



ITS Directive: EU-Wide Multimodal Travel Information Service EU 2017/1926

Implementation handbook

December 2019

DG MOVE B4: Sustainable and Intelligent Transport



This Implementation handbook is provided for information purposes only. It does not legally bind the Commission on whether the identified actions will be pursued or on the form in which they will be pursued. The document will be updated periodically.

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I. Context

The ITS Directive Delegated Regulation for the provision of **EU-Wide Multimodal Travel Information Services EU/2017/1926** (abbr. 'MMTIS') was published in the EU Official Journal (OJ) on the 21st October 2017¹. This European legal framework is based on the work of 11 Member States (MS) expert meetings held between November 2014 and March 2016 and a comprehensive and extensive stakeholder consultation with public and private entities across all transport modes.²

This framework provides the necessary requirements to make EU-wide multimodal travel information services accurate and available across borders. It establishes the specifications necessary to ensure the accessibility, exchange and update of standardised travel and traffic data and distributed journey planning for the provision of multimodal travel information services in the European Union.

The Delegated Regulation (DR) intends to provide appropriate framework conditions enabling the co-operation of all the relevant stakeholders along the travel information value chain. The relevant stakeholders include transport authorities, transport operators, travel information service providers, infrastructure managers and transport on demand service providers etc. Such enabling conditions aim to support the interoperability, compatibility, and continuity of multimodal information services and data across Europe.

1. Purpose of this document

In order to support the implementation of this comprehensive legal framework, an implementation handbook has been elaborated in order to:

- Provide an overview on existing EU-funded supporting implementation activities, present existing results and best practices;
- Provide answers to implementation challenges for all stakeholders involved;
- Identify further implementation activities to be considered in the future.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R1926>

² Full details on how the Delegated Regulation was developed can be found in the official Staff Working Document <http://ec.europa.eu/transparency/regdoc/rep/10102/2017/EN/SWD-2017-324-F1-EN-MAIN-PART-1.PDF>

2. Explanation of MMTIS Delegated Regulation

Context/Background			
<p>0 Recital This section provides background information and explanation for the various rules and requirements outlined in the MMTIS Delegated Regulation.</p>	<p>1 Subject Matter & Scope This section explains the overall objective of the MMTIS Delegated Regulation: it applies to the entire transport network and MS still reserve the right to choose whether or not to deploy MMTIS.</p>	<p>2 Definitions This section lists the definitions for the associated terms used throughout the MMTIS Delegated Regulation.</p>	
Data Access, Exchange & Update (Based on Annex I³)			
<p>3 National Access Points This section explains that Member States are responsible for setting up and choosing the structure of the NAP which will provide access to at least the static travel planning data listed in Annex I. It also clearly states who is responsible for providing the data in the NAP and that it must include discovery services and metadata.</p>	<p>4 Static Data Standards This section and recital 16 explain that the static data in the NAP must be represented using the relevant and appropriate standards according to the data type and transport modes. It also clearly states that the data can be fed into the NAP directly using the standard or using translation/conversion methods. Deadlines for providing the different datasets between 1.12.2019 – 1.12.2023.</p>	<p>5 Dynamic Data Standards This section, similar to 4, explains that if MS choose to include dynamic data in the NAP they must also be represented using the relevant and appropriate standards according to the data type and transport mode. It also clearly states that the data can be fed into the NAP directly using the standard or using translation/conversion methods.</p>	<p>6 Data Updates This section states that when changes occur/inaccuracies detected, the data in the NAP needs to be updated in a timely manner by those in charge of supplying the relevant data.</p>
Distributed Journey Planning (DJP)			
<p>7 Linking Services In order to conduct distributed journey planning across the EU, this section explains that, when requested, (local, regional, national) travel information service providers must provide to other similar service providers 'routing results' for journey requests. Routing results are defined as travel itineraries in a machine readable format resulting from a end-users' request. No interface standard is required but the recital highlights that the CEN DJP Open API is recommended.</p>			
Usage rights // Terms and Conditions (T&C)			
<p>8 Requirements for Data Re-use & Distributed Journey Planning This section outlines a number of rules and requirements to avoid abuse of market power and misuse of data. In particular access to data shall be based on the license agreement of the data provider although access must</p>			

³ Annex I defines the list of data that, if existing in a MS, must be accessible in the NAP. The data must be provided by the following 4 entities: Transport Operators, Transport Authorities, Infrastructure Managers and Transport on-demand Service Providers. The data list is organised according to what functions the data can be used for (location search, trip plan computation etc.)

be on a non-discriminatory basis. The source and date of the last static update must also be indicated. The display of travel information to end-users must be neutral. Contractual agreements to conduct DJP will define T&C. Financial compensation to recover the costs of making data accessible and conducting DJP is allowed.

Monitoring

9 Assessment of Compliance

This section outlines the procedure for MS to assess whether or not the DR has been correctly implemented and if any violations have taken place. The relevant entities may be requested by MS to complete an evidence-based declaration of compliance.

10 Reporting

This section outlines the reporting obligations of MS. The first report is due on 1.12.2019 and mainly covers the creation/implementation of the NAP. The reports thereafter are required every two years and cover all aspects concerned with the MMTIS DR.

