



UDRIVE

European Naturalistic
Driving Study

UDRIVE: Naturalistic Driving in Europe

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coordinator

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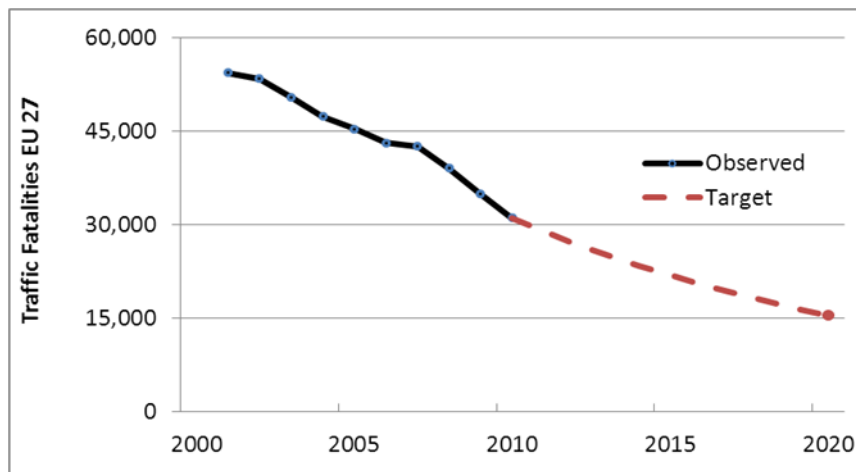
SHRP2 Safety Symposium

This presentation

- Background and aims of UDRIVE
- UDRIVE's fact and figures
- Approach and research areas of UDRIVE
- Why so complicated? (or: how does it work in Europe?)
- International collaboration
 - Advisory board
 - Initiative for international SCE working group
- Beyond UDRIVE

UDRIVE: towards safer road transport

- Around 30,000 road fatalities on EU roads, many more injuries each year
- EU target: minus 50% fatalities between 2011 and 2020
- Challenge: Identify a new generation of effective road safety measures



UDRIVE: towards greener road transport

- Severe burden on the environment: climate change, air quality, non-renewable fossil fuels
- EU target: reduction of carbon emissions of person cars to 130 g/km in 2015 and 95 g/km in 2020
- Challenge: identify and use driving style-related factors to reduce fuel consumption and emissions

UDRIVE aims to:

Increase our understanding of road user behaviour

and

Contribute to meeting the European road safety and environmental targets

by

Conducting a large-scale Naturalistic Driving study in Europe

UDRIVE: some facts and figures

Full name: eUropean naturalistic Driving and Riding for Infrastructure & Vehicle safety and Environment

Programme: 7th EU Framework Programme

Project type: Collaborative project, large-scale integrating

Coordinator: SWOV Institute for Road Safety Research (NL)

