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National Access Points – getting closer to MaaS EU-wide

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Abstract

This (draft) paper highlights the regulation on the provision of EU-wide multimodal travel information (MMTIS) and discuss the impact for the actors in the mobility eco system.

The regulation calls for standardization of formats for all traffic and travel data from all public and private modalities and the creation of a National Access Point in all EU-member countries for mobility from all mobility actors.

The regulation includes the potential to drastically improve awareness of alternatives to the use of private owned cars for mobility and increased use of ground transport as an alternative to short and medium airline routes even across borders.

The regulation is a giant leap forward in making it possible to deliver Mobility as a Service as all possible modality options can come into play when end users are looking for travel options.

Keywords:

NAP, MaaS, Multimodal, MMTIS

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Introduction to the EU regulation 2017/1926 of 31 May 2017 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services (MMTIS)

EU continues to fill out the framework for the deployment of intelligent transport systems as started back in 2010 for road transport and other modes of transport plus multimodal travel information services.

This paper highlights the regulation on the provision of EU-wide multimodal travel information services or MMTIS and discuss the impact for the actors in the mobility eco system.

The regulation calls for standardization of formats for all traffic and travel data from all public and private modalities and the creation of a National Access Point in all EU-member countries to be the point where (professional) users of mobility data can get to know where to find data from all mobility actors in each country.

The regulation includes the potential to drastically improve awareness of alternatives to the use of private owned cars for mobility and increased use of ground transport as an alternative to short and medium airline routes even across borders.

The MMTIS regulation is a giant leap forward in making it possible to deliver Mobility as a Service as all possible modality options including human powered mobility can come into play when end users are looking for travel options. The only remaining obstacle now is the mandatory opening for third party sales of tickets and other mobility services. Look to Finland for inspiration on a national regulation enforcing all actors to open for third party selling off their services/tickets.

Introduction to National Access Points for open mobility data

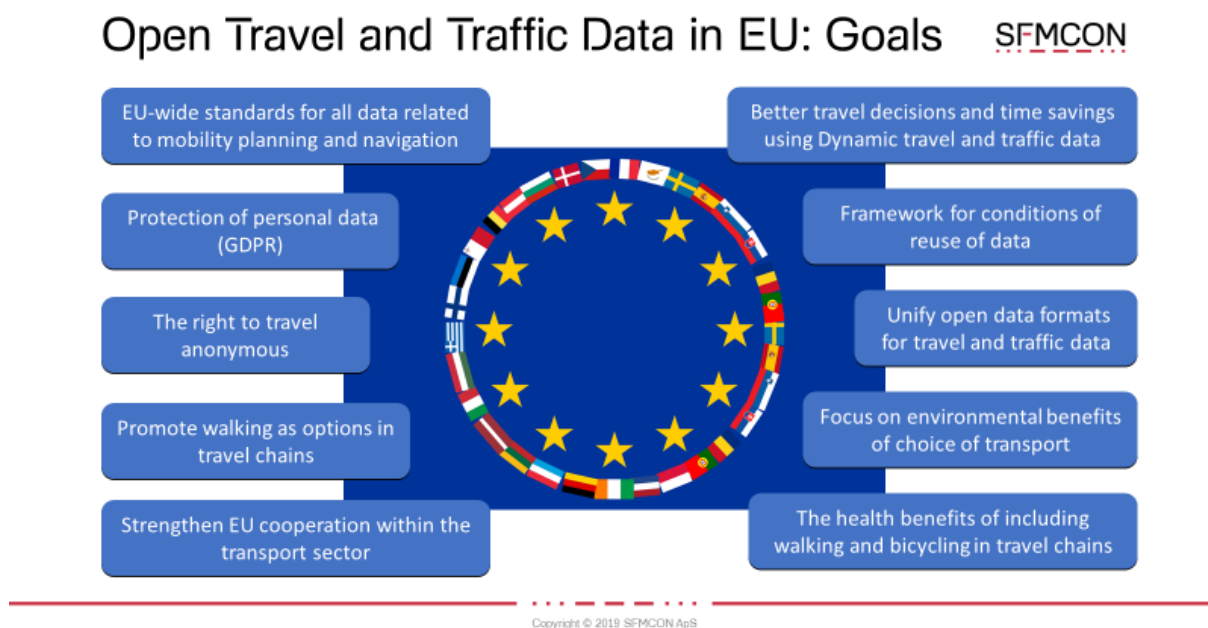


Figure 1: National Access Point delivering travel and traffic data to users in a defined set of common standards

