



## ECTRI INPUT

***“Public Consultation  
on the provision of EU-wide multimodal travel information services  
under the ITS Directive 2010/40/EU”***

**November 2015**

The European Conference of Transport Research Institutes (ECTRI) is an international non-profit association that was officially founded in April 2003. It is the first attempt to unite the forces of the foremost multimodal transport research centres across Europe and to thereby promote the excellence of European transport research.

Today, it includes 26 major transport research institutes or universities from 19 European countries. Together, they account for more than 4,000 European scientific and research staff in the field of transport. ECTRI as the leading European research association for sustainable and multimodal mobility is committed to provide the scientifically based competence, knowledge and advice to move towards a green, safe, efficient, and inclusive transport for people and goods.

**European Conference of Transport Research Institutes | ECTRI aisbl**

Rue du Trône 98 | 1050 BRUSSELS | Belgium

Tel: + 32 (0)2 500 56 87/88 | Fax: + 32 (0)2 500 56 89

Number: 831 370 370

Website: [www.ectri.org](http://www.ectri.org)

**Contact: Caroline Alméras, Secretary-General**

E-mail: [caroline.almeras@ectri.org](mailto:caroline.almeras@ectri.org)

ECTRI launched its Thematic Groups (TGs) in September 2007 as a means to facilitate exchanges among ECTRI researchers interested in similar research fields and in order to promote joint initiatives and positions.

The **Thematic Group on Mobility (TG MOBILITY)** consists of 56 experts from 25 Institutes and Universities representing 18 countries. Most of the institutes are working in the field of travel behaviour analysis and modelling, transport policies, mobility services, intermodality, ITS and land-use and transport interactions. Members are: AIT, BAST, BME, CDV, CENIT, DEUSTO, DLR, DTU, FHG, HIT, IFSTTAR, KTI, LNEC, POLITO, TØI, TRL, TTI, UNEW, UNIZA, UPM, UVEG, VGTU, VTI, VTT and RWS.

The **Thematic Group on Traffic Management (TG NEARCTIS)** is composed of 29 experts from 19 institutes, including 14 from ECTRI & 15 from NEARCTIS<sup>1</sup>. The scope of this TG is traffic modelling, traffic control, communication and positioning technologies; and cooperative systems. Members are: AIT, BAST, DEUSTO, DLR, EPFL, FhG, HIT, IFSTTAR, TRL, TUC, TUD, UCL, UNEW, UNIZA, UoS, UPM, UVEG, VGTU and VTI.

TG MOBILITY and TG NEARCTIS want to play an active role in the understanding and forecasting of travel behavior and needs of individuals living in urban, periurban and rural areas and in the definition and evaluation of new services that can contribute to reduce the negative environmental, social and economic aspects of mobility. Multimodal travel information is one the services that has the potential to contribute to modal shift and increasing the use of sustainable modes of transport and therefore help support reducing congestion, and improve the overall management of Europe's transport network.

ECTRI TG MOBILITY and TG NEARCTIS have attentively followed the implementation of the ITS Directive and Action Plan and therefore would like to provide some inputs to the questions raised on the "Public Consultation on the provision of EU-wide multimodal travel information services under the ITS Directive 2010/40/EU" (consultation period: 2/09/2015 – 8/12/2015).

For more information on their contribution, please consult [ECTRI Thematic Groups webpage](#).

\*\*\*\*\*

### **Objective of the consultation**

---

The objective of this public consultation is to collect the opinions of stakeholders and interested parties including EU citizens and private and public organisations and gain (quantitative) evidence on the issues related to the provision of EU-wide multimodal travel information services. The replies submitted to this public consultation will be taken into consideration for the development of the relevant specifications within the frame of the ITS Directive.

Intelligent Transport Systems (ITS) can significantly contribute to a more sustainable, safer and efficient transport system and the ITS Directive was adopted to accelerate the deployment of these innovative transport technologies across Europe. The ITS Directive<sup>2</sup> provides for the adoption of functional, technical and organisational specifications in the form of a delegated act to ensure the compatibility, interoperability and continuity for the deployment and operational use of EU-wide multimodal travel information services (Priority Action "A" of the ITS Directive). This delegated act will be a binding policy

---

<sup>1</sup> NEARCTIS Network of Excellence (FP7 funded project) was integrated within ECTRI as a new TG on Traffic Management in early 2015.

