



INTERNATIONAL UNION
OF RAILWAYS

UIC SECURITY PLATFORM

BIRC WORKING GROUP

Security of railway border crossing
within the East-West corridor



NOVEMBER 2014

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○ Background

The working group "Security – Border Crossing, International Railway Corridors" ("Security-BIRC") operates within the UIC Security Platform. It was established following the decision taken during a meeting of the Security Platform Steering Committee held on 24 October 2012 in Bratislava. The Steering Committee concluded that the experience and efforts of experts should be pooled together in one group representing railway security, infrastructure managers, railway undertakings, international railway organisations and governmental organisations in order to ensure the security of railway transport in Eurasia. "Security-BIRC" is led by PKP Polish Railway Lines (PKP PLK).

The Group decided to establish three subgroups:

- **"Security – Border Crossing", led by PKP PLK (SOK) Railway Security Guard, in Poland**
- "Security – International freight transport within the East-West corridor", led by the Coordinating Council on Trans-Siberian Transportation (CCTT)
- "Security – International passenger transport within the East-West corridor", led by Federal Passenger Company (FPC), in Russia

One of the main objectives of "Security-BIRC" and its subgroups is to draft three technical UIC Leaflets by the year 2015/2016:

- "Security of railway border crossing within the East-West corridor"
- "Security of freight transport within the East-West corridor"
- "Security of passenger transport within the East-West corridor"

This brochure is dedicated to the work carried out by the "Security – border crossing" subgroup.

○ Introduction

Bearing in mind the challenges of the 21st century as well as deepening the processes of globalisation, a key issue for the world economies is to eliminate barriers in railway transport by providing safe transport of passengers and goods. Border crossings play the main role in this process.

Railway transport security depends on a number of factors: the technical condition of the railway infrastructure, rolling stock, traffic and rail transport organisation, qualifications and proper performance of duties by employees. One of the main indicators of the state assessment of railway security and the security on railway border crossings is the number of occurring events, analysis of causes and effects as well as existing threats.

Organisation of international railway transport requires the use of the latest technologies, knowledge about modern systems of security and the improvement of training of personnel directly involved in the operation of the railway. It is also required to advise railway transport clients about potential threats which may arise in railway transit including border crossings.

The activities of the subgroup as well as future UIC Leaflets – the development of which is one of the major targets of subgroup – is to show the overall security issues concerning the transport of people and goods at railway border crossings on the international Eurasian Railway Corridor from China through Kazakhstan, Russia, Belarus and Ukraine to the European Union.

On the basis of data collected through the UIC Security Platform working group meetings, technical visits have been made to railway border crossings located along the external border of the EU, documents have been developed by other UIC Security Platform working groups and subgroups, and the list of practices and security level indicators have been drawn up. These outputs will be the basis for drawing up the UIC Leaflet "Security of the railway border crossings within the East-West corridor" addressed to entities involved in railway transport and responsible for the security of railway border crossings. The objective of the Leaflet is to introduce various aspects of the security issue, including economic, legal, technical, physical, and cultural areas.



○ Activity of the subgroup

Historical background of subgroup establishment and its activities

The issues concerning this subgroup originate from 19 November 2003 when UIC took a decision to provide funding relating to the expansion of the Schengen Area and problematic areas for railway companies of the countries located within the external border of the EU.

After successful presentation of accomplished research in 2006 within the framework of the UIC Schengenrail Project European Commission (DG JLS, Frontex) a decision was taken to continue the work relating to Schengenrail and to set up UIC WG "Acquis Schengen and illegal immigration". In the course of their meetings and technical visits based on existing documents (UIC Schengenrail Project Methodology, UIC Technical Guidelines "The Schengen acquis") experts of the group came to the conclusion that the area of interest had to be extended, taking into consideration the issues of railway companies which operate within both sides of the EU border. Starting from this point in time, the group was renamed "Schengenrail: Schengen zone and other zones". Experts of the group representing railway companies KZH, RZD, UZ, BC, FTA, EVR, LG, LDZ, PKP PLK, MAV, AFER, NRIC, TCDD, ZSSK, DB AG, SNCB, SNCF, international organisations, including representatives of the European Commission, have taken a decision to analyse the Schengen Code from the standpoint of its impact on the operation of railway companies.

