

PROJECT

## SAFER-LC

### SAFER Level Crossing by integrating and optimizing road-rail infrastructure management and design

**Funding:** European (Horizon 2020)

**Duration:** May 2017 - Apr 2020

**Status:** Complete

**Total project cost:** €4,888,927

**EU contribution:** €4,888,927



[CORDIS RCN : 209911](#)

#### Objectives:

Over the past few years, there is one person killed and close to one seriously injured every day on level crossings. Therefore SAFER-LC aims to improve safety and minimise risk by developing a fully-integrated cross-modal set of innovative solutions and tools for the proactive management and design of level-crossing infrastructure.

These tools will enable road and rail decision makers to find even more effective ways to detect potentially dangerous situations leading to collisions at level crossings, prevent incidents at level crossing by innovative design and predictive maintenance methods, and mitigate the consequences of incidents/disruptions due to accidents or other critical events.

The project will focus both on technical solutions, such as smart detection services and advanced infrastructure-to-vehicle communication systems and on human processes to adapt infrastructure design to end-users and to enhance coordination and cooperation between different stakeholders from different transportation modes.

The project will first identify the needs and requirements of rail-road infrastructure managers and LC users and then seek to develop innovative smart detection and communication systems and adapt them for use by all types of level crossing users.

A series of pilot tests across Europe will be rolled out to demonstrate how these new technological and non-technological solutions can be integrated, validate their feasibility and evaluate their performance.

The project will deliver a bundle of recommended technical specifications (for standardisation), human processes and organisational and legal frameworks for implementation.

SAFER-LC will also develop a toolbox accessible through a user-friendly interface which will integrate all the project results and solutions to help both rail and road managers to improve safety at level crossings.

#### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### Lead Organisation:

**Union International Des Chemins De Fer**

**Address:**

16 rue Jean Rey  
75015 PARIS

France

**Organisation Website:**

<http://www.uic.asso.fr>

**EU Contribution:** €766,063

**Partner Organisations:**

**Commsignia Kft**

**Address:**

7252 ATTALA SZECHENYI UTCA 14  
BUDAPEST  
1092  
Hungary

**EU Contribution:** €207,500

**Fundacion De Los Ferrocarriles Espanoles**

**Address:**

Santa Isabel 44  
28012 Madrid  
Spain

**Organisation Website:**

<http://www.ffe.es>

**EU Contribution:** €233,688

**Ethniko Kentro Erevnas Kai Technologikis Anaptyxis**

**Address:**

Charilaou Thermi Road  
57001 Thermi Thessaloniki  
Greece

**Organisation Website:**

<http://www.certh.gr>

**EU Contribution:** €216,406

**Intermodal Tasimacilik Ve Lojistikarastirma Dernegi**

**Address:**

SUMER 2 SOKAK 33 17  
06440 ANKARA  
Turkey

**EU Contribution:** €91,750

**Rheinisch-Westfaelische Technische Hochschule Aachen**

**Address:**

Templergraben  
52062 Aachen  
Germany

**Organisation Website:**

<http://www.rwth-aachen.de>

**EU Contribution:** €92,438

**Universite De Technologie De Belfort - Montbeliard****Address:**

Site De Belfort, 2Eme Etage  
90010 Belfort  
France

**EU Contribution:** €265,875

**Teknologian Tutkimuskeskus Vtt****Address:**

TEKNIKANTIE 21  
02150 ESPOO  
Finland

**Organisation Website:**

<http://www.vtt.fi>

**EU Contribution:** €399,125

**Deutsches Zentrum Fr Luft Und Raumfahrt E.v****Address:**

Linder Hoehe  
51147 KOELN  
Germany

**Organisation Website:**

<http://www.dlr.de>

**EU Contribution:** €587,483

**Universita Degli Studi Roma Tre****Address:**

Via Ostiense 159  
154 Roma  
Italy

**EU Contribution:** €120,979

**Neo Gls****Address:**

ALLEE ISAAC NEWTON 2 SITE MONTESQUIEU  
33650 MARTILLAC  
France

**EU Contribution:** €209,513

**Trainose Metafores-Metaforikes Ypiresies Epivatou Kai Fortiou Ae****Address:**

Karolou Str 1  
10437 Athina  
Greece

**Organisation Website:**

<http://www.trainose.gr>

**EU Contribution:** €111,958

**Sncf****Address:**

2 Place Aux Etoiles  
93200 Saint Denis  
France

**EU Contribution:** €204,392

**Iru Projects Asbl****Address:**

Avenue De Cortenbergh 71  
1000 Bruxelles  
Belgium

**Organisation Website:**

<http://www.iru.org>

**EU Contribution:** €237,250

**Institut Francais Des Sciences Et Technologies Des Transports, De L'amenagement Et Des Reseaux****Address:**

2, Avenue Du General Malleret-Joinville  
94114 Arcueil  
France

**EU Contribution:** €276,125

**Cerema (Centre D'Études Et D'Expertise Sur Les Risques L'Environnement La Mobilité Et L'Aménagement)****Address:**

25 AV FRANCOIS MITTERRAND  
69500 BRON  
France

**Organisation Website:**

<http://www.cerema.fr>

**EU Contribution:** €436,860

**Norges Teknisk - Naturvitenskapelige Universitet****Address:**

Hogskoleringen 1  
7491 TRONDHEIM  
Norway

**Organisation Website:**

<http://www.ntnu.no/>

**EU Contribution:** €431,525

**Technologies:**

Unclassified  
Non-technology

**STRIA Roadmaps:**

Network and traffic management systems, Smart mobility and services, Infrastructure

**Transport mode:** Multimodal transport

**Transport sectors:** Passenger transport, Freight transport

**Geo-spatial type:** Other