



PROLOGUE in its final 6 months

The PROLOGUE project aims to assess the feasibility and usefulness of a large-scale European naturalistic observation study and to make a large group of people familiar with the research method. Naturalistic observation studies will lead to a better understanding of the factors that affect road safety, accessibility, and the environment. The project is part of the 7th Framework Programme of the European Commission. It started in August 2009 and runs for two years. For general information, see:

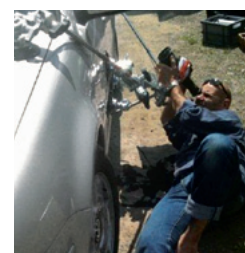
www.prologue-eu.eu

ND research topics and potential users

In October last year several new PROLOGUE Deliverables were made public. Three Deliverables deal with the potential application areas and potential users of naturalistic driving (ND) knowledge. The first one provides an extensive overview of previous and ongoing ND studies (D1.1). It makes clear that, so far, ND studies have mainly focused on road safety issues like 'driver distraction and inattention', 'driver drowsiness and fatigue', 'heavy vehicle – light vehicle interaction', and 'driver characteristics and states'. Though smaller in number, experiences show that ND research can also be successfully applied in areas related to eco-driving and traffic management. D1.2 reports on a small-scale questionnaire study to identify the areas of interest of the potential users. The results indicate that road transport professionals consider ND studies most useful for studying road safety issues, and more specific, for studying risk-taking behaviour, pre-crash behaviour, crash avoidance behaviour, and driver condition. There are only minor differences between the interests of respondents from different organisation types and from different groups of countries. Based on the earlier two Deliverables, D1.3 presents a framework for defining research topics that are relevant and suitable for being investigated in future naturalistic driving studies. For this, the framework uses combinations of (1) categories of driving behaviour and driver states, and (2) conditions under which these behaviours may be observed.

Naturalistic Driving in a nutshell; have a look at the video

Using an ordinary day of the fictive test person Michael as an illustration, the eight minute video shows what naturalistic driving is about and how this new approach can be of benefit to road transport. To watch the video go to www.prologue-eu.eu/naturalistic-driving/naturalistic-driving-video. The video is available in English, with or without German subtitles and in Spanish.



Review of technical and methodological issues

Two other PROLOGUE Deliverables that were published late 2010 deal with technical and methodological issues of ND studies. D2.1 discusses the current and the appropriate data collection and data analysis equipment for ND studies and presents a theoretical analysis of the requirements for different application areas. The Deliverable also discusses data quality issues and top-level database management requirements. D2.2 focuses on methodological issues related to naturalistic driving studies. It describes the experimental procedures, variables to be measured, experimental design, statistical analysis methods, organizational issues and legal and ethical issues for naturalistic studies.



The 'integral approach' and naturalistic observations

"The future of transport in Europe is likely to be a sustainable, integrated, technology-led and user-friendly system. This is quite literally the title of the EC communication on this topic that was published in 2009 and that will probably soon be followed by a new white paper. More or less the same ideas have been put forward in the 'triple-P' approach: People, Planet, Profit. According to these integral approaches, we must build and maintain a transport system in such a way that it will get us where we want fast and on time, in a cheap and comfortable way, safe, without damage to the environment and (thus) facilitating a strong economy. The main question is, of course, how?

As is often the case, the key to the answer is human behaviour. The speed and reliability of our travels are to a large extent determined by the homogeneity of traffic flows. Car emissions and fuel consumption can be reduced by up to 50% if we eco-drive and the vast majority of crashes is the result of human error. With some exceptions, road users are no criminals, so why don't they behave as they should? Apparently, driving or riding is not an easy task and vehicle, road, and user do not interact as well as they should. Most roads and vehicles are pretty predictable; humans can be pretty but are seldom predictable. Once we know when, how, and why people act as they do, we will be able to build self-explaining roads, develop intelligent assistance, provide efficient driver training et cetera, and deliver the triple-P trip Europe is looking for. To get this behavioural knowledge we need to observe road users in their normal routine, which is exactly what naturalistic observation studies are about!"



Rob Eenink,
SWOV Institute for Road Safety Research / Co-ordinator PROLOGUE

Last regional workshop to take place in Greece!

The last regional workshop on Naturalistic Driving will take place in Athens, Greece, on 22 February, and is organized by the Hellenic Institute of Transport. The Greek workshop is the last of six regional PROLOGUE workshops that were organized to present the ND research method, to show its usefulness for road safety, eco-driving and traffic management, and to get the support of relevant stakeholders. Previous workshops took place in Norway, Austria, the Netherlands, Spain and the UK. The working language in the February workshop is Greek, but there will be simultaneous translation into English for those participants who do not master the Greek language. For more information, please contact Katerina Toulou (toulouk@certh.gr).

