61st session of UN-ECE WP1 on road traffic safety
Geneva, 22 March 2011

Road and Rail interfaces

Isabelle Fonverne, Projects Officer Safety and Interoperability Coordinator of ILCAD
So just why is someone from the rail community addressing your road safety meeting?
> We have learned the value of collaborative working within the rail sector

> We have some problem areas that we can’t solve on our own

> We need your help
Outline

> The UIC – who, what, how?
> System Performance, safety and the interfaces
> Is it all engineering?
> The cooperative approach
What is UIC?

> A trade association for the global rail operating community

> Formed in 1922

> 200 members on all continents

> Integrated Railway Companies

> Railway Undertakings

> Infrastructure Managers

> Railway service providers

> Public transport companies
Our Mission

Promote the development of rail transport at global level, in order to meet challenges of mobility and sustainable development.
Who are we?

UIC in 2011: 200 Members on all Continents

- **80 active members**: integrated railways, railway infrastructure managers, railway operators, from Europe, Russia, the Maghreb, the Middle East, Kazakhstan, India, Pakistan, Japan, China, Korea, South Africa

- **83 associate members**: including railways in Asia, Africa, America, Australia

- **37 affiliate members**: companies conducting activities connected with rail transport public transport, sleeping cars, caterers, other railway bodies, ...
Where are our members?
What do we do?

- Know How,
- Benchmarking
- Technical and Operational expertise,
- Databases
- Technical solutions,
- Regulations, standards,
- Best practises.

- Exchange platforms,
- Innovation: new ideas, new concepts,
- Protecting member railways’ common interests,
- Support policies of development of key infrastructure projects

- Specifications,
- Standards,
- Interfaces,
- Studies,
- Interoperability for international rail corridors

- Forums
- Seminars
- Conferences

- Congresses
- WCRR 2011 (Lille)
- Technical Workshops
- Global Conferences and events (ILCAD International Level Crossing Awareness Day 9 June 2011)
Safety and interfaces
Benchmarking system safety performance

> Once any system is up and running it is sensible management practice to monitor how well it is doing

> Safety is the most important aspect of the rail product

> UIC has provided a safety database for our members since 2001

> Is now generating some very reliable data

> Is used to support the decision-making process

> Facilitates the direction to take for strategic investment
What has it shown us

- A whole range of things about system reliability
- Identifies areas of weakness
- Allows sensible studies on operational risk
- LX accidents account for 30% of all rail accidents
- 98% of all accidents at LX are caused by road users/pedestrians
- Important risk area for rail sector but a small element for road (2% of road fatalities in Europe)
Level Crossings some facts....

> They have been with us for years and according to the Vienna Convention 1968. According to article 18 of the Vienna Convention Rail has the priority!!

> Europe: trains have priority at level crossings. Road users must give way

> 2 main types of LC: Passive LCs / Active LCs

> Some LC accidents are due to malfunctions in rail safety systems

> Most level crossing accidents are linked to the behaviour of the users (98%)
Clearly this is something that we need to tackle

but we can’t do it alone!
Level crossings: A big operational risk for the Rail Community

- We could engineer out the problem – close all the level crossings
- Would restrict mobility in many places
- Build bridges or underpasses – not always possible in built up areas
- Better still go to the root of the problem - raise awareness and educate users
- Need to redress the balance of responsibilities and promote the multimodal nature of LX safety
- Engage in a real partnership with key stakeholders
- Promote consistency and coherence of policies at all levels
- Improve infrastructure and engineering – where necessary
So what has been done

> EC High Level study and report in 2003
> Global Level Crossing Symposia 1990 – 2010
> SELCAT project – FP6
> ELCF – 2005 – present (Engagement, Enforcement, Education)
> Signature of the ERSC of the principle rail associations
> 1st EC Workshop on LX safety – April 2010 and 2nd on 16 March 2011 in Tallinn
> Operation Lifesaver in USA, Canada, Argentina, Mexico, Estonia, Finland and soon in Israel
> ILCAD (2009-2010 and now 9 June 2011)
So what else has been done?

> In Australia a number of very severe accidents

> National Road/Rail Interface Committee (high level)

> SELCAT had a similar idea for Europe

> ELCF have taken over the European Road/Rail Interface Strategy

> ELCAD and ILCAD (EC support for the video)
Developing public awareness is key

**ELCAD (European Level Crossing Awareness Day)**
25 June 2009

> ELCF Task Force led by UIC
> 27 EU countries took part
> High-Level Press Conference at the European Commission
> Key actors involved (EC, EP, ERA, Road/Rail sectors, ELCF)
> Broad support (UN, Australia, Argentina, South Africa, USA...)
ELCAD became **ILCAD (International Level Crossing Awareness Day)** in 2010

**Range of supporting links and projects**

- ELCF/DG TREN high-level workshop held on 15-16 April 2010
- Maintenance of LX Signage (Vienna Convention) contact with UN-ECE
  
  **Common message - “Act safely at level crossings”**

- More than 40 countries across 5 continents
- A video clip *totally financed* by DG Move (road safety unit)
- High level press conference – EC, UNECE, road and rail sector...

