



## **BACKGROUND DOCUMENT FOR THE PUBLIC CONSULTATION ON ENABLERS FOR EUROPEAN MULTIMODAL TRAVEL PLANNING AND INFORMATION SERVICES**

### **1. INTRODUCTION**

This document provides background information for answering the public consultation questionnaire concerning possible measures to address the remaining barriers to the establishment and wider uptake of European multimodal journey planners and related travel and information services. The results of this consultation will be presented and discussed during a workshop organised by the Commission in 2013.

### **2. POTENTIAL AND PROMISES OF EUROPEAN MULTI-MODAL TRAVEL PLANNING AND INFORMATION SERVICES**

The provision of seamless multimodal door-to-door mobility<sup>1</sup> will contribute not only to the enhancement of the individual traveller's experience, but also to making the whole transport system greener, more sustainable and efficient. Providing reliable information about alternative transport options, according to users' preference, is required to promote modal shift. This will help convincing them to use different transport modes or their combination, rather than individual vehicles only.

The emergence of truly European Multimodal Transport Planning and Information Services can fulfil such a role. However, the pre-requisite for such services to emerge is to define the necessary conditions to ensure the availability, accessibility and exchange of all relevant information for all modes of transport, at the European level<sup>2</sup>. Opening up public data resources and fostering open data policy, are deemed instrumental, as facilitators of smart transport solutions, to achieving goals of the transport policy<sup>3</sup>. Providing Multimodal Transport Planning and Information Services also requires addressing first the question of

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<sup>1</sup> White Paper on Transport 2011, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0144:EN:NOT>

<sup>2</sup> CY Presidency conclusions of Informal Ministerial Meeting on Transport and Telecommunications, <http://ec.europa.eu/transport/themes/its/doc/2012-07-17-cy-informal-presidency-conclusions.pdf>

<sup>3</sup> Idem.

technical interoperability of data formats from different transport modes<sup>4</sup>. Finally, such all-encompassing framework conditions should also enable the development and use of intelligent systems for online reservation and smart ticketing for the planned travel options.

### **3. REMAINING CHALLENGES**

While the PSI Directive (Directive on the re-use of public sector information), and its ongoing revision,<sup>5</sup> provides a basis for re-use of public data and should be further promoted in the transport community, it is not considered sufficient in the domain of transport in general<sup>6</sup>, and of multimodal journey planning, in particular<sup>7</sup>. In addition, for multimodal journey planners to be effective, they also need to be fed with real-time transport data in order to be accurate and reliable. While there are a number of multi-modal journey planners, on local, regional or national level (however rarely providing cross-border or even fully door-to-door travel information), the need is to bring them together and ensure the sharing of the most accurate data available in the respective geographic areas. Technically, such cooperation could be possible in a distributed system with standardised open APIs (Application Programming Interface) it requires first to motivate and potentially also to incentivise the development of such cooperation among relevant journey planners' providers.

Subsequently, there is a number of persisting challenges that still impede the deployment of truly EU-wide Multimodal Travel Planning and Information Services:

1. Lack of access to public (and private) transport data, combined with unclear re-use rules and licences;
2. Lack of fully interoperable or compatible format for data exchange in all transport modes and newly emerging mobility services, combined with lack of open interfaces able to link together the existing, but sparse, national or regional solutions;
3. Lack of availability of public (and private) transport static and dynamic data, for all transport modes and their combinations; leading to potential unreliable services and complex liability issues for erroneous information;
4. Lack of strong mechanisms of cooperation between different stakeholders<sup>8</sup>, in order to provide reliable, but also economically viable service.

### **4. PROPOSED MEASURES**

#### **M1: Ensuring access to data through legislation**

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<sup>4</sup> Study "Towards a European Multi-Modal Journey Planner", conducted within the ITS Action Plan, Action 1.5. Promotion of multimodal journey planners.

<sup>5</sup> [http://ec.europa.eu/information\\_society/policy/psi/index\\_en.htm](http://ec.europa.eu/information_society/policy/psi/index_en.htm)

<sup>6</sup> ePSI Platform, <http://epsiplatform.eu/content/swedish-open-data-portal-project>

<sup>7</sup> CY Presidency conclusions of Informal Ministerial Meeting on Transport and Telecommunications, <http://ec.europa.eu/transport/themes/its/doc/2012-07-17-cy-informal-presidency-conclusions.pdf>

<sup>8</sup> 1<sup>st</sup> Smart Mobility Challenge, [http://ec.europa.eu/transport/its/multimodal-planners/index\\_en.htm](http://ec.europa.eu/transport/its/multimodal-planners/index_en.htm)

It is observed that the emergence of quality multimodal journey planning and information services occurs faster in countries (e.g. Czech Republic, Sweden) which have enforced specific regulations obliging the transport operators to provide open access to their data. This data can in turn be used as the source and lever for provision of information services, by public bodies or independent providers.

