](https://datex2.eu/specifications//t_blank)

**Contextual Use**: The DATEX II standard series provides a comprehensive framework for the exchange of traffic and travel information. It defines the structure and content of messages exchanged between systems, ensuring interoperability and consistency across different platforms. The standards cover various aspects, including location referencing, situation publication, variable message signs, measured data, and more. This ensures that traffic management systems can effectively communicate and share information, enhancing overall traffic efficiency and safety.

**Publication Date**: under continuous development

Related Documents:

* Part 1: Context and framework
* Part 2: Location referencing
* Part 3: Situation publication
* Part 4: Variable Message Sign (VMS) publications
* Part 5: Measured and elaborated data publications
* Part 6: Parking publications
* Part 7: Common data elements
* Part 8: Traffic management publications and urban extensions
* Part 9: Traffic signal management publications
* Part 10: Energy infrastructure publications
* Part 11: Publication of machine interpretable traffic regulations
* Part 12: Facility related publications
* Part 13: Status & Fault

Notes

* more information: <https://www.datex2.eu/datex2/specifications>
* profiling: <https://webtool.datex2.eu/wizard/>

### General Bikeshare Feed Specification (GBFS)

*Date Modified: 30.01.2025 18:07:34, GUID: {B33AF3D7-0DE6-4244-975F-A8E2E508930F}*

**Title**: General Bikeshare Feed Specification (GBFS)

**Reference**: GBFS

**Type**: Technical Specification

**Full Name and Hyperlink**: [General Bikeshare Feed Specification](https://gbfs.org/specification//t_blank)

**Contextual Use**: GBFS is a standardized data format used by shared mobility services to communicate the status of their systems in real-time. It includes information about vehicle availability, station locations, pricing, and more. GBFS enables integration with trip planning applications, enhancing the accessibility and usability of shared mobility services such as bikes, scooters, mopeds, and cars.

**Document Number**: N/A

**Publication Date**: Ongoing development

**Related Documents**:

* [**GBFS v3.0**](https://gbfs.org/specification/reference//t_blank): The latest version of the GBFS specification, detailing the types of files and data fields used.
* [**GBFS Implementation Guide**](https://gbfs.org/guide//t_blank): A guide for technical teams on how to publish the status of a mobility system in GBFS format.
* **MobilityData**: The organization responsible for maintaining and evolving the GBFS specification.

### GTFS

*Date Modified: 30.01.2025 18:07:34, GUID: {CAEF2437-B0BA-4aac-BFEB-3A8CE86835D6}*

**GTFS (General Transit Feed Specification)**

**Reference**: GTFS

**Type**: Technical Specification

**Full Name and Hyperlink**: [General Transit Feed Specification](https://gtfs.org/getting-started/what-is-GTFS//t_blank)

**Contextual Use**: GTFS is a standardized data format that allows public transit agencies to publish their transit data, including schedules, stops, and fares, in a format that can be consumed by various software applications. It enhances the accessibility and usability of public transit information, enabling users to plan trips and access real-time updates through their smartphones or other devices.

**Document Number**: N/A

**Publication Date**: Ongoing development

**Related Documents**:

* [**GTFS Schedule**](https://gtfs.org/getting-started/features/overview//t_blank): Contains information about routes, schedules, fares, and geographic transit details.
* [**GTFS Realtime**](https://gtfs.org/documentation/realtime/reference//t_blank): Provides real-time updates on trip updates, vehicle positions, and service alerts.

### GTFS-RT (GTFS Realtime)

*Date Modified: 30.01.2025 18:07:34, GUID: {BD5ADEA6-B249-4fad-ACB8-298D1542C33F}*

**GTFS-RT (GTFS Realtime)**

**Reference**: GTFS-RT

**Type**: Technical Specification

**Full Name and Hyperlink**: [GTFS Realtime](https://gtfs.org/documentation/realtime/reference//t_blank)

**Contextual Use**: GTFS-RT is an extension of GTFS that allows public transport agencies to share real-time information such as vehicle locations, arrival time predictions, and service alerts. It uses the Protocol Buffers format to provide timely updates, enhancing the accuracy and reliability of transit information for users.

**Document Number**: N/A

**Publication Date**: Ongoing development

**Related Documents**:

* [**GTFS Schedule**](https://gtfs.org/getting-started/features/overview//t_blank): Contains static information about routes, schedules, fares, and geographic transit details.
* [**GTFS Realtime Libraries & Demo Apps**](https://gtfs.org/resources/gtfs-realtime//t_blank): Tools and applications for producing and consuming GTFS-RT feeds.