<sup>2</sup> Directive 2010/40/EU [http://ec.europa.eu/transport/themes/its/road/action\\_plan/](http://ec.europa.eu/transport/themes/its/road/action_plan/)

measure laying down provisions containing requirements or any other relevant rules to be followed in the case of deployment.

These specifications will be aimed at ensuring interoperable travel data and services, where possible based on existing standards and technology. At present, multimodal information services across Europe lack interoperability and are fragmented in terms of what they offer including modal and geographical coverage, real-time information and quality levels. This initiative is expected to contribute to EU-wide continuity and harmonised delivery of multimodal travel information services. This in turn is expected to encourage a positive modal shift to sustainable modes of transport and therefore improve the efficiency of Europe's transport network management.

The scope of these specifications does not include integrated multimodal ticketing, however this remains a long term vision of the Commission.

### **What are multimodal travel information services?**

---

Multimodal travel information and planning services (MMTIPs) allow travellers to plan their journey from A to B comparing different travel options combining different variations of transport modes. MMTIPs may include a combination of two or more of the following transport modes which might be used by a traveller: air, rail, waterborne, coach, public transport, demand responsive transport, walking and cycling. Such services can allow the traveller to receive personalised routing results according to their specific travel preferences or needs including the fastest route, the cheapest route, the fewest connections, the most environmentally friendly, the most accessible for persons with reduced mobility etc. or simply a routing result based on the transport mode(s) they wish to use (i.e. cycling or public transport).

### **Who are the users of multimodal travel information?**

---

The users of multimodal travel information are primarily citizens travelling on journeys which can be new, infrequent or regular/daily. Travellers may require information to help select the most cost effective, quickest or time appropriate mode of transport for a given journey. Moreover, travellers may want to be aware of any changes to a journey which they are undertaking, whether it be disruptions, routing changes, or expected travel time. Users may require information for short local journeys or longer trips including those journeys which require cross-border travel.

However, the users of multimodal travel information services are not just limited to the travellers themselves, but increasingly transport operators and transport authorities also use MMTIPs to maximise the efficiency of their management of the transport network by using real-time information about travel disturbances and incidents to smoothly re-direct traffic flow across their network. Moreover, logistic firms and freight companies also use this real-time information to support their daily activities by making well informed decisions regarding choosing the best route to efficiently conduct their operations avoiding travel disturbances and incidents.

### **How is information delivered to users?**

---

Multimodal travel information services can be delivered to users through a variety of channels. Whilst there remains a portion of users who prefer to access information through staffed-services such as telephone advice lines or walk-in travel centres, the majority of these services are now provided online via browsers and also mobile phone applications. Information is provided by a range of organisation types including transport operators, transport authorities, public sector initiatives and private sector technology companies.

## Part I: Information about the participant

---

[all the questions of Part I are mandatory]

Please provide information to help us build your profile as a respondent. In accordance with **Regulation 45/2001**, all personal data collected through this survey will be kept securely and will ultimately be destroyed.

Please note that the questionnaire will only use your full contribution if your name, organisation (if you answer on behalf of an organisation or institution) and contact details are provided. If you choose to not provide your name, organisation and contact details, you have the option of submitting a general comment only.

If you do choose to provide us with your name, organisation and contact details, you can still opt for your answers to remain anonymous when results are published.

- Yes, I will provide my name and contact details  
 No, I prefer to provide a general comment only

General comment:

Please provide your name (first name and surname e.g. *John Smith*)

Evangelos Mitsakis and Pierre-Yves Gilliéron.

Please provide your email address

*A notification of receipt will be sent to this email address. Please note that if the email address is not valid, your contribution will not be taken into account.*

emit@certh.gr, pierre-yves.gillieron@epfl.ch and earsenio@lnec.pt

In what capacity are you completing this questionnaire? *[tick one answer]*

As a citizen/traveller  
 On behalf of an organisation or authority

If you are answering as a citizen, please provide your country of residence. *[tick one answer]*

Not applicable  
 Austria  
 Belgium  
 Bulgaria  
 Croatia  
 Cyprus  
 Czech Republic  
 Denmark

- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovenia
- Spain
- Sweden
- Slovakia
- United Kingdom
- Other, non-EU Member State (please specify below)

Please specify the name of non-EU Member State if applicable

If you are answering on behalf of a company/organisation/authority/association please indicate the relevant country or countries of operation [multiple choice].

