Beijing Demosite Activities

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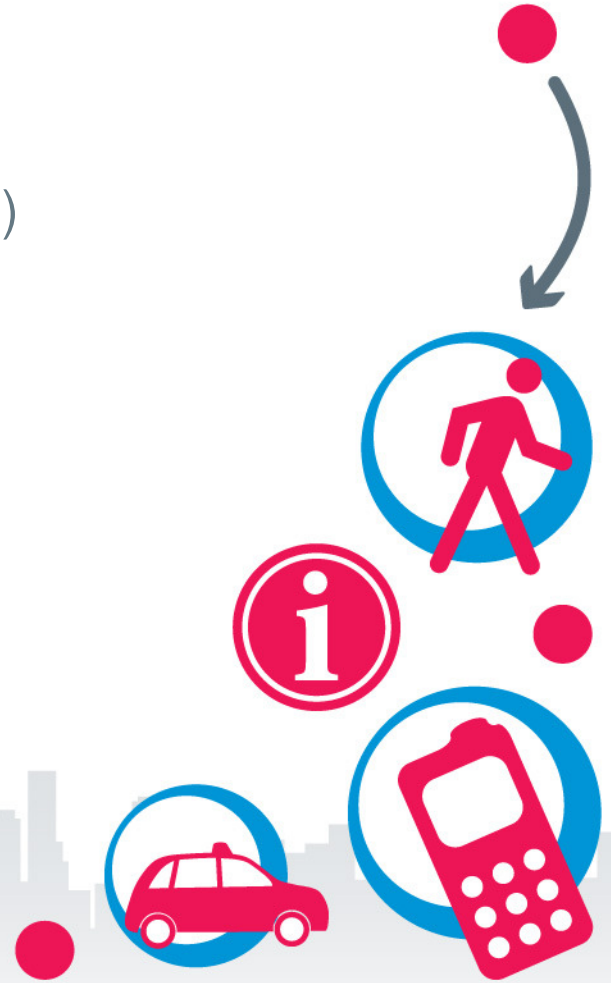
www.viajeo.eu

The Partners

- Thetis S.p.A. (coordinator)
- Beijing Public Transport Holdings, Ltd (BPT)
- Beijing Transportation Research Center (BTRC)
- Key Research ApS (Key Research)
- Plannung Transport Verkehr AG (PTV)
- Research Institute of Highways, Ministry of Communications, China (RIOH)
- T-Systems P.R. China Ltd (T-Systems)