Entry into force

11 Entry into Force

This section states that the MMTIS DR enters in the force on Friday 10th November 2017 (OJEU+20 days). However, as detailed in article 4, Member States have until 1st December 2019 to set up their NAP with at least phase 1 static data.

II. Support Actions

The chart below provides an overview of the existing and planned EU activities to support the implementation of Delegated Regulation 2017/1926 (MMTIS)⁴. The different activities represent a combination of technical, functional and organisational support projects to address the implementation challenges aforementioned.

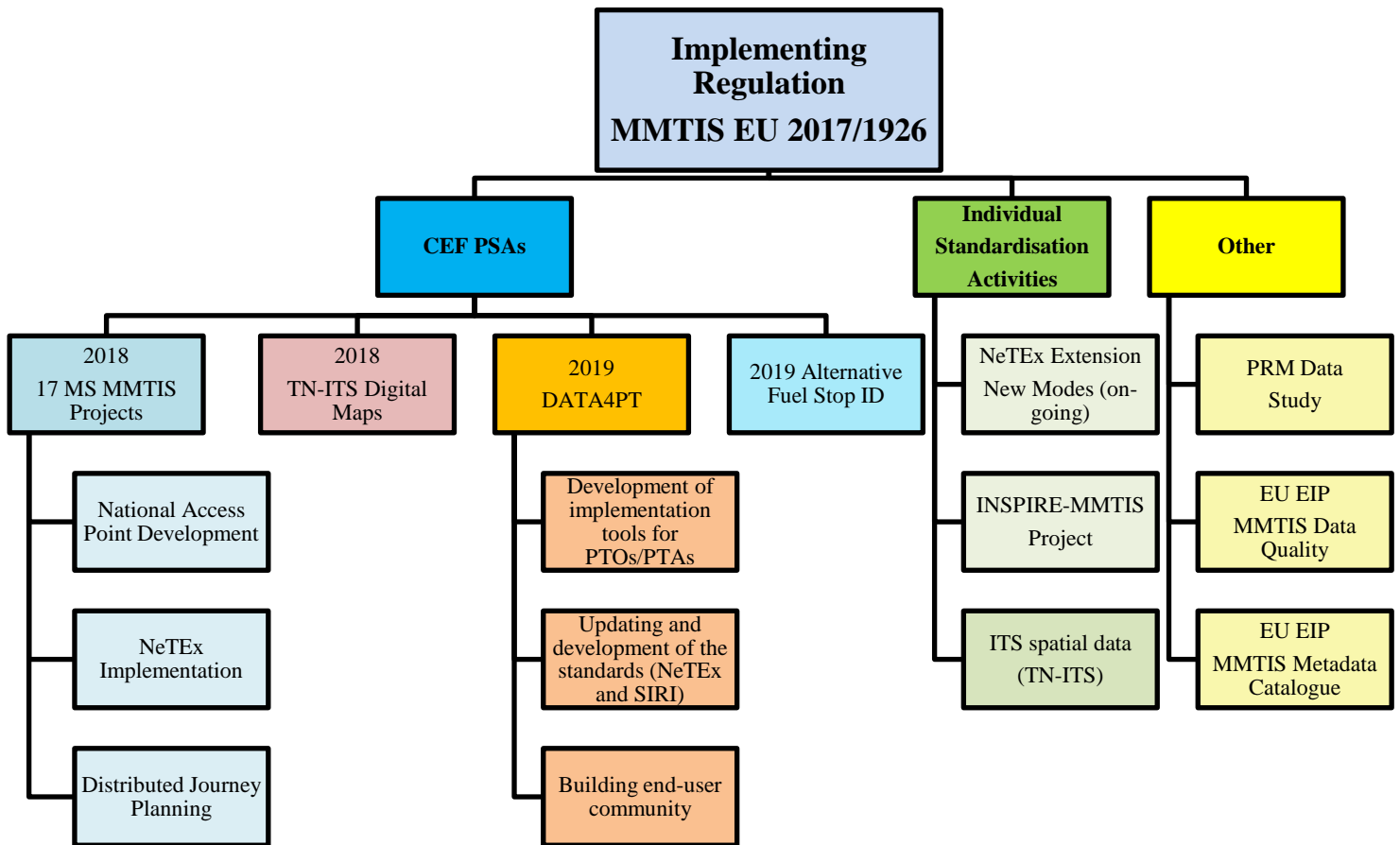
The activities are a combination of both national and European led projects, integrate public and private stakeholders and cover a broad range of transport modes.

The chart also demonstrates that all the support activities are inter-linked and contributing towards one common goal: effectively implementing MMTIS across all Member States. As such, it is essential that the results and outcomes of all activities can feed into others and are available for all possible stakeholders to view.

Based on the implementation needs of stakeholders and progress of existing activities to support the effective implementation of MMTIS, additional EU projects and support mechanisms may be funded in the future.

⁴ The activities listed below also support the implementation of other ITS Directive Delegated Regulations, namely action 'b' real-time traffic information. Strong coordination between the different delegated regulation implementation is essential.

