

PROLOGUE: how to realise large scale naturalistic observations?

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What are Naturalistic Observations?



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- Passenger cars/motorcycles:
 - Own car/bike: Naturalistic Driving
 - Sensors, camera's: continuous monitoring
 - Acceleration, speed, eye movements, headway, position on road etc.
- Vulnerable road users:
 - Site based observations
 - Interactions
- ICT as facilitator:
 - Large databases
 - Analysing software
 - Small & cheap sensors, camera's
- FOT: assessment of ITS
- ND: research methodology p.e. used in FOT's



Added value of Naturalistic Observations?



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- Traditional research: instrumented cars, simulators, police records, in-depth, interviews...:
 - No natural environment
 - No direct, systematic observation of a conflict, near miss or crash
- Issues for naturalistic observation:
 - the effect of road design characteristics, or weather conditions on the interaction between driver and vehicle;
 - driving style comparison of specific road user groups, e.g. novice drivers;
 - the identification of crash contributing factors;
 - the prevalence of mobile phone or other in-car information devices and the relationship with particular behaviour patterns or crashes;
 - the effect of particular interventions, p.e. eco-driving;
 - the interaction between motorised vehicles and vulnerable road users;

Potential user groups?









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- Research organisations
- Automotive industry
- Enforcement
- Insurers
- Driver training and licensing agencies
- Road authorities & Ministries of transport
- EU
- Fleet owners
- Road user organisations
- Environmental organisations

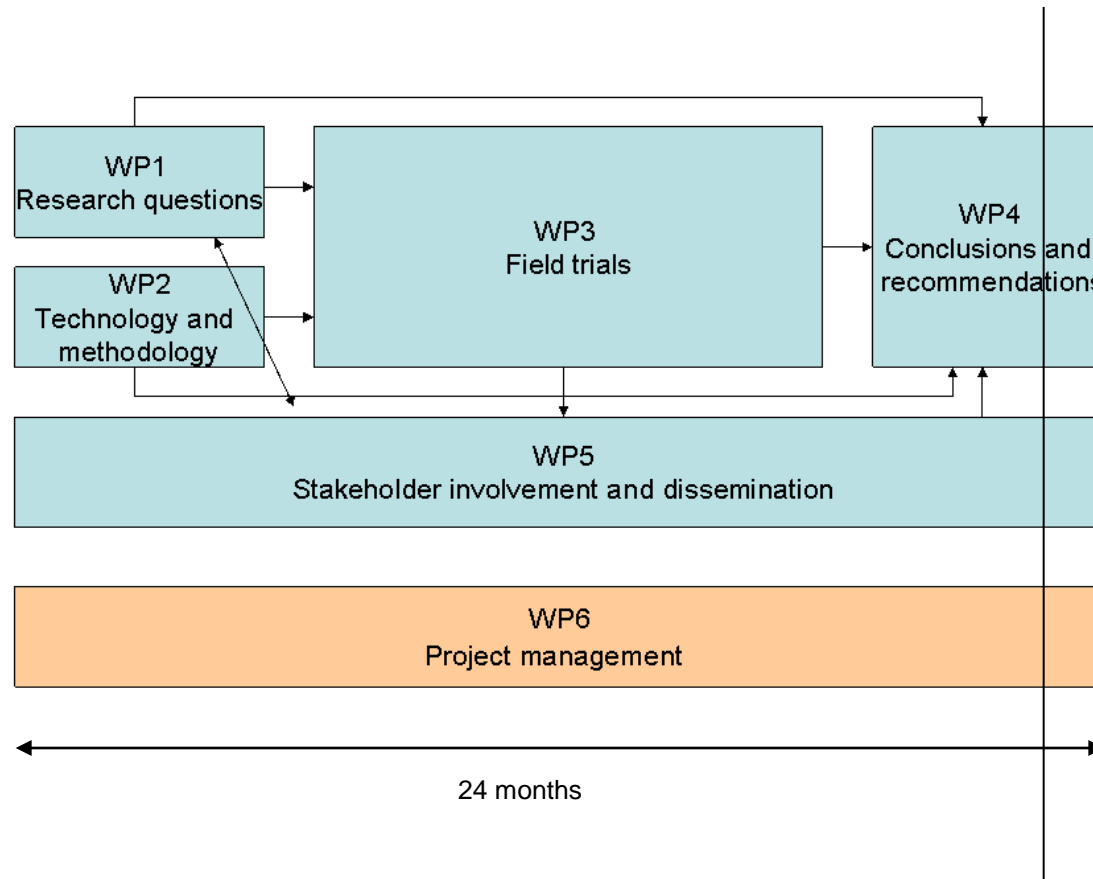
- Prologue is a feasibility study for a large scale European naturalistic observational study (august 2009-July 2011)
- Two parts:
 - To pick the best
 - technology and methodology
 - Topics
 - Stakeholders and users
 - To get support
- Outcome of a large scale ND study
 - Harmonised ND: superior knowledge human behaviour
 - Next generation road safety measures
 - Sustainability, traffic management
 - Economy will profit

