

Traffic Control, Communications Systems and
Traveller Information for Public Transport and
Freight Logistics Conference

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UTMC Information Deployment in Pedestrian navigation

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Introduction to sub-project

- **On-foot navigation system**
 - Enhanced pedestrian map background
 - On-foot navigation capabilities (via parks, business centres etc.)
- **Integration of dynamic PT data**
 - Real Time Public Transport Data from UTMC



FOR MORE INFO...

...please contact Mr. Tomas Starek (starek@telematix.cz) or
Mr. Michal Hasek (hasek@telematix.cz)

Project Goals

- **Develop, implement and test the pedestrian navigation technology.**
- **Understand how ‘seamless traveller’ services may effect how people travel in towns and cities in the future and the role of Local Authorities.**

Description

- **Special map background**
 - High-level of detail
 - shapes of buildings
 - Parks
 - Pavements
 - Pedestrian crossings
 - Based on OS mapping
 - Covers all of town centre + Hospital and GreenPark

FOR MORE INFO...

...please contact Mr. Tomas Starek (starek@telematix.cz) or
Mr. Michal Hasek (hasek@telematix.cz)

Description

- **Dynamic PT info implementation**
 - **Bus stops**
 - **coordinates**
 - **PT service related information**
 - **Dynamic data**
 - **Real-time timetable changes**
 - **Dedicated TMC server implementation**

FOR MORE INFO...

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Mr. Michal Hasek (hasek@telematix.cz)

Description

- **Pedestrian navigation engine**
 - Calculation walk only and walk, bus, walk routes
 - Navigation through parks, shopping centers, etc.
 - Implementation of Reading POI's in number of categories

FOR MORE INFO...

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Technology

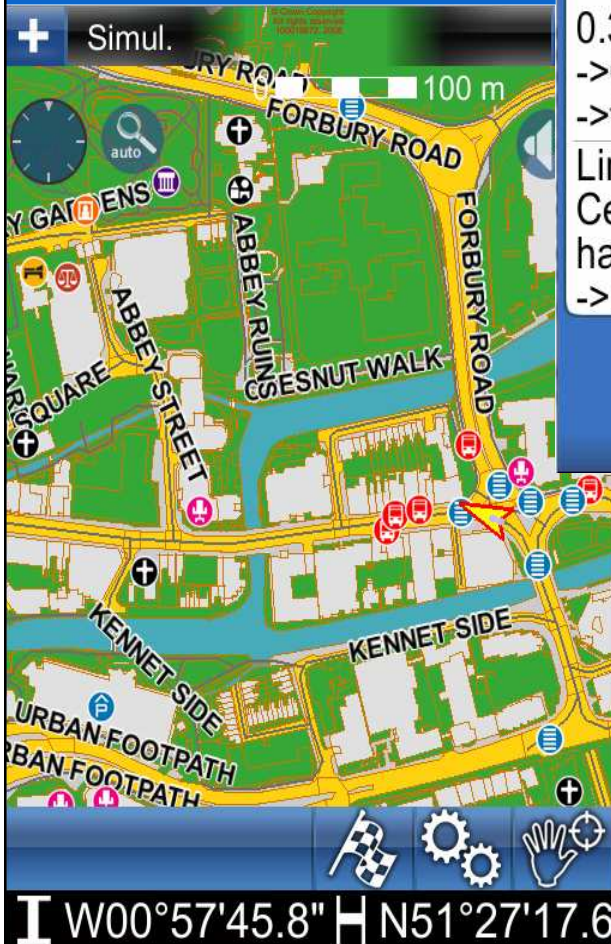
- System is built on
 - Dynavix navigation system
 - Orange SPV M700 3G Smartphone



- Reading UTMC database & information system

Mapping Background Development

- High level of detail
- Developed from OS
- Customized for peds purposes



Choose pedestrian/bus route

Pedestrian route: 2.2km

Line "12 Reading Station-Town Centre-University-Lower Earley"
->Reading Station - Centre Island: 0.3km
->Christchurch Green: 3 stops
->target: 0.9km

Line "144 Reading Centre-Hospital-University-Wokingham"
->Reading Station - Centre Island:

Back

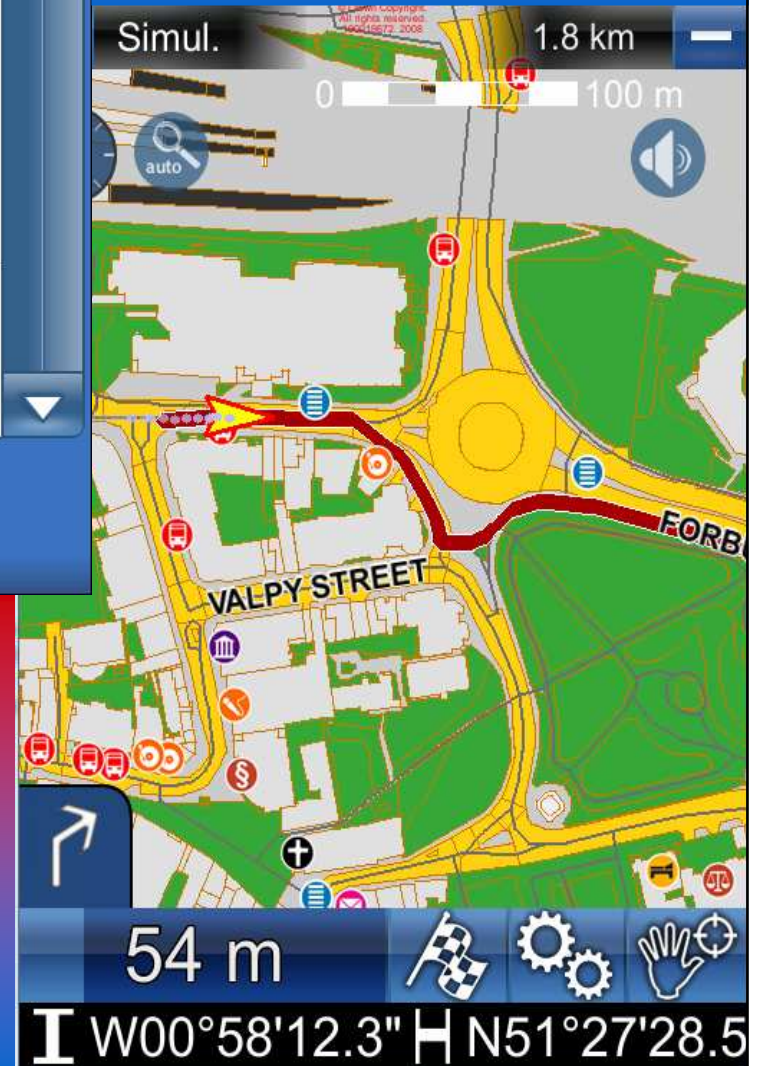
OK

RTTI

- Real time bus information
- Bus stop info
- Route selection

Navigation engine

- Navigation via parks, shopping centres, etc.
- Customized for peds purposes



Analysis

- **Strengths**

- Integration of Real Time information
- Customization for pedestrian use
- Developed to a level for people to understand the potential of these systems

- **Weaknesses**

- General problems with the GPS positioning
- System is at an early development stage – usability compared to a final product.