1. Overview



2. Connecting Europe Facility (CEF) Programme Support Actions (PSA)

The Connecting Europe Facility (abbr. 'CEF') is a key EU funding instrument to promote growth, jobs and competitiveness through targeted infrastructure investment at a European level. It supports the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services. CEF investments aim to fill the missing links in Europe's energy, transport and digital infrastructure. The CEF benefits people across all Member States, it aims to make travel easier and more sustainable and aims to facilitate cross-border interaction between public administrations, businesses and citizens.

Programme Support Actions (abbr. PSA) are dedicated CEF grants to achieve a specific and targeted objective including public and private collaboration. They are an effective and suitable funding instrument to support the implementation of MMTIS. In the context of implementing the real-time

traffic information specifications of the ITS Directive, the DATEX II and TN-ITS GO CEF PSAs were launched.

In the section below the relevant CEF PSAs to support the early implementation of MMTIS are described in detail.

a. Member States' MMTIS Projects (2018)

A dedicated CEF PSA was launched in May 2017 to award grants to Member States for national-led coordination projects to support the early implementation of MMTIS which apply to the TENT network including urban nodes. In total, a maximum of 5m EUR funding was available to support this action. The core objectives of the dedicated PSA were to:

- facilitate the access to static travel and traffic data from public and private actors in accordance to Annex I of MMTIS 2017/1926;
- enable the interoperable exchange of travel and traffic data in accordance with the technical requirements outlined in the delegated regulation;
- support the use of distributed journey planning at local, regional and national levels along the TEN-T network;
- enhance multi-stakeholders cooperation and partnerships.

Based on their national context Member States were invited to submit proposals based on the following activities:

Stakeholder Engagement

- develop a comprehensive stakeholder map that determines which public and private stakeholders are required to implement MMTIS;

National Access Point

- extend the existing national access point established for other specifications of the ITS Directive **OR** develop a new national access point to provide access to the static and where relevant dynamic datasets defined in Annex I;
- develop and/or finalise the national access point's data quality validation tools;

Interoperability of Static Scheduled Travel Data

-
- support the full implementation of NeTEx (based on the underlying Transmodel data model) at the level of local transport authorities and transport operators including any relevant training activities along the TEN-T network incl. Urban Nodes **OR** develop and/or finalise data mapping/translation tools to facilitate the integration of static scheduled transport datasets (excluding rail and aviation) from national standards and technical specifications into NeTEx (based on the underlying Transmodel) at the level of the national access point;
 - develop and/or finalise the national profile of NeTEx (based on the underlying Transmodel data model) in conjunction with the common European profile;

Distributed Journey Planning

- facilitate the provision of distributed journey planning with national, regional and local services with neighbouring cross-border services along the TEN-T network incl. Urban Nodes and the use of the CEN OPEN API standardised interface;

In total, **17** Member State projects were successfully selected. The tables below provide a **basic** overview on the different national project activities and respective timeline.

Table 1: Overview of Member States' MMTIS Projects

Member State	Stakeholder Coordination	National Access Point	Interoperability of Static Scheduled Travel Data (NeTEx)	Distributed Journey Planning
Austria	Stakeholder Map//Working Groups// Workshops	Expand Existing - Operational	Translation//National Profile	Implementation of EU DJP Interface
Belgium	Working Groups//Workshops / Stakeholder Map	New - Operational	Full Implementation in BE Urban Nodes	None
Croatia	Workshops	New - Study	None	None
Denmark	None	None	Translation//National Profile	None
Estonia	None	None	Translation//National Profile	None
Finland	User forum//Website// Guidelines	New - Operational	Translation//National Profile	None
France	Stakeholder Map//Training// User Forum//Workshops	New - Operational	Full Implementation in Grand-est Region	Implementation of EU DJP Interface (Grand-Est Region)
Germany	Stakeholder Map//Training// User Forum//Workshops	Expand Existing - Operational	Translation	Implementation of EU DJP Interface
Ireland	None	None	Translation//National Profile	None
Lithuania	Stakeholder Map	Expand Existing - Operational	Translation//National Profile	None
Netherlands	None	Expand Existing - Operational	Translation	None
Poland	Stakeholder Map//Website// Workshops	Expand Existing - Study	Study//National Profile	None
Portugal	Stakeholder Map//Website// Workshops	Expand Existing - Operational	Translation//National Profile	Implementation of EU DJP Interface
Slovenia	None	Expand Existing - Operational	Translation//National Profile	None
Spain	Stakeholder Map//Website// Workshops	Expand Existing - Study	Study//National Profile	None
Sweden	None	None	None	Implementation of EU DJP Interface
United Kingdom	None	None	National Profile	None

Member State	2017 Q2	2018 Q1	2018 Q2	2019 Q1	2019 Q2	2020 Q1	2020 Q2	2021 Q1	2021 Q2
Austria									
Belgium									
Croatia									
Denmark									
Estonia									
Finland									
France									
Germany									
Ireland									
Lithuania									
Netherlands									
Poland									
Portugal									
Slovenia									
Spain									
Sweden									
United Kingdom									

Table 2: Overview of Member States' MMTIS Projects

b. DATA4PT (2019)

Building on the activities covered by the national-led MMTIS CEF PSA projects, another dedicated CEF PSA has been launched to fund complementary activities with a broader scope concerning dynamic data and service provider implementation. The DATA4PT project website is accessible via <https://data4pt-project.eu/>.