The purpose of national access points in the EU countries is to create a catalogue for open data covering all modalities from all transport actors as a basis for creating multimodal travel information services.

A national access points is a digital interface providing access to open mobility data either directly or through reference to the data sources.

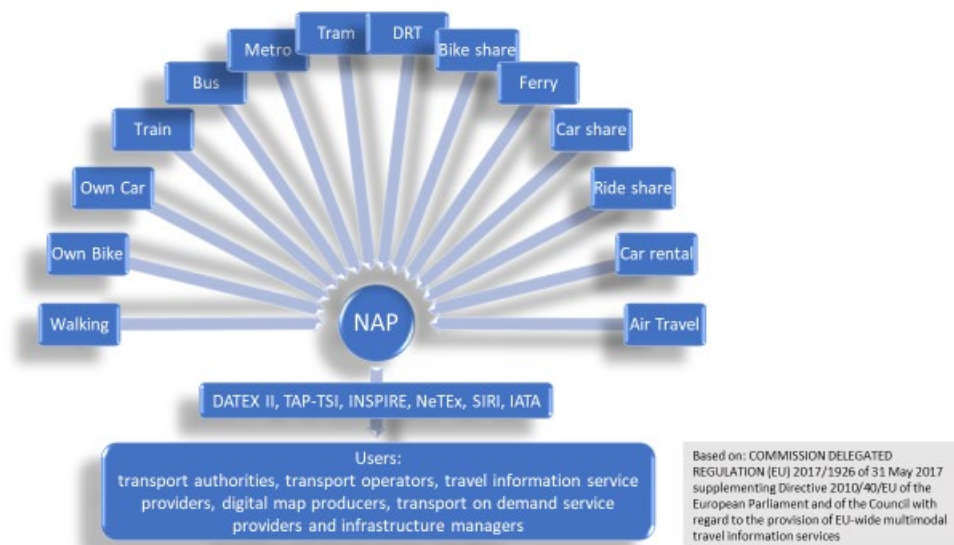
All transport actors are required to as a minimum to make static travel and traffic data available as open data.

The open and machine-readable data and meta data must be made available following standard formats, be accurate and to a known quality. This is necessary to make it possible for travel information service actors to deliver multimodal travel suggestions to end-users within or across national borders in the EU zone plus create digital maps for where and how you can get access to both scheduled and demand-responsive modes of transport.

The regulation also covers private owned modes of transport like the car, motorbike, bicycle plus walking. Service providers are encouraged to promote the environmental and health benefits of walking as part of multimodal travel chains.

From closed proprietary data-formats to open standards and open data

National Access Point – Common standards SFMCON



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Figure: National Access Point delivering travel and traffic data to users in a defined set of common standards

When all data are in a well-defined set of standards it becomes easier for the users to source the data for creating multimodal service, digital maps and many more applications and services as they can plug into the data they need.

The National Access Point for open mobility data is a digital catalogue of travel and traffic data from all modalities available in a country. As a minimum all transport actors must register their basic data and relevant travel and traffic data at same quality as used internally on the actors own digital platforms.

The regulation calls for use of a specific set of standards for the data made available. Some of the standards are well established but the NeTEx and SIRI standards are relatively new open standards for scheduled and demand responsive data.

Linking travel information services

When an end user looks for a travel plan through his preferred travel information service provider his start and/or the end point for the journey may be outside the reach of the travel information service providers own journey search mechanisms.

