

Data For Road Safety

A Safety Data Sharing Ecosystem



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Presentation Content



- DFRS Overview
- Architecture, Data Types and Data Exchange
- DFRS Collaboration
- DFRS Impact

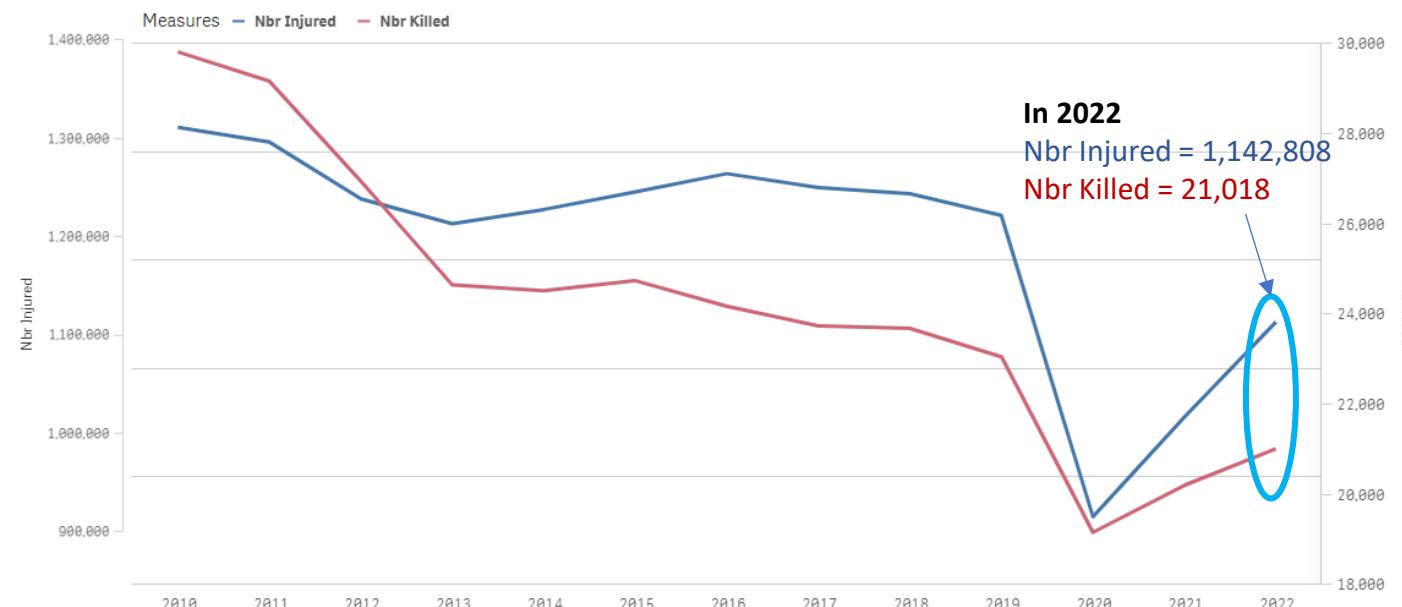
The Purpose...



The European Union (EU) has set the target to reduce road deaths and serious injuries by 50% by 2030 (. To achieve this, the EU has introduced the **Delegated Regulation 886/2013** to govern data sharing for road safety application.



Killed & Injured - Trend





DFRS Overview

About DFRS...



