

Czech ITS Forum on  
**Door-to-Door Seamless Mobility & Public Transportation Management**  
The Prague house, Avenue Palmerston 16, Brussels, 1st December 2011

## Forum Conclusions

1. Application of ITS in public transport has a great potential for all - travelers, transport services operators, organizers and public transport order parties. This is especially true when it comes to delivering on-line, effective, reliable, secure and relatively cheap information, advisory, planning, management, booking and ticketing services.
2. ITS systems can handle the modal split between individual and public transport and help to fulfill objectives of transport policies on regional, national and European levels. Before ITS deployment, there is a strong advice for a mutual exchange of information, knowledge and best practices between EU regions.
3. To achieve efficient implementation and services interoperability, the ITS deployment shall follow a regulatory framework. Such a framework should be available prior to the deployment. If a framework does not exist, it has to be developed and accepted on an appropriate level as soon as possible.
4. The forum participants encourage the European Commission, EU member states and regional governments, transport and ITS stakeholders to support joint and coordinated efforts, mainly in the following areas:
  - EU-wide system of public transport and European door-to-door journey planner
  - Standardization of international timetable data exchange and mutual validation
  - Regional dispatching and mutual data exchange
  - Public transport and interconnections with traffic management centers
  - Interoperable Electronic Fare Management at regional, national and cross-border levels
  - Multimodal tickets ideas
  - Rapid adoption of relevant EU recommendations for member states: EU Transport White Paper 2011, Directive 40/2010/EU ITS, the ITS Action Plan.

## Multimodal travelling

5. The precondition of a well-functional journey planner (JP) is the existence of a frequently updated timetable register with reliable data. The legal framework in the Czech Republic created an environment where the National Timetable Information System has been successfully operating for many years based on a kind of public-private partnership. The result is that passengers have a reliable multimodal journey planner (MMJP) available, equipped with cross border and door-to-door capabilities.
6. As a possible next step it is recommended by ITS&S that the future European MMJP, from a technical point of view, should have a decentralized architecture (on European level) with a distributed itinerary search function available via direct background cooperation of regional (centralized on national level) JP servers (e.g. EU-SPIRIT/DELFI specification). This would bring excellent local itinerary search results and less resistance of main JP stakeholders. On the other hand, non trivial updates should be applied in each incorporated search JP engine.
7. The above proposed distributed MMJP approach must rely on a long-term consensus of major stakeholders and also on a strong political support. There should be a steering committee responsible for co-ordination and global metadata maintenance. For each participating country, a nationwide MMJP should be created.

## Public transportation management

8. In the Czech Republic there are good examples of how public transport could be organized in an efficient way via regional organizers of integrated transport systems. Within each transport system, telematic is frequently used for public transportation management. Still, there is currently no dispatching system of regional organizers connected with the dispatching system of other regional organizers. Technology is not the limit in this case. Data exchange interface shall be agreed to enable dispatching centre interoperability. In the future (may be even today) the need for cross-border data exchange between dispatching centres will rise. This fact creates the need for a moderate discussion on an international level already today.
9. In the area of legal issues, ITS&S proposes an expansion of the National Timetable Information System so that it becomes an obligation for operators and the transport organizers to provide vehicle location data based on the law (now it is on a voluntary basis). This idea should be discussed on a national level but foreign practices shall be also studied.

## **EFC - Electronic Fare Management (Collection)**

10. It was explained, that the Czech Republic, with its 30% penetration rate (so far, about 3 million contactless chip cards have been issued), holds a leading position in EFC deployment in Europe. However, the lack of a regulatory framework as well as investment by many independent order parties caused the current situation, in which users' chipcards are not (or only partly) interoperable between systems and/or regions.
11. The Czech Ministry of Transport, in cooperation with public transport operators, order parties and ITS&S have taken up on an initiative, in compliance with EN 24014, to create an interoperability specification called the "national EFC standard". Current experience from the national standard development, that runs parallel to operation of independent EFC systems, has confirmed some difficulties:
  - it's a very long process that requires support from all players
  - the moderator's role is crucial and it is not easy to find someone who wants to play this role (in the CZ ITS&S is an informal leader)
  - it requires some financial resources that are not easy to find.
12. In Europe there are some other important interoperability activities, which may provide for inspiration across Europe as well. Special attention should be paid to projects in the Netherlands (OV-Chipkaart), Germany (VDV specification) and the UK (ITSO specification).

## **E-ticketing & on-line reservations**

13. On-line reservation systems and electronic tickets for passengers in public transportation are topics of their own. Contrary to time or distance coupons on chipcards, which are very common applications in EFC, the reservation systems allow passengers to reserve a concrete seat in a vehicle. Even if bought on-line, E-tickets usually need to be printed on paper today.
14. The forum participants share a vision that in the future passengers will have a one stop shopping possibility to buy a multimodal universal ticket. Such a ticket might be bought on-line when planning the journey and would exist on electronic carrier only (mobile phone, chipcard, tablet, etc). Developing this vision means dealing with many present technical, business and legal issues.
15. The issues to be solved are, above others, the following:
  - availability of reliable and guaranteed source of data
  - a unified data format for electronic data exchange

- a sharing capacity of seats in vehicles (esp. in buses) between operators and agents by using dynamical distribution of available seats
- negotiation between bus and railway operators on interconnection of booking systems
- willingness of carriers to provide data (might be a subject of some regulatory actions)
- high profits for telco operators when buying tickets over mobile networks
- possible regulatory measures to force some transport operators with a significant market share not to obstruct the universal multimodal tickets development.

Best practices should be shared across EU and are highly appreciated.

## Enclosures

List of participants

Forum proceedings to be downloaded here : <http://www.telematika.cz/itsf/>

## Editor of conclusions

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### List of Forum participants

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