

PROJECT

## InDeV

### InDeV: In-Depth understanding of accident causation for Vulnerable road users

**Funding:** European (Horizon 2020)

**Duration:** May 2015 - Oct 2018

**Status:** Complete

**Total project cost:** €5,470,000

**EU contribution:** €4,900,000



**Call for proposal:** H2020-MG-2014\_TwoStages

[CORDIS RCN : 193358](#)

#### Objectives:

The InDeV project addresses the second bullet point of the topic MG.3.4. i.e. "... in-depth understanding of road accident causation...". The main objective of the project is to develop a tool-box for in-depth analysis of accident causation for Vulnerable Road Users (VRU) based on a combined use of accident databases, in-depth accident investigations, surrogate safety indicators, self-reported accidents and naturalistic behavioural data. The tool-box will help to link accident causation factors to VRUs' accident risk, and provide a solid basis for developing preventive countermeasures and a better input for socio-economic cost calculations of VRU accidents. The proposed approach is to reveal the causal factors by focusing on the process of accident development, thus overcoming the main weakness of the traditional accident data based approach that might find correlations between various factors and accident frequency, but not show the causation chains. It will also employ, to a larger extent, observation of critical traffic events that are similar in process to real accidents, but are relatively more frequent and easier to collect in sufficient quantities.

The InDeV project includes the following steps: i) review of methods and identification of the critical sites and road user groups; ii) observation studies at the selected sites; iii) development of technical tools for automated behaviour data collection; iv) analysis of the socio-economical costs; v) compilation of the project results and development of the safety analyst tool-box.

The project has a clear focus on VRUs and the course of events in accidents they get injured in. It will provide solid knowledge, help to avoid a skewed view on the problem of VRUs' safety, and facilitate the proposed tailor-made countermeasures for these groups. Moreover, with the use of surrogate safety indicators, there will be no need to wait for accidents to happen in order to learn how to prevent them from happening.

#### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### Lead Organisation:

**Lund University, Department Of Technology And Society**

**Address:**

Paradisgatan 5

22100 LUND  
Sweden

**Organisation Website:**

<http://www.lu.se>

**EU Contribution:** €1,644,000

**Partner Organisations:**

**Universiteit Hasselt**

**Address:**

Agoralaan Gebouw D  
3590 Diepenbeek  
Belgium

**Organisation Website:**

<http://www.uhasselt.be>

**EU Contribution:** €594,375

**Corporation De L Ecole Polytechnique De Montreal Association**

**Address:**

BLVD EDOUARD MONTPETIT 2900  
MONTREAL, H3T 1J4  
Canada

**EU Contribution:** €0

**Nederlands Organisation For Applied Scientific Research**

**Address:**

Schoemakerstraat 97  
6060 DELFT  
Netherlands

**Organisation Website:**

<http://www.tno.nl>

**EU Contribution:** €311,000

**Transportøkonomisk Institutt**

**Address:**

GAUSTADALLEEN 21  
0349 OSLO  
Norway

**Organisation Website:**

<http://www.toi.no>

**EU Contribution:** €0

**Politechnika Warszawska**

**Address:**

Plac Politechniki 1  
00 661 Warszawa  
Poland

**Organisation Website:**

<http://www.pw.edu.pl>

**EU Contribution:** €230,000

**Ingenieria De Trafico SI**

**Address:**

DIPUTACIO 211 ENTRESOL  
BARCELONA  
Spain

**EU Contribution:** €317,500

**Bundesanstalt Für Strassenwesen (Federal Highway Research Institute)**

**Address:**

Brüdenstrasse 53  
51427 BERGISCHE GLADBACH  
Germany

**Organisation Website:**

<http://www.bast.de>

**EU Contribution:** €504,375

**Aalborg Universitet**

**Address:**

FREDRIK BAJERS VEJ 5  
9220 AALBORG  
Denmark

**Organisation Website:**

<http://www.aau.dk>

**EU Contribution:** €1,298,750

**Technologies:**

Safety systems  
Vulnerable road users' protection systems

**Development phase:** Research/Invention

**STRIA Roadmaps:** Smart mobility and services

**Transport mode:** Road transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Safety/Security

**Geo-spatial type:** Other