- **Standards being adopted**

- UTMC data format

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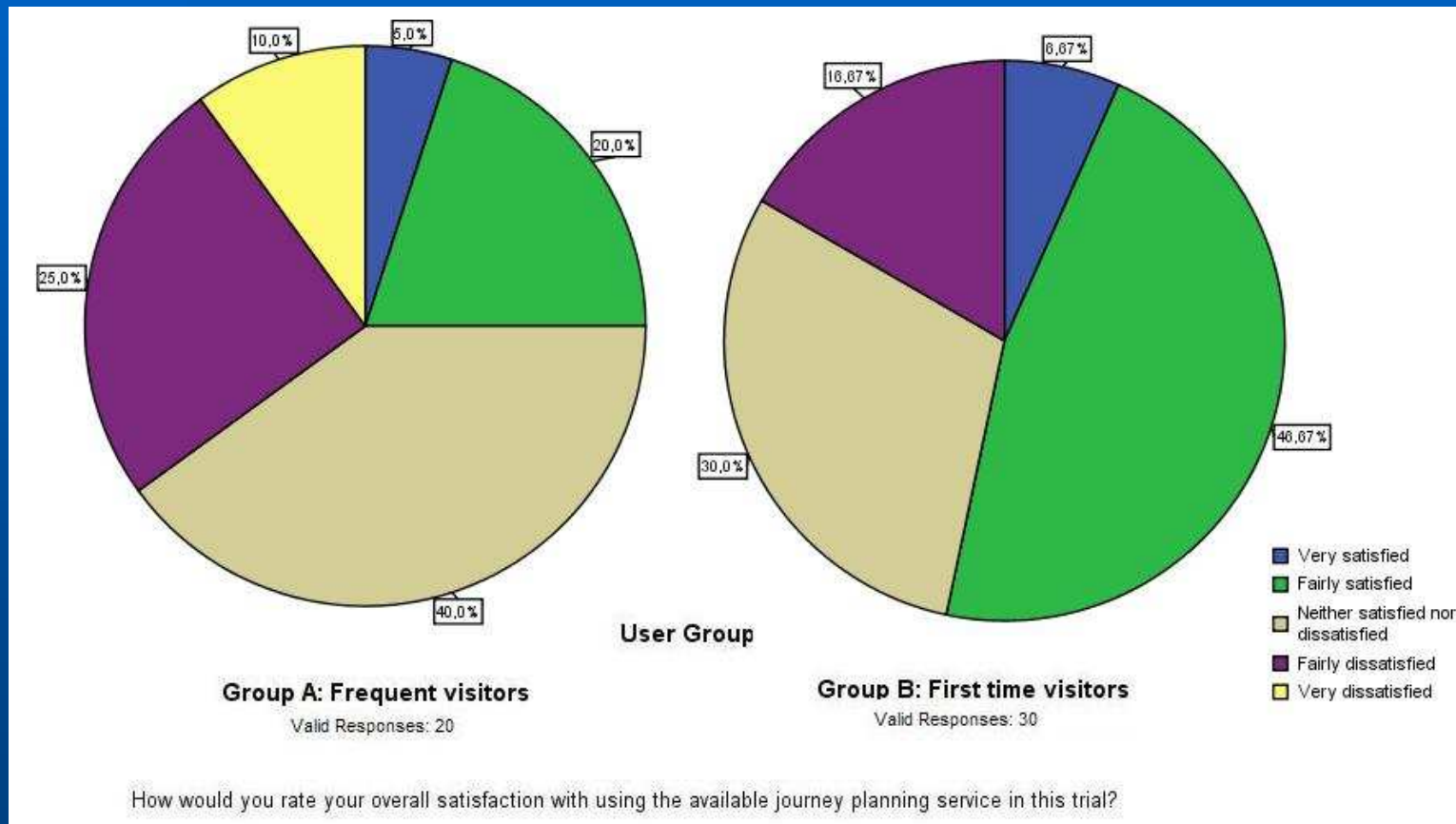
Evaluation

