Finnish Rail Agency
Annual Safety Report
2008

FINNISH
RAIL AGENCY

Contents

A NSA ANNUAL SAFETY REPORT – FINNISH RAIL AGENCY

This is a report on Finnish railway safety and the Finnish Rail Agency's activities during the year 2008. The report is given to the European Railway Agency as well as to the Finnish Ministry of Transport and Communications.

A.1. Scope of the report

The scope of this report is to give a view on the railway safety in the railway system in Finland and activities of the Finnish Rail Agency during the year 2008.

B. INTRODUCTORY SECTION

B.1. Introduction to the report

The purpose of this report is to give information on railway safety and the activities of Finnish Rail Agency to ERA and to the Finnish Ministry of Transport and Communications.

B.2. Railway Structure Information (Annex A)

The map of the Finnish railway network can be found in Annex A.1 on page 15.

We have one Infrastructure Manager, the Finnish Rail Administration and one Railway Undertaking, VR-Group Ltd, which operates both passenger and freight traffic. Detailed information on Railway Undertakings and Infrastructure Managers is in Annex A.2 on page 16.

B.3. Summary – General Trend Analysis

When measured by the number of different types of accidents or by the number of fatalities the railway safety has remained about the same level in Finland during the last six years. The number of derailments in rail traffic has decreased to near zero because many of the tracks have been upgraded and therefore the number of buckling of rails caused by the heath has decreased significantly. Six of the derailments during the year 2003 and two during the year 2004 occurred in train traffic. After that the derailments included in our statistics have occurred during the shunting.

During the last 10 years the number of level crossing accidents in total has varied around 50 (figure 1). There is no up-going or down-going trend to be seen. In 2008 we had 58 level crossing accidents in total. The accidents are scattered around the rail network. There are no specific black spots. The number of fatalities at level crossings has varied from four to twelve during the last ten years. In 2008 we had eight fatalities in level crossing accidents. The numbers are too small for statistical analyses.

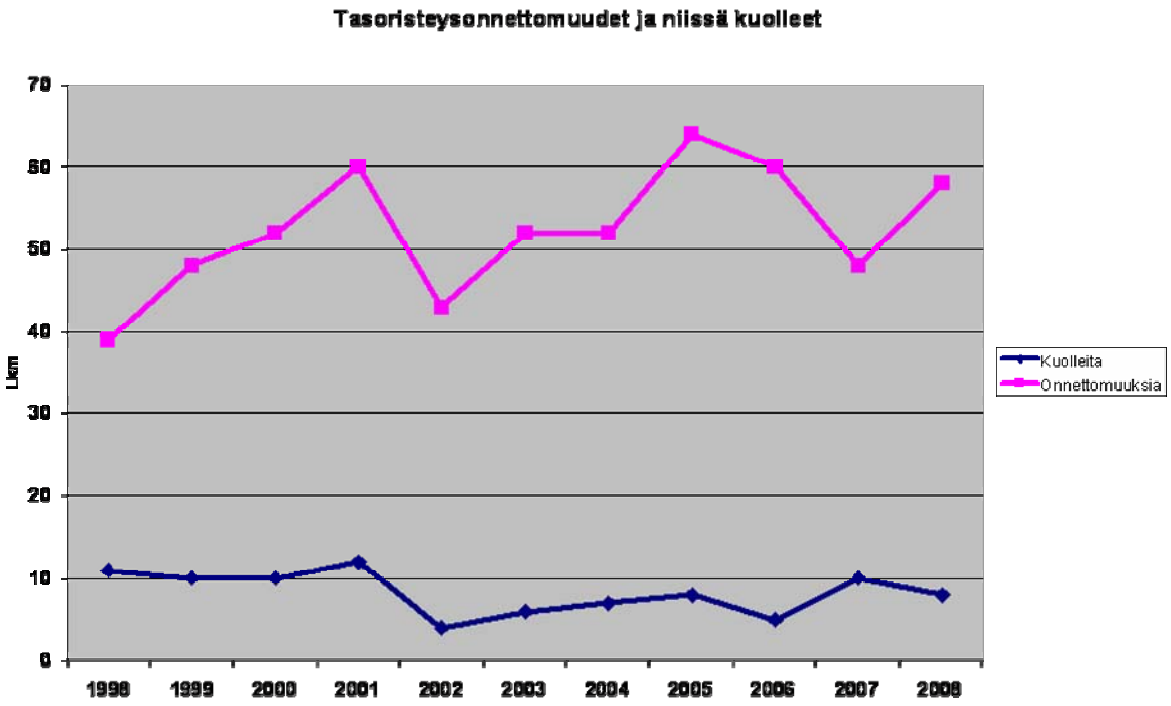


Figure 1. Level crossing accidents (pink line) and fatalities (blue line) in level crossing accidents during 1998-2008 on the Finnish rail network.

The number of broken half-barriers has been increasing during the last nine years. In the year 2008 we had 268 half-barriers broken in the crashes. In two days out of three somebody breaks the half-barrier. There is one level crossing on the private rail on the harbour area where the half-barriers were broken several tenths of times.

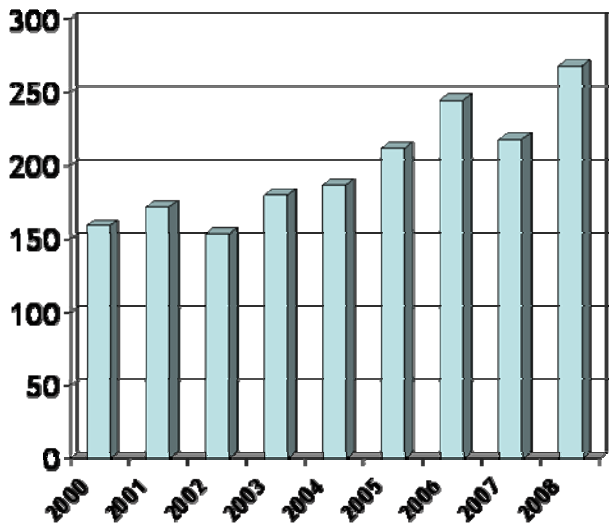


Figure2. Number of half-barriers broken at Finnish level crossings in 2000-2008.

During the year 2008 there were no changes in safety certificates or safety authorisations.

