Regional Cooperative ITS – Enabling Interoperable Data Access and Transport Information Services via B2B Standardised Interfaces

Marco Boero

Head of Research & Innovation
Softeco Sismat SrL
Genoa, Italy
ITS for regional mobility services

Multi-modal Real-time Travel & Traffic Information

- Reliability (up to date information about delays…)
- Comfort (short transit, improved waiting time…)

→ positive impacts on travel behaviour: **co-modality**

→ European **open service market** development based on **public sector data**

→ **supporting policies**
  → EU Digital Agenda (single digital space)
  → Open Data initiatives (e.g. OGD)
  → IST Directive

**RTTI on smartphones**: a growing market (Frost & Sullivan, 2011)

- 280.000 users in Europe (DE, FR, ES, IT, NL, UK)
- 2,2 millions by 2017
In-Time EU pilot (2009 – 2012)

Application context

- Local RTTI contents/services by Local Authorities (Regional, city level) → base services
- Independent Travel/Traffic Information Service Providers (TISPs) → Value-added services
- An open service environment → e.g. Internet of Services, Future Internet ...

Current issues and barriers

- different local technologies
- different data formats
- different access services
- need for individual B2B interfacing
In-Time EU pilot (2009 – 2012)

In-Time target view

- **ensure harmonised** access to data and services
  
  - use of EU ITS standards
  
  - **bundling** all transport info in one city

- **enable interoperability** of end-user applications (TISP services) wrt
  
  - local data/service resources
  
  - cross-site

- **Piloting in 6 EU cities**
  
  - Vienna, Munich, Florence, Bucharest, Olso, Brno
Enabling technologies

Open Data, harmonised B2B service interface

- In-Time Commonly Agreed B2B interface (CAI) for data/service access
  - multi-(co-)modal services
    - different mobility domains
  - no “fit-for-all” model
    - different EU ITS standards
  - a harmonised, multi-standard data model

- The In-Time Follower City Package
  - usable data model + open service interface specifications
Pilot validation
end user TISP services in European sites

Local Journey Planners & Services

Munich services

In-Time adapter and WS

Vienna services

In-Time adapter and WS

Brno services

In-Time adapter and WS

Bucharest services

In-Time adapter and WS

Oslo services

In-Time adapter and WS

Florence services

In-Time adapter and WS

internet

Registry/Catalogue

In-Time adapter

In-Time adapter

In-Time adapter

In-Time adapter

In-Time adapter

Travel & Traffic Information Service Providers
Pilot validation
end user TISP services in European sites
Cooperative mobility services
integrating users’ feedbacks in the service chain

Mobile social nets services, mobile communities Apps, crowd sourcing: an emerging market?

© My Coyote, France
www.mycoyote.net

© SeeClickFix, USA
www.seeclickfix.com

Tom Tom HD Traffic™, NL
www.tomtom.com/livetraffic/

Waze mobile community
www.waze.com
Co-Cities EU pilot (2011 – 2013)

Adding user feedback services

- Cooperative Mobility
  - Information / validation of services

- End-user devices
  - In-vehice
  - Hand-held (i.e. PNDs, smartphones)

- Validated by Local Authorities
  - Feedback processing

- Evaluation of cooperative mobility services
  - Impacts, options, ...

- Piloting in 6 EU sites
  - Vienna, Munich, Tuscany Region, Bilabo, Prague, Reading
  - Roadmap for EU cities and regions

www.co-cities.eu
Co-Cities user feedbacks

user Apps + backoffice processing

End user Apps

City Authorities backoffice systems

see us live @ Demo Launch Area !!!
Conclusions

Smart Mobility for Smart Cities and Regions: a role for “smart” information delivery

- Open Data access initiatives → a key requirement
- Multi-modal integration → smart, sustainable travelling
- An open market for applications → business enablers
- Citizens empowerment:
  → let them be an actor in the information / service provision chain !!!
Thank you for attention !!!

Marco Boero, Softeco Sismat SrL, Genoa (IT)

marco.boero@softeco.it