The action consists of technical and organisational activities to facilitate the development and deployment of the European public transport data standards Transmodel, NeTEx and SIRI for the provision of Union-wide multimodal travel information services, which apply to the TEN-T network including urban nodes.

The action aims to:

- enable the interoperable exchange of travel and traffic data in accordance with the technical requirements outlined in Commission Delegated Regulation (EU) 2017/1926 across the Union;
- enhance multi-stakeholders cooperation and partnerships amongst public authorities and travel information service providers.

In total, 1.9 m EUR funding supports this action. The project is coordinated by UITP and ITxPT and nine Member States are also involved: Austria, Croatia, Czech Republic, Denmark, France, Italy, Portugal, Slovenia and Sweden. The project will last for four years, until end of 2023.

The action includes the following activities:

- Support the technical development of Transmodel, NeTEx and SIRI to fulfil the needs of multimodal travel information service providers:
 - Conduct technical artefact maintenance;
 - Develop data validation tools and test platform;
 - Conduct required updates for all standards;
 - Develop National SIRI profiles.
- Develop the Transmodel, NeTEx and SIRI end-user community;
- Facilitate the operational use of Transmodel, NeTEx and SIRI standards by public transport operators and public transport authorities:
 - Conduct technical conversion and operational use based on the developed shared European validation tools;
 - Exchange of best practice.

c. TN-ITS Digital Maps (2018)

A dedicated CEF PSA was launched in May 2017 to award grants to a consortium of at least 12 Member States to support the implementation of data exchange used for digital maps for Union-wide multimodal travel and real-time traffic information services on the TEN-T network. In total, a maximum of 2m EUR funding was made available to support this action. The core objective of the dedicated PSA is to support the implementation of delegated regulations under Directive 2010/40/EU regarding the requirements to make road, traffic and transport services data used for digital maps accurate and available to digital map producers and service providers through national access points.

The action shall include the following activities:

- define and maintain common specifications, starting from the ROSATTE specifications and extend them to cover all relevant static road data listed in the Annex RTTI and all relevant static travel data listed in the Annex of MMTIS. For ‘location search’ type of data (e.g. addresses, road service types, geographical names), data specifications of INSPIRE Directive for the relevant annex themes should be considered;
- extend the specifications to relevant additional data needs related to cooperative, connected and automated mobility;
- support the further standardisation of these extended specifications;
- develop and deploy in each participating country an operational and self-sustainable exchange procedure of relevant data, using these common specifications;
- coordinate with national authorities in charge of the implementation of the Commission Delegated Regulations 'b' RTTI and 'a' MMTIS, in particular regarding the national point of access and the implementation of the static data part of these Regulations; in particular, duplication of efforts have to be avoided;
- develop common terms and conditions for data use and exchange across all the participating countries, facilitating the access to these data exchange procedures to all;
- interested digital map producers and service providers.

On the 1st January 2018, a consortium made up of 15 Member States (Belgium, Cyprus, Estonia, France, Finland, Greece, Hungary, Ireland, Lithuania, Netherlands, Portugal, Slovenia, Spain, Sweden, UK) led by ERTICO ITS Europe started and will run until December 2021.

d. Alternative Fuel Stop ID

The objective of this PSA is to assist Member States with collection of the data related to the alternative fuels infrastructure and coordination and establishment of repository concerning

unique Identification Codes (IDs) of e-mobility actors, which are an essential part for a future harmonised development of electro mobility services in Europe.

The PSA started in January 2019 and will last until December 2021 with fifteen Member States involved (The Netherlands, Belgium, Luxembourg, Germany, Poland, Austria, Croatia, Slovenia, Spain, Lithuania, Czech Republic, Hungary, Portugal, France , Greece); it consists of four key activities:

- Coordination of ID registrations of e-mobility actors;
- Data collection and data availability related to alternative fuels;
- Dissemination;
- Coordination at national level.

The final objectives of this PSA are:

- to support better consumer awareness and buy-in to the use of alternative fuels through better information about the location/ availability of alternative fuel infrastructure;
- to support a structured market development by helping to develop an EU-wide approach for the assignments of ID codes to e-mobility actors.

3. Standardisation Activities

a. Transmodel/NeTEx Extension – Data Models and Definitions for New Modes (2018)

Between 2010 and 2012, the Urban ITS Expert Group highlighted the specific need for standards in the Urban ITS Context in multimodal travel information, urban logistics and traffic management. A request for a new standardisation mandate was launched in August 2014 following a stakeholder, CEN and MS consultation. A pre-study to identify a gap/overlap analysis and the new work item proposals including standards requirements was conducted between September 2015 and May 2016.

The Commission Implementing Decision to develop standards for Urban ITS was adopted in February 2016 (Mandate M/546).

A list of standardisation proposals were identified and out of more than 100, 6 projects were selected, one of which is '**data models and definitions for new modes**'.