C. ORGANISATION

C.1. Introduction to the organisation

The main task of the Finnish Rail Agency as a national safety authority is to reinforce railway safety in Finland.

Other tasks include preparation of both EU and national legislation, implementation of TSI's, technical approval of rolling stock and infrastructure, and issuing safety certificates and safety authorisations. The Finnish Rail Agency gives instructions for health inspections as well as competence requirements and training for staff working on the railways.

In 2008, the Finnish Rail Agency no more took care of ticket inspections on trains. The Ticket Inspection Office was integrated to the Helsinki Metropolitan Area Council (YTV).

The Finnish Rail Agency is led by a director general. Mr Kari Alppivuori was appointed as the director general in July, 2006. In 2008, Mr Alppivuori was absent from April 2nd till August 31st. Mr Hannu Pennanen from the Ministry of Transport and Communications acted as the Director General during that time.

A new organisational structure was prepared, and it came into force on March 1st, 2008. According to the new structure, the Agency had one department: the Safety and Interoperability Department. The department was divided into three units: the Supervision Unit, the Technical Unit and the Interoperability Unit. The Regulatory Body is a separate organisational body, as is the Legal Services Unit, and the Administrative Unit. Communications are taken care of by the Communications manager.

Until the end of February 2008, the board members were Mr Lauri Leino, Head of the Safety Department, Mr Juha Piironen, Head of the Regulation Department, Ms Heidi Niemimuukko, Head of the Supervision and Development Unit, Mr Markus Pettinen, Head of the Administrative Unit, and Ms Katri Myllykoski, Communications Manager, who acted as the secretary of the board.

From the beginning of March, the board members included Ms Heidi Niemimuukko Director of the Safety and Interoperability Department, Ms Henrika Räsänen, Head of the Legal Services Unit, Mr Markus Pettinen and Ms Katri Myllykoski. Mr Yrjö Mäkelä was appointed Head of the Safety and Interoperability Department on September 1st, and he joined the board, as did Mr Taisto Tontti, Head of Development, who was appointed member of the board in November, 2008.

There were 38 members of staff in the Finnish Rail Agency.

The organisation chart can be found on Annex B on page 17.

C.2. Organisational flow – relationship (diagram) between the NSAs and other national bodies

The Finnish Rail Agency is an independent government agency working under the Ministry of Transport and Communications. It cooperates closely with the Finnish Rail Administration, The Competition Authority, and The Accident Investigation Board.
The organisational flow diagram can be found on Annex B on page 17.

D. THE DEVELOPMENT OF RAILWAY SAFETY

1. Initiatives to maintain/improve safety performance

The safety measures taken by the RU and IM were not triggered by accidents or precursors to accidents but they were triggered by the NST set earlier by the NSA and by the increase of wrongly set routes especially in maintenance work. The IM lacked information on the accidents and incidents of their contractors.

Finnish Rail Agency has set National Safety Targets 2007-2010 for railway stakeholders with the letter dated on January 24th, 2007. The NST are general and qualitive. No quantitative targets have been set. The general long term targets are

- nobody needs to die or be seriously injured in railway traffic or working at railways if they do not violate the rules,
- safety is systematically taken account in all activities and organisations,
- train traffic safety in Finland must remain on the high European level and
- no serious damages occur to environment or infrastructure or rolling stock.

These safety targets were met during the year 2008.

The increasing number of wrongly set routes triggered regular safety meetings, systematic safety monitoring, and the renewal of communication guidelines in maintenance work by RU and a research on traffic control in maintenance work by the NSA, RU and IM (see D.2).

The IM developed the accident and incident reporting of their contractors. There was not enough information on the accidents and incidents. During the year 2008 the maintenance contractors reported several near-misses and other less serious incidents. On the other hand there have been changes in the safety culture and the operational environment of the contractors. These changes have had effect on the railway safety.

Table D.1.2 – Safety measures with other triggers

Safety measure decided	**Description of the trigger of the measures**
Safety measured decided by RU and IM	Setting of National Safety Target
Regular safety meetings by RU	Increase of wrongly set routes
Safety monitoring by RU	Increase of wrongly set routes
Communication guidelines of RU in maintenance work	Increase of wrongly set routes
Research on traffic control in maintenance work (NSA, RU & IM)	Increase of wrongly set routes
Development of accident and incident reporting to IM	Lack of knowledge on accidents and incidents of the maintenance contractors

2. Detailed data trend analysis

We had no major railway accidents and no passenger fatalities in Finland during the year 2008. The most serious accidents occurred during shunting. In one accident a shunter injured seriously in the collision of two maintenance vehicles during the shunting. Another one caused damages worth over € 150 000 when a maintenance vehicle collided with a locomotive. There were no serious injuries in that accident.

The total number of significant railway accidents in 2008 was 27, which is higher than in 2007 (21) but lower than in 2006 (52). Part of the decrease from the year 2006 to the year 2007 is due the changes in the accident statistics of RU. The number of fires in rolling stock during 2006 (17) includes also the non-significant accidents. However this change in statistics does not explain all of the decrease. The total number of significant railway accidents per million train km has decreased from 2006 to 2007 and from 2007 to 2008. The number of trespasser accidents was in 2008 14 which is higher than in 2007 (9) but lower than in 2006 (17). The figures are quite low and the random variation mainly explains the changes. The number of trespasser accidents per million train km decreased from 2006 to 2007 and remained about the same from 2007 to 2008.

Total number of level crossing accidents has remained around 50 for about ten years. There is no up- or down-going trend. We had 9 significant level crossing accidents in 2006, 11 in 2007 and 9 in 2008. The number of significant level crossing accidents is about 20% of level crossing accidents in total.

There is no clear trend in total number of fatalities in railway accidents. The fatalities caused by railway accidents occur mostly to level crossing users or trespassers. Total number has remained on the same level during the last five years. The number of fatalities in level crossing accidents has remained in about ten fatalities during the last ten years (variation between 4 and 12). No trends can be calculated from that small numbers.

The number of serious injuries was 13 during 2006, 3 during 2007 and 6 during 2008. These numbers are estimates because we do not get information directly from the hospitals. There were less serious injuries in level crossing accidents during 2007 than during 2006.

During the last ten years the number of track buckles has decreased clearly. Many of the main tracks have been upgraded during the time.