- EU-wide
- Global
- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy

- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovenia
- Spain
- Sweden
- Slovakia
- United Kingdom
- Other, non-EU Member State (please specify below)

Please specify the name of non-EU Member State if applicable

What is the name of your organisation or authority?

European Conference of Transport Research Institutes - ECTRI

What is your function within this organisation or authority?

Moderator Thematic Group Mobility (Evangelos Mitsakis)  
Moderator Thematic Group Traffic Management (Pierre-Yves Gillieron)

Please indicate the approximate number of members your organisation represents.

26

Please categorise your organisation as appropriate [tick]

*You may tick more than one answer*

- Academic institution
- Application developer
- Association
- Consultancy
- Consumer rights organisation
- Industry
- Insurance company
- Non-governmental organisation (NGO)
- Network operator
- Passenger association
- Public administration
- Research and development institute
- Standardisation organisation
- Systems supplier

- Telecommunication service provider
- Transport authority
- Transport operator
- Transport company (other)
- Travel information service provider
- Travel data provider
- Other – : *organization of transport research institutes*

Please categorise your organisation within the travel information service chain as appropriate [tick]  
*You may tick more than one answer*

- Network operator
- Transport operator
- Travel information service provider
- Data generator
- Data owner
- Content provider
- Data user
- Other

Is your organisation registered in the Transparency Register of the European Commission? [tick]

- Yes
- No

*If yes, please indicate the identification number*

54191854341-51

The Transparency Register of the European Commission is accessible on:

[http://europa.eu/transparency-register/index\\_en.htm](http://europa.eu/transparency-register/index_en.htm)

Please note that received contributions, together with the identity of the contributor, may be published on the Internet, unless the contributor objects to publication of the personal data on the grounds that such publication would harm his or her legitimate interests. In this case the contribution may be published in anonymous form.

Please indicate your preference as regard publication of your contribution: [tick]

- My contribution can be published including my personal information / name of my organisation
- My contribution can be published anonymously
- My contribution cannot be published

Explanations about the Protection of Personal Data are available on:

[http://ec.europa.eu/geninfo/legal\\_notices\\_en.htm#personaldata](http://ec.europa.eu/geninfo/legal_notices_en.htm#personaldata)

The policy on "protection of individuals with regard to the processing of personal data by the Community institutions" is based on Regulation (EC) N° 45/2001 of the European Parliament and of the Council of 18 December 2000.

**Part II. Use of multimodal travel information services**

---

[Part II is applicable to people who travel for personal and/or business reasons]

1) **How often** do you make the following types of journey? [multiple choice - tick all that apply]

	Weekly	Monthly	Quarterly	Annually	Less often	Never
Journeys within your city or local region	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within your country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cross border journeys to another European country	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within another European country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2) Typically do you seek information to help you **plan** your journeys **before** you travel? [multiple choice - tick all that apply]

	Frequently	Occasionally	Never
Journeys within your city or local region	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within your country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys to another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3) Typically do you seek **real-time information** about your journey **while** you are travelling? (e.g. disruption information, delays, alternative routes) [multiple choice - tick all that apply]

	Frequently	Occasionally	Never
Journeys within your city or local region	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within your country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys to another European country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Journeys within another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4) Normally, **how** do you access this travel information? (i.e. from which sources) *If you selected 'never' for all of the responses in Q2-3 please select not applicable [tick all that apply]*

- An operator's website
- An independent website (i.e. non-transport operator provided)
- An operator's mobile phone application
- An independent mobile phone application (i.e. non-transport operator)
- Telephone service (i.e. voice based)
- Travel agency \ in-person service
- Other
- Not applicable

If you indicated 'other' please describe:

Google transit.



5) Considering your experiences as a traveller, are you satisfied with the **geographical coverage** of travel information that is available to you (i.e. the cities, urban, regional areas covered, countries available to you etc.) *[tick]*

- Yes  
 No  
 Partly

5.a) If you answered no or partly, would you like the geographical coverage of travel information available to you to be **enlarged**? (i.e. the possibility to plan your journey to more places in Europe?) *[tick]*

- Yes  
 No  
 No preference

If relevant, please provide further details to support your response. *[optional]*

Lack of standards in providing the information. Especially the information on public transit outside of large urban areas is not as complete as one could wish.