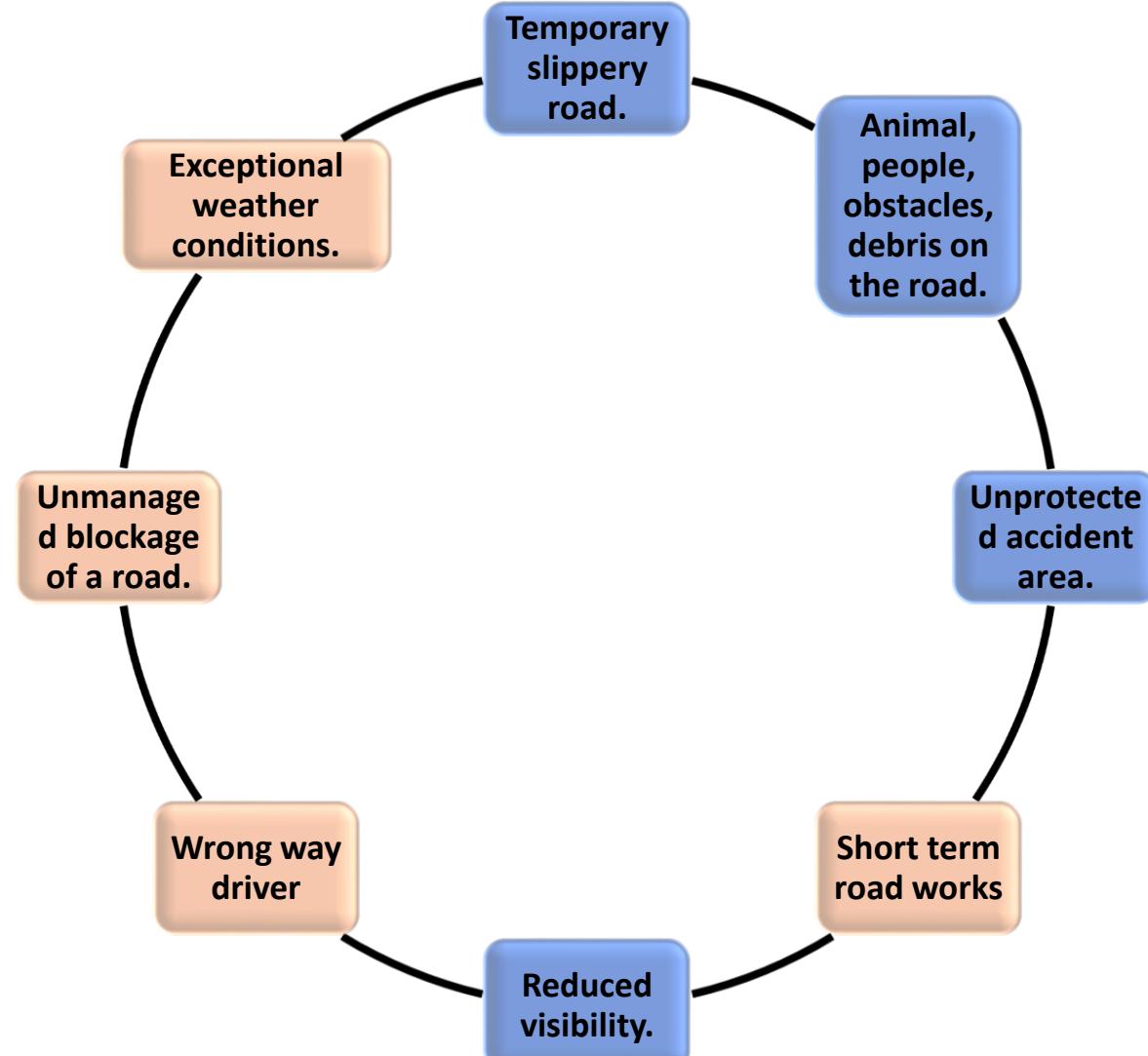
- European Transport Ministries, the European Commission and current industry partners established the Data for Road Safety during the High-Level Meeting on Connected and Automated Driving on 15 February 2017 in Amsterdam.
- The mission of the European Data for Road Safety is to improve road safety by maximizing the reach of safety-related traffic information powered by safety data generated from vehicles and infrastructure.
- The DFRS ecosystem supports the implementation of existing EU laws (DR 886/2013) on access to safety data. By prioritising access to safety data and enabling collaboration between vehicle manufacturers and countries, the DFRS ecosystem aims to enhance traffic safety for all road users.