The number of signals passed at danger was 18 in 2006, 22 in 2007 and 30 in 2008. Also the numbers per million train km have increased. The problem for Finnish railway safety is the high number of wrongly set routes and the increase of SPAD’s. Most of these situations occurred in accordance with maintenance work. However 75% of the wrongly set routes were cases when the train was routed to the wrong but unoccupied track. The SPAD’s occurred mostly near the stations when there were no concrete threads for collisions. Because of that we had a research on the traffic control during the maintenance work starting at the end of 2008.

The costs caused by the accidents are not yet collected in Finland. It is impossible even to give estimation on accident costs. We are concentrating on making a procedure to collect accident costs with the method described in the revision of Annex 1 of the Safety Directive. We will have amendments in national legislation (revision of Railway Act) during the years 2009 and 2010. We also started a research in 2008 on the data collection of the costs caused by accidents. The research will be completed in 2009. We have made some estimation on costs of deaths and costs of serious injuries for the years 2006, 2007 and 2008.

Total number of working hours of staff and contractors lost as a consequence of accidents is not collected in Finland. We have had discussions on this and the general estimation was just that the number of working hours lost as a consequence of accidents is low.

About 77% of state owned tracks are equipped with the ATP. That includes almost all the tracks with passenger traffic or mixed traffic and the main freight traffic lines. The traffic

volumes on tracks without ATP are very low, so almost all of the traffic is operated on the ATP lines (98% of traffic during 2008).

Total number of level crossings has decreased by about 50 per year during the last years. At the beginning of 2007 there were still 4,382 level crossings on the Finnish rail network. About 80% of the level crossings are open passive crossings. Over 80% of the level crossings are private road crossings. The road is typically non-paved road with very low traffic volume (1-10 vehicles per day).

There is more data on the CSI and collection of data in Annex C.

E. IMPORTANT CHANGES IN LEGISLATION AND REGULATION

The Railway Act (555/2006) was not amended in 2008. However, the Decree concerning the Safety and Interoperability of the Railway System (750/2006) given under the Railway Act was amended. The amendment (454/2008) concerns the EC verification and the declaration of verification and implements the Commission directive 200732/EC.

Finnish Rail Agency gave nine NSA regulations in 2008. However, only one regulation, the NSA regulation (RVI/301/412/2008) concerning the train protection device was a new regulation. The other NSA regulations given in 2008 were merely updates (see more in Annex D).

F. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

F.1. National legislation – starting dates – availability

Finnish Rail Agency issued neither safety certificates nor safety authorisations in 2008.

1.1. Starting date for issuing Safety Certificates according to Article 10 of Directive 2004/49/EC

Not applicable: The Railway Act sets only the closing date for issuing Safety Authorisations.

1.2. Starting date for issuing Safety Authorisations according to Article 11 of Directive 2004/49/EC

Not applicable: The Railway Act sets only the closing date for issuing Safety Authorisations.

1.3. Availability of national safety rules or other relevant national legislation to Railway Undertakings and Infrastructure Managers

Regulations given by the Finnish Rail Agency were published on the Finlex website in the internet. The Agency's website has a link to Finlex.

All Finnish legislation, including decisions and regulations of central agencies are published on www.finlex.fi. Finlex is maintained by the ministry of justice. All its contents are public and can be browsed and downloaded free of charge.

F.2. Numerical data (Annex E)

F.3. Procedural aspects

3.1. Safety Certificates Part A

3.1.1. Reasons for updating/amending Part A Certificates (e.g. variation in type of service, extent of traffic, size of company)

Not applicable: no such requests were made to the Finnish Rail Agency in 2008.

3.1.2. Main reasons if the mean issuing time for Part A Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive

Not applicable: no safety certificates were issued in 2008.

3.1.3. Overview of the requests from other National Safety Authorities to verify/access information relating the Part A Certificate of a Railway Undertaking that has been certified in your country, but applies for a Part B certificate in the other Member State

Not applicable: no such requests were addressed to Finnish Rail Agency in 2008.

3.1.4. Summary of problems with the mutual acceptance of the Community wide valid Part A Certificate

Not applicable: no such requests were addressed to Finnish Rail Agency in 2008.

3.1.5. NSA Charging fee for issuing a Part A Certificate

The fees collected by the Finnish Rail Agency are based on the Government decree on fees charged by the Finnish Rail Agency, which was passed on August 30, 2006, and came into force on September 1, 2006. The fee for issuing a Part A Certificate is charged by the hour.

3.1.6. Summary of the problems with using the harmonised formats for Part A Certificates, specifically in relation to the categories for type and extent of service

Not applicable: problems did not occur, since no applications were received by the Finnish Rail Agency.

3.1.7. Summary of the common problems/difficulties for the NSA in application procedures for Part A Certificates

Not applicable: problems did not occur, since no applications were handled by the Finnish Rail Agency.

3.1.8. Summary of the problems mentioned by Railway Undertakings when applying for a Part A Certificate

Not applicable: no problems were mentioned, since no applications were made to the Finnish Rail Agency.

3.1.9. Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Representatives of the Finnish Rail Agency and those of the RU meet frequently. Feedback is given and received in these occasions. Railway companies are also invited to participate in Finnish Rail Agency's customer research, which is carried out once a year.

Complaints against all Finnish Rail Agency's decisions can be filed to Helsinki Administrative Court.

3.2. Safety Certificates Part B

3.2.1. Reasons for updating/amending Part B Certificates (e.g. variation in type of service, extent of traffic, lines to be operated, type of rolling stock, category of staff, etc.)

Not applicable: no such requests were made to the Finnish Rail Agency in 2008.

3.2.2. Main reasons if the mean issuing time for Part B Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive

Not applicable: no Part B Certificates were issued by the Finnish Rail Agency in 2008.

3.2.3. NSA Charging fee for issuing a Part B Certificate

The fees collected by the Finnish Rail Agency are based on the Government decree on fees charged by the Finnish Rail Agency. The decree was passed on August 30, 2006, and came into force on September 1, 2006. The fee for issuing a Part B Certificate is charged by the hour.

3.2.4. Summary of the problems with using the harmonised formats for Part B Certificates, specifically in relation to the categories for type and extent of service

Not applicable: no such problems occurred in 2008.