6) Are you satisfied with the number of **different transport modes** (bus, rail air, cycling etc) **typically** included in the travel information that is available to you? *[tick]*

- Yes  
 No  
 Partly

6.a) If you answered no or partly, would you like the modal coverage of your travel information to be **enhanced** (i.e. more travel options display showing more modes of transport?) *[tick]*

- Yes  
 No  
 No preference

7) Do you typically have access to some form of **multimodal** travel information services (e.g. an online journey planner providing various travel options including two or more transport modes) when considering the following types of journey? *[multiple choice - tick all that apply]*

	Yes	Partly	No	Don't know
Journeys within your city or local region	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys around your country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys to another European country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8) Specifically thinking about the range of journeys you undertake, which of the following modes of transport/travel options would you **like** to be able to consider? *[multiple choice - tick all that apply]*

	Very likely	Likely	Not likely	No
Air	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local public transport (bus, tram, metro etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long distance coach	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waterborne	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road (passenger cars)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-pooling (e.g. ride sharing)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-sharing (e.g. car clubs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dial-a-ride services (for persons with reduced mobility)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bike-sharing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9) Considering those modes of transport you normally choose for your journeys, if you had access to a **wider range of travel options by different modes**, how likely do you think that might **change** your travel choice? (e.g. using local bus services rather than a taxi; rail rather than air; long distance coach rather than private car etc.) *[multiple choice - tick all that apply]*

	Very likely	Quite likely	Possibly	No
Journeys within your city or local region	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys around your country	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys to another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journeys within another European country	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10) Which **quality criteria** do you consider as the most important for multimodal travel information services? *[multiple choice - please rank criteria]*

	Very Important	Important	Less important	Not important	Undecided	Don't know
Geographical accuracy (i.e. is walking information or interchange locations accurate?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time accuracy / up-to-date (i.e. does the information provided accurately reflect reality?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness (i.e. is new information provided when needed? This might include information on planned disruptions to service, service changes etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usefulness (i.e. does the information given provide the answer needed?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Completeness (i.e. is all the service information available?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consistency (i.e. information is consistent between different sources?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inclusiveness (i.e. information sufficient to support the needs of persons with reduced mobility)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Precision	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please specify other quality criteria if appropriate [OPTIONAL]

11) Please rate the following functions according to how important they are to you for multimodal travel information services? [multiple choice - please rank criteria]

	Very Important	Important	Less important	Not important	Undecided	Don't know
Location searches (addresses, points of interest, stations/stops etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nearest stop/interchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timetable information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coverage (door-to-door queries)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coverage (station-to-station queries)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Range of transport modes available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Routing information (walk, cycle, drive)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Travel time estimates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planned disruption information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prices, tariffs and how to book tickets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of seats / tickets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interchange facilities (including accessibility)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle facilities (including accessibility)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise and Air pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C02 emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real time information (arrival/departure times; unplanned disruption information)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supporting information (lost property; making a complaint etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you indicated 'other' please specify

Information provided on board, at stops/interchanges and at mobile.

12) What are the most important benefits you see from using comprehensive multimodal travel information services? (i.e. better use of time avoiding delays/congestion, health benefits from active travel, reduced pollution from using sustainable modes etc.) [OPTIONAL]

To get reliable information on traffic condition and time of arrival to destination.  
To have the possibility to change the mode of transport during a journey.  
To support the advanced management of traffic for integrating information of all modes.  
To help in a better use of time.

**The following questions are only applicable to transport operators and transport authorities**

12.a) Do you agree that multimodal travel information services (**real-time information**) are **helpful** for transport operators and transport authorities to effectively coordinate and manage the flow of travellers across the transport network? [tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided
- I don't know

If relevant, please provide further information to support your response [OPTIONAL]

Providing real time and reliable information to passengers will reduce the stress of operators and users.

