

# LXinfo - special edition



June 25th, 2009

## 28 nations take part in first Europe-wide awareness day

The first European Level Crossing Awareness Day with the theme "Stop accidents! Europe for Safer Level Crossings!" on June 25<sup>th</sup>, 2009 involves 28 countries. All 25 European Community member states with railways have been joined by Israel, Serbia and Switzerland. Across Europe at least 600 people are accidentally killed on level crossings each year, and where road vehicles are involved there is always the potential for those travelling by train to lose their lives too.



The European Level Crossing Awareness Day is a joint commitment following the signature of the European Road Safety Charter

engaging both road and rail sectors to strong actions on raising public awareness on the danger of risky behaviour at level crossings. This was agreed last March and welcomed by the European Commission's Vice-President and Transport Commissioner, Antonio Tajani, who said: "Road safety is a priority issue for the European Commission. It is my personal conviction that such initiatives should be encouraged. I am sure that activities like the European level crossing awareness day will help to improve the safety at level crossings."

Although level crossing accidents total only 2% of road deaths they account for a third of all rail fatalities. On March 20<sup>th</sup>, 2009 road and rail organisations acknowledged their shared responsibility to deal with this issue by signing the European Road Safety Charter. The charter is an initiative of the European Union, with the objective of

developing concrete actions, assessing results and further heightening awareness about the need to reduce traffic accidents and fatalities through the exchange of best practices in traffic safety in Europe, while adding a European dimension to individual or collective initiatives.

Because 95% of these accidents are caused by road users it is wholly appropriate that the pan-European Level Crossing Awareness Day has been organised jointly by both road and rail sectors. The objective of the day is to reach out to the population at large to help develop the understanding that by



obeying the rules for the safe use of level crossings, their safety and that of others can be improved.

The focus on educational measures and the

promotion of safe behaviour at and around level crossings in each of the 28 participating countries on June 25<sup>th</sup> is built around existing national programmes but utilising the "Stop accidents! Europe for Safer Level Crossings!" message for the first time.



## Hundreds of safety events

A wide variety of awareness raising events are being held across Europe on June 25<sup>th</sup>. They include:

- Leaflets handed out at level crossings, schools, driving schools, scouting clubs and other places too
- Posters displayed in railway stations and other locations where people gather
- Special messages broadcast on radio and television
- Press conferences organised with national and local press.

The European Level Crossing Awareness Day project involves the roads sector, government agencies, train operators, rail infrastructure managers and police forces from all EU countries with railways plus Israel, Serbia and Switzerland. Representative organisations involved include European and International rail associations (CER, EIM and UIC), the European Level Crossing Forum (ELCF), the European Transport Safety Council (ETSC), the European Railway Agency (ERA) as well as the European Commission and media. Additionally, several countries outside Europe such as Australia, Canada, India and South-Africa have shown their interest in the initiative. Who knows, but in future years we may see a World Level Crossing Awareness Day.

## The weakest link: The human factor at level crossings



ERA makes clear that research indicates that the human factor plays a key role when developing measures to improve safety at level crossings.

These measures should take into account the key topics of the research with reference to the human factor, some are reported below.

### *Familiarity*

USA: "The results of the Safety Board study are consistent with previous findings on stop sign compliance at passive crossings. A study funded by the Federal Highway Administration (FHWA) found that 60% of drivers stopped at level crossing stop signs compared with 80 percent who stopped at highway intersection stop signs where there was no level crossing. Another study reported that for familiar crossings, stopping compliance can be as low as 29%." (Safety study, Safety at Passive

Grade Crossings, National Transportation Board (NTSB), 1998)

USA: "This study (Abraham, Datta and Datta, 1998) identified two-thirds of the respondents to be very familiar with the crossings they violated" ('Human Factor in Traffic Safety', Robert Dewar and Paul Olson, 2002)

Australia: Wigglesworth investigated 85 fatal accidents which occurred at level crossings in Victoria between 1973 and 1977, 73/85 drivers (86 %) were familiar with the crossing (Wigglesworth 1979)

USA: "Overall, each of the 18 drivers interviewed by the Safety Board underestimated the frequency of train crossings per day, typically by a factor of 2 to 3" (Safety study, Safety at Passive Grade Crossings, NTSB, 1998).