3.2.5. Summary of the common problems/difficulties for the NSA in application procedures for Part B Certificates

Not applicable: no Part B Certificates were applied in 2008.

3.2.6. Summary of the problems mentioned by Railway Undertakings when applying for a Part B Certificate

Not applicable: no complaints were made in 2008.

3.2.7 Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Representatives of the Finnish Rail Agency and those of the RU meet frequently. Feedback is given and received in these occasions. Representatives of the railway companies are invited to participate in Finnish Rail Agency's customer research, which is carried out once a year.

Complaints against all Finnish Rail Agency's decisions can be filed to Helsinki Administrative Court.

3.3. Safety Authorisations

3.3.1. Reasons for updating/amending Safety Authorisations

Not applicable: no such requests were made to the Finnish Rail Agency in 2008.

3.3.2. Main reasons if the mean issuing time for Safety Authorisations (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive

Not applicable: no Safety Authorisations were issued in 2008.

3.3.3. Summary of the regularly problems/difficulties in application procedures for Safety Authorisations

Not applicable: problems or difficulties did not occur, since no applications were made in 2008.

3.3.4. Summary of the problems mentioned by Infrastructure Managers when applying for a Safety Authorisation

Not applicable: no applications were made in 2008.

3.3.5. Feedback procedure (e.g. questionnaire) that allows Infrastructure Managers to express their opinion on issuing procedures/practices or to file complaints

Representatives of the Finnish Rail Agency and those of the Finnish Rail Administration meet frequently and discuss cooperation between the two agencies. Feedback is given and received in these occasions. Representatives of the Finnish Rail Administration are invited to participate in Finnish Rail Agency's customer research, which is carried out once a year.

Complaints against all Finnish Rail Agency's decisions can be filed to Helsinki Administrative Court.

3.3.6. NSA Charging fee for issuing a Safety Authorisation

The fees collected by the Finnish Rail Agency are based on the Government decree on fees charged by the Finnish Rail Agency. The decree was passed on August 30, 2006, and came into force on September 1, 2006. The fee for issuing a Safety Authorisation is charged by the hour.

G. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

Description of the supervision of Railway Undertakings and Infrastructure Managers

1.1. Audits/Inspections/Checklists

Supervision was carried out following a supervision strategy, which was prepared in 2007. The railway undertakings and the infrastructure manager were informed of the forthcoming supervision. Targets of supervision included the existence of qualifications register, the condition of infrastructure, transportation of dangerous goods, qualifications, rolling stock, among other things.

Finnish Rail Agency's audition strategy was not yet approved in 2008.

One (1) employee of the Finnish Rail Agency is responsible for audits. He will invite colleague(s) to join him according to the theme and objectives of the audit.

In 2008, Hyvinkää workshop of the VR Group was audited in September 2008. The theme for the audition was safety of rolling stock in maintenance services.

RU and IM have carried out 33 inspections out of 34 planned.

1.2. Vigilance aspects/Sensitive points to follow-up by the NSA

N/A

2. Description of the coverage of the legal aspects within the annual reports from the Infrastructure Managers and Railway Undertakings

		Issued Safety Certificates Part A	Issued Safety Certificates Part B	Issued Safety Authorisations	Other Activities (To specify)
3. Number of inspections of RUs/IMs for 2008	planned	N/A	N/A	N/A	
	carried out	N/A	N/A	N/A	

		Issued Safety Certificates Part A	Issued Safety Certificates Part B	Issued Safety Authorisations	Other Activities (To specify)
4. Number of audits of RUs/IMs for 2008	planned	N/A	N/A	N/A	
	carried out	N/A	N/A	N/A	

5. Summary of the relevant corrective measures/actions (amendment, revocation, suspension, important warning, etc.) related to safety aspects following these audits/inspections

N/A

6. Short summary/description of the complaints from IM('s) concerning RU('s) related to conditions in their Part A/Part B Certificate

No Part A/Part B certificates were issued in 2008.

7. Short summary/description of the complaints from RU('s) concerning IM('s) related to conditions in their authorisation

N/A

H. NSA CONCLUSIONS ON THE REPORTING YEAR – PRIORITIES

I. SOURCES OF INFORMATION

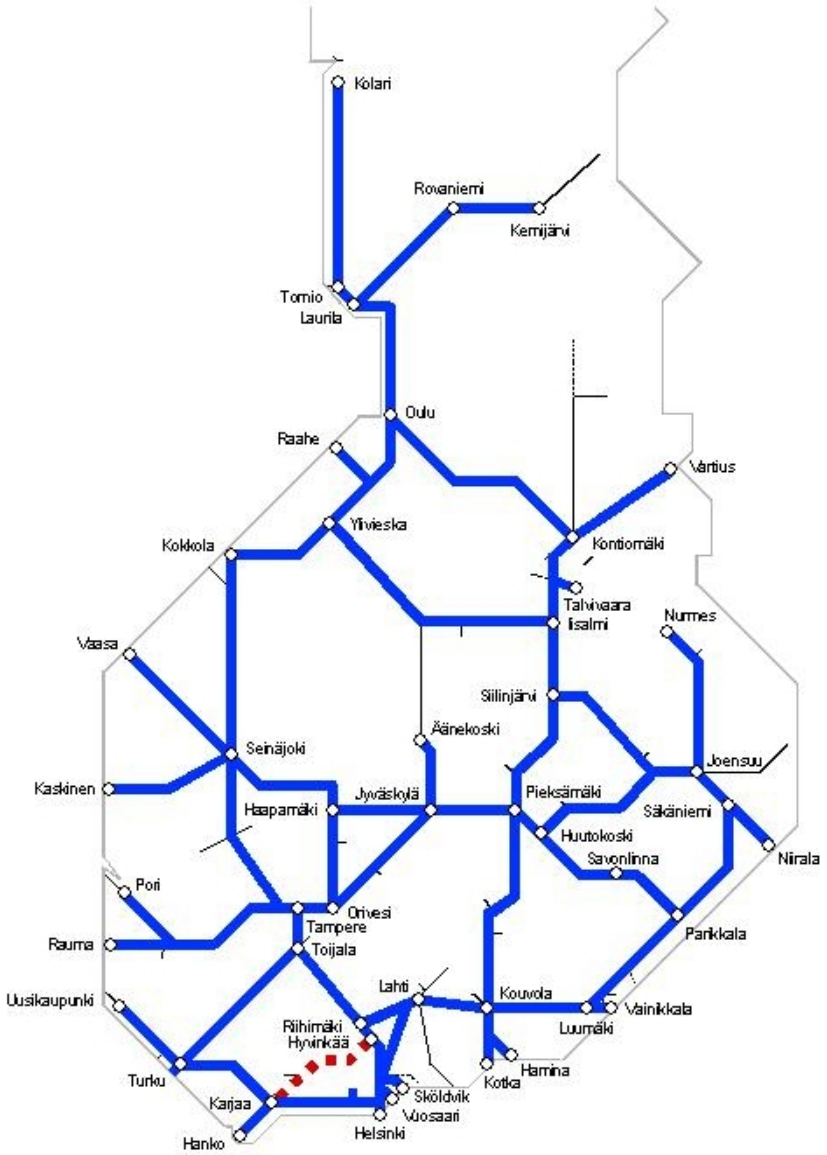
Finnish Rail Agency's documents
Finnish Rail Agency's website at www.rautatievirasto.fi and at www.finnishrailagency.fi
Finnish Rail Agency's Annual Report 2008
Safety Report of Finnish Rail Administration
Safety Report of the VR-Group Ltd.
Finlex website at www.finlex.fi