### IATA SSIM

*Date Modified: 30.01.2025 15:40:01, GUID: {EEC79522-E329-4da9-89B6-82617E53E335}*

**Title**: IATA Standard Schedules Information Manual (SSIM)

**Reference**: IATA SSIM

**Type**: Recommendation

**Full Name and Hyperlink**: [IATA Standard Schedules Information Manual (SSIM)](https://www.iata.org/publications/store/Pages/standard-schedules-information.aspx)

**Contextual Use**: The IATA Standard Schedules Information Manual (SSIM) provides a comprehensive set of recommended practices, messaging formats, and data processing procedures for the exchange of air traffic-related information. It standardizes the exchange of scheduling information for airline schedules, slot coordination, and minimum connect time (MCT) data. The SSIM ensures that all IATA member airlines and their business partners can efficiently and accurately share flight information, enhancing overall operational efficiency and coordination within the aviation industry.

**Document Number**: Not specified

**Publication Date**: Annually updated

**Related Documents**: None

### INSPIRE

*Date Modified: 30.01.2025 15:41:20, GUID: {5A823122-0DEE-44ec-A7CC-E8C8B7ED8F8D}*

**Title**: INSPIRE Data Specifications

**Reference**: INSPIRE Data Specifications

**Type**: Technical Specification

**Full Name and Hyperlink**: [INSPIRE Data Specifications](https://inspire.ec.europa.eu/data-specifications/2892)

**Contextual Use**: The INSPIRE (Infrastructure for Spatial Information in Europe) initiative by the European Commission aims to create a European infrastructure for spatial information to support joint environmental policies. The INSPIRE Data Specifications provide common data models, code lists, map layers, and additional metadata to ensure interoperability when exchanging spatial datasets. These specifications facilitate the consistent combination of spatial data and services from different sources across Europe, enhancing data-driven decision-making and innovation in environmental policy.

**Document Number**: Not specified

**Publication Date**: Various parts published between 2007-2020

**Related Documents**: None

### mobilityDCAT-AP

*Date Modified: 30.01.2025 16:10:31, GUID: {E2577D77-AFB9-46e3-818C-9764DC209E14}*

**Title**: mobilityDCAT-AP

**Reference**: not specified

**Type**: Technical Specification

**Full Name and Hyperlink**: Metadata Specification for Mobility Data Portals [mobilityDCAT-AP releases](https://mobilitydcat-ap.github.io/mobilityDCAT-AP/releases/index.html)

**Contextual Use**: mobilityDCAT-AP is a formal metadata specification for mobility data portals, extending DCAT-AP. It contains a model with definitions of the syntax and semantics for various data elements and how these elements relate to each other. This specification provides precise and unambiguous metadata designations for any mobility-related data offerings, facilitating harmonised, platform-independent metadata descriptions in both human-readable and machine-readable formats.

**Publication Date**:

**Related Documents**: official recommendation for implementation is [here](https://github.com/mobilityDCAT-AP/mobilityDCAT-AP/wiki/Chapter-2:-Recommendations-for-the-deployment-of-mobilityDCAT%E2%80%90AP#2-when-should-i-implement-mobilitydcat-ap)

* [Core Vocabulary (mobilityDCAT-AP Core)](https://github.com/mobilityDCAT-AP/mobilityDCAT-AP)
* [Controlled Vocabularies (mobilityDCAT-AP Vocabularies)](https://github.com/mobilityDCAT-AP/controlled-vocabularies)

### NeTEx

*Date Modified: 11.02.2025 15:07:04, GUID: {477B7D19-AF4F-483d-BF7D-70FEBB8AE8BB}*

**Title**: NeTEx (Network Timetable Exchange)

**Reference**: CEN/TS 16614

**Type**: Technical Specification

**Full Name and Hyperlink**: [NeTEx (Network Timetable Exchange)](http://netex-cen.eu/?page_id=11)

**Contextual Use**: NeTEx is a CEN Technical Standard for exchanging public transport schedules and related data. It provides a means to exchange data for passenger information such as stops, routes, timetables, and fares among different computer systems, along with related operational data. NeTEx ensures interoperability and consistency across different platforms, facilitating the efficient and accurate sharing of public transport information.