DFRS governance

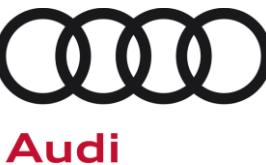
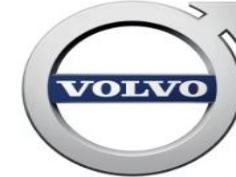


DR 886/213 - SRTI Categories



DFRS Partners

DFRS is made up of 25+ partners and growing...

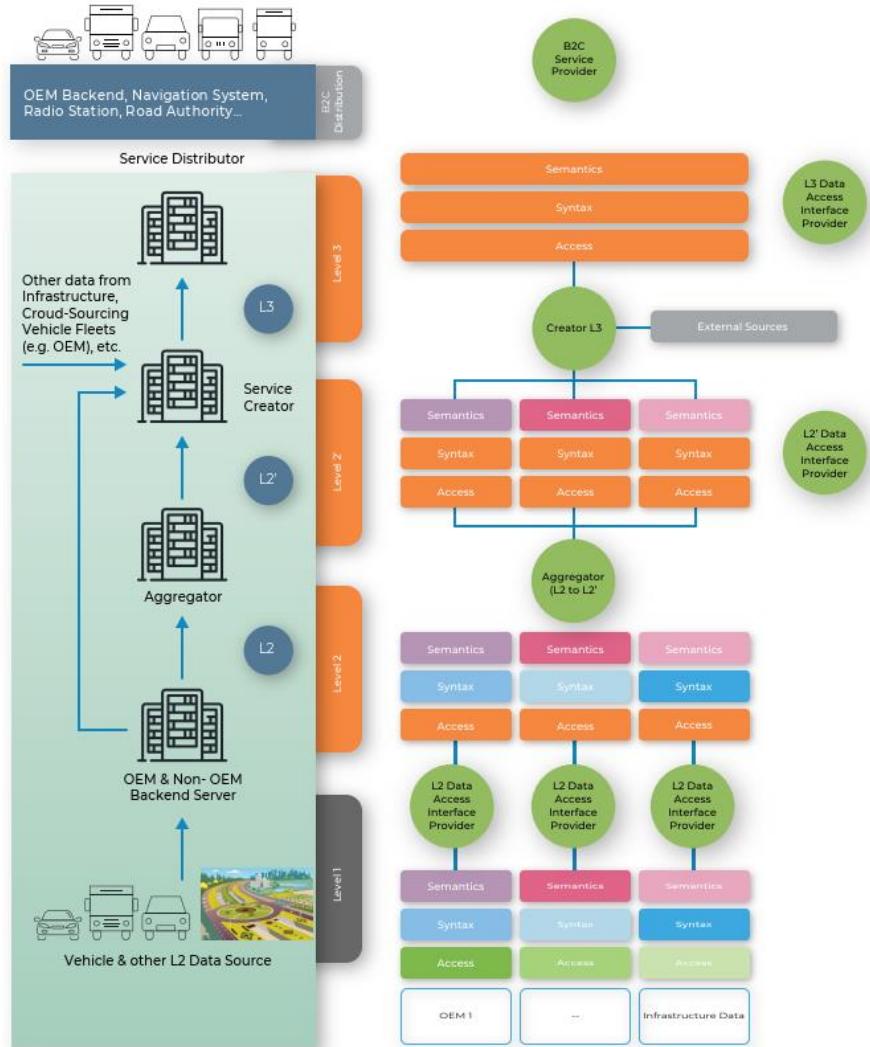


Many new candidates in the row now



Architecture, Data Types & Data Exchange

DFRS Ecosystem Architecture



DFRS Defined Roles

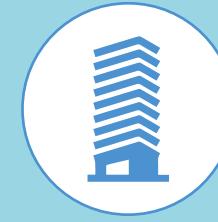
- Data Provider (L2/L3)
- Data Access Interface Provider (L2/L2'/L3)
- Aggregator (L2 to L2')
- Creator (L3)
- Service Provider