J. ANNEXES

ANNEX A: Railway Structure Information
ANNEX B: Organisation chart(s) of the National Safety Authority
ANNEX C: CSIs data – Definitions applied
ANNEX D: Important changes in legislation and regulation
ANNEX E: The development of safety certification and authorisation – Numerical Data

ANNEX A: RAILWAY STRUCTURE INFORMATION

A.1. NETWORK MAP



A.2. List of Railway Undertakings and Infrastructure Managers

A.2.1. Infrastructure Manager

Name	Address	Website/Network Statement Link	Safety Authorisation (Number/Date)	Start date commercial activity	Total Track Length/Gauge	Electrified Track Length/Voltages	Total Double/ Simple Track Length	Total Track Length HSL	ATP equipment used	Number of LC	Number of main (light) signals
Finnish Rail Administration	PO Box 185, Fi-00101 Helsinki	www.rhk.fi	RVI/1228/310/2006 April 27th, 2007	January 1st, 1995	5,919 km/1524 mm	3,067 km/	570 km/5,349 km	0 km	Bombardier	3,515	11,000

A.2.2. Railway Undertaking

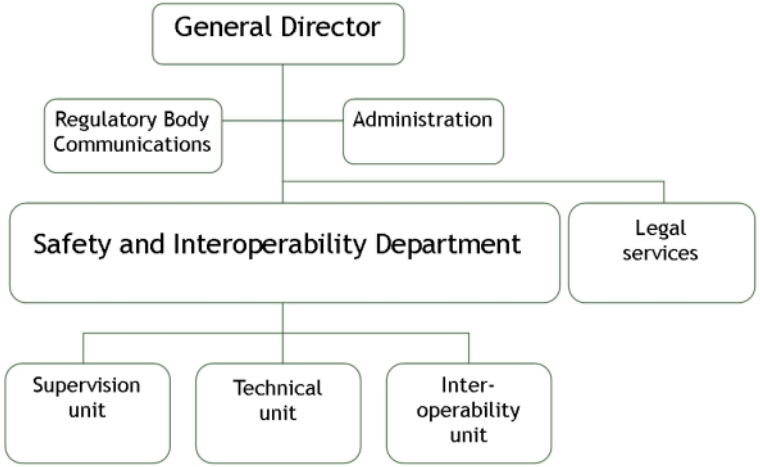
Name	Address	Website	Safety Certificate 2001/14/EC (Number/Date)	Safety Certificate A-B 2004/49/EC (Number/Date)	Start date commercial activity	Traffic Type (Freight,…)	Number of Locomotives	Number of Railcars/Multiple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport	Volume of freight transport
VR Group	PO Box 488, Fi-00101 Helsinki	www.vr.fi	RVI/1219/310/2006 April 27th, 2007	RVI/1219/310/2006 April 27th, 2007	July 1st, 1995 as VR Group	Freight, passenger	534	384	13,016	1,774/3,818	70 million trips	42,000 tons

Abbreviations: HSL = High Speed Line (Definition acc. Directive 96/48/EC)
ATP = Automatic Train Protection
LC = Level Crossing

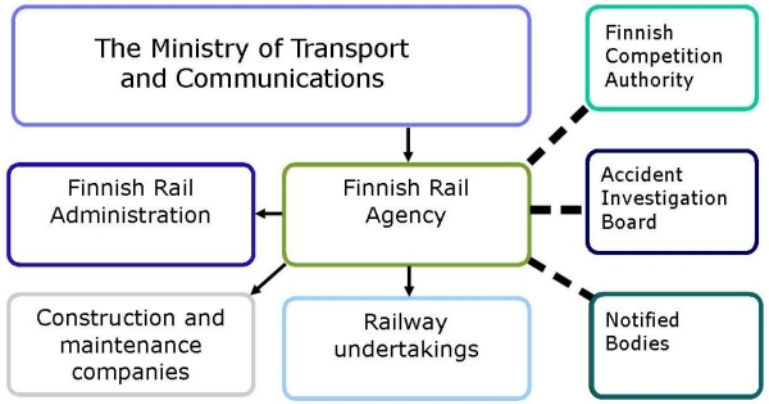
ANNEX B: ORGANISATION CHART(S) OF THE NATIONAL SAFETY AUTHORITY

B.1. Chart: Internal organisation

Finnish Rail Agency's organisation as of March 1st, 2008



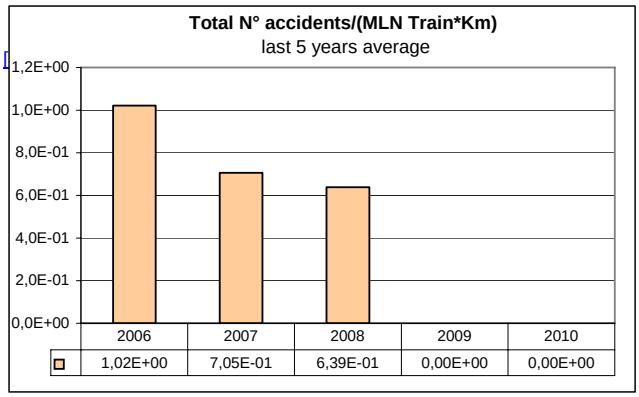
B.2. Chart: Relationship with other National Bodies