This standardisation activity shall define a harmonised data model for 'new modes' such as bike-sharing, car-sharing etc. which Transmodel and NeTEx do not currently support. The project started in January 2018 and will last 30 months. During this period the data model

itself shall be defined and in the long term these extensions will aim to be fully integrated as an extension of Transmodel and NeTEx.

b. INSPIRE-MMTIS Project (2018)

The INSPIRE Directive (2007) is a European legal framework which establishes the infrastructure for spatial information in Europe. The Directive addresses 34 spatial data themes needed for environmental applications, with key components specified through technical implementing rules. The datasets listed in Annex I of MMTIS include spatial datasets and as such, several of the standards and technical specifications prescribed in MMTIS all cover the same spatial datasets.

In February 2018 an EU JRC funded project started in order to investigate this overlap and produce recommendations to Member States on how to address this issue within the National Access Points. The final report was published in December 2019 and is available on the following link:

<https://publications.jrc.ec.europa.eu/repository/handle/JRC118744>

The project was made up of a team of data standardisation experts representing all the different transport mode data standards required in National Access Points (INSPIRE, NeTEx/Transmodel, DATEX, TAP-TSI, IATA) and also TN-ITS.

Specifically, the project conducted the following tasks:

- develop definitions of the static data categories of listed in Annex I of MMTIS which are relevant to the INSPIRE Directive (spatial information);
- conduct a mapping exercise between the different data standards/specifications and identify possible overlaps and propose recommendations of how to overcome such issues;
- defining and testing a methodology of managing such overlaps with a number of practical and relevant use cases;
- develop a joint final report including technical recommendations for Member States on the usage of standards for the different data categories in scope.

While the focus of the first phase of this project concerns spatial data overlaps, recommendations for future activities/follow-up actions to address other datasets of Annex I of MMTIS (i.e. timetable data) could be envisaged.

c. TN-ITS

TN-ITS (ITS Spatial Data – Data Exchanges on Changes in Road Attributes CEN/TS 17268) is a European technical specification for the exchange of road-related spatial data, and especially updates thereof. Based on the content specification, the standard defines also a physical exchange format (structure and encoding) for the actual data exchange. In addition, it defines web services that are needed to make the coded data on updates available.

A number of changes were made to the technical specification which is of relevance for the MMTIS Delegated Regulation:

- There is a link possible now to the INSPIRE data sets (INSPIRE Transport Networks) over location referencing (INSPIRE Linear Referencing)
- There is a strong move towards DATEX II in the area of the definitions of validity of rules/traffic signs (validity), in the area of vehicle definition/classification (vehicle characterisation)
- TN-ITS has been expanded for the following data categories in order to fulfil the requirements of the delegated regulations of the ITS directive:
 - Toll Road (including Property Type for User charges)
 - Toll Station
 - Parking Site (in alignment with DATEX II)
 - Refill Point Gas (in alignment with DATEX II)
 - Charging Points (in alignment with DATEX II)
 - Public Transport Stop (in alignment with IFOPT)
 - Feedback information – it is possible to provide feedback to the data providers also in open text (i.e. feedback on quality/accuracy of the dataset or the road feature can be provided as an example)
- In the area of traffic signs the TS has been aligned to ISO 14823:2017 (Intelligent transport systems -- Graphic data dictionary) (for Info: ISO14823:2017 specifies a graphic data dictionary, a system of standardized codes for existing road traffic signs and pictograms used to deliver Traffic and Traveller Information (TTI). The coding system can be used in the formation of messages within intelligent transport systems).

4. Other

a. Study: Mapping accessible transport for persons with reduced mobility

In Europe, one in six people are affected by a disability to some degree. Transport and personal mobility have a significant impact upon the quality of life of persons with disabilities and persons with reduced mobility (PRM). When planning a trip across different EU countries and with different operators, PRMs face difficulties knowing what level of service they can expect and thus are faced with barriers, lack of assistance or language/accessibility problems during their journey, particularly at connecting points and on arrival at their destination. The

problem may become even more critical when the PRM successively uses different modes of transport.

New communication systems can significantly improve traveler information for PRM but the effectiveness of such information depends on how well potential users are aware of, can access, and actually apply this information. Accessibility related travel data⁵ for persons with reduced mobility was deemed a priority dataset to be included within the scope of MMTIS by all stakeholders and is included within level of service 1 (to be provided by 1 December 2019 at the latest).

A study to map accessible transport for persons with reduced mobility has been launched in 2018. Some of the tasks strongly correspond with the implementation of the Delegated Regulation for what concerns PRM travel data. Notably the study aims at:

- Mapping the availability of MMTIS PRM travel datasets across all MS and all modes of transport;
- Developing recommendations of how to create and integrate such datasets in travel information services in accordance with National Access Points and the MMTIS Delegated Regulation.

b. EU EIP: MMTIS Data Quality

The EU ITS Platform (EU EIP) is an EU funded initiative to foster, accelerate and optimise current and future ITS deployments in Europe in a harmonized way. It traditionally includes National Ministries, Road Authorities, Road Operators and partners from the private and public sectors of almost all EU Member States and neighboring countries but rail and public transport stakeholders are increasing their participation in view of the broader scope of MMTIS. In order to foster cooperation and the necessary consensus between stakeholders, the EU ITS Platform aims to establish commonly understood state of the art and promotes the actual take-up of EU specifications, guidelines, best practices and/or methodologies.