Today this will mean that the end user is on his own and has to build a travel chain, take the car, book a flight (which works multimodal globally) or give up.

The regulation is providing a new set of standards and rules that travel service providers need to

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adhere to in order to build multimodal travel plans covering span of more than one travel service provider:

travel information service providers shall provide to another information service provider routing results based on static, and where possible, dynamic information.

The routing results shall be based on start and endpoints, time of travel, possible travel options, the hand over point between travel information services and taking disturbances in consideration.

The regulation is quite specific about the quality and criteria for linking of travel information services: *The data shall be reused in a neutral manner and without discrimination or bias. Criteria used for ranking travel options of different transport modes or combinations thereof, or both, shall be transparent and not be based on any factor directly or indirectly relating to the user identity or, if any, the commercial consideration related to the reuse of the data and shall be applied on a non-discriminatory basis to all participating users. The first principle travel itinerary presentation shall not mislead the end-user.*

The regulation includes the following recommendation for creating distributed journey plans:

“..travel information services should use the European Technical Specification entitled ‘Intelligent Transport Systems — Public Transport — Open API for distributed journey planning 00278420’ currently under finalization when performing distributed journey planning. When service providers establish handover points for distributed journey planning, such handover points should be listed in the national access point. “

National Access Points – Master Plan 2019-2023

The National Access Points level 1 must be established and in operation at the latest December 1, 2019 in all member countries.

The regulation (ref. 1) includes an annex for the data categories and the timing for making the data available through the National Access Point.

The roll out is illustrated in the National Access Points in EU- Master Plan

National Access Points in EU - Master Plan

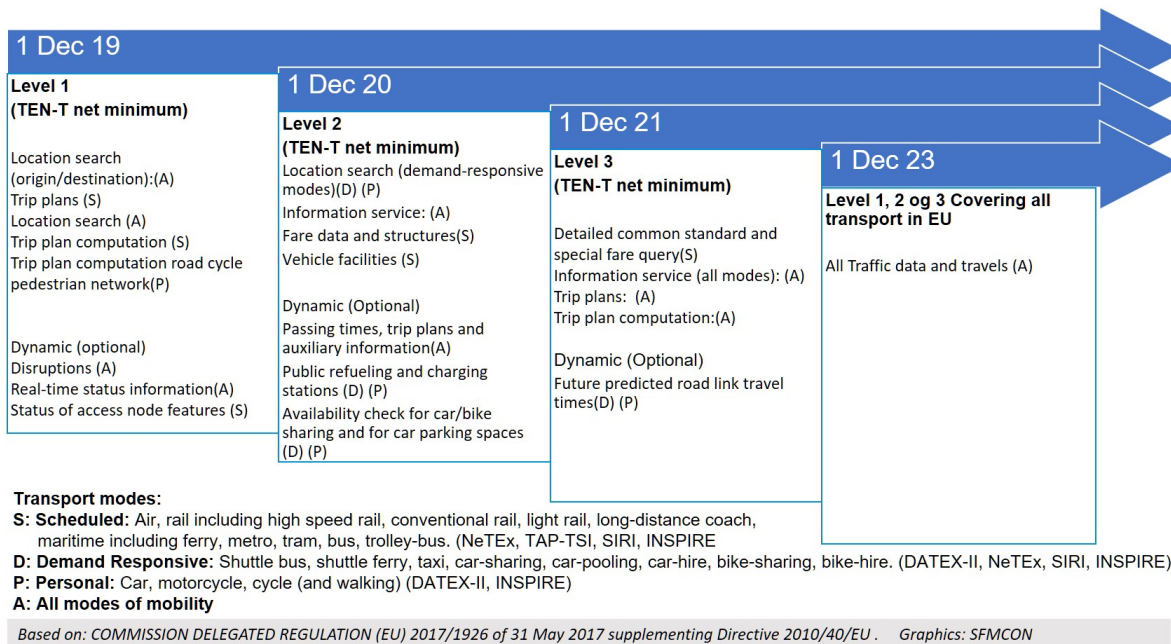


Figure: National Access Points in EU – Masterplan illustrating the roll out of open mobility data as defined in the regulation. Transport modes and applicable standards are indicated for each data type

The three first milestones shall at a minimum apply for the European TEN-T network for static travel data. Inclusion of Dynamic travel and traffic data is optional with a roll out as listed. December 1, 2023 all mobility data in the EU zone shall adhere to the regulation.