12.b) If available, do you currently **use** multimodal travel information services (**real-time information**) to help coordinate and manage the flow of travellers across your transport network? [tick]

- Yes
- No

If relevant, please provide further information to support your response [OPTIONAL]

---

**Part III: Understanding barriers and policy enablers**

[Part III is mandatory to complete by organisations filling in the questionnaire. Citizens/travellers can also answer Questions in Part III]

**Barriers – economic, legal and technical**

13) Please rate the severity of the following current **economic** related barriers to the provision of multimodal travel information services in your view. *[multiple choice – please rank criteria]*

	Very Important	Important	Less important	Not important	Undecided	Don't know
Staff costs of collecting and managing data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Costs of aggregating data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Costs of linking to third party data sources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charges for access to certain data or services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insufficient business case to cover costs of delivering information services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of certainty about continuity of data supply to justify systems investment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other – please specify below	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you indicated 'other' please specify*

*If you have other economic related barriers to the provision of multimodal traveller information services not mentioned below please detail below*

*[OPTIONAL]*

14) Please rate the severity of the following current **legal** related barriers to the provision of multimodal traveller information services in your view. *[multiple choice – please rank criteria]*

	Very Important	Important	Less important	Not important	Undecided	Don't know
Lack of fair and equal access to data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of clarity of liability issues when re-using data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of clarity of data ownership	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of clear terms and conditions for re-use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other – please specify below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you indicated 'other' please specify*

*Please specify other legal related barriers to the provision of multimodal traveller information services*

*[OPTIONAL]*

Lack of (legal) framework for a strong encouragement of open data (not only for transport).

15) Please rate the severity of the following current **technical and organisational** related barriers to the provision of multimodal traveller information services in your view. *[multiple choice – please rank criteria]*

	<i>Very Important</i>	<i>Important</i>	<i>Less important</i>	<i>Not important</i>	<i>Undecided</i>	<i>Don't know</i>
Lack of data in electronic form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of tools to collect and manage data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of common formats for exchanging data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low quality of data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of processes for correcting data errors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of central access points to obtain aggregated data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of data available in common formats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of adoption by suppliers and data providers of existing common data formats	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of deployed Automated Vehicle Location (AVL) systems to create real-time data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of appropriate common service interfaces for linking systems dynamically	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of adoption by suppliers and data providers of existing common interfaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of multilingual data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other – please specify below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you indicated 'other' please specify*

*If you have other technical and organisational related barriers to the provision of multimodal traveller information services not mentioned below please detail below*

*[OPTIONAL]*

Lack of agreement on a minimal set of data shared and published by all stakeholders.

#### Data formats/exchange protocols

16) Do you think that travel and traffic data **should** be interoperable across the EU? *[tick]*

- Yes  
 No  
 I don't know

17) Do you think that travel and traffic data at present **is sufficiently** interoperable across the EU? *[tick]*

<input type="checkbox"/> Yes <input type="checkbox"/> Partly <input checked="" type="checkbox"/> No <input type="checkbox"/> I don't know
--

18) Do you think that the use of common data standards can help enhance the **consistency, re-use and exchange** of travel and traffic data across the EU? *[tick]*

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know
---

19) Do you think that data formats and exchange protocols used across the EU in all Member States should be harmonized? *[tick]*

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know
---

19.a) If yes, which formats and protocols do you think should be harmonized across the EU? *[multiple choice – please rank criteria]*

	Important	Not important	Don't know
Transmodel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IFOPT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NeTEx	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SIRI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
EDIFACT (TAP TSI)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GTFS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DATEX II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TPEG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UTMC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GDF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you indicated 'other' please specify*

--

19.b) If yes, do you think that this needs to be tackled at an EU level? *[tick]*

- Yes, the EU should **mandate** the use of common and harmonized data formats by **private and public** actors
- Yes, the EU should **recommend** the use of common and harmonized data formats by **private actors and mandate their use by public** actors
- Yes, the EU should **recommend** the use of common and harmonized data formats by **private and public** actors
- No
- Other
- I don't know

If you indicated 'other' please specify

19.c) If you indicated 'not important' to any of the above, please provide further information to support your answer *[OPTIONAL]*

20) What would be the **main benefits** in your view if harmonized data formats and exchange protocols were prescribed? E.g. reduced costs from no longer needing to support numerous data formats; reduced barriers to entering new European markets. If possible, please include **quantifiable examples**. *[OPTIONAL]*

Automated and reliable data exchange.  
Increase the number of services.  
Richer and more reliable information for users.  
Cost reduction in providing multimodal real-time information.  
Benefits in terms of time savings and more efficient use of resources.

21) What would be the **main costs and burdens** in your view if harmonized data formats and exchange protocols were prescribed? E.g. implementing a data format not currently supported etc. If possible, please include **quantifiable examples**. *[OPTIONAL]*

It will reduce drastically the development of interfaces between applications.  
Possibly there will be additional costs as private data/service providers can be less willing to share data/services through harmonized data formats and exchange protocols.