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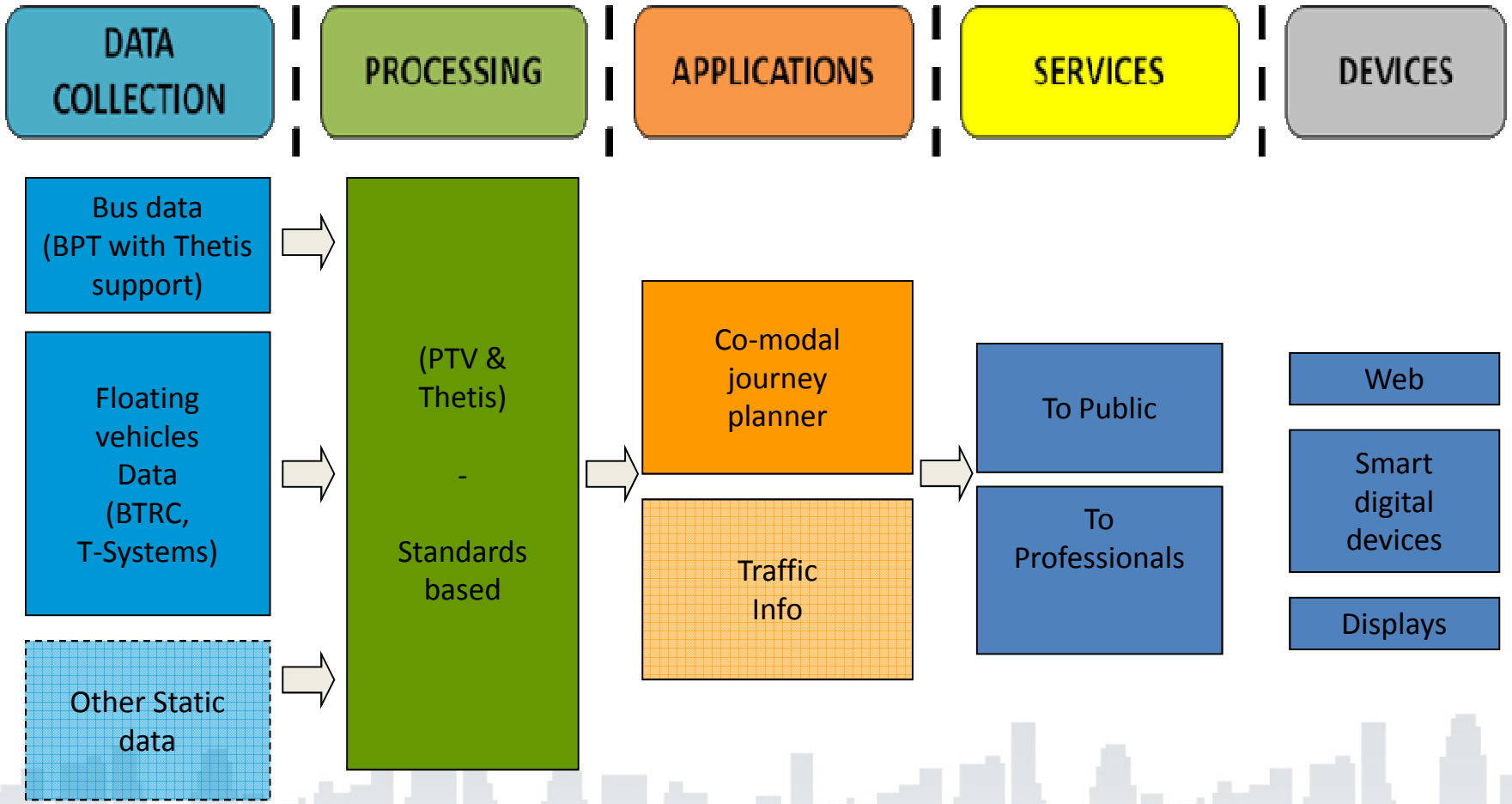
Project Scope



Role of RIOH in Beijing Demo

- Research Institute of Highway, the Ministry of Communications (RIOH, www.rioh.cn) is a research institute directly under the Ministry of Communications of China.

- Task 6.3.2 Investigation
- Task 6.3.3 Open platform
- Task 6.3.4 Design and Implementation
- Task 6.3.5 Validation and Impact Assessment
- Task 6.3.6 Dissemination

Available Data

- Real Time Data
  - FCD:
    - Taxi (provided by BTRC)
    - Cars (provided by T-Systems)
    - Buses (provided by BPT/Thetis)
- Static Data
  - Road-side Equipment:
    - Loops (provided by RIOH) – only history data ?
  - Timetables:
    - Bus timetable of the lines running in the demo area (provided by BPT)
    - Underground trains run frequency (including start and end of service time), based on published timetables.