**Document Number**: CEN/TS 16614

**Publication Date**: Various parts published between 2014-2024

**Related Documents**:

* Part 1: Public Transport Network topology (CEN/TS 16614-1:2014)
* Part 2: Scheduled Timetables (CEN/TS 16614-2:2014)
* Part 3: Fare Information (CEN/TS 16614-3:2015)
* Part 4: European Passenger Information Profile – EPIP (CEN/TS 16614-4:2017)
* Part 5: Alternative Modes Exchange Format (CEN/TS 16614-5:2021)
* Part 6: European Passenger Information Accessibility Profile – EPIAP (CEN/TS 16614-6:2024)

### OCPI

*Date Modified: 30.01.2025 16:12:17, GUID: {4472B597-2F44-461b-B7B1-74BCACB02E64}*

**Title**: OCPI (Open Charge Point Interface)

**Reference**: OCPI

**Type**: Technical Specification

**Full Name and Hyperlink**: [OCPI (Open Charge Point Interface)](https://evroaming.org/wp-content/uploads/2024/11/OCPI-2.2.1-d2.pdf/t_blank)

**Contextual Use**: The Open Charge Point Interface (OCPI) allows for a scalable, automated roaming setup between Charge Point Operators (CPOs) and e-Mobility Service Providers (EMSPs). It supports authorization, charge point information exchange, charge detail record exchange, and smart charging functionalities. OCPI ensures interoperability and consistency across different platforms, facilitating efficient and accurate sharing of electric vehicle charging information.

**Document Number**: Not specified

**Publication Date**: Latest version available at [OCPI 2.2.1-d2](https://evroaming.org/wp-content/uploads/2024/11/OCPI-2.2.1-d2.pdf/t_blank)

**Related Documents**:

* [OCPI 2.2.1-d2](https://evroaming.org/wp-content/uploads/2024/11/OCPI-2.2.1-d2.pdf/t_blank)
* [OCPI 2.2.1](https://github.com/ocpi/t_blank)
* [OCPI 2.2](https://github.com/ocpi/t_blank)

This work has been carried out in the context of EMDS (Electric Mobility Data Standards), which aims to standardize data exchange protocols for electric mobility services.

### Open Journey Planner (OJP)

*Date Modified: 30.01.2025 18:07:34, GUID: {77DBDD7C-6A16-4195-AFE6-3D44A30E8033}*

**Title**: Open Journey Planner (OJP)

**Reference**: CEN/TS 17118

**Type**: Technical Specification

**Full Name and Hyperlink**: Open Journey Planner (OJP)

**Contextual Use**: The Open Journey Planner (OJP) is a standardized framework designed to improve journey planning by providing access to multi-modal transport data. It enables users to plan trips involving various forms of transportation—such as buses, trains, trams, ferries, bicycles, and walking—across different transport operators and regions. OJP offers a flexible and open interface that allows for seamless integration of real-time and scheduled transport information, making it easier to coordinate complex trips across different systems.

**Document Number**: CEN/TS 17118

**Publication Date**: Ongoing development

### SIRI

*Date Modified: 11.02.2025 15:07:48, GUID: {E14C46B0-7A08-4284-BF7D-294B3FD4373B}*

**Title**: SIRI (Service Interface for Real Time Information)

**Reference**: SIRI EN 15531

**Type**: Technical Specification

**Full Name and Hyperlink**: [SIRI (Service Interface for Real Time Information)](http://www.transmodel-cen.eu/standards/siri/)

**Contextual Use**: SIRI allows distributed computers to exchange real-time information about public transport services and vehicles. It is a European standard that enables real-time information sharing between different computer systems used by public transportation operators, traffic management agencies, and travel information providers. SIRI supports various functionalities, including real-time departure information, vehicle progress tracking, timetable updates, and status messages about service operations. This ensures interoperability and consistency across different platforms, enhancing the efficiency and accuracy of public transport information exchange.