A key task of the EU EIP concerns the development of quality requirements and quality assessment practices for all ITS Directive priority services involving the transport authorities

⁵ Geometry/map layout structure of access nodes, Stop facilities access nodes (including platform information, help desks/information points, ticket booths, lifts/stairs, entrances and exit locations), Vehicles (low floor; wheelchair accessible, wheelchair spaces, marking for persons with visual impairments, grab handles etc.), Accessibility of access nodes, and paths within an interchange (such as existence of lifts, escalators), Accessibility of access nodes, and paths within an interchange (such as existence of lifts, escalators)

and operators in a major role, building up on results from EIP and EIP+, widening the scope to other priority services than for priority actions b) and c).

The objectives of the activity of EU EIP on data quality are the following:

- Identify stakeholders, value chains, recommended work processes, quality assurance, and introduction paths for road operator relevant ITS Directive priority services;
- Propose European minimum quality requirements and quality assessment practices for all ITS Directive's priority services involving transport authorities/operators in a major role;
- Validate and improve the quality criteria, requirements and assessment practices proposed;
- Work towards specifying optimum quality for selected priority services.

The EU EIP has published the Quality Package in November 2019: <https://www.its-platform.eu/highlights/multimodal-travel-information-services-mmtis-update-quality-framework>

c. EU EIP: Metadata catalogue

Article 3 of MMTIS stipulates that “national access points shall provide discovery services to users, for example services allowing for the search of the requested data using the contents of the corresponding metadata and displaying such contents”.

In this context, the objectives of the sub-activity are the following:

- Ease search EU-wide by making metadata consistent and harmonised across all EU NAPs;
- Update the existing 2015 “[Coordinated Metadata Catalogue](#)” developed at the initiative of the Netherlands, Austria, Germany, and Sweden, to take into account MMTIS and hence covers multi-modal travel data and services.

The “Catalogue” is available [here](#), the accompanying Annexes: [annex 1](#) and [annex 2](#).

5. Link with other ITS Directive Delegated Regulations

Four other Delegated Regulations have been adopted by the Commission:

Priority Action	Specification	Date of Adoption	OJ	Date of Effect
B	Real Time Traffic Information (RTTI)	18 Dec 2014		13 July 2017

C	Safety Related Information (SRI)	8 Oct 2013	1 Oct 2015
D	eCall	26 Nov 2012	23 April 2014
E	Truck Parking Information (TPI)	8 Oct 2013	1 Oct 2015

There are many commonalities between the different delegated regulations and in the context of implementing the MMTIS Delegated Regulation, it is important that the commonalities as well as the differences are taken into account and wherever possible joint synergies and collaboration should be ensured. This is particularly important for the following aspects:

Data Access and Exchange	
Commonalities	Differences
Some Datasets Data standards (INSPIRE/DATEX) Data Quality/Update Requirements	All modes Use of License Agreements Entire Transport Network Different Datasets Public and Private Obligations Use of National Profiles of Standards Data Standards (Transmodel/NeTEx, TAP-TSI, IATA)
National Access Points	
Commonalities	Differences
Structure/Type Use of Data Standard Converters	Phased Implementation for data sets
Other	
Commonalities	Differences
	Requirements for Services, not just Data

6. MMTIS Stakeholder Workshops







It is imperative that the progress of the implementation and the results of all the aforementioned projects and initiatives are discussed in a forum which represents all of the key stakeholders affected by the Delegated Regulation. Dedicated workshops will be organised periodically by the European Commission with stakeholder organisations, such as:

Sector	Entity	URL
Member States	National Administrations - Experts nominated by Member States involved in the development of MMTIS	n/a
Local Authorities	Polis Eurocities	https://www.polisnetwork.eu/ www.eurocities.eu/
Public	UITP (International Association of	www.uitp.org/

Transport	Public Transport)	
	EMTA (European Metropolitan Transport Authorities)	http://www.emta.com/
	ITxPT (Information Technology for Public Transport)	http://itxpt.org/en/home
Rail	CER (Community of European Railways)	www.cer.be/
	ALLRail	http://allrail.eu/
	EIM (European Rail Infrastructure Managers)	www.eimrail.org/
Air	IATA (International Air Transport Association)	www.iata.org/Pages/default.aspx
Road	IRU (International Road Transport Union)	https://www.iru.org/
Service Providers	TISA (Traveller Information Services Association)	http://tisa.org/
	MaaS Alliance	https://maas-alliance.eu/
Other	EU EIP (EU ITS Platform)	https://eip.its-platform.eu/
	Transmodel/NeTEx/SIRI Representative	http://www.transmodel-cen.eu/ http://netex-cen.eu/
	DATEX Representative	http://www.datex2.eu/
	TAP-TSI/EDIFACT Representative	http://tap-tsi.uic.org/

A workshop was recently organised on the 12/11/19, and further workshops will take place on a periodical basis.