PROLOGUE: consortium



	SWOV, Institute for Road Safety Research (co-ordinator)	www.swov.nl	Netherlands
	CERTH-HIT, Centre for Research and Technology Hellas	www.hit.certh.gr	Greece
	KfV, Austrian Road Safety Board	www.kfv.at	Austria
	Loughborough University	www.lboro.ac.uk/research/esri	UK
	Or Yarok	www.oryarok.org.il	Israel
	TNO, Defence, Security and Safety; Human Factors in Transport	www.tno.nl	Netherlands
	TØI Institute for Transport Economics	www.toi.no	Norway
	Training & Testing International Planning and Service GmbH	www.test-and-training.com	Austria
	Universitat de València	www.uv.es	Spain

PROLOGUE outline



Task 1.1

Experiences from ND related studies

- previous and current studies
- different methodologies (EDR, instrumented cars, "real ND")
- input from organisations (European and world-wide)



Task 1.2

Interests of user groups

- literature scan
- input from Advisory Board members
- communication with SHRP2 programme
- questionnaire to User Forum members



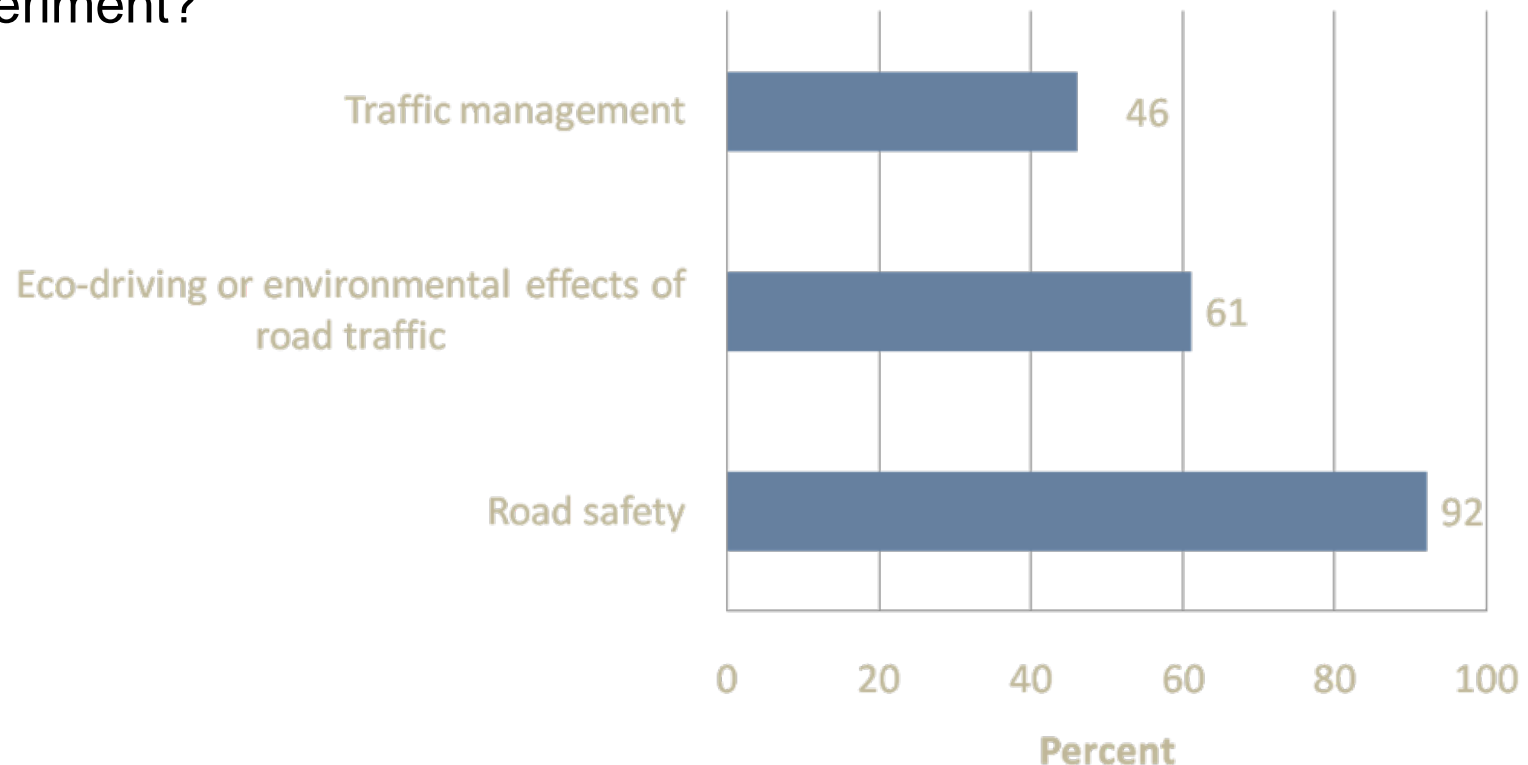
Task 1.3

Application areas and research questions

- actual and potential areas

User survey: General areas of interest

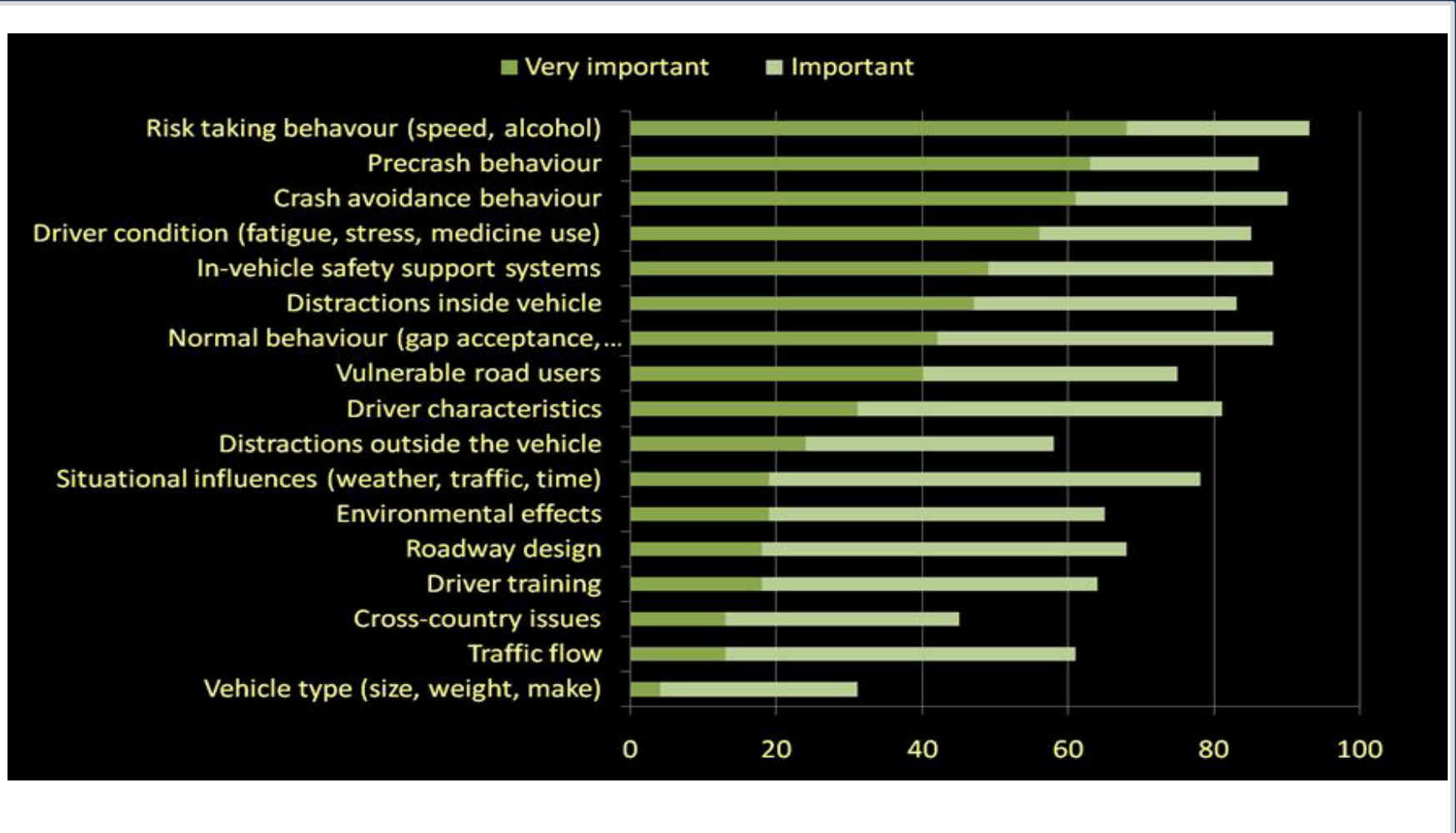
“Which of the following areas would you consider to be interesting to investigate with the use of a large-scale European naturalistic driving experiment?”