**Document Number**: Not specified

**Publication Date**: Various parts published between 2015-2024

**Related Documents**:

* [Part 1: Context and Framework (EN 15531-1:2015)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 2: Communications (EN 15531-2:2015)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 3: Functional Service Interfaces (EN 15531-3:2015)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 4: Functional Service Interfaces: Facility Monitoring (CEN/TS 15531-4:2011)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 5: Functional Service Interfaces: Situation Exchange (CEN/TS 15531-5:2016)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 6: Functional Service Interfaces: Control Actions (CEN/TS 15531-6:2024)](https://transmodel-cen.eu/index.php/siri//t_blank)
* [Part 7: European Real Time Passenger SIRI Information Profile (CEN/TS 15531-7:2024)](https://transmodel-cen.eu/index.php/siri//t_blank)

### TAP-TSI

*Date Modified: 30.01.2025 16:25:07, GUID: {682395F9-50B7-41f0-A637-3327735690CE}*

**Title**: TAP TSI (Telematics Applications for Passenger Services)

**Reference**: TAP TSI

**Type**: Technical Specification

**Full Name and Hyperlink**: [TAP TSI (Telematics Applications for Passenger Services)](https://www.era.europa.eu/domains/technical-specifications-interoperability/telematics-applications-passenger-service-tsi_en/t_blank)

**Contextual Use**: TAP TSI defines European-wide procedures and interfaces between all types of railway industry actors. It is a technical specification relating to the telematics subsystem of the rail system in the European Union, aimed at ensuring interoperability of data sharing in rail transport. TAP TSI covers applications for passenger services, including systems providing passengers with information before and during the journey, reservation and payment systems, luggage management, and management of connections between trains and with other modes of transport. This specification facilitates harmonised, platform-independent data exchange, enhancing operational efficiency and passenger experience across the European rail network.

**Document Number**: Not specified

**Publication Date**: 14 December 2025

**Related Documents**:

* Commission Implementing Regulation (EU) No 1305/2014 (TAF TSI)
* Commission Implementing Regulation (EU) No 454/2011 (TAP TSI)

This work is referenced on the [DR MMTIS](https://www.era.europa.eu/domains/technical-specifications-interoperability_en/t_blank) and is set to be implemented on 14 December 2025.

### TN-ITS

*Date Modified: 30.01.2025 17:59:18, GUID: {8DC75ED7-5F93-4ef6-A530-A0751B86F9D9}*

**Title**: CEN TS 17268

**Reference**: CEN TS 17268

**Type**: Technical Specification

**Full Name and Hyperlink**: [CEN TS 17268:2018 - Intelligent transport systems - ITS spatial data - Data exchange on changes in road attributes](https://standards.iteh.ai/catalog/standards/cen/e33ce532-08fd-42b3-b6ca-6b29bfb4c1a5/cen-ts-17268-2018/t_blank)

**Contextual Use**: Describes the exchange of road-related spatial data, focusing on updates to road attributes. It defines the content specification, physical exchange format, and web services needed for data exchange. This specification supports the seamless exchange of static road data between road authorities and map makers, enhancing road safety, transport efficiency, and various ITS applications.

**Document Number**: 17268

**Publication Date**: 11 December 2018

### TOMP API

*Date Modified: 30.01.2025 17:59:55, GUID: {FBBB2596-1666-4708-B010-04F9227229DB}*

**Title**: TOMP API

**Reference**: TOMP API

**Type**: Technical Specification

**Full Name and Hyperlink**: [Transport Operator to Mobility-as-a-Service Provider API](https://github.com/TOMP-WG/TOMP-API/t_blank)

**Contextual Use**: The TOMP API is designed to facilitate technical communication between Transport Operators and Mobility-as-a-Service (MaaS) Providers. It aims to create an interoperable open standard for data exchange, enhancing the integration and efficiency of multimodal transport services. The API supports various functionalities, including booking, trip planning, and payment processing, ensuring seamless user experiences across different transport modes.

**Document Number**: N/A

**Publication Date**: Ongoing development

**Related Documents**:

* [**Telematics Applications for Passenger Service TSI**](https://www.era.europa.eu/domains/technical-specifications-interoperability/telematics-applications-passenger-service-tsi_en/t_blank): Applies to applications for passenger services, including systems providing passengers with information before and during the journey, reservation and payment systems, and management of connections between trains and other transport modes.

### Transmodel

*Date Modified: 30.01.2025 18:07:34, GUID: {0D35A5A5-9321-4869-84CD-A33C1C285172}*

**Title**: Transmodel

**Reference**: EN 12896

**Type**: Technical Specification

**Full Name and Hyperlink**: Transmodel - Public Transport Reference Data Model

**Contextual Use**: Transmodel provides a comprehensive conceptual model for public transport information systems. It covers multiple subdomains including transport network infrastructure and topology, schedules, journey planning, fares, fare validation, real-time passenger information, and operational systems. The model facilitates interoperability between different public transport information systems and supports the integration of various transport modes.