### Knowledge of rules

Austria: most of 169 drivers interviewed felt badly informed about behaviour rules at level crossings (presentation published by the Austrian Road Safety Board)

Germany: 33% of the road users wrongly believed that they had not to stop at a red flashing signal; 8% believed that they were allowed to cross through lowering gates, if this was possible without danger (presentation published by the Austrian Road Safety Board at: [http://www.kfv.at/fileadmin/webcontent/Publikationen/Fachartikel/VM/Enquete\\_2008/5\\_Human\\_Factors\\_Pripfl.pdf](http://www.kfv.at/fileadmin/webcontent/Publikationen/Fachartikel/VM/Enquete_2008/5_Human_Factors_Pripfl.pdf) )

### Waiting time

USA: "the reasons given for violating warnings often involve statements that the train was not in sight, was stopped for an unreasonable amount of time or was moving slowly" ('Human Factor in Traffic Safety', Robert Dewar and Paul Olson, 2002)

Germany:

About 1/3 of road users are regularly annoyed by long waiting times  
2 minutes between signal activation and arrival of the train is acceptable  
Willingness for violations increases with long waiting times (15 min)(Presentation published by the Austrian Road Safety Board).

### Distraction

USA: "The Safety Board cited distraction as the primary probable cause or contributing factor in 12 of the 60 study accidents" (Safety study, Safety at Passive Grade Crossings, NTSB, 1998)

### Recognition errors

USA: "Berg et al. (1982) found that 80 percent of accidents involved recognition errors (i.e. breakdown in the detection or perception of information necessary to recognize the presence of an approaching train and to identify the action necessary to avoid a collision)" ('Human Factor in Traffic Safety', Robert Dewar and Paul Olson, 2002)

## Message of support from Operation Lifesaver



Operation Lifesaver, which has played a major role in reducing level crossing deaths in the United States, Canada and elsewhere has voiced its support for the European Level Crossing Awareness and the importance of addressing safety at level crossings.

"We congratulate the nations participating in European Level Crossing Awareness Day (ELCAD) today for successfully bringing individual countries together to showcase their rail safety efforts," said Washington based Operation Lifesaver President Helen M. Sramek.

"We welcome the effort this week, as we in the United States launch a new campaign to reduce the number of pedestrians killed

and injured while trespassing on or around train tracks."

The goal of Operation Lifesaver's new Common Sense public awareness campaign is to reduce the number of pedestrians who are killed and injured when trespassing around tracks and trains. The "Common Sense" campaign is designed to educate 18 to 34-year-olds, who make up the largest percentage of rail-related pedestrian casualties, about the risks of trespass on railways. The campaign includes an interactive website, internet ads, videos, and local events.

More information is online at [www.CommonSenseUseIt.com](http://www.CommonSenseUseIt.com).

# The rail sector view



The European Rail Agency (ERA) has issued a booklet in support of the European Level Crossing Awareness Day which sets out the latest data from across the European Union and comments on the key risk factors underlying level crossing accidents.

ERA was set up to help create an integrated railway area by reinforcing safety and interoperability. Its main task is to develop economically viable common technical standards and approaches to safety, working closely with railway sector stakeholders, national regulatory and accident investigation authorities, other European and concerned parties.

Statistics on accidents at level crossings across the European Union have been published by Eurostat since 2004 and ERA since 2006. ERA statistics show that, in 2006 and 2007 30% of deaths and 32% of serious injuries as a result of accidents on railways occur at level crossings. Level crossing accidents were 21 % of all significant accidents on railways. 2,592 significant accidents at level crossings occurred in the period 2006–2007 resulting in 860 deaths and 955 serious injuries. These statistics make level crossings an area of primary importance in the management of transport safety.

