

UIC activities in the field of railway safety

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INTRODUCTION

UIC is the worldwide organisation for the promotion of rail transport and cooperation across the world and comprises 200 members on all 5 continents. UIC, as a technical platform, provides its members with technical know-how and expertise (regulations and specifications in order to enhance technical cooperation) and ensures the coherence of the rail system to help meet challenges of mobility sustainable development.

UIC has set up high-level professional cooperation bodies capable of defining and directing technical projects to best serve the interests of its members. Thus alongside the “Passenger”, “Freight” and “Rail System” Forums, encompassing numerous technical and operational areas, has been set in place, covering the areas of infrastructure, rolling stock and train dynamics, signalling and control-command. In addition, the “Fundamental Values Department” at UIC Headquarters is tasked with giving fresh impetus to and maintaining coherence between a numbers of areas of activity vital to the success of the railways: safety and security, sustainable development, research, and expertise development. All these activities have resulted in the launch of new projects or campaigns to promote the advantages of rail across the world.

Safety is one of the railways’ main assets compared to other transport modes. UIC and its members are therefore working together to maintain and further improve safety levels. Safety is one of the transverse units within the “Fundamental Values Department” at UIC Headquarters.

SAFETY AT UIC

UIC Safety Platform

The UIC Safety Platform provides a forum for sharing information and experience among the Safety Directors of UIC Members to identify risks posing threats to the safety of the rail system and to develop solutions. Members may be railway undertakings as well as infrastructure managers or integrated railway companies. Safety is a transverse subject, involving all potential players of various interfaces. The UIC Safety Unit also supports seminars dedicated to railway safety issues in different regions (Asia, Middle-East for example).

The UIC Safety Platform, chaired by Mr. Jean-Michel Richard (SNCF) pursued its activities in the following five core areas:

- Safety Management System
- Occupational Health and Safety
- International Rail Safety Network
- Human Factors
- Safety Performance

Support to safety groups of the European Railway Agency (ERA)

The common UIC “System Safety Management Group” (SSMG)/CER Safety Support Group drafts position papers and proposals for the speakers in the safety related working groups of the ERA on various issues such as “Common Safety Methods” (CSM), in particular “Risk Acceptance Criteria” (RAC) and “Assessment Bodies” (AB), Certification of “Entities in Charge of Maintenance” (ECM), “Safety Certification” and “CSM for Monitoring”.

There is also regular information exchange on ERA-related safety topics with experts of the “International Liaison Group of Governmental Railway Inspectorates” (ILGGRI) – an informal group of representatives of “National Safety Authorities” (NSA).

Human factors/Occupational health and safety

UIC activities relating to occupational health, safety and human factors focused on the following themes:

- Study on the contribution of psychology to the safety of rail operations
- Study on local management safety checks
- Guidance on high visibility clothing and “Personal Protective Equipment” (PPE) for track workers
- Managing psychologically traumatic incidents and preventing post-traumatic stress

The special project “Organisational and human aspects of safety at border crossings” is completed. The results of this project and further items in the area of human factors, as the outcome of work on the management of emotionally distressing events and prevention of post-traumatic stress were presented at a workshop which took place in Paris at UIC HQ on 18th and 19th May 2011.

Day 1 of this two-day UIC seminar “Safety in the rail system – the human factors” was dedicated to the item, how the human sciences can help control railway risk.

The main goal of this first day of the seminar was:

- provide a general overview of the available and practically-applicable knowledge
- illustrate using examples from specific cases
- provide a basis and sources of reference for further research
- note the limits of such approaches’ validity or relevance

UIC Safety Database/Safety Performance

The goal of the UIC Safety Database (SDB) is to create an inventory of information containing not only accident statistics, but comprehensive detail about causes, descriptions, severity and particularities of accidents. Every “significant” accident, meaning those causing personal injury, major costs, or disruptions to railways, is catalogued with a wealth of information. These data include the type of line, location and rolling stock involved, the nature and cause of the accident with a verbal description, information about accident victims, and other categories of data which can be extracted and analysed in connection with various studies.