Prepared by TRG

Evaluation methodology

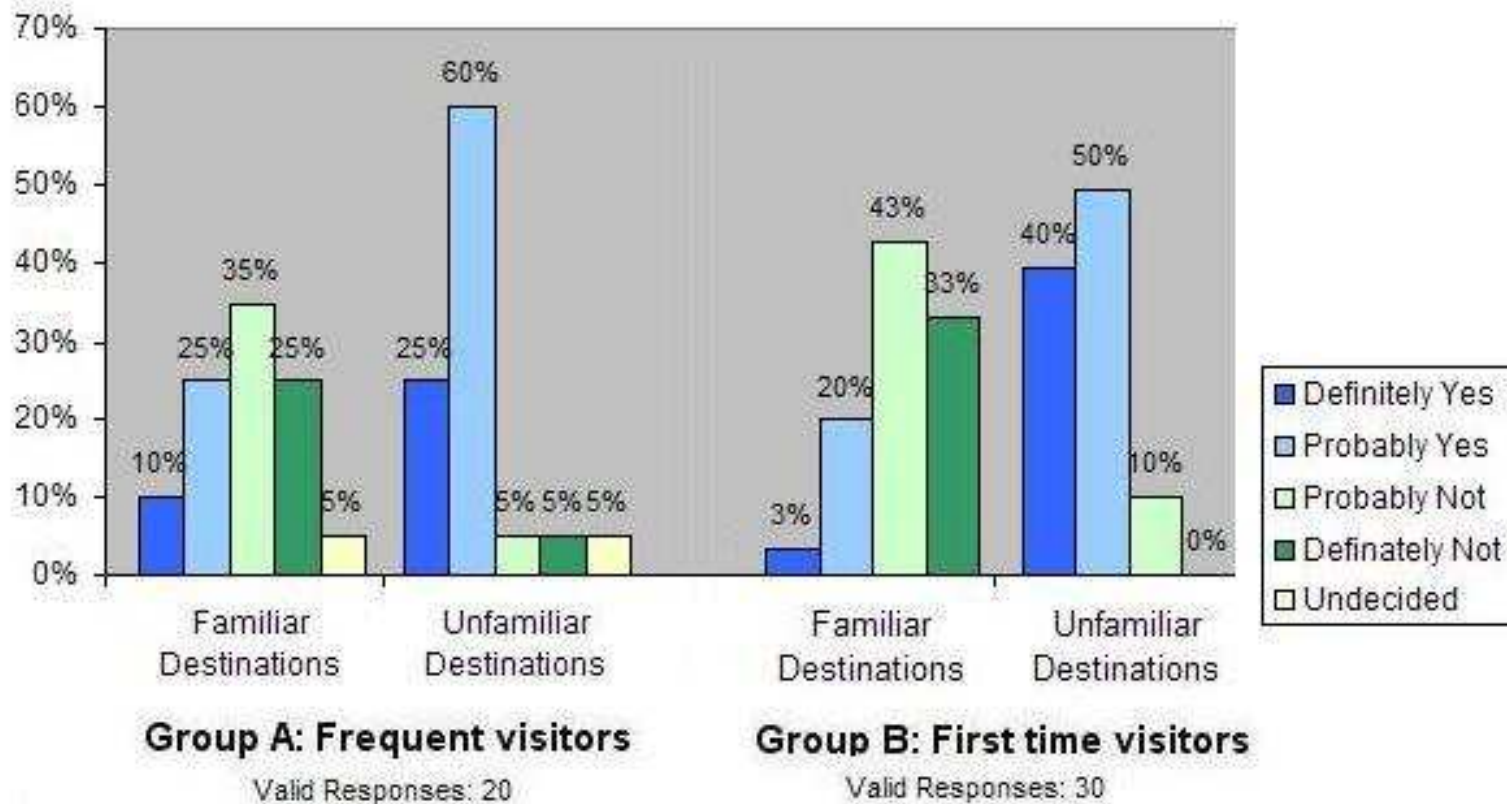
- **2 User Groups:**
 - **Group A (Frequent Visitors)**
 - **Group B (First Time Visitors)**
- **Focus Groups**
- **Questionnaire Survey**

Results(1)



Overall level of satisfaction

Results(2)