DFRS Data Types

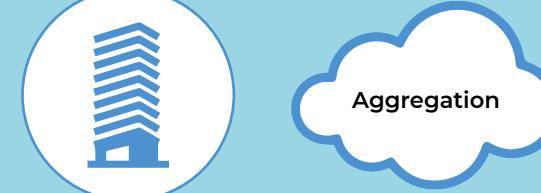


L1 Data

- Raw sensor data
- Doesn't leave vehicle



L2 Data

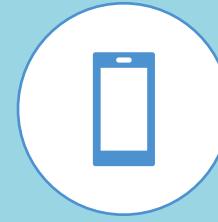


L2' Data

- Mass data from individual vehicles
- Various data types depending on OEM/fleet:
 - Accident / Broken Down Vehicle / Vehicle In Difficulty
 - ABS / Dangerous Slow Down
 - ESP Actuation / Traction Control / Traction Loss / Hydroplaning / Slippery Road
 - Reduced Visibility / Rear Fog Light Activation / Windshield Wiper Operation



L3 Data



Service

- Intelligently clustered & combined
- (Possibly) validated with other data
- SRTI warning message suitable to warn drivers
- Eight SRTI categories defined in Delegated Regulation 886/2013
- Inform end users via various services and channels

SENSORIS Format Utilised

DATEX II Format Utilised



DFRS Industry Collaboration

Industry Cooperation



DATEX II

TISA
Traveller Information Services
Association



®
CAR 2 CAR
COMMUNICATION CONSORTIUM

 C-ROADS



DFRS/Euro NCAP Self-declaration Guide

GET STARTED 



DFRS/Euro NCAP Self-declaration Guide

V 1.0

Data for Road Safety (DFRS) & Euro NCAP have partnered to integrate data-sharing into vehicle safety assessments.

To earn Euro NCAP points through cloud communication, manufacturers must share real-time safety relevant data, ingest safety relevant data, and submit specific self-declarations to both Euro NCAP and DFRS.

This guide gives an overview of this process by describing the various self-declarations for meeting these requirements, underscoring a commitment to innovation, collaboration, and safer roads.

Mapping Table

To be awarded points the data shared/ingested by the car manufacturers at a minimum must fit within the Euro NCAP categories mentioned in the [Safe Driving Vehicle Assistance Protocol 2026](#).

This table shows the mapping of the Euro NCAP categories, and the DR 886/2013 categories used within the DFRS ecosystem.

DFRS SRTI Category (DR 886/2013)	Euro NCAP Equivalent
Temporary slippery road	Poor road
Animal, people, obstacles, debris on the road	Item on road Stopped vehicle with hazard lights on Broken down vehicle
Unprotected accident area	Crashed vehicle
Short-term road works	Construction zones
Reduced visibility	Poor weather conditions
Exceptional weather conditions	
Wrong-way driver	Wrong-way driver
Unmanaged blockage of a road	

DFRS/Euro NCAP Conditions:

- All of DFRS Data has to be used in level 3 (L3) service creation**
 - Other data sources can be used as an option "on top" of DFRS data to further enhance Service Quality
- Access to DFRS Data requires DFRS membership**
 - Principle of Reciprocity remains to be applicable - No L3 consumption without data sharing
- Only DFRS Members can issue relevant self-declarations of any kind (except for OEM Self Declaration "SD1")**
 - A valid Data Sharing Confirmations (SD2) can only be issued by either a DFRS Data Access Interface Provider or by a DFRS Data Aggregator
 - A valid Data Utilization Confirmations (SD3) can only be issued by a DFRS Service Creator
 - A valid Local Hazard Services Self Declaration (SD5) can be issued by any OEM that can provide evidence of being compliant with DFRS Rule-Set by submitting valid Data Sharing Confirmation (SD2) and Date Utilisation Confirmation (SD3)
 - OEMs that don't want to become a DFRS member can choose to delegate their level 2 (L2) data sharing to a DFRS Data Access Interface Provider to use DFRS Services as if they were a DFRS Member
- All declarations need to be renewed whenever there are relevant changes and after an agreed minimum period has elapsed.
The relevant changes take form in the following two scenarios:**
 - Scenario 1: OEM makes changes to their data that is flowing to the DFRS ecosystem
 - Scenario 2: New source added to the DFRS ecosystem