Discussion of effects of the regulation:

For the end-user

Today people are used to be able to navigate anywhere internationally using GPS in the car including access to dynamic information on the traffic situation ahead.

In the future you can get access to digital maps and other up to the minute accurate travel information services for all ground, sea and air modes of transport.

Multimodal travel information service providers will be able to deliver all practical options for your door to door mobility needs including duration, modal shifts and total price for each proposed travel chain.

While travelling you can be kept updated with important and reliable navigation and modal shift information and alternative paths in case of disruption.

For the users including travel information service and MaaS providers

Many different open and closed data formats are in use today for travel and traffic data making it an uphill battle to create multimodal travel information services even on a national level.

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Also, some transport actors are not willing to share their data with others in the mobility ecosystem. When the National Access Points are populated with data in the near future, access to travel and traffic data for all modalities and auxiliary information for prices, how to book, where to recharge etc. will be available to users of mobility data including travel information service and MaaS providers. The threshold for creation valuable services to end users will be lowered dramatic reaching a plug and play access to the data of interest.

For MaaS providers the only remaining outstanding element to be opened for third parties is the ability to sell tickets and services as a third party to transport actors on behalf of customers.

For the Transport Actors

Most transport actors today are using special developed, closed and proprietary traffic data and travel information systems and formats including ticketing systems. The result is that sharing of data is almost impossible and too costly to justify.

As the data formats are standardized all transport actors will request their system suppliers to use open standards. Vendor lock ins due to data formats will be history and transport actors are likely to procure better traffic data and travel information solutions at a lower price on the market.

For the system suppliers

As standards for traffic and travel data becomes unified throughout the EU zone it will be easier to bid on procurements internationally and the solutions are likely to become easier and faster to implement as time spent on developing own standards can be taken out of the equation.

The standardization is however not good news for system suppliers based on proprietary and closed data formats who are likely to be disrupted by more agile and open data competitors if they do not disrupt their own business model.

Concluding Comments

The regulation for provision of EU-wide multimodal travel information service including the creation of National Access Points for travel and traffic data is going to be a major revolution for the public and private actors involved in delivering mobility services throughout the whole EU.

The MMTIS regulation enforces adaptation to standards and mandatory opening of data to third parties for all.

To meet deadlines all transport actors must establish open data interfaces adhering to the regulation and the masterplan. Already end 2019 all scheduled modes of modalities in the EU-zone has to deliver travel and traffic data in the NeTEx format. Yet you do not hear much about actions on the subject. Finland is in good shape when it comes to the National Access Point (www.finap.fi) and Norway is in front already operating a national travel-planner based on NeTEx (<http://www.entur.org/>)

The other Nordic countries are teaming up to the task. See more on (<https://nordicopenmobilitydata.eu/>)

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The MMTIS regulation (ref 1) is binding, yet there is no provision for consequences for not complying. It will soon become clear if that is an issue or not.

A critical success factor will also be a real demand or pull from users to get access to and use the new open standardized data to the benefit of both the suppliers of data (more business) and end users (digital maps of alternatives to the private car and cost and time savings)

The next couple of years will be require attention and investment in compliance with the NAP standards. Efforts that are comparable to the complexity of GDPR compliance or maybe even more drastic when it comes to the tactical development plans for mobility actors in the EU.

References

1. COMMISSION DELEGATED REGULATION (EU) 2017/1926 of 31 May 2017 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services