



UDRIVE

European Naturalistic
Driving Study

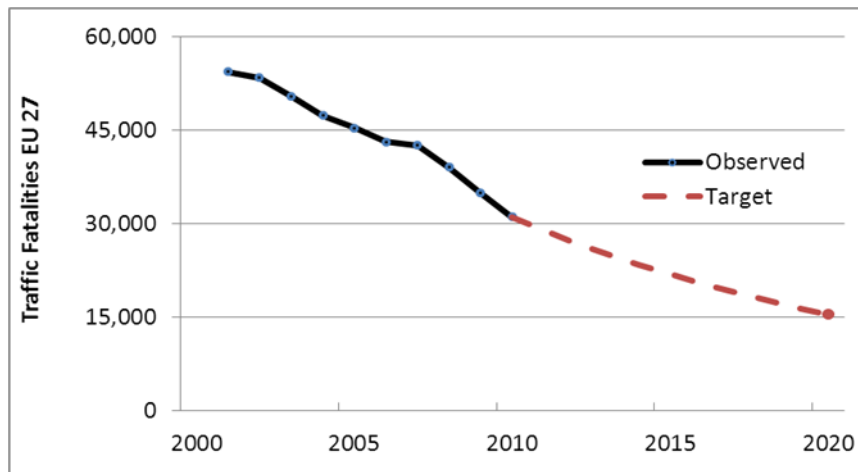
**UDRIVE:
Naturalistic Driving
in Europe**

This presentation

- Background and aims of UDRIVE
- The Naturalistic Driving approach
- UDRIVE's fact and figures
- Approach and research areas of UDRIVE
- 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

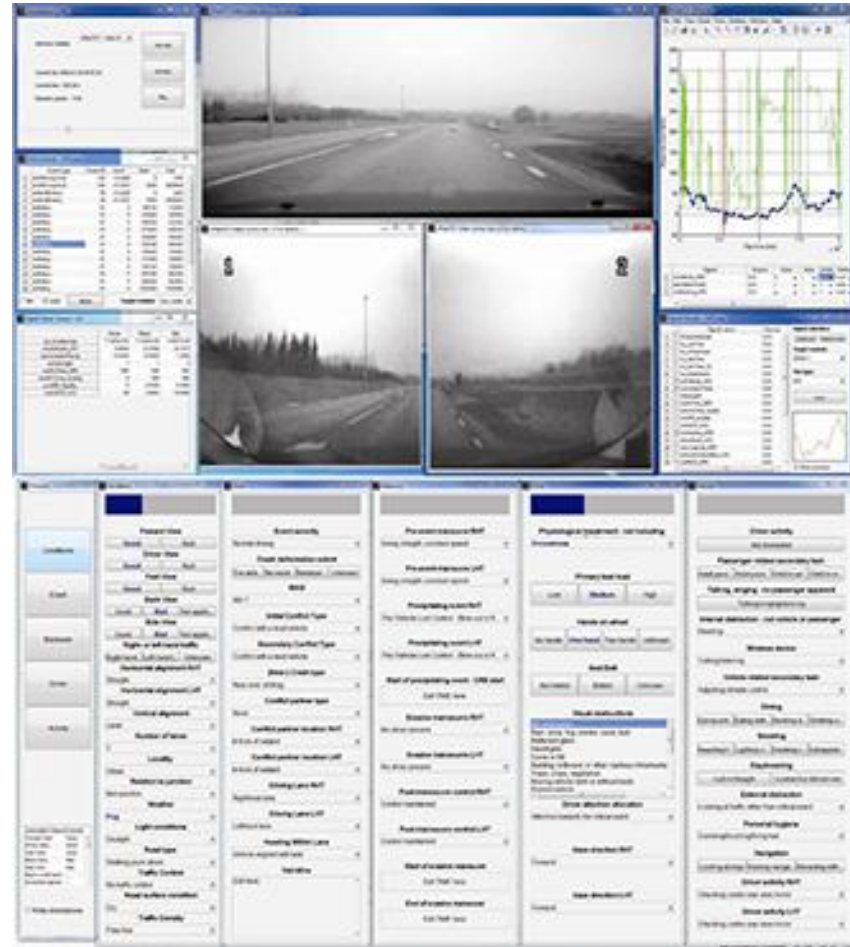
by

Conducting a large-scale Naturalistic Driving study in Europe

What is Naturalistic Driving (ND)?

