



# FACT SHEET

## What is SIMUSAFE?

SIMUSAFE stands for SIMUlation of behavioural aspects for SAFEr transport. This European funded H2020 project will focus research on the most at-risk transportation situations by looking at hazard bearing road designs as well as the altered driving conditions that frequently impair road users.

## Our mission

SIMUSAFE aims to improve driving simulator and traffic simulation technology to safely assess risk perception and decision making of road users, including; pedestrians, cyclists, motorcyclists and powered two wheelers, and car drivers.

## Objectives

The goal of SIMUSAFE (SIMUlator of Behavioural Aspects for SAFEr Transport) is to develop realistic multi-agent behavioural models in a transit environment, following the FESTA-V model methodology where researchers will be able to monitor and introduce changes in every aspect, gathering data not available in real world conditions.

Driving simulators of several vehicles (cars, motorcycles, bicycles) and Virtual Reality (for pedestrians) will be used to simulate test environments. This will also enable the evaluation of scenarios which are not possible even with naturalistic driving (dangerous conditions, multiple monitored actors in the same scene, under influence of substances) whilst obtaining biometric data.

## SIMUSAFE by numbers:

Project start: 1 June 2017

Project ends: November 2020

Project Funded under: H2020-EU.3.4.

Overall budget: € 8 739 480

## SIMUSAFE Partners: by type (academic, industrial, etc.)

- IBM ISRAEL - SCIENCE AND TECHNOLOGY LTD (Israel)
- IFSTTAR; INSTITUT FRANCAIS DES SCIENCES ET TECHNOLOGIES DES TRANSPORTS, DE L'AMENAGEMENT ET DES RESEAUX (France)
- BRAINSIGNS SRL (Italy)
- EFA; EUROPAISCHE FAHRLEHRER ASSOZIATION (Germany)
- MDH; MAELARDALENS HOEGSKOLA (Sweden)
- AIPSS: ASSOCIAZIONE ITALIANA DEI PROFESSIONISTI PER LA SICUREZZA STRADALE (Italy)
- SENSEAIR ALCOHOL SENSING AB (Sweden)
- PROMETEO INNOVATIONS SLNE (Spain)
- PROGRES 123 SRO (Slovakia)
- TMSI; TWENTE MEDICAL SYSTEMS INTERNATIONAL B.V. (Netherlands)
- COVENTRY UNIVERSITY (United Kingdom)
- UNIVERSIDADE DO PORTO (Portugal)
- LINK INNOVA ENGINEERING SL (Spain)



- APTIV SERVICES DEUTSCHLAND GMBH (Germany)
- UNIVERSITA CATTOLICA DEL SACRO CUORE (Italy)

### Research cycles and milestones:

- Phase 1: The first research cycle (data aggregation) will take place between the 7<sup>th</sup> (December, 2017) and 12<sup>th</sup> month (May, 2018) of the project. Aims to measure actor behaviour and aid in the measurement of its proneness of risky behaviour.
- Phase 2: The second research cycle will take place between the 20<sup>th</sup> (January,2019) and 22<sup>nd</sup> month (March ,2019) of the project .Controlled Environment (CE) and Simulator Driving (SD) scenarios will take place in Poland to obtain data from special situations (interactions among actors, controlled extreme situations, etc.).
- Phase 3: The third research cycle will take place between the 31<sup>st</sup> (December,2019) and 36<sup>th</sup> month (May,2020) of the project. SD tests will be performed to improve the analytic tools for the production of meaningful data for intervention planning regarding risk intervention, particularly under different Altered Driving Consciousness (ADC).

### Simulators and Environments utilised:



The project partners will utilise a test track of for the pre-meditated scenarios taking place in Poland and various locations, and more over utilise multiple simulators in five different countries for various scenarios:

Location	Car cockpit	Motorcycle cockpit	Bicycle cockpit	Pedestrian cockpit
ES	3	1	1	1
SE	2	1	1	1
FR	1	-	-	-
IT	1	-	-	-
UK	1	1	1	-

### Outcomes and key metrics:

The projects expected outcomes will advance driver training programmes, the understanding of the usefulness of vehicle safety devices and the safer integration of new types of vehicles, i.e. automated vehicles, on the roads.

Towards the end of the project, initial steps towards the creation of 1) new standards, 2) new safety devices and 3) new training modules are planned. These are expected to lead to a higher level socio-economic impact. The applications of the new knowledge generated is continually evaluated in the project to further assess details of these actions and their full potential.

**Current operations:** Further information can be found via the project’s website ([simusafe.eu](http://simusafe.eu)) or follow SIMUSAFE on Twitter (@simusafe) for project updates, news, and results.