Europe's National Investigation Bodies have investigated serious accidents since 2006, some of them occurred at level crossings; all information on accidents that they have investigated can be found at: <http://pdb.era.europa.eu/pdb>

ERA makes recommendations to the European Commission (EC) relating to safety and interoperability. However, technical requirements for level crossings are within the competence of member states and are not a subject of these recommendations.

In 2008, ERA recommended to the EC a suite of Common Safety Targets (CSTs), which include safety at level crossings which led to an EC decision earlier this year which requires member states to maintain their current risk to level crossing users as long as the risk is lower than ten times the EU average, otherwise they will have to improve their performance. This target is expressed in terms of collective risk to level crossing users as well as to passengers, employees, unauthorised persons on railway premises and others.

# What's happening across Europe?

## Austria



7,116 level crossings, 36 fatalities in 2007, 25 fatalities in 2008

Partners: Ministry of Transport, Austrian Federal Railways (ÖBB), Austrian Road Safety Board (Kuratorium für Verkehrssicherheit, KfV)

Events: Leaflets distributed at LX, in schools, driving schools... (2 weeks before) / Press conference and press release on 25th in co-operation with TV and radio / Cinema advertising / Spot broadcast in radio and TV / Raffle with some important and meaningful questions / June 25<sup>th</sup> will be a kick off a larger term campaign ending beginning of July, starting again in September.



## Belgium

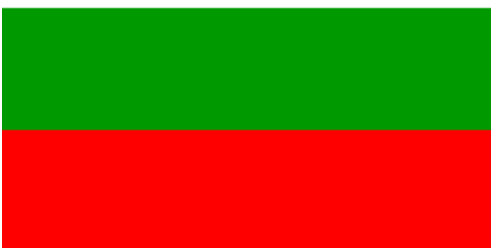


1,929 level crossings, 19 fatalities in 2007, 12 fatalities in 2008

Partners: Infrabel (Rail Infrastructure Manager), IBSR

Events: Special focus on main harbours of Belgium targeting truck drivers / Leaflets to be dispatched in the enterprises close to the harbours / Ongoing national campaign started in March 2009 with distribution of leaflets in all main train stations and at dangerous level crossings / TV spots / posters / Participation in EC press conference

## Bulgaria

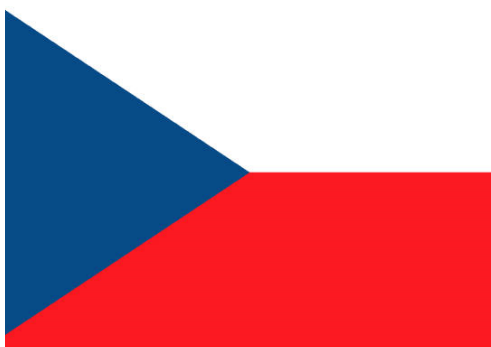


820 level crossings, 4 fatalities in 2007, 3 fatalities in 2008

Partners: National Railway Infrastructure Company of Bulgaria (NRIC), Ministry of Transport

Events: Press release issued by the Bulgarian Railways (NRIC) / NRIC employees will stop and inform drivers at busiest level crossings of rules for correct use of level crossings / leaflets / Possible TV report

## Czech Republic



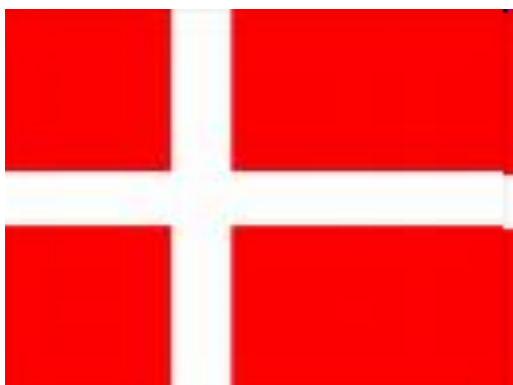
8,296 level crossings, 30 fatalities in 2007, 43 fatalities in 2008

Partners: SZDC (Railway Infrastructure Administration)