In addition to further promoting the use of PSI Directive provisions in the domain of transport and subscribing to the principles of Open Data Package, it is suggested, in order to achieve pan-European coverage of multimodal information and travel planning services, to propose a dedicated European legislation on access to transport data, echoing the aforementioned national practices. The obligation, for all transport operators, of providing (scheduling, fare and real-time) their data would be accompanied by a specific licence for access to data defining appropriate conditions of use.

## **M2: Defining interoperable data format**

Existing standards (e.g. Transmodel, IFOTP, SIRI, NeTEx, TAP-TSI) are deemed to provide for rich data interchanges enabling EU-wide multimodal journey planning<sup>9</sup>. However, the use of such standards should be made consistent. Furthermore, the interoperability of data provided according to those standards should be ensured, for all transport modes. The key difficulty lies in adapting the legacy systems to standards through development of appropriate interfaces. The development of a standardised interface (API, as mentioned before) would enable linking the existing journey planning services together, in an open and flexible way. Additionally, new data standards would be potentially necessary for integrating new mobility services (car-pooling, bike sharing, park & ride, etc.) into multimodal information services.

Building on an assessment of the compatibility of existing standards, it is proposed to define the needed interoperable data formats and/or interfaces in order to capture and pool data from all transport modes and their combination, and also new mobility services and possible information flows from nomadic devices. It would entail the proposal to develop (at the level of European Standardisation Organisations) related standards to ensure interoperability<sup>10</sup>.

## **M3: Support and promotional activities aiming at extending availability of transport data**

While access to data is of key importance, the problem of availability of relevant and quality data is also an issue. The collection of missing data needs also to be addressed. While potentially, the use of social networks and crowd sourcing could be envisaged, such initiatives need to be coordinated and supported by relevant public bodies or private entities delegated to do so.

For that reason, it is proposed to establish support activities, e.g. financial support, for the collection of missing data, and potentially also for creation of data warehouses for its

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<sup>9</sup> Study "Towards a European Multi-Modal Journey Planner", conducted within the ITS Action Plan, Action 1.5. Promotion of multimodal journey planners.

<sup>10</sup> Such proposal would take into account the results of the upcoming "Preparatory Action to develop and validate a European passenger transport information and booking system across transport modes", which will start in the beginning 2013, TED notice 2012/S 139-231662: <http://ted.europa.eu/udl?uri=TED:NOTICE:231662-2012:TEXT:EN:HTML>

proper storage. Financial instruments could also be made available to incentivise the creation of a standardised API (interface) and its use by the existing journey planning services.

Furthermore, in order to achieve its full potential of contribution to the modal shift, Multimodal Travel Planning and Information Services must not only be reliable, but also be known and accepted by the citizens, which can be achieved by further promotional activities.

#### **M4 Foster cooperation between stakeholders, by establishing a cooperation platform**

The provision of fully-fledged multimodal information services, including journey planning, pricing, booking, payment and ticketing, requires the cooperation of many different stakeholders, and potential integration of already existing services (e.g. in a distributed system with open APIs). It is essential that such cooperation be broad in nature and consolidated at the very beginning of launching any specific project.

The European Commission wants to enable and facilitate such cooperation, helping to establish broader platform of cooperation between different stakeholders, namely in the field of fare management and ticketing. As observed in some Member States (e.g. Sweden) the integration of ticketing options into multimodal information services can help building a strong business case for the provision of such information, thanks to increased revenues coming from fare collection. A pre-requisite for that is the development of a cooperation platform that could help defining potential business models, collecting and exchanging best practices and ensuring the provision of high quality services.

## **5. CONCLUSION**

In light of the above considerations, the Commission has decided to launch a public consultation on the aforementioned possible measures addressing the remaining barriers to take-up of European transport planning and information services, looking first at those affecting multimodal journey planners. In the attached questionnaire, you will be asked to express your opinion on the problems identified by the Commission (as described above) and on the pros and cons of the range of possible measures proposed to address them. You are also invited to address additional comments, information and/or positions on European policy in the field of ITS / multimodal journey planning to the email address [MOVE-ITS@ec.europa.eu](mailto:MOVE-ITS@ec.europa.eu)