III. Timeline

			1 st Dec 2019	1 st Dec 2020	1 st Dec 2021	1 st Dec 2022	1 st Dec 2023
Static Data in NAP	TEN-T incl. Nodes						
	Entire Network						  
Member State Reports			✓		✓		✓



Annex I: Static Data Level of Service 1



Annex I: Static Data Level of Service 2



Annex I: Static Data Level of Service 3

Content of MS Reports

As stated in Article 10 of the MMTIS Delegated Regulation, Member States must periodically provide reports to the European concerning the implementation of the MMTIS Delegated Regulation. The first report was due on 1.12.2019 and mainly covers the creation/implementation of the NAP. The reports thereafter are required every two years and cover all aspects concerned with the MMTIS Delegated Regulation.

IV. Annex

1. MMTIS Q&A – for Stakeholders

Please note that the replies were prepared by Directorate- General for Mobility and Transport and do not commit the European Commission. Moreover, only the Court of Justice of the European Union is competent to authoritatively interpret Union law.

National Access Points – Art 3	
Questions	Answers
<p>When a trip has its departure and its arrival in several Member States’ territories, which Member State is responsible for obliging transport operators or service providers to make their data accessible to the NAP?</p> <p><i>Should identical data be available by the NAP of each MS involved? Could a MS link to the NAP of other MSs? Which MS is responsible for evaluating the quality of the data?</i></p>	<p>Each Member State has control over the corresponding data covering the departure and arrival in the Member State’ territory.</p> <p>As underlined in recital 11, when there is a provision of services across different Member States, more than one access point is relevant to provide access to the travel and traffic data. However, efforts should be made to avoid unnecessary duplication of data and take into account the shape and form of the relevant access points.</p> <p>If the relevant NAPs have the form of a data repository, the data and metadata could be listed in all relevant NAPs. If, however, some of the relevant NAPs take the form of a database/data warehouse, then the data and metadata could be hosted in one of them and listed in all others.</p> <p>This means that a Member State can link to the NAP of other Member States, provided that they have common understanding on how to deal with those data and that several requirements are met, such as the provision of discovery services to users as outlined in Article 3 para. 3.</p> <p>Regarding the quality of the data as stipulated in para. 2 (a) of Art. 9: “in order to conduct the assessment, the competent authorities of Member States may request from the transport authorities, transport operators, infrastructure managers, transport on demand service providers or travel information service providers, the following documents: a description of the travel and traffic data listed or stored in the access points and the travel information services available including connections with other services if applicable, as well as the information on the quality thereof”.</p>

<p>Are there any best practices on how NAPs can verify whether the data is accurately represented in the standards and quality claimed?</p>	<p>One idea is to look at the EU EIP’s work on the quality requirements for the European services for Multimodal Travel Information (MMTIS) as well as their data content during the expert group meeting which took place on 27/03/2019. The Quality Package related to the Delegated Regulation has been published on the EU EIP website: https://www.its-platform.eu/highlights/multimodal-travel-information-services-mmtis-update-quality-framework</p> <p>Some Member States, like the Netherlands or France have also developed analysis tool of data quality in their NAP.</p>
<p>Which kind of historic data for scheduled and demand responsive transport modes the NAPs shall make available for users, including format and standards applicable?</p>	<p>Historic data are aggregated data that have been gathered on the basis of previous measurements. Historic data that can be used for door-to-door travelling and distributed journey planning need to be made accessible through the NAP. Overall, the objective should be to provide the data set out in the Annex of the Delegated Regulation.</p>
<p>How to make sure that private actors participate in the NAP?</p>	<p>Member States should first develop a map of the stakeholders impacted by the Delegated Regulation. Furthermore, it is the Member States’ responsibility to ensure effective implementation of the Delegated Regulation. In this context, the best way forward might either be to introduce national legislation foreseeing fines in case of non-compliance with the referred regulation and / or to designate a public body vested with the powers to impose fines. Some Member States have also decided to make the provision of data a condition to get authorisation for the services to operate. If such mechanism is effectively put in place and fines are duly imposed by the competent authorities, the Commission might not need to initiate an infringement procedure with those Member States that do not comply with the obligations laid down by the Delegated Regulation.</p>
<p>If a transport service provider is active throughout the Union and collects machine-readable data in a central database, to which National Access Point is the data to be submitted?</p>	<p>Article 3 of the Delegated Regulation stipulates that: “<u>the national access point shall constitute a single point of access for users to (...) data (...) provided by (...) or transport on demand service providers within the territory of a given Member State</u>”. Article 3 implies that data have to be submitted to the corresponding National Access Points, in the country where the operation takes place, to ensure that users can access the data of the operation, which takes place in the territory.</p>

The foregoing interpretation is also without prejudice to the wording of Article 3(5) that stipulates that two or more Member States may set up a common access point.