**Document Number**: EN 12896

**Publication Date**: Ongoing development (latest version referenced)

**Related Documents**:

* **NeTEx (Network Timetable Exchange)**: A standard for exchanging public transport schedules and related data.
* **SIRI (Service Interface for Real Time Information)**: A standard for exchanging real-time public transport information.
* **IFOPT (Identification of Fixed Objects in Public Transport)**: A standard for identifying fixed objects such as stops and stations in public transport.
* **CEN TS 16614**: Technical Specification for NeTEx.
* **CEN TS 15531**: Technical Specification for SIRI.

## work in progress

In this chapter we place Specifications and Requirements that are not processed, are either unclear or too general, being a placeholder for a real specification of the interface.

### Quality Frameworks Specification

*Date Modified: 11.02.2025 15:10:20, GUID: {8C2D1401-BF54-470a-A87C-1076FD154F7E}*

TODO, what does this specification / recommendation does?

- make specific or remove e.g. provide list of quality frameworks

### Specification for Content Consumer data retrieval interface

*Date Modified: 11.02.2025 15:10:26, GUID: {69695A87-EBC5-47cf-BE97-A9B8E9483960}*

TODO, what does this specification / recommendation does?

- make specific or remove

### Specification for map data

*Date Modified: 11.02.2025 15:10:04, GUID: {6D9DECD8-FBCA-4d32-A313-253F7899F239}*

TODO, what does this specification / recommendation does?

- make specific or remove

### Specification for the user management metadata repository interface

*Date Modified: 11.02.2025 15:10:30, GUID: {DA09DDC9-9B5F-48e0-BA9B-015027D7F249}*

TODO, what does this specification / recommendation does?

- make specific or remove

### Specification for Ticketing System

*Date Modified: 11.02.2025 15:10:33, GUID: {1B7E21F6-14F6-4b87-859A-57F929C60DC1}*

TODO, what does this specification / recommendation does?

- make specific or remove

### Specification of Content Consumer support interface

*Date Modified: 11.02.2025 15:10:41, GUID: {82CC8D2F-E13E-47eb-BE1F-7D75E6DD2C3C}*

TODO, what does this specification / recommendation does?

- make specific or remove

This specification describes how the Content Consumer interacts with the NAP support technically.

### Specification of content provider data provision interface

*Date Modified: 11.02.2025 15:11:20, GUID: {911BBC94-A631-4bc2-98A7-F795D2E93E2D}*

TODO, what does this specification / recommendation does?

- make specific or remove

If the NAP provides data the data provision should follow the recommendations from EC and NAPCORE.

The technical specification of the content provision interface, e.g. sFTP

Actual existing requirements for machine to machine interfaces:

TSI Telematics: TOMP API?

AFIR + IA: minimum technical requirements (no type defined) Data format DATEX II

SSTP: Truck Parking – Content requirements + Format DATEX II

SRTI: DATEX II

MMTIS: NeTEx + SIRI depends on data category

### Specification of Content Provider Metadata repository interface

*Date Modified: 11.02.2025 15:11:26, GUID: {AC07F298-FBD1-4be1-9F28-642826EE1128}*

TODO, what does this specification / recommendation does?

- make specific or remove

This specification provides the technical specification for the Content Provider metadata repository interface.

### Specification of Content Provider support interface

*Date Modified: 11.02.2025 15:11:32, GUID: {2F4665D0-6CEF-4ab9-85A6-5F3CEF1FF0BB}*

TODO, what does this specification / recommendation does?

- make specific or remove

The specification for the content provider support interface describes the technical means by which the support can be contacted.

### Specification of content provider user management interface

*Date Modified: 11.02.2025 15:11:36, GUID: {D271BE6E-335F-468c-8DB8-CC201E38958F}*

TODO, what does this specification / recommendation does?

- make specific or remove

This specification contains the technical description of the content provider user management interface.

### Specification of interface to Content Consumer

*Date Modified: 11.02.2025 15:11:40, GUID: {B80CF473-075E-41d6-BCD6-286ED8D59230}*

TODO, what does this specification / recommendation does?

- make specific or remove

This specification describes the technical means to exchange metadata with the content consumer.