22) How important do you consider the following types of static data (i.e. with a low frequency of change) to generate and provide multimodal travel information services? [multiple choice – please rank criteria]

	<i>Very Important</i>	<i>Important</i>	<i>Less important</i>	<i>Not important</i>	<i>Undecided</i>	<i>Don't know</i>
Address identifiers (road name, house number, postal code)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road network and their physical attribute (speed limits, directional information etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of access nodes (public transport stops, railway stations, airport terminals, ferry terminals etc.) for different transport modes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of bike and (e)car-sharing stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of car-pooling pick up points	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of bike&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of park&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of parking spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location of publicly/semi-publicly accessible electric vehicle charging stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driving restrictions and permissions (multi-occupancy lanes, height limits etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accessibility information to aid journeys by Persons with Reduced Mobility (PRM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expected travel times	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking options (pedestrian permission/network)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycling options (cycling permission/network)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Topography of access nodes incl. platform information, traveller information points, walking time between platforms, terminals,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

availability of lifts/escalators/entrances/exits						
Timetables (all scheduled modes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tariffs/fares (all modes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Booking options (all modes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other – <i>please specify</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please specify which other type of static multimodal travel data would be relevant for generating and providing multimodal travel information services [OPTIONAL]

For tourism, provide information about cultural/monumental sites.  
Types of services provided in interchange points.

23) **How often** do you think that **static** travel and traffic data should minimally be **updated**? [tick]

- According to a pre-defined timeframe (e.g. weekly, monthly, annually etc)
- When changes occur
- Dependent on the type of data
- Never
- I don't know

23.a) If your answer to Q23 was when changes occur, what timeframe do you think is an **appropriate maximum delay** for that updated data to be made accessible? [tick]

- 1-3 days
- 4-6 days
- 7-10 days
- 10-15 days
- 15-20 days
- None of these
- I don't know

If relevant, please provide further information to support your response [OPTIONAL]

24) How important do you consider the following types of dynamic data (i.e. with a higher frequency of change) to generate and provide multimodal information services to users? [multiple choice – please rank criteria]

	<i>Very Important</i>	<i>Important</i>	<i>Less important</i>	<i>Not important</i>	<i>Undecided</i>	<i>Don't know</i>
Availability of vehicles at bike-sharing stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of vehicles at car-sharing stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for vehicles at bike-sharing stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for vehicles at car-sharing stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of spaces at bike&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of spaces at park&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for spaces at bike&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for spaces at park&ride facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traffic conditions (real-time position of vehicle)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information on disturbances (known and expected)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of parking places incl. on-street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for parking places	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability at publicly/semi-publicly accessible charging stations for electric vehicles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whether reservations can be made for accessible charging stations for electric vehicles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time expected to find a parking place	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road, tunnel, bridge closures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calculated travel time based on current travel conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road closures for pedestrians, in-door and outdoor, incl. off the public road network	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Road closures for cyclists, indoor and outdoor incl. off the public road network	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Status information on access nodes: are lifts, escalators operational, closure of entrances/exists	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seat availability (all modes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness and/or delays of scheduled connections (all scheduled modes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other – <i>please specify</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please specify which other type of dynamic multimodal travel information that should be provided to users [OPTIONAL]

**Data sharing/access point**

25) Do you think that to support the provision of EU-wide multimodal travel information services travel and traffic data should be made consistently **accessible**? [tick]

Yes  
 No  
 I don't know

26) Do you think that **points of access** where the data is either stored (database, data warehouse, data marketplace) or signposted/indicated to where the data is can be found (registry) would help ensure consistency in the sharing of travel and traffic data? [tick]

Yes  
 No  
 I don't know

If no, please provide information to support your response including possible alternative approaches [OPTIONAL]

26.a) If yes, where should the **access point(s)** be set up in the EU? [tick]

Centrally at EU-level  
 Nationally  
 Regionally  
 No preference  
 I don't know

27) Do you think that the **EU** should intervene and **mandate** points of access to be set up across the EU in the frame of the specifications? *[tick]*

- Yes  
 No  
 I don't know

Please provide information to explain your response: *[OPTIONAL]*

28) What would be the **main benefits** to your organisation if the use of an access point(s) was prescribed? (e.g. reduced costs for identifying and monitoring availability of data; ability to expand coverage of existing services etc.) If possible, please include **quantifiable examples**. *[OPTIONAL]*