[www.ilcad.org](http://www.ilcad.org)
11th Global Level-Crossing Symposium, 26th – 29th October 2010, Tokyo, Japan

- The Global Level Crossing Symposium is a forum bringing together road and rail safety experts from all around the world to exchange information on safety/management of LX.
- The first LX Symposium took place in 1990 in the USA, June 2008 at UIC HQ in Paris, October 2010 in Tokyo, October 2012 will be in London.
- Core theme: Cooperation.
- For more information: www.level-crossing.org.
International/Educational Conference on railway safety on 15 March + 2nd EU workshop on level crossing safety on 16 March 2011

In Tallinn, Estonia

150 participants from 22 countries, about 30 speakers
“Apart from statistics, there are many sad stories around, horrible accidents that happened at level-crossings and affected us directly or indirectly. It is time now to put our knowledge, capacities and willingness together and make the difference! To this end, UNECE is ready to host a multi-disciplinary group of experts including experts from road traffic safety, railway transport, road and railway infrastructure, where UNECE Governments, international organizations (UIC), the European Commission and the stakeholders at large would be represented.”

Eva Molnar, Director, Division of Transport, UNECE
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group

Objective

> This is a multi-disciplined problem which needs a multi-disciplined approach

> Would like to develop the concept of a UN-ECE Road/Rail Interface Safety Group (Australian model)

> Objective in a short term: to bring together safety specialists from the road and rail so as to better understand the issues at this intermodal interface.

> Longer term, through a multi-disciplined strategic plan, foster a contribution to the reduction of the level of operating risks to rail from errors and omissions by third parties whilst supporting the overall objective of reducing the instances of fatality to road users and pedestrians.
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group - Role

> to provide guidance, advice and direction through the UN-ECE Working Party 1 to the UN-ECE Member States on national policy and initiatives that will reduce the level of operating risks to rail from errors and omissions by third parties at places where there is a level interface between road and rail including foot paths.

The group will incorporate the following broad principles:

> Adopt a “Safe System” approach gathering the 5 key elements typically used in level crossing safety of Engagement, Education, Engineering, Enforcement and Economics leading to safer road use, safer vehicles, safer roads and road sides, safer speeds and finally safe behaviour, Railway level crossings can be considered within the same system by the recognition of these elements at the interface between road and rail.

> Engage with industry, government, enforcement agencies, road and railway stakeholders and system users.
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group – Functions

To fulfil its Role the Group will:

1. Develop policy recommendations and provide guidance and advice through the UN-ECE Working Party 1 to the Member states.
2. Develop a road/rail interface strategy and supporting action plan that contributes to achieving the goals of the Transport plan in the Members states and the objectives of the rail sector.
3. Monitor and report to the UN-ECE WP1 on the effectiveness of initiatives deployed under the strategy, including recommending corrective actions.
4. Assess potential projects to ensure that priority is given to system wide safety initiatives that address high risk.
5. Develop a framework to support a consistent national implementation of initiatives.
6. Identify future strategic and operational research needs and mechanisms for delivery using, where possible, existing resources.
7. Monitor international initiatives at the road/rail interface.
8. Develop and maintain networks and engage with and share knowledge with key stakeholders.
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group – Membership (1)

Membership should include at least one representative from:

- The UN-ECE Working Party 1
- The ELCF (European Level Crossing Forum), its Chairman and Secretariat. Some ELCF members representing from both railway and road safety.
- The rail sector
- Road and Rail Safety authorities
- Enforcement agencies
- Road vehicle manufacturers,
- GPS manufacturers,
- Organisations representative of Road drivers, motorcyclists, pedestrians, driving instructors
- Insurance companies

The Chair may invite others to participate as observers or to support specific initiatives.
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group – Membership (2)

Qualifications of Members
Members should possess the skills, experience and authority to represent and commit their respective organisations appropriately in this forum and to contribute actively and constructively to the wide range of safety issues at a road/rail interface from a national level.

Chair and Secretariat
Governance should be composed of a Chairman and Vice-Chairman nominated by a UN-ECE member state and appointed by a majority of members for a period of 24 months. This mandate may be renewed for one additional two-year-period, or as otherwise determined by WP1. The Chair will attend WP1 meetings as the nominated representative of this group. The Secretariat will be ensured by the WP1 Secretary and is responsible for the coordination of Secretariat services.
Creation of a multidisciplinary UN-ECE Road/Rail Interface Safety Group –

**Frequency of Meetings**
Meetings should be held quarterly until the appropriate activity level has been identified after which the frequency can be adjusted. Scheduled meetings will take place at UN-ECE in Geneva on an agreed and voluntary basis (no time or travel expenses can be taken in charge).

**Relationships**
The Group recognises the need for high level interaction with other bodies that will assist in influencing or achieving its Strategic Objectives. In acknowledging those relationships it will ensure no overlap of initiatives and will seek to progress complementary actions. Existing relationships with other groups (UN-ECE WP1, SC1, SC2 and ELCF).

**Deliverables**
Recommendations, guidelines, workshops aimed at supporting the core objectives to be developed in the strategic plan of action.
Thank you for your kind attention

Isabelle Fonverne, Projects Officer, Safety and Interoperability
fonverne@uic.org
Coordinator, ILCAD (International Level Crossing Awareness Day) campaign www.ilcad.org

WEAR. BELIEVE. ACT.
DECADE OF ACTION FOR ROAD SAFETY 2011–2020