By making the best use of the expertise of all concerned parties committed to providing security in railway transport, the participants of the group proposed to incorporate not only the efforts of railway security personnel but also the expertise of representatives of railway operators, railway police, border security and customs, and international bodies. The Steering Committee of the Security Platform held in 2012 in Bratislava analysed the proposal and established the Working Group "Security – Border Crossing, International Railway Corridors" (Security-BIRC) consisting of three subgroups, one of which was called "Security – Railway Border Crossings", which aimed to follow-up on issues relating to providing security of railway border crossings en route East-West.

One of the major targets in the initial stage of its operation was to settle an issue concerning railway personnel engaged in trans-border transport. It was agreed that the following targets of the UIC subgroup would be:

Bring together all major players committed to providing security in railway transport, including railway border crossings in order to conclude all earlier launched topics

Analyse developed documents in the area of railway crossing security

Analyze in a first phase the existing security system along the Eurasian corridor

Present these developments in a UIC leaflet



Activities of a new subgroup from the beginning

The subgroup "Security – border crossing", working in close cooperation with the UIC Security Division and Frontex, has successfully completed the issue relating to the status of railway personnel engaged in trans-border transport.

This issue was initiated in 2008 by the railway companies of Lithuania, Belarus, Latvia, Ukraine, Russia, Hungary, Bulgaria and Poland. The work of the subgroup – thanks to meetings with EU representatives (DG JLS), questionnaires, technical visits, financial analysis, and participation in the Frontex/Working Group "PP Express" joint project – has been approved by the European Parliament with amendments to the Schengen code initiated by the subgroup.

At present the subgroup concentrates on completing the work programme for 2014/2015. The main items on the agenda include:

Continue cooperation with Frontex

Analyse existing documents in the area of providing security to railway border crossings

Use expertise of Railway Institute of Poland and other research and international bodies in the area of providing analysis relating to border crossings within the external border of the EU

Develop and distribute questionnaire to collect necessary information for the future Leaflet

Develop Technical UIC Leaflet "Security of railway border crossings within the East-West corridor"

Based on the experience of earlier groups and analysis of developed documents, the subgroup identified a number of factors which affect the safety of people and integrity of goods. They were categorised and described in the following sections:

- Territorial factors
- Operational and technical factors, interoperability
- Legal factors
- Security systems
- Socio-economic factors

These factors influence all aspects of border crossing procedures. Their analysis led to interesting conclusions that are presented briefly in this brochure and will be developed in the UIC Leaflet.



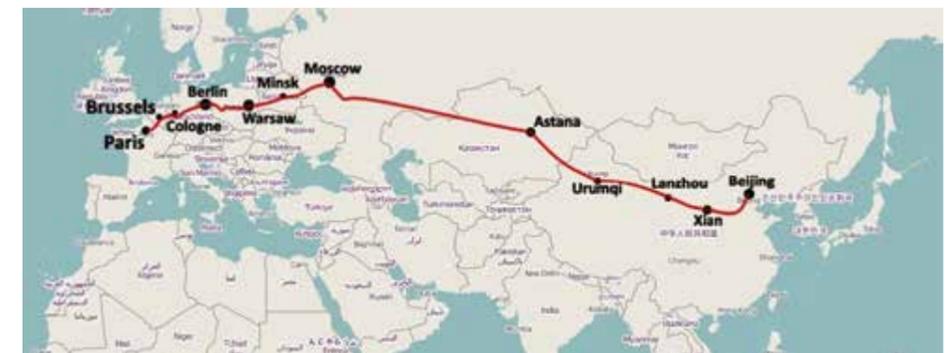
Graph 2: Railway border station Kena on the border between Lithuania and Belarus (EU/Customs Union, Schengen zone/non Schengen zone)
WG source

Analysis of the Eurasian Corridor

Rail corridors and border crossings play an essential role for the transport of people and goods between Europe and Asia.

To ensure their competitiveness two of the most important factors must be guaranteed: time of transport and security. Efficiency measures of the border crossing procedures along this corridor are of paramount importance. Security issues of border crossings in the rail corridor connecting the countries of Europe and Asia listed in this brochure will be described in the future UIC Leaflet. Countries of the Eurasian corridor foster the creation of a modern, integrated transport system. Advancing integration processes and the globalisation of the economy means that investments in transport corridors have become a necessity. The Eurasian corridor is of strategic importance for the development of international cooperation and implementation of transit transport, which is essential to the economies of individual countries.

