Survey Harmonisation with New Technologies Improvement (SHANTI)

The transport sector is one of the major sources of global warming, both from individual travel behaviour (especially car use) and from freight transport (mainly by trucks). Mobility surveys, as well as data collections about travel behaviour, are essential to develop transportation policies and measures which encourage more environment-friendly transport modes. Data quality is a real challenge, mainly because response rates are declining and interviewees are more and more reluctant to respond to burdensome questionnaires. Furthermore, harmonized data are a must for authorities, but in Europe different approaches and data qualities exist. The data needs from the transport sector allow the assessment of past policies, in terms of efficiency and equity. They allow the elaboration of new policies measures at European level (e.g. to reduce the emissions due to transport).

Mobile communication and positioning technologies including GPS/GALILEO, GSM and Radio Data System (RDS) have advanced rapidly and their costs are decreasing. They demonstrate great potential as survey instruments for tracking individual mobility and travel behaviour as well as freight movements, by enabling to conduct surveys along longer periods (e.g. a week instead of a day) and providing more accurate data on the spatial and temporal frameworks of travels, together with a relatively low burden for interviewees. Hence, We are at a turning point where aiming at producing guidelines towards European harmonized travel surveys should not miss the opportunities of an advancement by means of new information and communication technologies.

The purpose of this Action was to coordinate research efforts on data harmonization for transport surveys across Europe. Guidelines for harmonizing surveys are not only a statistical problem, because each country also needs to analyze survey results throughout time (time series in the perspective of previous surveys on the same thematic issues with normally the same design) and changing the protocol or the definitions may have an impact on indicators in the sense that the changing behavior could be confused with changes in methodology. Therefore, institutions are often not willing to follow international guidelines in changing design that has proven successful on the national level. Therefore a bottom up approach relying on the skills of the researchers involved in the field of national travel surveys and so quite well knowing their particularities were more promising and lead to more acceptable guidelines. To make results of different survey approaches comparable – it was necessary to develop a methodology or heuristic in which way a transition from one design to another can be derived and how the results of either survey approach can be “translated” or transformed into the results of another. On the other hand, several New European Member states which are willing to install travel or transport surveys benefited of experiences and best practices from expertise out of the network. The Action built bridges between European countries as well as among researchers, enhancing research and disseminating recommendations throughout European society.

Besides the potential impact on important European policies, other benefit is the quality of data that underlie influential aggregate indicators since this issue is a major concern for decision-making. Through working with the data and collaborating with the agencies supplying them, researchers provided important feedback on collection and measurement issues and how they can be improved. These issues include sampling methods, conceptual definitions of variables, questionnaire design, weighting schemes, collection procedures, electronic assembly, and data processing. All of these are crucial issues in ensuring accurate data, which are the basis for economic assessments.

Following the first main input of the project, getting harmonized data on a European Level may also be useful for developing analysis of inequities across Europe (e.g. by gender or region). Furthermore harmonized data allows the applicability of best practice examples in transport policy and the implementation of measures from one country to another – a question which becomes more and more relevant against the background of the climatic change. This issue is covered within this Action since that these developments should fulfill adequate and effective European policy measures.

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