Events: Press release / Publication of safety messages and dangers / Cooperation with national TV and radio (interviews, debates, discussions, etc.) / Posters and information: leaflets, and advertising boards / Internet (special website of the campaign with photographs of real situations on LX and interactive discussion)

# What's happening across Europe?

## Denmark



1,075 level crossings, 0 fatalities in 2007, 2 fatalities in 2008

Partners: Danish Road Directorate, Danish Road Safety Council, Danish railway companies

Events: Press release

## Estonia



330 level crossings, 13 fatalities in 2007, 9 fatalities in 2008

Partners: AS Eesti Raudtee, AS Edelaraudtee, AS Elektriraudtee (Railway companies), Eesti inghäalingute Liit (The Association of Estonian Broadcasters) / Politsei (Police forces) / Tehnilise Järelevalve Amet (Estonian Technical Surveillance Authority) / City of Tallinn / Operation Lifesaver Estonia

Events: Outdoor posters displayed at LX located in major cities / E-mail to notify local residents / Internet: An advertising clip will be prepared – displayed on various web sites (youtube, vimeo) / Radio: Special message will be developed – broadcasted by all radio stations / TV: Press release to all channels / Estonian version of Operation Lifesaver with a dedicated website / 3 campaigns per year

## Finland

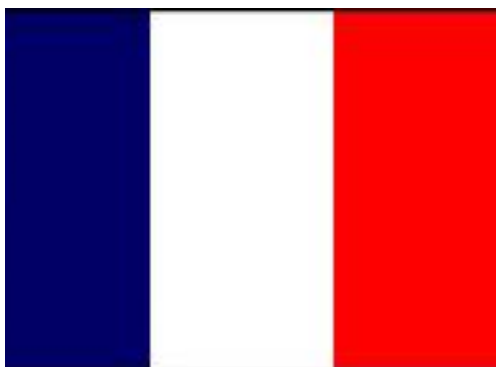


4,218 level crossings, 10 fatalities in 2007, 8 fatalities in 2008

Partners: Ministry of Transport and Communications Finland. The Finnish Rail Administration, The Finnish Rail Agency, Liikenneturva – Central Organisation for Traffic Safety in Finland, VR Group (Finnish Railways), Finnish Road Administration, Finnish Vehicle Administration, Finnish Motor Insurers Centre, Police forces

Events: Radio commercials in June, July, October and November / Website and brochure at [www.rhk.fi/tasoristeys](http://www.rhk.fi/tasoristeys) / Material for driving school use / Posters at harbours / Press release / Police enforcement

## France



18,507 level crossings, 38 fatalities in 2007, 38 fatalities in 2008

Partners: Rail infrastructure Manager (Réseau Ferré de France, RFF) / National Road Safety Organisation (Sécurité Routière) / Traffic control association (Prévention Routière) / SNCF / Sustainable development Ministry (Ministère de l'écologie, de l'énergie, du développement durable et de l'aménagement du territoire) / National Security Service (Police Nationale) / Police Forces

Events: Selection of 18 level crossings for half-day initiatives to give a verbal awareness message, leaflets and pins to road drivers stopped at these crossings / Police forces involved with speed cameras / Local press (TV, Radio, newspapers) / Two websites: [www.securitepassageaniveau.fr](http://www.securitepassageaniveau.fr) / [www.catenaireman-lejeu.com/web.index.html](http://www.catenaireman-lejeu.com/web.index.html) / Repetition of the 2008 campaign with a focus on young drivers and pedestrians / An independent telephone survey to assess the results

# What's happening across Europe?

## Germany



20,385 level crossings, 66 fatalities in 2007, 52 fatalities in 2008  
Partners: Ministry of Transport / Deutsche Bahn / ADAC DVR  
(Professional association having liability for industrial safety and insurance)