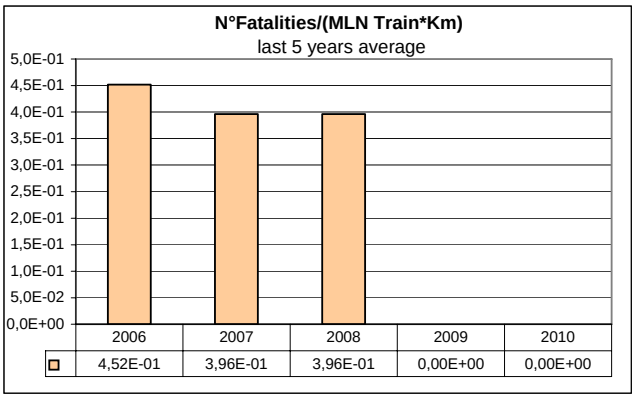


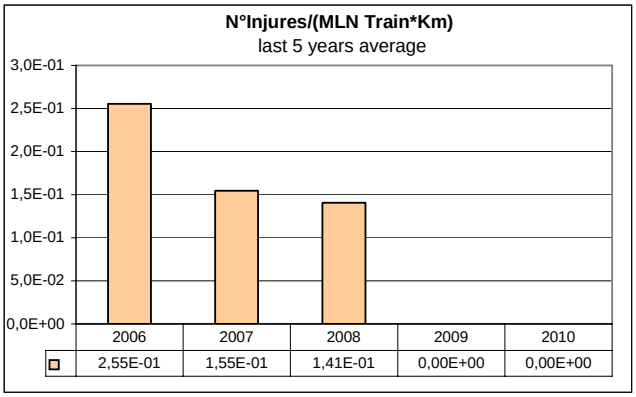
ANNEX C: CSIS DATA – DEFINITIONS APPLIED