In 2010 the SDB included statistics about significant accidents of 21 European members. More than 80% were caused by third parties, mostly trespassing and accidents at level crossings, the road/rail interface. The SDB can be used by members to compare statistics and trends across Europe, and to identify particular risks or successes. A SDB activity report is published every year, figures about accidents by type and causes of accidents are included. The public version of this report is available on the UIC website: http://safetydb.uic.org/IMG/pdf/Full_Report_2010_Public.pdf

There are initiatives within other regions, especially Asia and Middle East, to establish similar Safety Databases, using the same principles as in Europe.

Safety at level crossings – the road/rail interfaces

The successful “International Level Crossing Awareness Day” (ILCAD) – coordinated by UIC – held in 2010 on the 22nd June in more than 40 countries across five continents, structured around the joint message “Act safely at level crossings” continued in 2011 on the 09th June. This campaign focused on educational measures and the promotion of safe behaviour at and around level crossings – the road/rail interface. This partnership initiative has been developed in conjunction with the road safety unit of the European Commission; accidents at level crossings are caused mostly (more than 95%) by road users and pedestrians, mainly because of their misbehaviour.

That is why it is so important to highlight this issue and bring these risks to the attention of crossing users and make them aware of the risks they run by not taking care. This is of course not a problem that can be uniquely addressed by the rail community; it has to be handled as one of shared concern amongst several players, including the road and rail sectors, police forces, road users and those with responsibility for licensing those users as well as with pedestrians and cyclists.

ILCAD is built around a range of national events held jointly at various locations in every participating country. In addition to regular or permanent activities held throughout the year, many special communication actions take place: flyers handed out at level crossings, in schools, driving schools, to scouts. Posters are displayed in railway stations and other central places, videos are shown on screens in railway stations and on the internet and there will be special messages broadcast on radio and television.

More information can be found on the dedicated website: <http://www.ilcad.org> ILCAD 2012 is in preparation!

UIC/ILCAD has been granted the use of the logo of the UN-ECE global decade of Action for Road Safety 2011-2020 as part of many other road safety initiatives using the motto: “Together we can save millions of lives”. The creation of a multidisciplinary UN-ECE group of experts on level crossing safety (road and rail experts, representatives from the governments ...) is in progress.

Safe Loading

Rail is demonstrably the safest transport mode for freight. The position of rail freight and of Combined Transport in particular, in segments such as the transportation of steel coils and paper rolls is undeniable. As a matter of fact, these heavy concentrated loads benefit fully from the combination of mass and flexibility offered by the intermodality of Combined Transport. These transports also must obey strict loading and lashing prescriptions.

The growth of that particular segment has unfolded against the background of a rapidly and deeply changing railway landscape, characterised by a multiplication of actors and an increasing competition between them. The high level of safety achieved by rail freight should not be allowed to be affected by the metamorphosis of the railway landscape. Safety is the concern of all the actors of the logistical chain and of the chain of Combined Transport: not only the railways but also the industrial shippers, road haulers, terminal managers, combined transport operators, equipment manufactures ... All of them must know and comply with the proper implementation of the existing loading rules and directives, and use the adequate equipment for these transports.

That is the reason why the UIC Safety Platform together with the UIC Freight Forum organise a working seminar on the 12th October 2011 in Paris at UIC HQs: "Safe loading: a matter for all rail freight partners"

The seminar shall conclude on the next steps to be taken by all the actors in order to maintain and even improve the high level of safety of the transport of concentrated goods by rail.

OUTLOOK 2012

The following three international railway safety events are scheduled in London/UK in the same week:
07th – 12th October 2012:

- 22nd International Railway Safety Conference (IRSC)
- 12th Global Level Crossing Symposium
- UIC Safety Platform Plenary Meeting