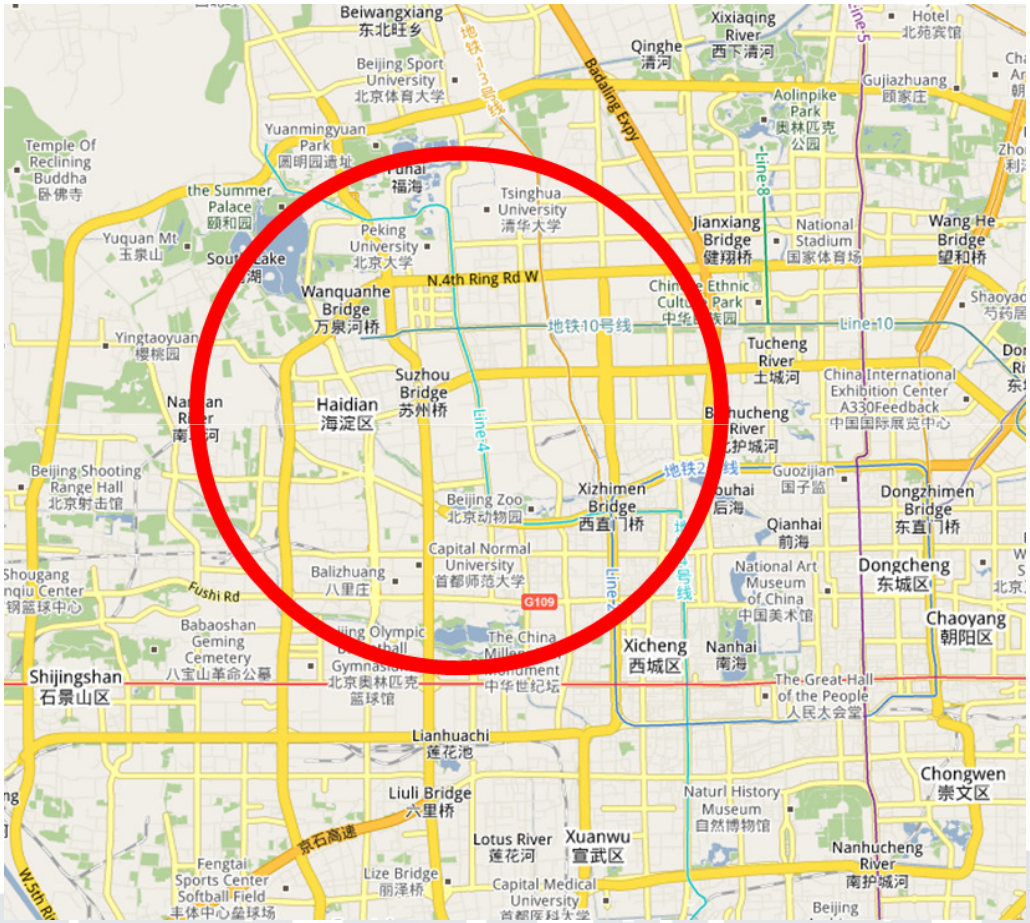
Data standards

Interface Name	Designation	Transmitted Data	Standard to be used	Remark
FCD	I1	Vehicle ID Time Stamp Position Speed	SIMONE	SIMONE does not count as an European Standard (see section 6.1 of Deliverable 3.1)
Roadside Traffic Data	I2	Detector ID Lane N° Direction Traffic Count (passenger cars) Traffic Count (lorries) Time Gap (between vehicles)	DATEX II (reduced)	Road side units (especially in case of older systems) feature low computing power and low bandwith connections. DATEX II is designed for centre to centre communication and rather heavy, hence a level 3 compliant interface is used.
Roadside Environmental Data	I3	Detector ID Direction Measurement CO2 Measurement NOx	DATEX II (reduced)	Road side units (especially in case of older systems) feature low computing power and low bandwith connections. DATEX II is designed for centre to centre communication and rather heavy, hence a level 3 compliant interface is used.
Centre Road Traffic Data Interface	I4	Traffic Events Traffic Load per Segment	DATEX II	Classic DATEX II application

Data standards

Interface Name	Designation	Transmitted Data	Standard to be used	Remark
Static Public Transport Information	I5	Timetables Stop Positions	SIRI	Using the subset defined by VDV as indicated in section 6.6 on Deliverable 3.1
Dynamic Public Transport Information	I6	Vehicle ID Time Stamp Vehicle Position Vehicle Speed Delays (line, vehicle)	SIRI	
Traffic Information Provision to Mobile Clients	I7	Traffic Messages Traffic Load	TPEG TEC	To be used by websites providing the same information.
Comodal Routes	I8	Waypoints Travel Time on Links Traffic Mode	IN TIME / eMotion	No public standard available, the European Project IN TIME defined a well received approach.

Demo Area



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Platform Functionality-Beijing Demo

- Public transport operation

  Use of real-time estimation and short term forecasts of traffic condition for public transport operation

- Real-time traffic information

  Real-time estimation and short-term forecasts of real-time traffic condition by fusion of various data sources

Platform Functionality -Beijing Demo

- Public transport information

  Provision of real time information with delays in public transport system and interchange information

- Cross modal journey planning

  Cross modal journey plan and traveller information to support the entire journey including pedestrian guidance and cycling route. The journey planner can also provide functions for car-sharing and taxi-sharing.

Platform Functionality-Beijing Demo

- Display system

  Dynamic timetable and interchange information on displays in public transport and at stops/station/interchanges

- Web based cross-modal journey planner

  Pre-trip planning, book and security payment of public Tran sport

Validation point

- Increased take up and acceptance of new technology by the user
- Increased public transit users
- Reduction of traffic
- More optimized transport systems and networks
- Better transport systems accessible for all
- Reduction of pollutant emissions and noise
- Increased energy efficiency
- Increased transport safety

Thank you!

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