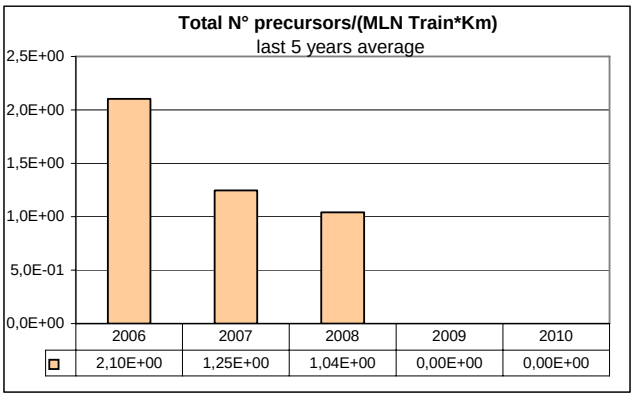
C.1. CSIs data

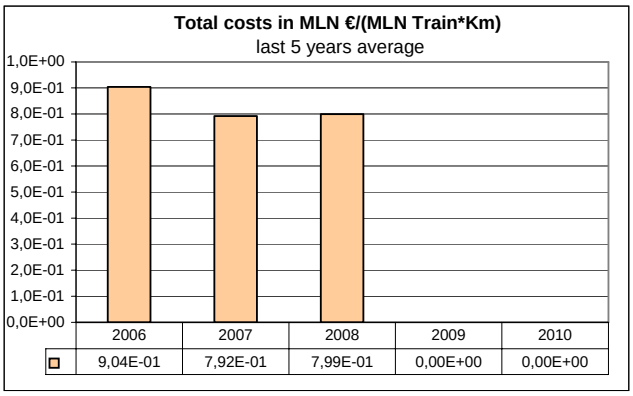
Performances at a glance





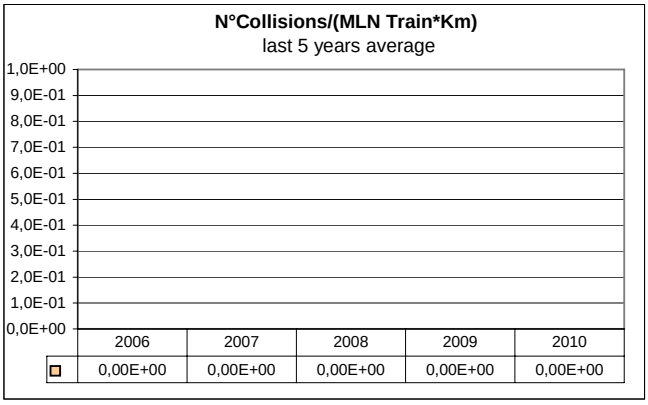


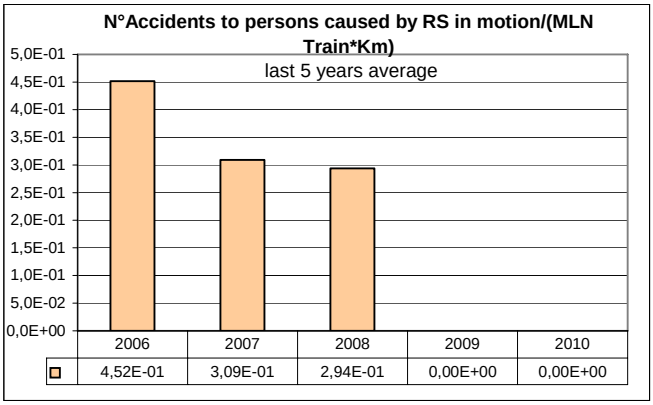


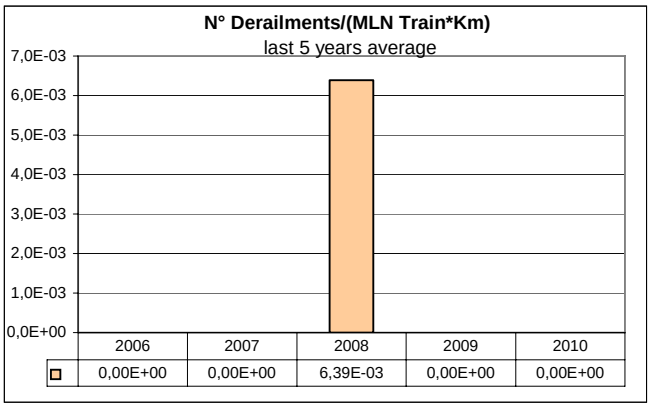


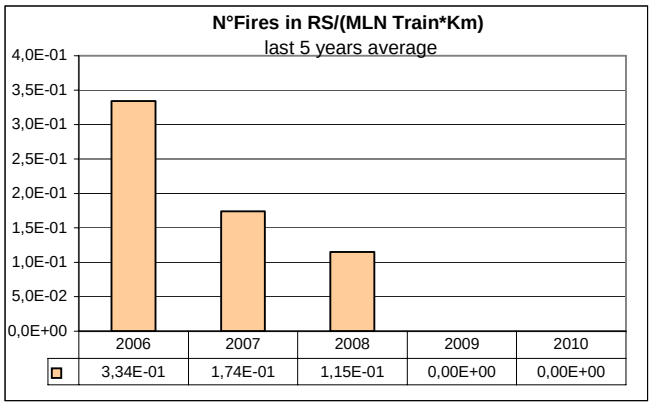
2007 report: values related to 2006.
2008 report: values related to the average between 2006 and 2007.
2008 report: values related to the average among 2006, 2007 and 2008.
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

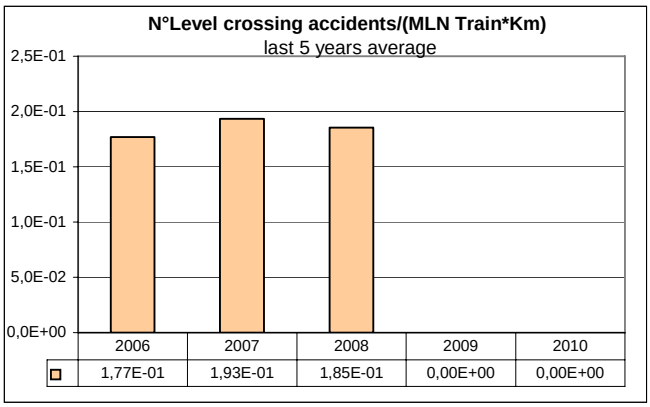
Accidents divided by type

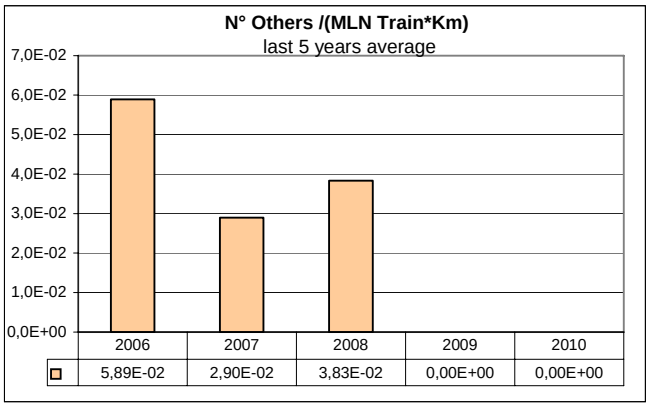












2007 report: values related to 2006.
2008 report: values related to the average between 2006 and 2007.
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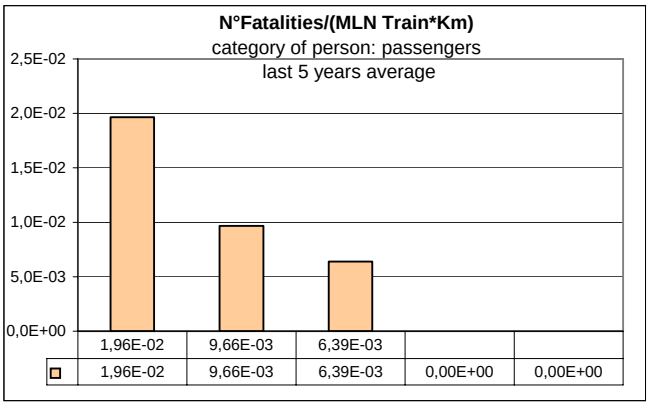
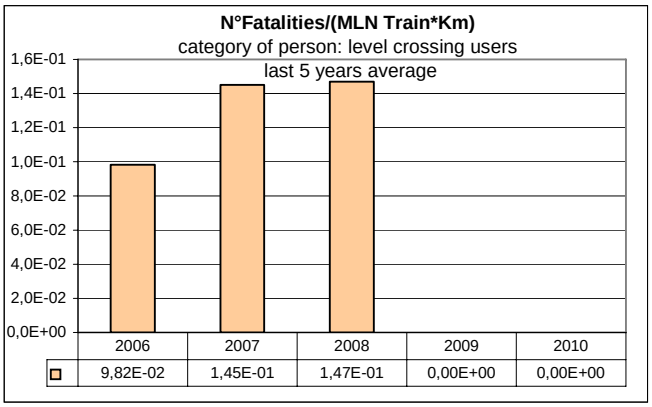
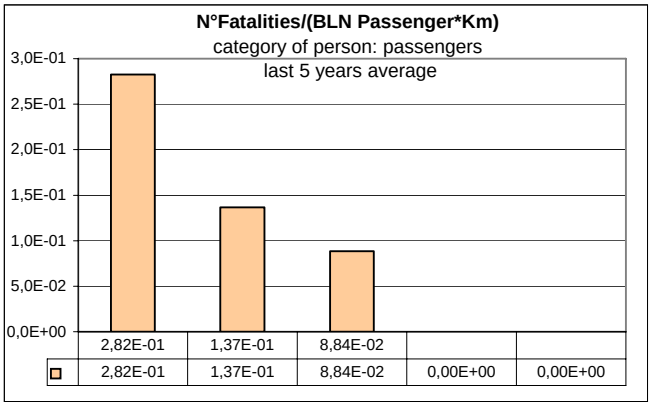
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