The transport of people and goods affects the income growth of countries participating in Eurasian transport routes. Prices, quality of service and time are the basis for the increase in rail traffic.



Map of the Eurasian Corridor
Source: study

The information contained in the future UIC technical Leaflet is designed to provide a summary to help plan secure transport management for those involved in the transport process. The information can also be an additional supportive instrument.

A future UIC technical Leaflet will contain the processes on which secure routes along selected Eurasian corridors can be based. Despite many existing barriers and differences, railway crossings are properly managed and adequately prepared for the secure service of people and goods. Variations in individual components may cause difficulties, however, in the safe and smooth crossing.



Analysis of security on railway border crossings

Fast, efficient, and secure transport of people and goods at railway border crossings depends on:

- Availability of precise information about border crossing
- Identification and monitoring of risks
- Application of appropriate procedures

Common accessibility of railway infrastructure and rolling stock may be used as a tool in various kinds of attacks and sabotage.

To plan the security process, factors of hazards and risk assessment have to be taken into account. These factors are:

- Breach of public security
- Emergency and crisis states
- Risk of terrorist attack

The number of occurring events has a direct impact on the level of security. The degree of risk depends on the number of occurring risks. On the basis of the matrix given below we can assess the risk and the degree of possible risk for border crossing.

Probability \ Impact	Impact		
	Low 1	Medium 2	High 3
High 3	3	6	9
Medium 2	2	4	6
Low 1	1	2	3

These risks are being monitored and the emergency actions are planned

These risks are being monitored

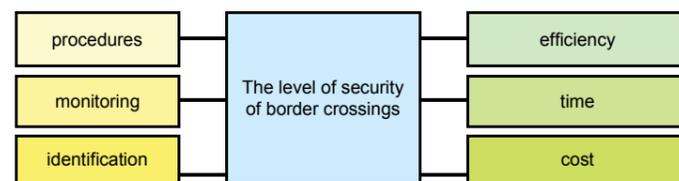
Simplified risk assessment - Source: matrix - WG resources

The level of security in the transport of people and goods is essential for entities involved in the transport process as it plays an important role in effectiveness, time and cost.

In addition to the technical security measures, consideration must be given to the role of services established to provide the desired level of security and public order.

Apart from physical security the essential element is the technical means of protection, which can include mobile and stationary monitoring equipment, as well as coercive measures.

With the support of the technical means of security, the services responsible for public order monitor and identify risks incurred, effectively eliminating them.

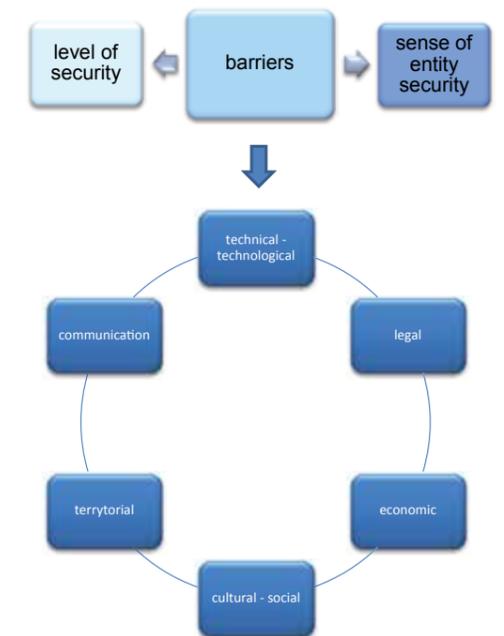


Process safety at railway border crossings - Source: SOK study

Identifying the main barriers

In the process of subgroup operation some main barriers to be taken into account in the security aspects have been identified:

A number of countries on the Eurasian corridor are causing numerous barriers that are hindering smooth and secure transport.



Political – territorial barriers

Along the rail corridors we cross different political systems, unions and economic systems. As an example we can indicate the European Union and Schengen Agreement signed by the states, which on this basis have abolished checks on persons and goods on border crossings (France, Belgium, Germany and Poland). Heading further east, other countries take a number of other legislative initiatives enabling easier border crossing. The Custom Union can be also an example.