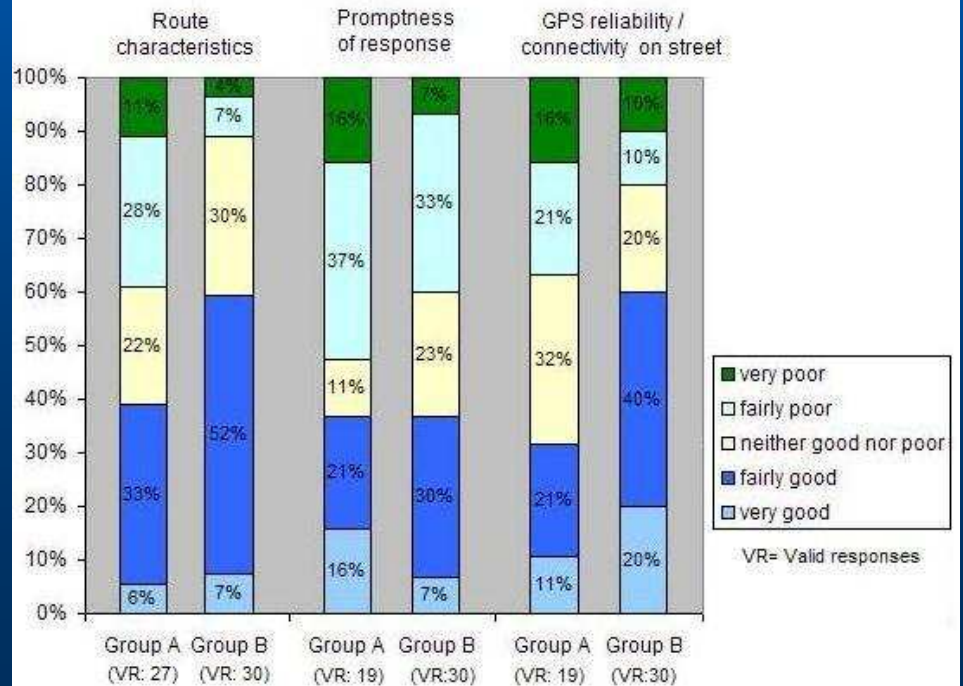
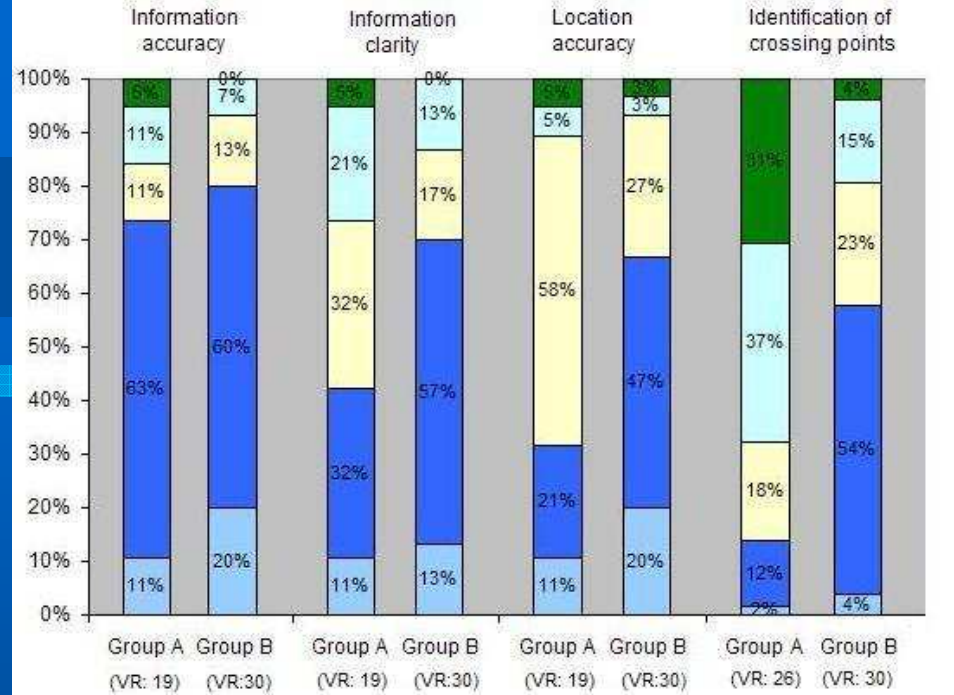


Would the service be useful to you when you plan your everyday trips to familiar and unfamiliar destinations?

