



SAFER LEVEL CROSSING BY INTEGRATING AND
OPTIMIZING ROAD-RAIL INFRASTRUCTURE
MANAGEMENT AND DESIGN

SAFER-LC Workshop 3, Madrid, 05 February 2020

Overview

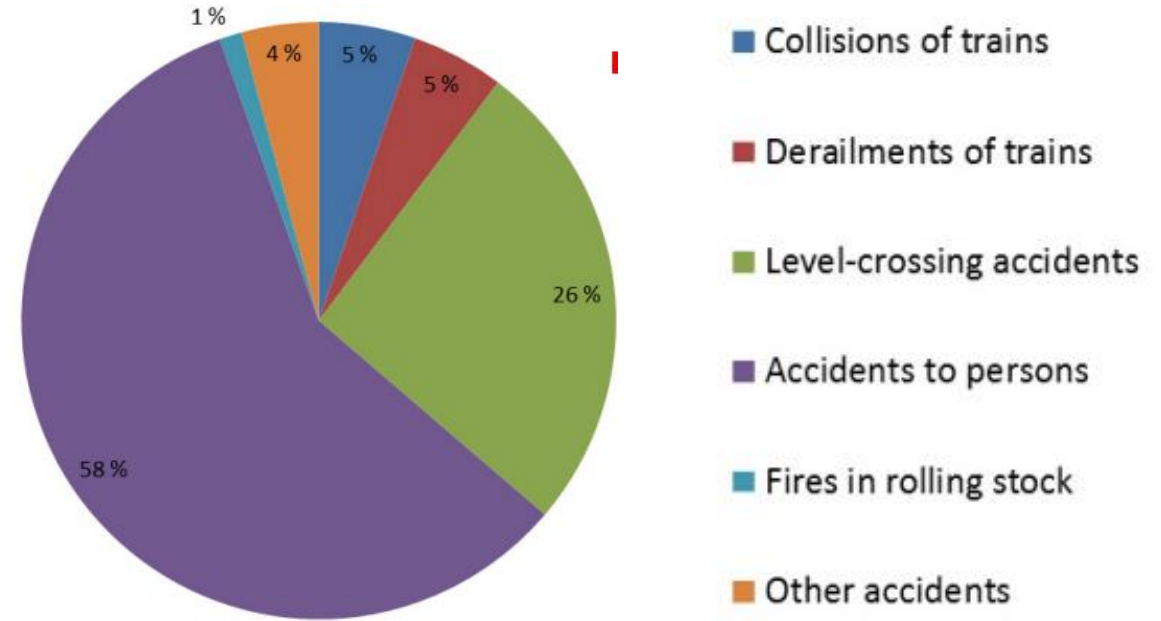
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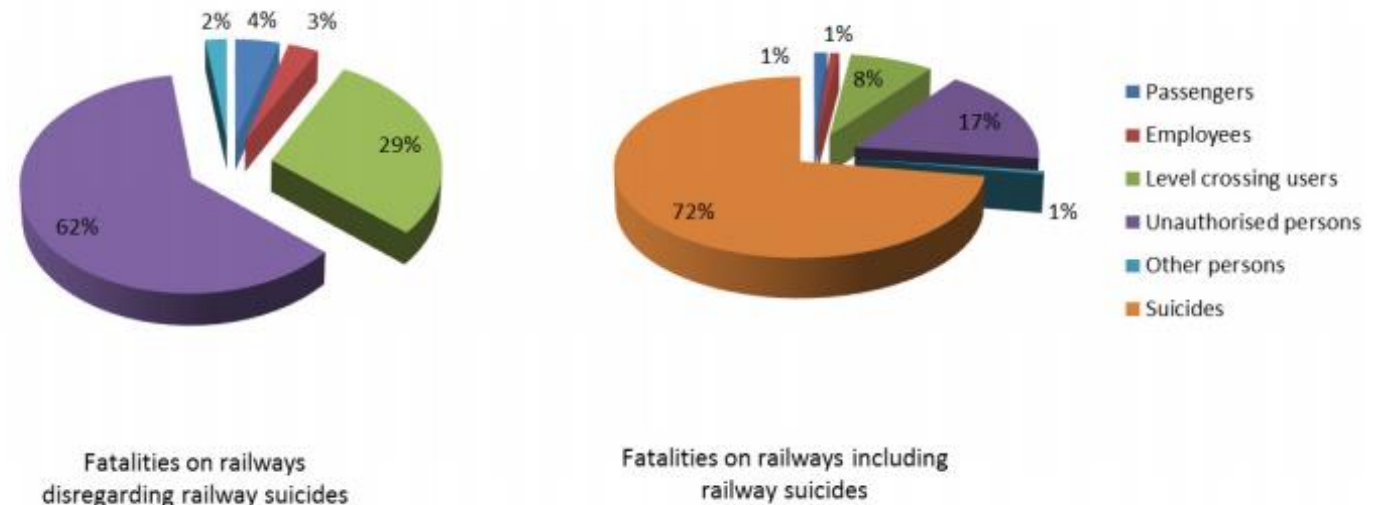


Background

▲ Breakdown of significant accidents (2012-2014) – ERA Figures



▲ Relative share of victims per category of persons (2012-2014)- ERA Figures



Objectives

- ▲ Improve safety and minimize risks at and around level crossings (LCs)
 - by developing innovative solutions and tools to detect as early as possible potentially dangerous situations leading to collisions at LCs and to prevent incidents at level crossing
- ▲ Focus both on technical solutions and on human processes
 - to adapt infrastructure design to end-users
 - to enhance coordination and cooperation between different stakeholders from different transportation modes.
- ▲ Develop a toolbox which will integrate all the project results and solutions to help both rail and road managers to improve safety at level crossings.