- Sensors and cameras mounted in/on own vehicle
- Unobtrusive observations of everyday driving
- Several months to several years
- Recording
 - Vehicle manoeuvres: e.g. speed, acceleration/deceleration, direction
 - Driver/rider behaviour: e.g. eye, head and hand manoeuvres
 - External conditions: e.g. road, traffic and weather characteristics
- In-depth insight in road user behaviour and risk factors
 - In interaction with vehicle, road and other road users
 - In ordinary situations and in (near) crashes

ND data collection and output



The added value of ND

- No experimental interventions
- 'Natural' behaviour in natural surroundings
- Direct observation of conflicts and (near) crashes
 - Exact and detailed information what preceded
 - No bias by post-hoc reporting

More traditional research methods:



Laboratory study



Driving simulator study



Instrumented car study

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

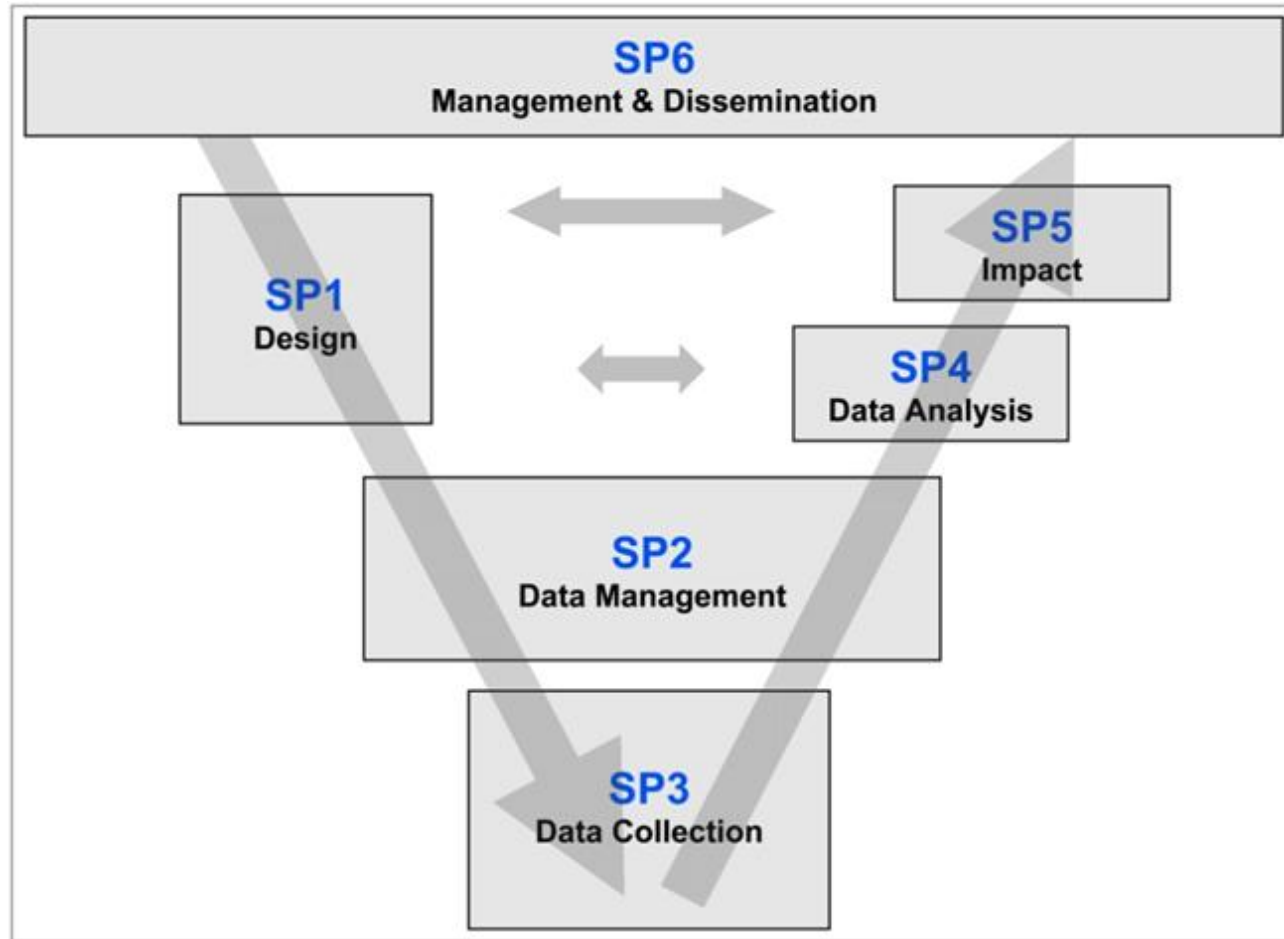
EU funding: € 8 million



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

- Austria
- Spain

Powered two-wheelers

- Netherlands } Long and short haul trucks



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

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