The workshop is in parallel to a two-day event on European road safety, held by the Forum of the European Road Safety Research Institutes (FERSI), with special focus on best practices and successful policies towards the reduction of road fatalities and the creation of a pan-European alliance for safer roads.

22 June 2011: final PROLOGUE workshop in Vienna

The final PROLOGUE workshop will be held in Vienna on Wednesday 22 June. If you are interested in getting a concise overview of the findings of PROLOGUE and getting the latest information about the plans for a future large-scale European naturalistic driving study, please make a note in your diary now. More information will follow in due course via the PROLOGUE website. If you want to receive information by personal e-mail, just send a message to infoprologue@swov.nl, with your name, affiliation, country and e-mail address



INTERACTION: ND activities to start in spring

The EU project INTERACTION focuses on driver interactions with mature in-vehicle technologies, and specifically on interactions with navigation systems, communication systems, and speed control systems (speed limiter and cruise control). Within INTERACTION various research methods are being applied, including focus groups, questionnaires, experimental test drive, and, last but not least, the naturalistic driving approach. The ND activities will start in spring and include 120 participants each being followed for five weeks. The results are expected to be made available mid 2012. For more information about the INTERACTION project, go to interaction-fp7.eu.



2 BE SAFE: safety of motorized two-wheelers

As announced in the previous issue of this newsletter, among numerous other experiments, 2 BE SAFE includes first pan-European Naturalistic Riding pilots. At TRL (Honda Fireblade), INRETS (Honda VFR800, CBF1000), University of Thessaly/NTUA (BMW F650), and the University of Florence (Piaggio Beverly Tourer 300), motorcycles have been successfully equipped with numerous sensors and cams. The motorcycles have already been given to test subjects. The data collection phase is scheduled until May 2011 and will be followed by data analyses. The respective reports will be available in late 2011 at www.2besafe.eu.



PROLOGUE and FOT-Net: co-operation and information exchange

Field Operational Tests (FOTs) often use the naturalistic driving (ND) approach to study the way drivers interact with on-board information systems and other ICT support systems, looking at driver responses to technological interventions. The naturalistic observation approach as such, has a broader perspective, studying road user behaviour in all sorts of circumstances and in interaction with other road users, related to safety, accessibility and the environment. Given the correspondence between FOTs and ND studies, PROLOGUE and the platform for FOT studies FOT-Net, agreed to exchange information and collaborate whenever useful. In this framework, the PROLOGUE project was represented in various FOT meetings.

Joint workshop on near crashes

Naturalistic Driving studies and Field Operational Tests are considered to provide valuable information not only about normal traffic conditions but also about traffic conditions preceding crashes or, as a proxy, near crashes. The concept of near crashes, however, is not that straight forward. In November last year, in the framework of various cooperation agreements, FOT-Net, DaCoTA and PROLOGUE jointly organized a workshop to discuss various issues related to the near crashes concept. A wide variety of experts were engaged in finding answers to questions like "What are near crashes, how can they be defined?" "What are the different techniques and equipments to measure near crashes?", and "What is the predictive value of near crashes for actual crashes and road safety?".

All presentations are available at the [past events section of the FOT-Net website](#).





Contact and imprint

This is the third PROLOGUE Newsletter. The first two newsletters are accessible through www.prologue-eu.eu/prologue/deliverables. The PROLOGUE Newsletter will be published twice a year during the course of the project.

Editors: Anita Eichhorn (KfV) & Ingrid van Schagen (SWOV)
Editorial Committee: Rob Eenink (SWOV), Claudia Gruber (Test & Training International) & Martin Winkelbauer (KfV)
Layout & Graphic: STETER.COM
Photos: Paul Voorham, Netherlands / KfV, Austria / SWOV, Netherlands / TNO, Netherlands

© SWOV Institute for Road Safety Research – printed or digital reproduction is permitted with due acknowledgements.

If you do not wish to receive this newsletter any longer, you can let us know by replying to this e-mail with 'Cancel' typed behind Subject.

For more information about the PROLOGUE project, please have a look at www.prologue-eu.eu or mail to infoprologue@swov.nl.
For questions and remarks about the newsletters, please contact infoprologue@swov.nl.



PROLOGUE Project Consortium
(Click on the Logo to see Webpage)