29) What would be the **main costs and burdens** to your organisation if the use of an access point(s) was prescribed? (e.g. costs of processing/updating data or links of data within the access point). If possible, please include **quantifiable examples**. *[OPTIONAL]*

### Linking travel information services

The following questions include references to the **linking of travel information services**. This is the use of interfaces to link existing information systems to provide more information than what is available in a single system. For example, one approach to this is 'distributed journey planning' with an architecture that splits the computation of trip legs amongst multiple engines, each covering a separate region. The engines each compute trip legs between agreed boundary (or "transition") points, which are then combined to create a single set of end-to-end trips for the user. Another approach is the 'chaining of journey planners' where simple deep linking between systems is used to generate an end-to-end journey solution.

30) Do you think that different journey planning services covering specific transport modes that **operate within the same city, region, country** should be linked directly (known as meta-planning) in order to improve the **modal coverage**? *[tick]*

- Yes  
 No  
 I don't know

31) Do you think that **different local, regional and national** multimodal travel information services should be **linked directly** (known as distributed or chained journey planning) in order to improve the **geographical coverage**? *[tick]*

- Yes
- No
- I don't know

32) In your view, are there any **technical barriers or circumstances** (e.g. across borders) preventing different (multimodal) travel information services effectively linking? Please detail below *[OPTIONAL]*

Data ownership.

33) In your view, are there any measures that can be implemented to **help improve** the linking of different travel information services? (i.e. a common interface) *[tick]*

- Yes
- No
- I don't know

Please provide information to support your response: *[OPTIONAL]*

Common user interface and/or HMI. Public transport supply information should be public in a mandatory way (not depending on the decision of the supplier).

34) Do you think linking of services needs to be tackled at an EU level? *[tick]*

- Yes, the EU should intervene and prescribe measures to help effectively link travel information services to increase **modal** coverage
- Yes, the EU should intervene and prescribe measures to help effectively link travel information services to increase **geographical** coverage
- Yes, the EU should intervene and prescribe measures to help effectively link travel information services to increase **modal & geographical** coverage
- Yes, but the EU should **only recommend** measures to help effectively link travel information services
- No
- Other
- I don't know

Please provide information to support your response:

- 35) What would be the **main benefits** to your organisation if travel information services were more commonly and effectively linked? (e.g. able to provide services at lower costs; able to provide wider coverage service; able to procure cheaper systems). If possible, please include **quantifiable examples**. [OPTIONAL]

The benefits associated to users.

- 36) What would be the **main costs and burdens** to your organisation if travel information services were more commonly and effectively linked? (e.g. increased hosting costs from extra demand; costs of implementing common interfaces etc) If possible, please include **quantifiable examples**. [OPTIONAL]

#### Quality levels

- 37) Do you think that the **current quality** of multimodal travel information services across the EU is sufficient (concrete examples listed in question 10)? [tick]

- Yes  
 No  
 I don't know

Please explain your response: [OPTIONAL]

- 38) Do you think that the quality of multimodal travel information services should be **consistent** across the EU? [tick]

- Yes  
 No  
 I don't know

- 39) Do you think that the improvement of quality levels of multimodal travel information services should be tackled at an **EU level**? [tick]

- Yes, EU should intervene and **prescribe measures** to improve quality levels  
 Yes, EU should **recommend** measures to improve quality levels  
 Other  
 No  
 I don't know

If appropriate, please provide information on which measures you feel the EU should prescribe/recommend [OPTIONAL]

40) What would be the main **benefits** to your organisation if data quality levels of multimodal travel information services were improved? (e.g. cost savings from reduced complaint handling; reduced costs in reworking data etc) If possible, please include **quantifiable examples**. [OPTIONAL]

41) What would be the main **costs** and burdens to your organisation to improve data quality levels for multimodal travel information services? (e.g. additional data collection costs; cost of new or upgraded tools; additional data verification costs etc) If possible, please include **quantifiable examples**. [OPTIONAL]

#### **Terms and Conditions for access and re-use of data**

42) Do you think that travel data across different modes of transport from the **public sector** should be made accessible for re-use **to service providers in a fair and equal way** (including possible financial compensation)? [tick]

- Strongly agree  
 Agree  
 Disagree  
 Strongly disagree  
 Undecided  
 I don't know

43) Do you think that travel data across different modes of transport from the **private sector** should be made accessible for re-use **to service providers in a fair and equal way** (including possible financial compensation)? [tick]

