

INFORMATION SOCIETY TECHNOLOGIES (IST) PROGRAMME



AIDE/HUMANIST

Title Workshop on naturalistic driving studies

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Summary: Agenda for the AIDE/HUMANIST workshop on naturalistic driving studies 13/09/2006

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Content

Recently a growing number of studies have been conducted and published in the US that aim at analysing driving behaviour in its natural context. These studies do not follow an experimental approach but try to examine driving behaviour on a descriptive level. The goals of these studies are either to describe the impact of certain measures or systems on driving behaviour or to gather information on driver needs from observations of natural driving behaviour.

The typical procedure is

1. Equipping a number of vehicles with comprehensive sensory technology
2. Giving these instrumented vehicles to a number of participants who are instructed to use these vehicles as natural as possible
3. Collecting the data
4. Analysing the data, using e.g. data mining tools
5. Deriving conclusions about the effects of systems/measures or about driver needs

Currently data from the following naturalistic driving studies are published and available:

1. Dingus et al., (2006). The 100-car naturalistic driving study (NHTSA)
2. Sayer, et al. (2005). The effects of secondary tasks on naturalistic driving performance (UMTRI)
3. Stutts et al. (2003). Distractions in every day driving (AAA Foundation for Traffic Safety)

It can be expected that studies following this approach of “naturalistic driving observation” will become more and more influential in the scientific discussion and thus also a major issue for future European research programmes.

For this reason the aims of this workshop are to discuss the following issues

1. What kind of conclusions can be drawn from naturalistic driving studies?
2. What are methodological guidelines to follow in order to
 - a. Reduce the effort of such studies
 - b. To strengthen the conclusions drawn from such studies
 - c. To analyse existing data
 - d. To plan naturalistic driving studies

The expected outcome from this discussion is a draft set of recommendations on minimal methodological requirements for “naturalistic driving studies” that have to be fulfilled to properly conduct such studies and to derive valid conclusions from such studies as input for further research projects and to assist analysis of existing data. The results of the workshop and possible recommendations can be an input for the next meeting of ISO/TC 22/SC 13/WG 8 in Ottawa.

Agenda 13.9.2006

Time	Topic	Who ?
10:00-10:15	Welcome and Introduction	Bengler/Baumann/Gelau
10:15-11:15	Working title: Effects of secondary tasks on naturalistic driving performance	Sayer (UMTRI)
11:15-11:30	Break	
11:30-12:00	Presentation: Title to be confirmed	Krüger (IZVW)
12:00-12:30	Naturalistic Driving Studies to investigate IVIS use and distraction exposure: interests and limits of the approach	Brusque (INRETS)
12:30-13:30	Lunch break	
13:30-14:00	Driving for safety – naturalistic field studies	Vollrath (DLR)
14:00-14:30	Finding a position of naturalistic driving studies in the methodological spectrum	van der Horst (TNO)
14:30-14:45	Break	
14:45-16:15	Panel discussion on definition of a set of statements on methodological requirements for naturalistic driving studies.	All
16:15-17:00	Summary/Adjourn	Bengler/Baumann/Gelau

As well as there will be five invited presentations, presentation materials (ppt, doc, pdf) that are provided by participants to be used during the workshop are greatly appreciated!

Participation and Registration

The workshop is open to all participants in the projects HUMANIST and AIDE who have an interest in these issues and who are willing to spend a day debating them. The number of participants is limited and should not exceed 20 - 25. Therefore we kindly ask you to register formlessly by email (to: martin.baumann@phil.tu-chemnitz.de) as soon as possible but not later than 31st of August. Participants will be admitted on a first-come, first-served basis.

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Organizational

Date and Time:

September 13 2006, 10:00 – 17:00

Venue:

BMW Group Forschung und Technik,
Hanauerstr. 46
80992 Munich

From the airport: 45` min by taxi, 60 min by public transport.

From the main station: 20 min by public transport.

(Detailed map, descriptions will follow)

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