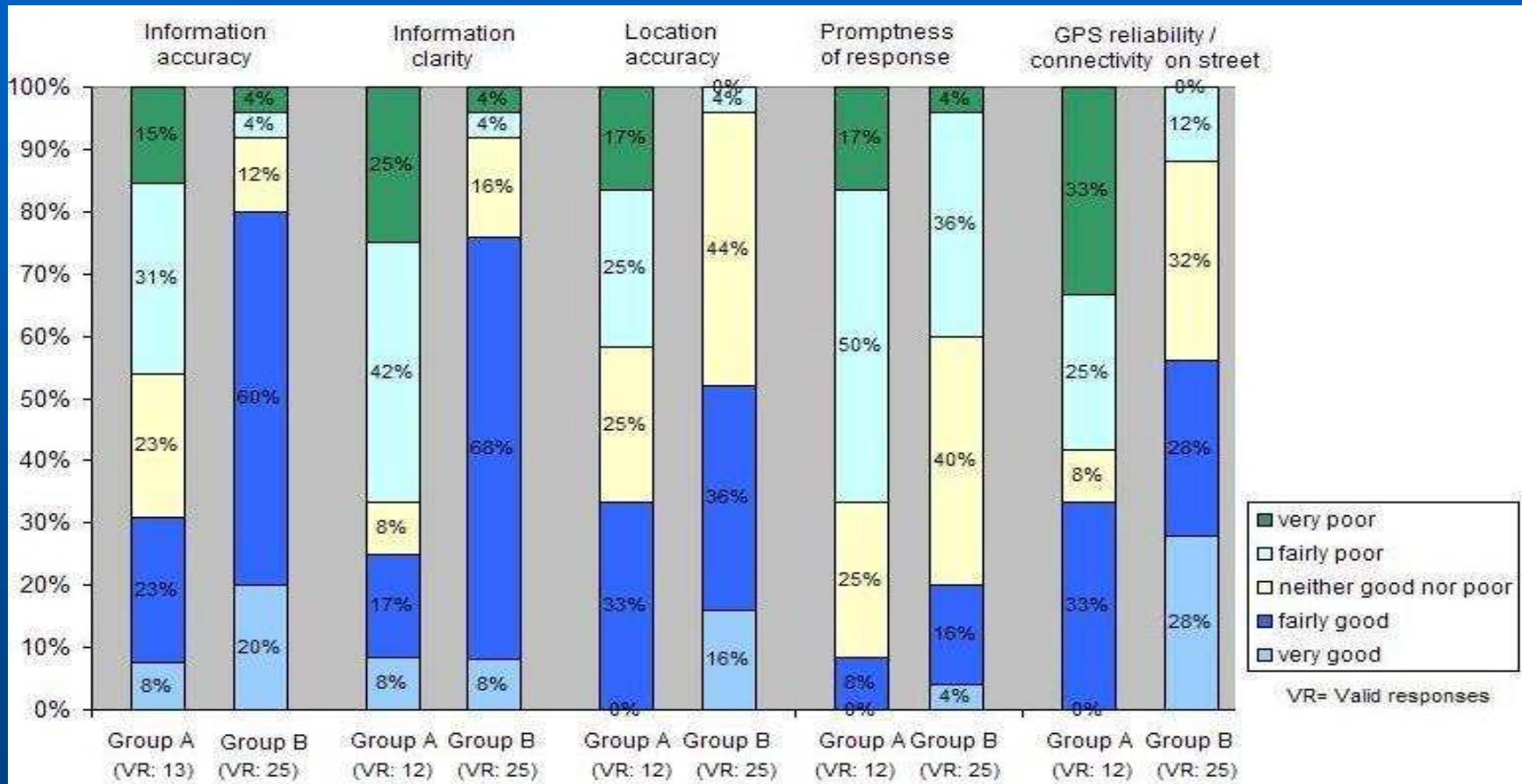
System usefulness

Results(3)

Quality of on-foot navigation information



Results(4)



Quality of public transport information

Current Status

- **Trial are to be continued to Christmas outside of the SEEDA project as part of Ifigeneia's PHD.**
- **Looking for R&D opportunities to develop the concept further.**

Further information

- **Submit questions to:**

- Tomas Tvrzsky, tvrzsky@telematix.cz, +420 284 094 630
- Tomas Starek, starek@telematix.cz, +420 284 094 630
- Michal Hasek, hasek@telematix.cz, +420 284 094 630

- **Internet address for project:**

- www.readingseedaproject.co.uk