Background

Fatalities on rail premises 2010-2016

- Suicides: 74%
- Trespassers: 17%
- LC users: 7%
- Passengers
- Staff
- Other
Objectives

▲ Improve safety and minimize risks at level crossings
  • developing innovative solutions and tools to detect as early as possible potentially dangerous situations leading to collisions at LCs and to prevent incidents

▲ Focus both on technical solutions and on human processes
  • to adapt infrastructure design to end-users
  • to enhance coordination and cooperation between road users/managers and rail transport managers

▲ 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 starting may 2017

▲ Budget: ~ 5 M€
Consortium

- Coordinator: UIC
- 17 partners
- 8 EU 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

- Development of innovative measures
  - Human centered measures
  - Technical solutions

- Field-test and evaluation of the measures

- Elaboration of recommendations and guidelines

- Collection of all results in a toolbox
Work achieved

▲ Analysis of level crossing safety in Europe and beyond (D1.1 – FFE)

▲ Level crossing accidents and factors behind them (D1.2 – VTT)

▲ Needs and requirements for improving safety at level crossing (D1.3 – UIC)

▲ State of the art of LC safety analysis: identification of key safety indicators concerning human errors and violation (D2.1 – FFE)

Selected scenarios

- Scenario for risk assessment
  - risk evaluation based on user behaviours using automatic video data analysis

- Scenario for smart detection system
  - car stuck or stopped at LC
  - information sharing in case of a train approaching

- Scenario for early detection of failures on the LC’s equipment

- Scenario for surveillance of the road and rail surface at the LC

- Scenario for Optimized closure time

- Communication system for information sharing
## Next Events

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Mid-term conference</td>
<td>10 October 2018</td>
<td>Madrid</td>
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<tr>
<td>Workshop 3 on the toolbox (evaluation)</td>
<td>December 2019</td>
<td>Paris</td>
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<tr>
<td>Workshop 4 on the toolbox (training)</td>
<td>April 2020</td>
<td>Paris</td>
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Website available at

www.SAFER-LC.eu

Contact

Info@safer-lc.eu