

## Action TU 0804

### Survey Harmonisation with New Technologies Improvement (SHANTI)

Participating countries: BE, BG, CH, DK, ES, FI, FR, DE, GR, IL, IT, LV, LU, NL, NO, PL, SP, UK

Chair of the Action: Jimmy Armoogum, FR, jimmy.armoogum@inrets.fr

COST Science Officer: tgoger@cost.esf.org

[www.cost-xx.com](http://www.cost-xx.com)



#### Objectives:

- The main objective of the action is providing guidelines for harmonizing national travel surveys across Europe
- Building bridges among European countries and researchers, enhancing the overall quality of the research means in the transport surveys field
- Encouraging the membership of countries where a tradition of NTS is not present but where it notably a willingness to set up such a transport survey, especially in Southern and Eastern Europe, but as well in some western countries (Ireland, Portugal, Iceland)
- Bridging the gap between academia and society i.e the application of research results in politics and planning

#### Working Group 1: Methods and tools

This Working Group should tackle statistical problems, which are methods and tools that can be used for passenger and vehicle surveys. From the work achieved in this WG, the Action will report all best practices for the different areas to be undertaken in survey methodologies (sampling, weighting, etc.). This WG will develop a generic methodology enabling the combination of multiple sources for transport and mobility related information (including, for example, conventional mobility surveys as well as new sources of data such as trace data from personal and vehicle tracking systems based on GPS, GSM and related technologies) in a coherent and statistically rigorous way.

#### Working Group 2 Use of new technologies

The massive reduction in the cost of GPS services, the general reduction in size, weight, energy consumption and price of various measurement devices (e.g. GSM, accelerometers, pulse meters, and others) and the improvements in battery power enable conducting continuous monitoring studies of a longer duration (several days, weeks). The respondents are relieved of the more time consuming aspects of such studies, but retain control over their participation. The disadvantage of such passive monitoring studies is the absence of information about the purpose and social context of the observed travel.

#### Working Group 3 Vehicle-based survey

On the European average more than 95 % of all passenger cars and half of all light commercial vehicles are permanently available to private households. These vehicles can be either company cars or privately owned. The profiles of vehicle use can be specified through average annual driven mileage per vehicle and for the fleet as a whole total, the purpose of travel as to the trip destination, the infrastructure use could be shared among urban, inter-urban or motorway road use, and fuel consumption could be measured together with e.g. data on CO2 emissions. Hence data collected on vehicles are also of great interest for a better knowledge of European mobility trends.

#### Working Group 4 Household travel surveys

Several COST Countries have established traditions in household transport surveys, which are often influenced by cultural, geographic and administrative backgrounds of the individual country. Often, these surveys have proven useful within the borders of the individual country, while on the other hand, there are comparability problems over the national borders due to differences in methodology, definitions and contents.

In WG 4, the state of the art of household surveys across Europe shall be determined – this shall mainly focus on transport surveys, but also on further data sources with important meta-information. Subsequently, it shall be analyzed how far these existing data sets are comparable and to what extent they could be merged into a continental data base. At the same time, it has to be discussed what kind of data is necessary for a sound transport policy and for transport models (e.g. variables on emissions, data to calibrate models).

Finally, guidelines and recommendations shall be discussed: How can future surveys be implemented to ensure continuity and usefulness in the individual countries on one hand and a higher level of harmonization on the other hand?

#### Main Achievements:

- We are starting this action