Economic barriers

The states in the rail corridor have different currency systems. They also have different economic systems, as well as various levels of access to international rail services. In addition consideration should be given to the different objectives of rail transport in individual countries, and the amount of duties and other charges. Movement of people and goods depends on the wealth of society and monetary systems.

Legal barriers

Individual countries in the European part of the corridor belonging to the European Union have a (similar) unified legal security system and control of people and goods transport.

Non-EU countries operate according to their own regulations.

The UIC Leaflet will give us information on operations at border crossings taking into account the behaviour in specific situations and the use of the emergency management process. It will enable an appropriate response to be made in the case of particular events.

Cultural-social barriers

Individual countries along the corridor from China to France are significantly different from each other culturally; therefore, these differences affect all processes at border crossings. The railway route running from Asia to Western Europe means combination and blending of cultures, thus connecting people from different continents.



Replacement of railway bogies
WG resources

Technical-technological barriers

Fast, efficient, modern and safety railway infrastructure connecting China with Western Europe promotes and provides opportunities for the development of the transport of people and goods. Despite such a high technical advancement, we should pay attention to the factors that cause inconvenience. These factors include different track gauges, catenary voltage and technical equipment. There are different systems for railway infrastructure management, as well as endangering the security of systems used for rail traffic.

Communication barriers

Good communication is the key to every area of human activity, whether in business, politics or in private life. Facing increasing globalisation and increasingly close international contacts, an extremely important role in the modern world is the ability to communicate with the representatives of other countries and organisations. Communication also plays a crucial role in the flow and exchange of experience, good practice and information about incidents affecting safety. A border crossing communication system is therefore essential.



Portable cameras
Source : WG resources



Officers of Railway Guard and Border Guard in Poland
WG resources



Officers of Polish Border Guard
Source: www.rzg.pl



Mobile Monitoring Centre
WG equipment

UIC technical Leaflet

For the development of the UIC technical Leaflet a study will be conducted to investigate the factors affecting the security of transporting people and goods at rail border crossings along the Eurasian transport corridor between France-Belgium-Germany-Poland-Belarus-Russia-Kazakhstan-China. The aim is to show the issues that affect the security of transporting people and goods at rail border crossings on the Eurasian transport corridor.

On the basis of the data collected from the working meetings, technical visits conducted by the group and the questionnaire, we will be able to:

Show the state of security on border crossings

Introduce the functioning and operation of border crossings

Show the existing systems of law and protection

Present the impact of socio-economic factors on the level of security at border crossings



The selection of test methods was taken into account: the subject of research, which is the security of border crossings, the type of analysis of the factors affecting the level of security (quantitative or qualitative) and the range of phenomena and processes under study. For the development of research the probing method was used and the technique was a questionnaire.

Characterising the survey, it is worth paying attention to a few essential features. This technique allows you to quickly collect information from a large spatially distributed population, eliminates the influence of the interviewer on the answers and helps to achieve far-reaching uniformity of equipment, due to the highly standardised set of questions.



Summary

The informational and promotional brochure shows the work of the subgroup "Security – railway border crossings", led by Railway Security Guard (SOK) of PKP PLK, objectives, goals, the future UIC Leaflet and the importance of the secure movement of people and goods at railway border crossings. At the beginning of the 21st century the challenges set high standards for rail corridors linking Europe with Asia to ensure efficient, safe and secure transport.

Advancing globalisation processes link countries, unite nations and build bridges from east to west. As ever, the development of all branches, including transport, depends on many factors, which should be a common denominator of a widely understood sense of security in crossing borders between countries.

Border crossings are all part of the process of transporting persons and property, which ensures the smooth functioning of transport efficiency, reducing time and travel expenses. The planning process of transport, as well as carriers and operators of transport should have a sense of security in meeting the challenges and tasks.

By building a transport system countries must overcome barriers, which should be a priority. Bearing in mind the technical and physical security in building and organising border crossings, the socio-cultural aspects cannot be forgotten. This understanding of security will be the result of all the factors which contribute to the smooth flow of people and goods.

Despite the barriers and differences encountered, railway crossings are adequately prepared to safely serve people and goods.

240 members
across 5 continents...

The worldwide association of cooperation for railway companies



2 500 billion passenger-kilometres

9 500 billion tonne-kilometres

More than 1 000 000 kilometres of lines



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sourced from sustainable forests