DFRS's Real World Impact

DFRS Impact



Reducing the number of
secondary incidents



Reducing the severity of
accidents



Reducing the impact of
accidents on congestion

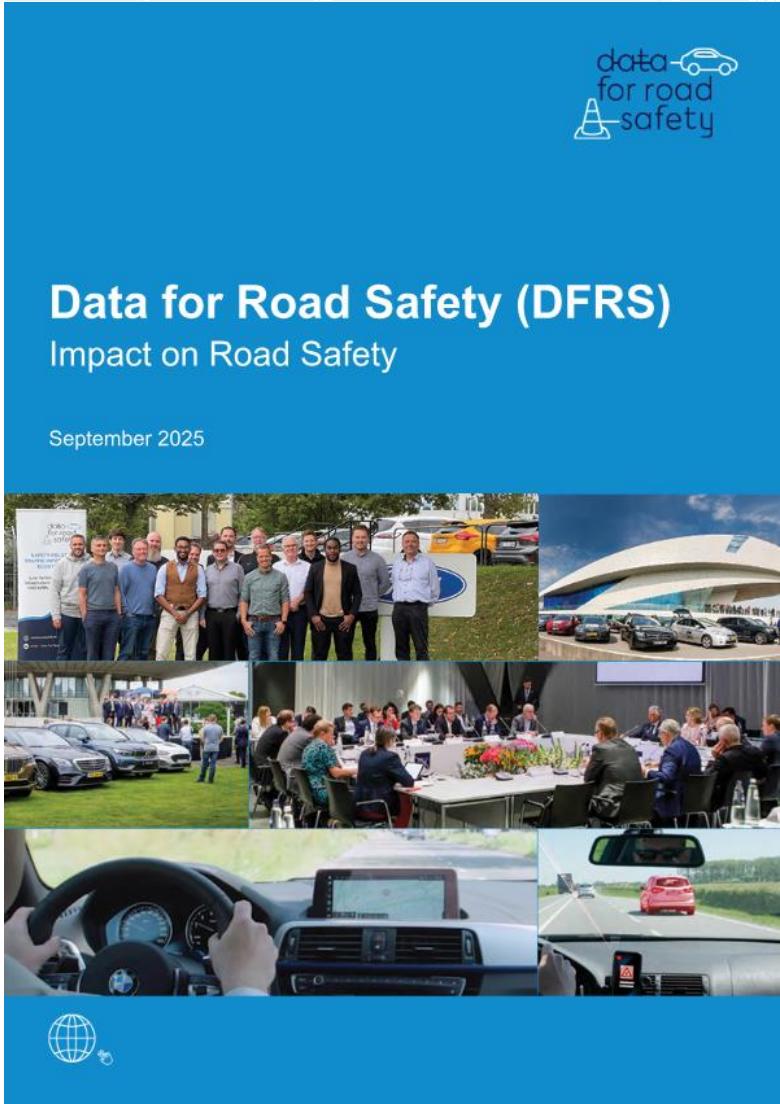
DFRS Live Map



The DFRS live map is a tool that provides a holistic view of safety-related events occurring in the past 48 hours. The dashboard features an interactive map displaying several incidents.



DFRS Impact



Data for Road Safety (DFRS)
Impact on Road Safety

September 2025



Impact of DFRS Data Deployment Across Europe

The deployment of DFRS data across Europe is delivering measurable improvements in road safety, operational responsiveness, and data-driven decision-making. This section of the impact report presents a series of case studies that highlights the diverse applications and impacts of DFRS data among consortium members across Europe.

The impact of DFRS is demonstrated across three strategic dimensions:



Impact through Business Transformation:

exemplified by members such as National Highways, where DFRS data is driving organisational change and innovation in traffic management.