Research topics: user's preferences



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Outcomes of WP2 - Reports



1. Methodological and organizational issues and requirements for ND studies

- Research design and set up
- Protocols
 - procedures for selection of vehicles and participants
 - experimental procedures
- Metrics to measure
- Statistical analysis methods
- Organizational , Legal and ethical issues



2. Data collection, analysis methods and equipment for ND studies including Inventory of;

- Data acquisition equipment
- Data storage and management methods
- Data analysis tools

WP3: Small scale field trials



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Israeli FT: 4 studies on young drivers behaviour



Dutch FT: Combination of Site based and In-vehicle observation



Austrian FT: Effect of video feedback during driver training period



Spanish FT: Identification and description of incidents



Greek FT: Effect of secondary tasks



- User Forum
- Dissemination by printed and electronic means (newsletters)
- Communication: 6 workshops

User forum and workshops



	Where	When	Participants/ respondents/
Regional workshops	Norway/Sweden	October 2010	} 191
	Austria/Germany	November 2010	
	Netherlands/Belgium	November 2010	
	Spain/Portugal	December 2010	
	Great Britain/Ireland	January 2011	
	Greece	February 2011	
International workshops	Brussels	February 2010	54
	Vienna	June 2011	60-70?
User Forum	---	As per 1 July 2011	500?
Survey 1	Among User Forum via internet	December 2009	72
Survey 2	Among workshop participants via internet or on paper	October 2010 - February 2011	107



- Financial and administrative management
- Quality Assurance
- Advisory Board, renowned experts:
 - Ken Campbel (SHRP2)
 - Antonio Avenoso (ETSC)
 - Cees Boutens (RAI/ACEA)
 - Peter Burns (Transport Canada)
 - Joao Cardoso (LNEC)
 - Bernard Niedermaier (BMW)
 - Gea van Ootmarssen (AgentschapNI)
 - David Shinar (Ben Gurion University)

- Pilot outcome (WP3): Tsippy Lotan
- Recommendations (WP4) : Fridulv Sagberg
- Support?
 - Draft call Work Program SST2012
 - Integrated Project SST.2012.4.1-3. Large scale naturalistic driving observations for safe and sustainable transport
 - Focus on road safety, eco-driving crucial

PROLOGUE contact details



Please go to

<http://www.prologue-eu.eu/>

Or mail to

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