Events: Road show campaign: Expertly staffed tour with ADAC truck to market places and railway stations. Prelude in April touring the cities of Dresden (April 21<sup>st</sup>), Kiel (April 23<sup>rd</sup>) and Hannover (April 25<sup>th</sup>). Continuation in summer / autumn in the cities of Mainz (June 25<sup>th</sup>), Stuttgart and Rosenheim / Advance advice of the road show by posters on Buses, in railway stations and other busy / locations / Press, Press conference, expert panel, interviews with mayors, police and traffic enterprise / Child programme, school classes within the scope of the road safety education / Film and Flyer from ADAC, DVR and German railways / representatives as a contact in the truck

## Greece



N/A level crossings, N/A fatalities in 2007, N/A fatalities in 2008

Partners: IOAS (Road Safety Institute), possible partnership with the Ministry of Transport

Events: Press release issued by IOAS / Possible publication and distribution of a leaflet and broadcast of a radio advertisement

## Hungary



5,900 level crossings, 71 fatalities in 2007, 118 fatalities in 2008

Partners: Hungarian Railways (MAV)

Events: Press release



## Ireland



1,073 level crossings, 0 fatalities in 2007, 1 fatalities in 2008

Partners: Irish Rail

Events: Press release

# What's happening across Europe?

## Israel



112 level crossings, 0 fatalities in 2007, 0 fatalities in 2008

Partners: Israeli Railways, Road Safety Authority

Events: Press release / Radio advertising / Possible distribution of leaflets to drivers and pedestrians / Publication of safety messages on Israel Railways internet site

## Italy



N/A level crossings, N/A fatalities in 2007, N/A fatalities in 2008

Partners: Italian Railways

Events: Press release

## Latvia



666 level crossings, 34 fatalities in 2007, 27 fatalities in 2008

Partners: Railway organisations

Events: Press release / Campaign focusing on safety at railway in general targeting all users, including level crossing users

## Lithuania



523 level crossings, 4 fatalities in 2007, 4 fatalities in 2008

Partners: Not advised

Events: Not advised



# What's happening across Europe?

## Luxembourg



147 level crossings, 0 fatalities in 2007, 0 fatalities in 2008

Partners: Sécurité Routière Luxembourg

Events: Press release

## Netherlands



2,700 level crossings, 19 fatalities in 2007, 18 fatalities in 2008

Partners: ProRail (national rail infrastructure manager)

Events: Press release / Speech at 'Day of the Railways' conference about level crossing issues / Ready made article for door-to-door papers about do's and don'ts at level crossings / 2 campaigns throughout the year: for children the campaign "DingDingDing!" and for youngsters the campaign "Pazzup!" (use of website, flyers, advertisements, videogame)

## Poland



2,700 level crossings, 19 fatalities in 2007, 18 fatalities in 2008

Partners: Polish Railways (PKP), National Council of Road Traffic Safety, Chief Command of Police, Chief Command of Border Guard, Chief Command of Military Police, Chief Command of State Fire Service, Polish Scouts Union, "Safe Driver" Krzysztof Hołowczyc Foundation, Media, organisations

Events: 27 press conferences across Poland / Reconstruction of a level crossing accident in Warsaw / Education actions in schools / Cooperation with TV and radio (spots emission, interviews, debates, discussions etc.) / Posters and information – leaflets, billboards, advertising boards / Internet (website of the campaign, advertising banners on websites bodies involved) / Voluntary engagement / All year round campaign (emphasis on activities during summer break)

## Portugal



2,700 level crossings, 19 fatalities in 2007, 18 fatalities in 2008

Partners: Ministry of Transport, Portuguese Railways (REFER)

Events: Kick off national campaign "Pare, Escute e Olhe" at two level crossings / European Road Safety Charter to be signed / Presentation of Green book about LX security / Press release / TV campaign outdoor advertising / Level crossing area on REFER website / Flyers and brochures / Stressing three main priorities: closures, upgrades, awareness