Impact through Evaluation:

highlighted by members such as INRIX, who has showcased how Service Providers use DFRS data to assess and enhance service performance.



Impact through Operation:

examples demonstrated by Austria, where real-time OEM-generated warnings are improving situational awareness and accelerating incident response, particularly in remote areas.

Together, these examples underscore the growing importance of harmonised, high-quality vehicle data in shaping the future of road safety and infrastructure management across Europe.

DFRS Data Volume across a Typical Summer Month (June/July 2025)



Highest number of events in a day



The total number of events



Curious ?

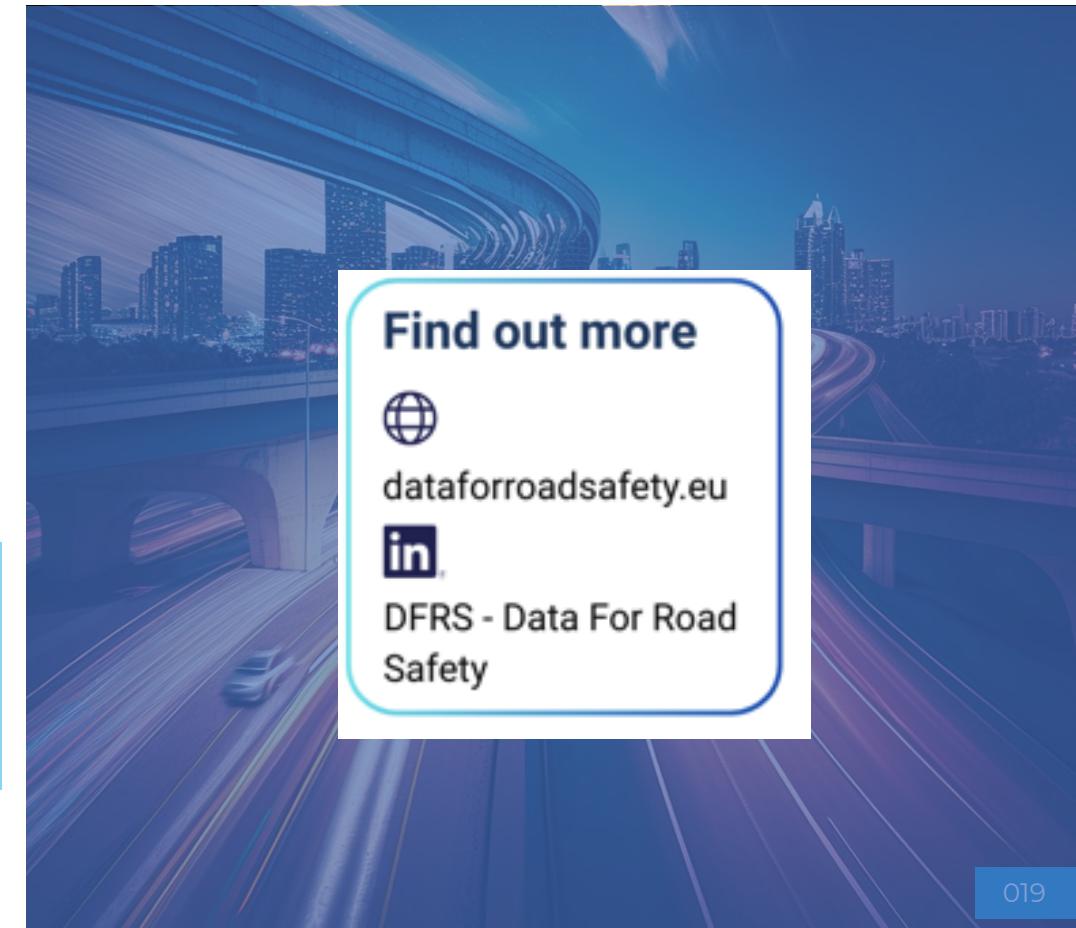


ITS European congress Istanbul -> dedicated SIS on DFRS/SRTI with DG MOVE & Euro NCAP

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Thank you!