



A MEasurement Tool to determine the quality of the Passenger Experience

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Developing a Pan European Tool to Measure the Quality of the Passenger Experience

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Overview of talk

1. Introduction to the project
2. Rationale of the study
3. What we hope to achieve
4. What is METPEX
5. How we hope to achieve it
6. Progress to date
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1. Introduction to the Project: Funding

- EU, under the 7th Framework Programme for three years.
 - ‘ Collaborative Project – Small or medium-scale focused research project’, under the SST.2012.3.1-1. Research actions regarding the accessibility of transport systems
- Total project 2.8million euros
- Start date November 2012

1. Introduction to the Project: The consortium

COVUNI - Coventry University	<i>UK</i>
INTR - Interactions	<i>Ireland</i>
SIGNOSIS	<i>Belgium</i>
ITENE	<i>Spain</i>
ZHAW - Zurich University of Applied Sciences	<i>Switzerland</i>
Eurokleis s.r.l.	<i>Italy</i>
POLITO - Politecnico di Torino	<i>Italy</i>
ANGRE - Regional Development agency of Grevena	<i>Greece</i>
KTH - KTH Royal Institute of Technology, Stockholm	<i>Sweden</i>
INTECO - Integral consulting	<i>Romania</i>
FIA – Federation Internationale de l'Automobile	<i>Belgium</i>
VTM – VTM Consultores	<i>Portugal</i>
SMART CONTINENT	<i>Lithuania</i>
SBOING	<i>Greece</i>
TERO	<i>Greece</i>
RSM	<i>Italy</i>

1. Introduction to the Project: METPEX

Will provide an inclusive, validated passenger experience measurement instrument to inform high quality, user centred, integrated, accessible public transport services which are capable of attracting and retaining public transport users whilst meeting sustainability targets.

2. Rationale for the study

- No single validated, PanEuropean tool to measure quality from the passenger's experience
- Lack of agreement and definition of whole journey and accessibility
- Gaps in knowledge concerning the effects of intermodality and whole journey experiences
 - Lack in knowledge means lack of ownership
 - Operators focus on their vehicles and their journeys
- The quality of the journey is more than the sum of its parts

3. What we hope to achieve: Aims and objectives

- To develop, validate and evaluate a standardised tool to measure passenger experience across whole journeys.
- To show how this can be used to inform policy makers in providing inclusive, passenger-oriented integrated transport systems that are accessible by all citizens.

3. What we aim to achieve: The tool will provide

- Reliable data for transport providers, policy makers, vehicle designers and municipalities
 - to measure and benchmark their services
 - to assess where changes need to be made which will increase efficiency and effectiveness of service delivery.
- Enabling wider access to safe, secure, convenient, comfortable and economical public transport will
 - support the EU's carbon reduction targets as this will lead to an increase in the number of people who use public or active forms of transport.

3. What we hope to achieve: Specific objectives

- 1. To develop an integrated approach to the measurement of the whole journey passenger experience** that takes into account human (physiological, perceptual, cognitive, sensory and affective) socio-economic, cultural, geographic and environmental factors.
- 2. To assess costs of ‘inaccessible transport’ for different sectors of society** (e.g. low income groups, rural communities, the elderly, disabled and those with lower levels of literacy).
- 3. To assess the extent to which this can be used** to drive innovation and attention to transport quality from the customer’s perspective in the transport industry.
- 4. To evaluate the passengers experience from different regions** to support the integration of regional transport networks into an European transport network
- 5. To facilitate the harmonization** of travel behaviour research and analysis across European Union Member States

4. What is METPEX: Toolset

- Suite of accessible tools available for use initially in pilot sites
- Tools
 - Mobile app connected to personal sat nav
 - On-line questionnaire
 - Semi structured interview protocols
 - Focus group protocols
- Mixture:
 - Quantitative and qualitative data collection, to develop rich picture of transport barriers
 - Some high tech data gathering using gamification and automatic data collection

4. What in METPEX: Trial sites

- Stockholm (Sweden),
- Vilnius (Lithuania),
- Grevena (Greece),
- Dublin (Ireland),
- Bucharest (Romania),
- Rome (Italy),
- Valencia (Spain),
- Coventry and West Midlands (UK).

5. How we hope to achieve it: Overall Approach

- **Develop** an inclusive tool to improve the **quality of mobility solutions**, recognising the need for accessible seamless travel
- **Iteratively develop and validate** METPEX through use in 8 sites
- **Evaluate** derived information in terms of its scope and usefulness
- **Develop quality indicators** which recognize passenger issues, cultural diversity and multimodal, informed travel patterns, through
 - analysis of previous research,
 - meta-analysis of METPEX trial data
 - discussions with stakeholder groups.
- **Examine and measure innovative and integrated transport solutions** in the trial sites to assess accessibility issues.
- **Understand** the mobility requirements of a heterogeneous but growing group of travelers to establish inclusive, cost-effective solutions.
- **Inform** local, national and international travel policy

5. How we hope to achieve it: Post processing

- Data will be collated and used to benchmark quality of passenger service against:
 - Region/operator
 - Modal type
 - Journey type
 - Passenger demographic
 - Touch points
- Barriers and enablers will be identified at different touch points in the journey
- Results presented to stakeholders, who will be guided in prioritisations

6. Progress to date: Back end systems

- Free navigation app has been developed and is currently available
- Automatic data collection protocols for Androids developed
- Gamification concepts and principles established
 - METPEX game will
 - Pull information from the navigation app and facebook
 - Tailor questionnaire to users profile (to increase usability of the extensive questionnaire)
 - Provide a novel, entertaining and tailored activities based on user's responses

6. Progress to date: METPEX variables

- Comprehensive set of whole journey variables derived from
 - Literature and state of the art review
 - Interviews with stakeholders
 - Pilot survey
- 450 variables
 - Prioritises
 - Associated with specific journey stages
 - Assigned to different instrument instruments

6. Progress to date: Stakeholder interviews

- Over 40 stakeholder interviews held across Europe to ascertain
 - Potential value of METPEX
 - Approaches to data collection
 - Priorities in data collection

6. Progress to date: Pilot survey

- Pilot questionnaire developed out of the state of the art review
 - 200-300 responses across project

6. Impacts and barriers: Proposed impact

- **Improving quality of life for EU citizens** through the identification of factors which inhibit travel on public transport or cause distress
- **Supporting EU sustainability policy** with respect to carbon reduction, integrated more effective and accessible mobility, and reductions in congestion.
- **User centred transportation design** recognizing needs of all citizens e.g. accessible vehicles, better trained staff , integrated multi modal services
- **Land use policy** inform strategic thinking which takes into account user needs and design of integrated services and higher quality spaces
- **Research community.** The provision of a recognized, validated research tool will increase research efficiency and effectiveness.
- **Strengthening the EU** through the development of integrated transport services, clearer benchmarks, citizen engagement and easier comparison across different community initiatives.

6. Impacts and barriers: Recognised barriers

- Crowded, unintegrated market: many tools, projects etc already covering some areas at national and international level
- Data sets may not be large or specific to provide the level of information needed by operators and municipalities to effect change
- Lack of ownership of the whole journey and division of responsibilities across different stakeholders
- Austerity measures restrict capability of municipalities to implement changes when non transport areas, such as health and education need to be prioritised
- Influence of top down measures and external factors which effect quality of passenger journey

Thank you for listening

- Keeping in touch
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