Consortium: 19 partners, 10 countries

Duration: October 2012 - September 2016

Budget: € 10.5 million

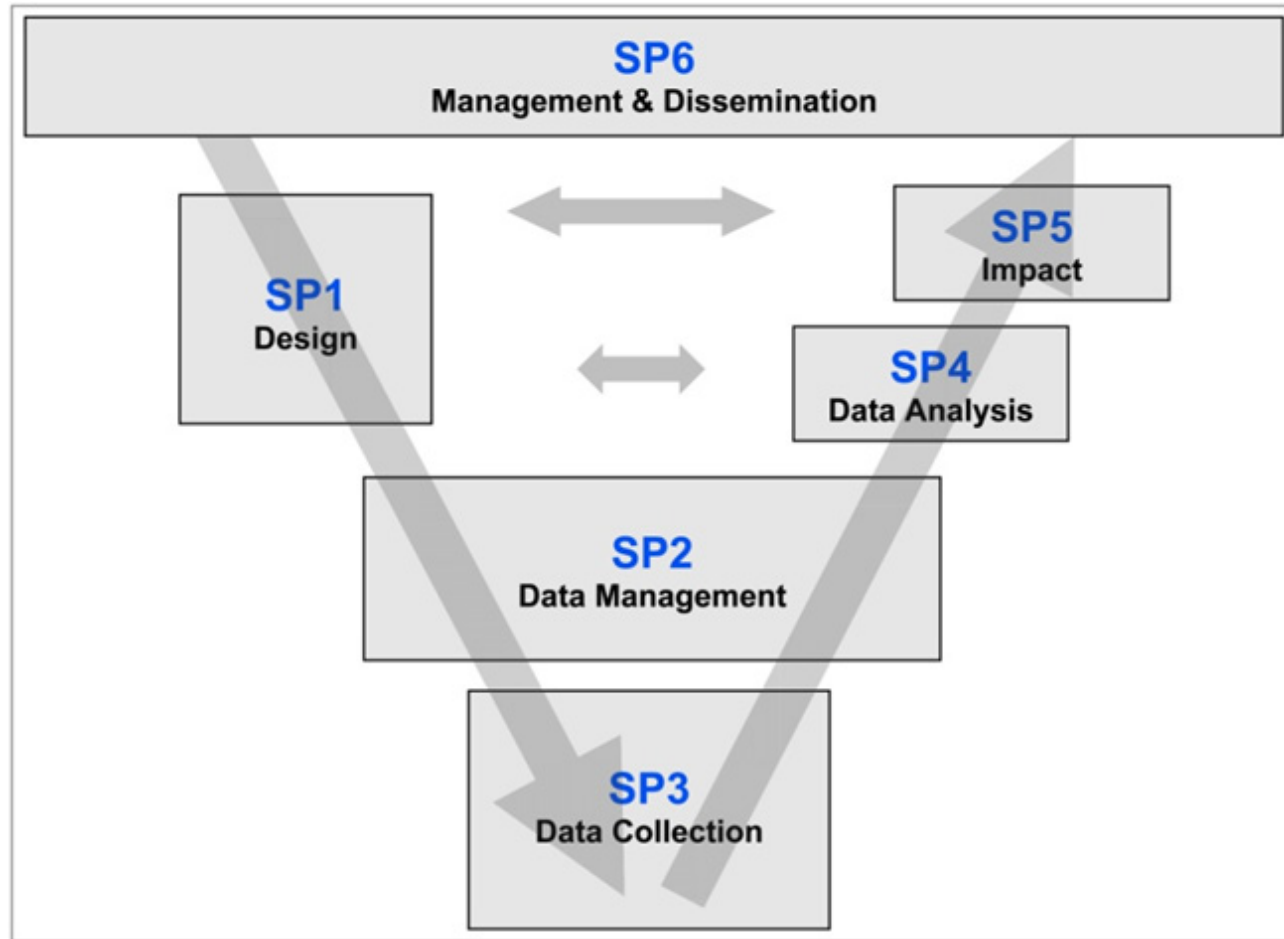
EU funding: € 8 million



The consortium: research, industry, interest groups

Country	Partners
Austria	KFV
Czech Republic	CDV
Germany	BAST, DLR, TU Chemnitz
France	CEESAR, IFSTTAR, LAB
Israel	Or Yarok
Netherlands	SWOV (Coordinator), TNO
Poland	IBDiM
Spain	CIDAUT
Sweden	SAFER, VOLVO
UK	Universities of Leeds and Loughborough
International	ERTICO, FIA

The UDRIVE approach: based on FESTA-V



Data collection: seven operation sites:

- France
- Germany
- Poland
- UK

Person cars
($120 \times 2 = 240$ vy)

- Austria
- Spain

Powered two-wheelers
(80 vy)

- Netherlands } Long and short haul trucks
(150 vy)



Main research/analysis areas

- Building one central database with collected ND data
- Within UDRIVE, performing analyses of:
 - Characteristics of everyday driving
 - Crash causation factors and associated risks
 - Inattention and distraction
 - Car drivers interacting with pedestrians and cyclists
 - Motorcycle behaviour
 - Driving styles in relation to eco-driving

Main application areas

- Within UDRIVE, the results will be applied in 4 specific areas:
 - New and promising measures to make traffic safer and more sustainable
 - The potential of ND for monitoring performance indicators over time
 - Driver behaviour models for road transport simulation
 - Exploration of commercial applications of ND data

Why so complicated?

- Personal view
- UDRIVE: database, research questions, applications cars/trucks/PTW, 7 sites
- EU-funded R&D focussed on application: measures, technology
- “Green is hot, safe is not”
- Support needed from member states, (car) industry, stakeholders
- Budgets fixed, need more => new project
- ND/R was/is/will be used in many EU projects: FOT-Net

International collaboration: Advisory Board

- Advice followed, if not: written movation by coordinator
- At crucial stages (start, RQ, conclusions etc.)
- Renowned experts:
 - Ken Campbell (SHRP2)
 - Tom Dingus (VTTI)
 - Carol Flannagan (UMTRI)
 - Veneta Vassileva (ACEM, PTW)
 - Mike Regan (University NSW, Sydney)
 - George Yannis (University Athens)
 - David Shinar (Ben Gurion University Israel)
 - Carlo van de Weijer (TomTom)
 - Fred Wegman (chair, Delft University)

International collaboration: SCE wg

- Idea from Advisory Board
- Vital role (risks, relevance, ..) for safety critical events in NDS
- Some issues:
 - Reliable: definition, selection methods?
 - Valid: how do SCEs link to road safety targets?
- FOT-Net, UDRIVE take initiative for international working group on SCE's
- Please contact: martin.baumann@dlr.de
- (or give me your card)

Beyond UDRIVE

- UDRIVE will produce a wealth of data
 - Not all can be analysed and exploited within UDRIVE
 - But the database will remain for analyses after the project
 - By UDRIVE partners
 - By other experts
- Taking into account legal and ethical restrictions

Find more information about the project?
Become a member of the UDRIVE User Forum?
Get informed about progress and relevant events?

Go to

www.UDRIVE.eu

and join us now