Key facts

- ▲ Framework : H2020 Call 2016-2017 Mobility for Growth
 - Topic: MG-3.4-2016 : Transport infrastructure innovation to increase the transport system safety at modal and intermodal level (including nodes and interchanges)
- ▲ Duration : 3 years
 - 1st May 2017 – 30 April 2020
- ▲ Budget
 - 4 888 927 €



Consortium



CONSORTIUM

COORDINATOR: 1-UIC - International Union of Railways

2-VTT - Technical Research Centre of Finland Ltd

3-NTNU - Norwegian University of Science and Technology

4-IFSTTAR - French institute of science and technology for transport, development and networks

5-FFE - Spanish Railways Foundation

6-CERTH-HIT - Centre for Research and Technology Hellas - Hellenic Institute of Transport

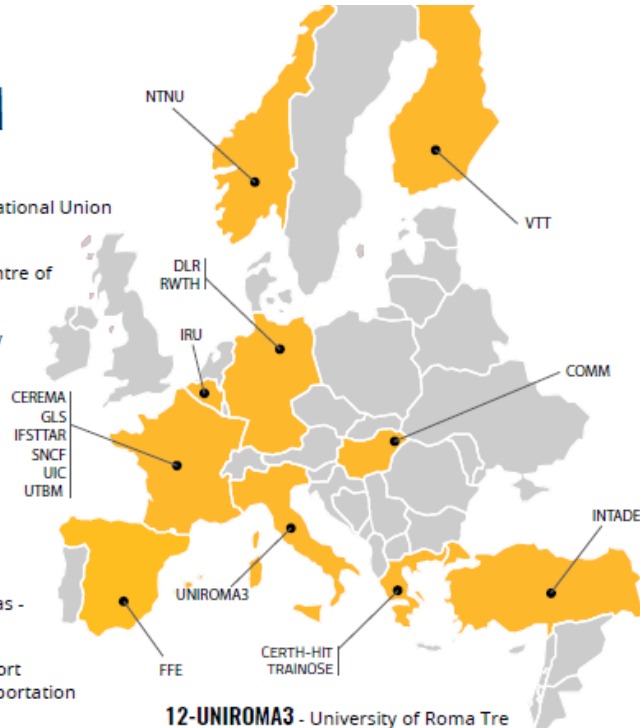
7-TRAINOSE - Trainose Transport - Passenger and Freight Transportation Services SA

8-INTADER - Intermodal Transportation and Logistics Research Association

9-CEREMA - Centre for Studies and Expertise on Risks, Environment, Mobility, and Urban and Country planning

10-GLS - Geoloc Systems

11-RWTH - Rheinisch-Westfaelische Technische Hochschule Aachen University



12-UNIROMA3 - University of Roma Tre

13-COMM - Commsignia Ltd

14-IRU - International Road Transport Union - Projects ASBL

15-SNCF - French Railways

16-DLR - German Aerospace Center - Institute of transportation Systems

17-UTBM - University of Technology of Belfort-Montbéliard

▲ Coordinator : UIC

▲ 17 partners

▲ 8 European Union countries

▲ 2 associate countries

Approach

- ▲ Analysis of LC safety systems and definition of needs and requirements of the rail and road users for safer level crossings
 - ▲ Analysis of the differences in LC environments between countries
 - ▲ In depth review of LC accident data
 - ▲ Identification of most dangerous situations at LC
- ▲ Development of innovative measures
 - ▲ Human centered low cost measures :how measures can be better adapted from a user perspective?
 - ▲ Technical solutions
- ▲ Field-test and evaluation of the measures
- ▲ Elaboration of recommendations and guidelines
- ▲ Collection of all results in a toolbox



Where we are ?

- ▲ Technical work, field tests and evaluation of the measures are completed
- ▲ On-going work
 - ▲ Cost benefit analysis
 - ▲ Recommendations
 - ▲ for standardisation
 - ▲ for policy makers
 - ▲ Update of SAFER-LC Toolbox

Organisation of the day - Morning Session

9.45 – 10.15	Presentation of the SAFER-LC toolbox -G. Havarneanu (UIC)
10.15 – 11.15	Evaluation group exercise
11.15 – 11.45	Coffee break
11.45 – 12.15	Individual evaluation session
12.15 – 13.00	Interactive session - Debriefing and reporting from each group



Organisation of the day - Afternoon Session

<p>14.00 –</p> <p>16.30</p>	<p>SAFER-LC key results, recommendations and next steps</p> <ul style="list-style-type: none"> - WP₁ – LC in Europe and beyond (VTT) - WP₂ – Human Factor at LC (FFE) - WP₃ – Innovative Technical solutions (CEREMA) - WP₄ – Pilot testing (CERTH-HIT) - WP₅ – Cost-Benefit Analysis (IFSTTAR) - WP₆ – Final dissemination event (UIC) <p>Discussion and conclusions</p>
<p>16.30</p>	<p>End of the workshop</p>