Data standards – Art 4 & 5

Questions	Answers
<p>Current data standards do not cover all of the data categories listed in Annex I. Is there a timing for further standardisation, e.g. for transport on demand services specified in the Annex: shuttle bus, shuttle ferry, taxi, car-sharing, car-pooling, car-hire, bike-sharing, bike-hire?</p>	<p>CEN has recently submitted a proposal⁶ for the execution of a standardisation action in the ITS domain in the field of alternative modes of transport. The proposed action addresses the development of a data exchange format dedicated to the publication of data concerning alternative modes, in particular car sharing, cycle sharing, carpooling, car/cycle rental. Once the work on the new modes is finalised on the model side, it will also require a corresponding exchange protocol (expected to be a NeTEx extension).</p>
<p>Are transport authorities, transport operators, infrastructure managers or transport on demand service providers responsible for delivering data in the requested formats?</p>	<p>Yes, they have to provide the data in the required format as inferred from Articles 4 and 5.</p>
<p>Article 5 specifies that if Member States choose to provide dynamic data in the NAPs, the relevant and appropriate standards have to be used. How do Member States need to notify their decision of including or not dynamic data?</p>	<p>Member States have to report to the Commission on the progress made in relation to the implementation of the Delegated Regulation. In these reports, Member States should clarify whether the deployment also covers dynamic data.</p>

Data standards – Art 6

Questions	Answers
<p>How can “timely update” and “reasonable financial compensation” be interpreted?</p>	<p>Assessments should be made ad hoc. A good benchmark for interpreting the notions of “timely update” and “reasonable financial compensation” can be derived from the market conditions: i.e. how often data change; what kind of up-to-date data travelers need; what is the market price of the relevant data: i.e. how much money do private undertakings need to dedicate to have access to the data.</p>

⁶ Development of a TS in the field of Alternative modes of Transport – CEN/TS PT1711

Data protection and reusability of data

Questions	Answers
<p>What is the intention of the Regulation as regards ensuring neutrality, identity and commercially independent reusability of data without discrimination and misleading?</p> <p><i>Currently, some travel Information service providers sell personal identity, habits and knowledge of personal locations (start and end of journey) to third parties without any option for users to use those travel information services anonymously.</i></p>	<p>This question fully reflects one of the objectives of the Delegated Regulation, to provide a Union-wide alternative to existing multimodal journey planning tools and platforms. The data fed into the National Access Points should be accurate and accessible to all interested parties on fair and equal terms. The gathered data can only be used and reused for the purposes foreseen in this Regulation, and not for other commercial purposes. As regards processing of personal data, the General Data Protection Regulation is applicable. The NAPs should safeguard that the above principles are being respected, i.e. by introducing clauses regarding the use and re-use of data and by making sure that data is accessible on equal and non-discriminatory terms and conditions.</p>

Annex

Questions	Answers
<p>Could you clarify the meaning of “road link travel times” in section 2.3 of the Annex? Is there any other guidance you could provide on the meaning of terms in the Annex more generally?</p>	<p>“Future predicted road link travel times” can be understood as expected time of travel for future trips on road network.</p> <p>The JRC has carried on some work on the overlaps in standards between INSPIRE and MMTIS. This Report include further definition of the terms in the Annex and has been published on the following link: https://publications.jrc.ec.europa.eu/repository/handle/JRC118744</p> <p>Additionally, the Study on ITS Directive, priority action A (https://ec.europa.eu/transport/sites/transport/files/2016-05-its-directive-multimodal-services.pdf) gives some clarification on data needs and therefore the ones set out in the Annex.</p>

2. MMTIS Infographic – for the General Public



DIGITALISATION: MAKING TRAVEL DATA ACCESSIBLE FOR BETTER JOURNEY PLANNING

Have you ever found yourself trying to **plan a journey across Europe** without knowing all the options for scheduled trains, planes, coaches and public transport? It isn't always easy to get the right **information about cross-border transport and connections**.

The goal of this initiative is to solve this problem by establishing **national access points with travel data from all types of transport**. This data will then be made available to businesses such as service providers and developers, who would use it to build travel information websites, online journey planners and other applications. As a result, **new and more accurate services** to plan journeys across Europe will be available to anyone who needs them.



1 BILLION TRIPS PER YEAR

Demand for cross-border
travel information in the EU

Benefits of using single journey planners



Save time

Use single planners for all transport for entire journey.



More choice

Fastest Journey, fewest connections, least polluting.



Business opportunities

Easier operations for service providers and developers.

How will the new travel information system work?

- END USERS/TRAVELLERS**
 - Uses a travel information service (website, app...) to plan a journey across the EU.
 - Saves time and has more choices regarding the type of transport.
- LINKING SERVICES**
 - Local, regional and national travel information services may decide on a voluntary basis to link with each other's services to provide better information to users.
 - Financial compensation may be required by the travel information services.
- SERVICE PROVIDERS/DEVELOPERS**
 - Use the data from national access points to set up travel information services such as websites or app for smart phones etc...
 - Have to comply with the terms and conditions set by transport operators, transport authorities etc...
 - Financial compensation may be required by the transport operators, transport authorities etc. to use their data.
- NATIONAL ACCESS POINTS**
 - All EU Member States have to set up National Access Points by 2019
 - National access points will gather travel information from scheduled trains, coaches, planes and public transport, from both private and public entities.
 - The data provided through the National Access Point needs to be in a common language.