# What's happening across Europe?

## Romania

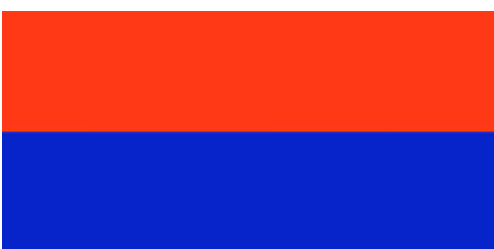


5,132 level crossings, 60 fatalities in 2007, 42 fatalities in 2008

Partners: Romanian Railways (CFR)

Events: Press release

## Serbia



N/A level crossings, N/A fatalities in 2007, N/A fatalities in 2008

Partners: Not advised

Events: Not advised

## Slovakia

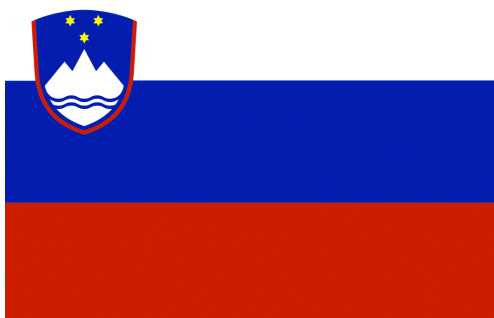


2,265 level crossings, 6 fatalities in 2007, 17 fatalities in 2008

Partners: ŽSR (The Railways of the Slovak Republic), Ministry of Transport, Post and Telecommunication / Police Forces / Media

Events: Press release / Distribution of DVD on safety at level crossings in cooperation with the Czech Railways / Distribution of brochure "the young rescuer" in primary schools produced in cooperation with the Ministry of Interior and Transport / Focus on June 25<sup>th</sup> becoming a special day for safety involving the railways, police forces and media

## Slovenia



932 level crossings, 10 fatalities in 2007, 9 fatalities in 2008

Partners: Ministry of Transport, police forces, Slovenian Railways

Events: Advertisements in local newspapers, on the local radio and television / Lectures / Posters for the local communities / Circular letters to kindergartens, primary and secondary schools / Police surveillance at level crossings / Recommendations to driving schools / Distribution of posters informing the local population building on actions undertaken in October/March

## Spain



2,272 level crossings, 19 fatalities in 2007, 17 fatalities in 2008

Partners: ADIF (national rail infrastructure manager)

Events: Press release

## Sweden



9,000 level crossings, 3 fatalities in 2007, 3 fatalities in 2008

Partners: Banverket (Rail Administration), Vägverket (Road Administration)

Events: 8 LX spread over the country. Each of them will be covered by 4 people with local media as well as other authorities (police, local politicians etc). / Simple folder to handout to everyone passing, leaflets, soft drinks / Experience from previous campaigns re-used / National press release / Campaign part of a broader road/rail safety week / Surveys to measure effectiveness of the message

## Switzerland

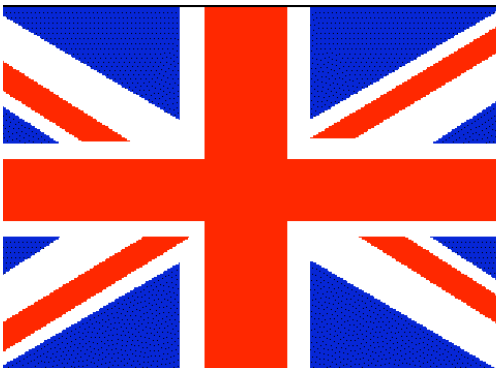


5,510 level crossings, 6 fatalities in 2007, 10 fatalities in 2008

Partners: Federal Department of Transport

Events: National Video spot distributed through TV, radio and internet / Use of posters in public places and special presentations in schools considered/ Press release / Targeted presentation in selected institutions by their own representatives (active distribution) / A survey will be made to assess the results

## United Kingdom



7,500 level crossings, 12 fatalities in 2007, 14 fatalities in 2008

Partners: Network Rail, Rail Safety and Standards Board, Industry, police forces, key political and media stakeholders

Events: National press release and conference / Local press events / 10 level crossings across the country with face to face briefing of users

*Note: Data, details of events and partners submitted by individual nations and collated by International Union of Railways (UIC)*