- Strongly agree  
 Agree  
 Disagree  
 Strongly disagree  
 Undecided  
 I don't know



44) Do you think that the re-use of travel and traffic should **not** include any **transfer of ownership** of data?  
[tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided
- I don't know

45) Do you think that on request, when **financial charges** for the re-use of data are applicable, the data owner/provider should **indicate the calculation basis** for the published charge and indicate which factors were taken into account in the calculation of the charge? [tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided
- I don't know

46) Do you think that there should be **transparency** in the **criteria** used to rank travel options and **neutrality** in the way information is provided to the user?[tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided

47) Do you think that the re-use of travel and traffic data should include safeguards for the **reputation** of the data owner? [tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided

48) Do you think that the re-use of travel and traffic data should also be **open to cross-sectorial use**? [tick]

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Undecided

49) Do you think that the establishment of terms and conditions for the re-use of travel and traffic data should be tackled at an EU level?

- Yes, EU should prescribe common terms and conditions for access and re-use of data
- Yes, EU should recommend common terms and conditions for access and re-use of data
- Other
- No
- I don't know

50) What would be the main **benefits** to your organisation if the terms and conditions for access and re-use of data were improved? If possible, please include **quantifiable examples**. [OPTIONAL]

51) What would be the main **costs** and burdens to your organisation if the terms and conditions for access and re-use of data were improved? If possible, please include **quantifiable examples**. [OPTIONAL]

#### **Part IV: Impacts of improved multimodal travel information services/legitimacy for EU intervention**

52) As highlighted throughout the questionnaire, there are different areas of EU intervention to improve the access, use, re-use and update of travel and traffic data (data formats/exchange protocols, linking services, points of access, quality levels, T&C). Within such a common **EU framework**, how do you see the **best form of EU intervention**? *Multiple options are feasible. [tick]*

- Legislation
- Exchange of best practise
- Funding
- Promote sector cooperation (smart cities initiative, MoU etc.)

If appropriate, please provide further information [OPTIONAL]

53) In your opinion, what **level of impact** do you think such a common EU framework could have in the following domains? [multiple choice – please rank criteria]

	<i>High impact</i>	<i>Low impact</i>	<i>No Impact</i>	<i>Negative impact</i>	<i>Undecided</i>
<b>Multimodal travel information services</b>					
Enhance user satisfaction through better information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved interoperability between systems and services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Efficiency of the transport network</b>					
Reduce congestion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve reliability/predictability of travel times	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve transport efficiency (e.g. kms travelled)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Economy &amp; innovation</b>					
Promote innovation, new technologies and services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduction in the costs of providing such services (through increase in supply and demand etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strengthen the EU internal market	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boost job creation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Environment</b>					
Promote sustainable modes of transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve air/ noise pollution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve CO2 emissions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide quantitative evidence if available (including reference to documents, websites...)

54) Do you expect any other impact due to the provision of multimodal information services? *Please specify and provide quantitative evidence if available (including reference to documents, websites...)* [OPTIONAL]

One may think about adding safety to the list of possible improvements: it is at least possible to add a safety-aware routing, or to pick modes with the additional objectives safety. The impact of this should be investigated, of course, beforehand.

55) In the frame of EU-action, what geographical scope do you think the provisions containing requirements, procedures or any other relevant rules should apply? [tick]

Core trunk transport routes only (i.e. the trans-European network (TEN-T))

All trunk routes and urban networks (i.e. the comprehensive European transport network)

Door-to-door (i.e. the extended European transport network)

Dependent on the nature of the provisions

I don't know

### Other questions

---

Please give reference to any studies or documents that you think are of relevance for this consultation, with links for online download where possible. *[OPTIONAL]*

**THANK YOU FOR RESPONDING TO THIS PUBLIC CONSULTATION**

### Contact

**Evangelos MITSAKIS**  
**Moderator of TG MOBILITY**  
Associate Researcher  
CERTH - HIT, Greece  
[emit@certh.gr](mailto:emit@certh.gr)  
+30 2310 498459

**Pierre-Yves GILLIÉRON**  
**Moderator of TG NEARCTIS**  
Senior Researcher  
EPFL, Switzerland  
[pierre-yves.gillieron@epfl.ch](mailto:pierre-yves.gillieron@epfl.ch)  
+41 2169 32750