

SENIORS

Safety ENhanced Innovations for Older Road users



MOTIVATION AND OBJECTIVES

A reduction of almost 48% of total fatalities was achieved in Europe in the past years due to efforts that were put into road safety. This includes also a reduced number of elderly fatalities due to road accidents. However, among all the road fatalities, the proportion of elderly is steadily increasing.

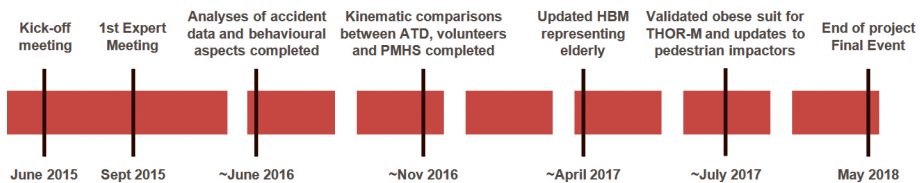
In an ageing society, the SENIORS project aims to improve the safe mobility of the elderly, and obese persons, using an integrated approach that covers the main modes of transport as well as the specific requirements of this vulnerable road user group.

Thus, this project will primarily investigate and assess the injury reduction that can be achieved through innovative and suitable tools as well as safety systems in the automotive sector targeting the protection of the elderly (and obese persons) as car occupants and external road users (pedestrians, cyclists, e-bike riders) being involved in a crash.



PROJECT PLAN, MILESTONES AND DELIVERABLES

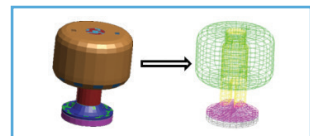
The figure provides a simplified overview of some expected results during the project runtime. Many other deliverables, information on workshops etc. can be found on the SENIORS website.



TECHNICAL APPROACH

The SENIORS project contains four technical Work Packages which interact and will provide the needed substantial knowledge throughout the project.

- WP1** Accidentology and behaviour of elderly in road traffic
- WP2** Biomechanics
- WP3** Test tool development
- WP4** Current protection and impact of new safety systems



Publications of results are aimed at conferences and in journals in short term. The transfer of knowledge and results will also be guaranteed through cooperation with regulatory, industry, consumer and insurance entities by the means of public workshops. An Advisory Board will monitor the project's overall quality standards and give advices e.g., regarding the methodology.

ACHIEVEMENTS

- Identified distinctions in kinematics of road users by age in pre-crash and crash phase
- Identified anthropometric and injury mechanism particularities of elderly, and also obese persons, compared to younger people
- Customised R-scripts package for the calculation of injury risk curves
- Developed and optimised test tools, procedures and assessment methods in the area of passive vehicle safety with special regard to elderly and obese users

Budget	2.9 M€	Funding	2.9 M€
Duration	36 months	Start	June 2015
DG	INEA	Contract n°	636136
Coordinator	Marcus Wisch, BAST	Contact	wisch@bast.de
Partners	Autoliv, Fiat Chrysler Automobiles, Ford, Humanetics, IDIADA, LMU Munich, Transport Research Laboratory		
Website	www.seniors-project.eu		