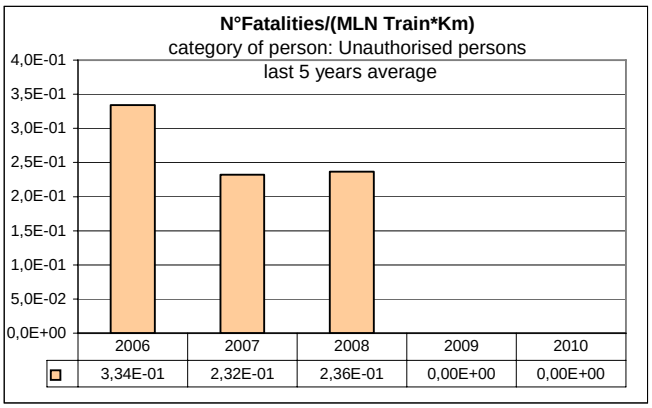
Fatalities divided by category of people involved

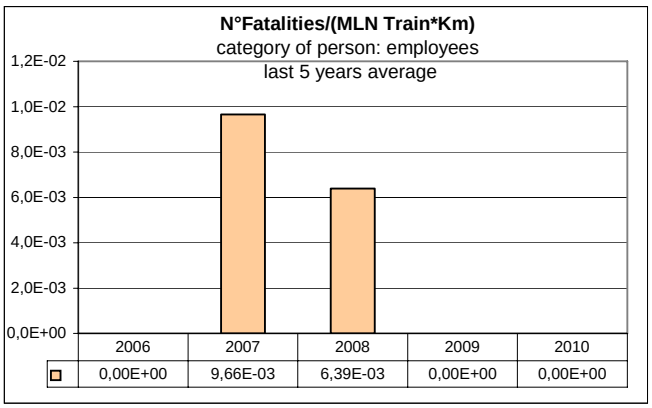
Fatalities divided by category of people involved

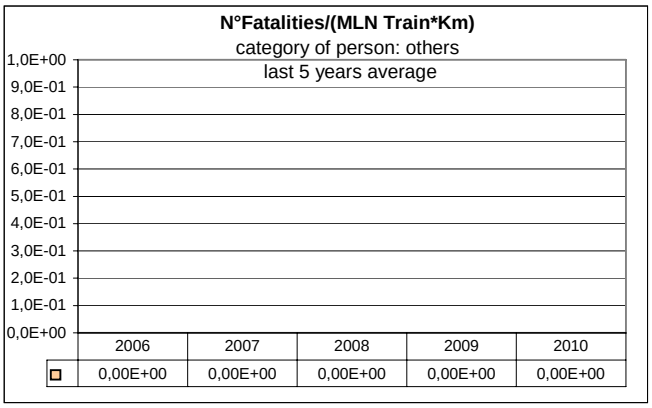












2007 report: values related to 2006.
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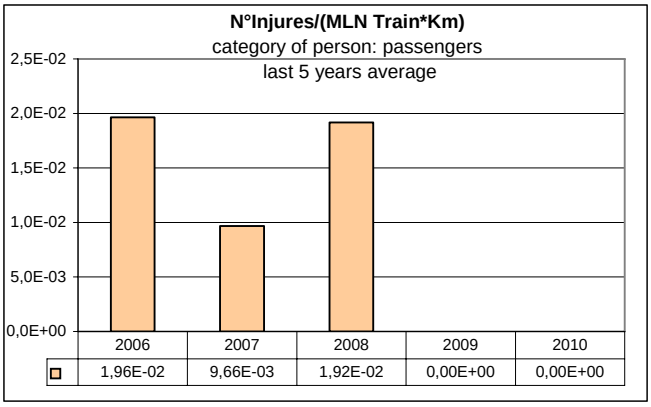
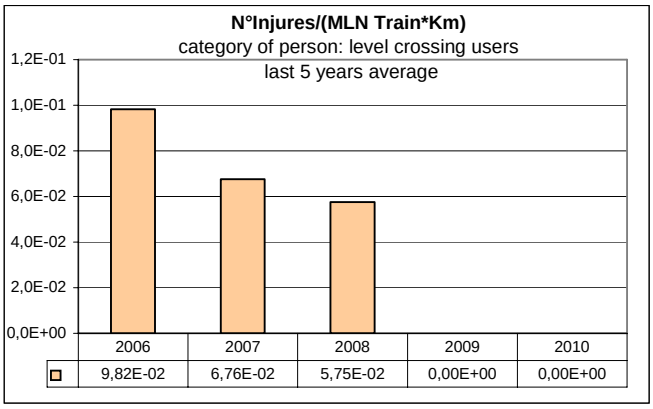
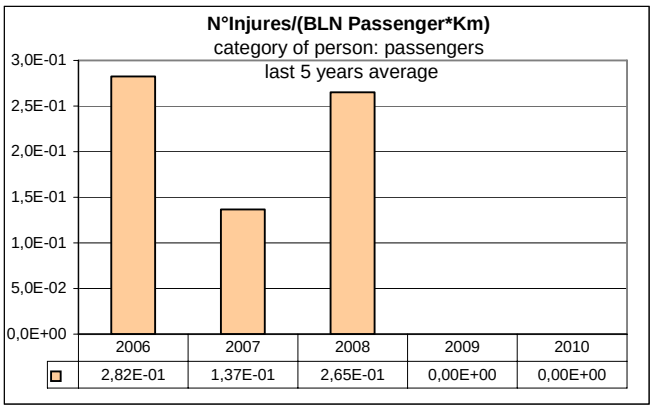
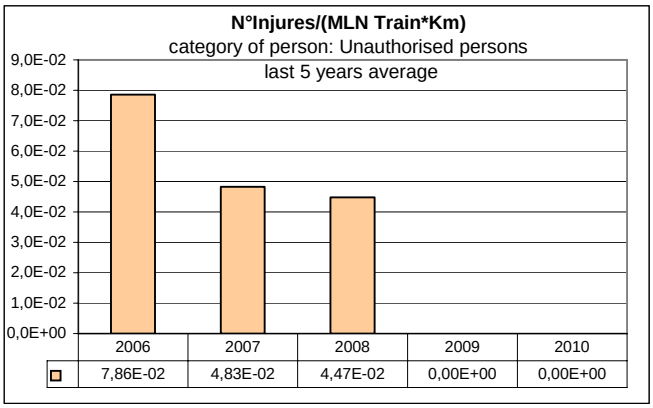
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

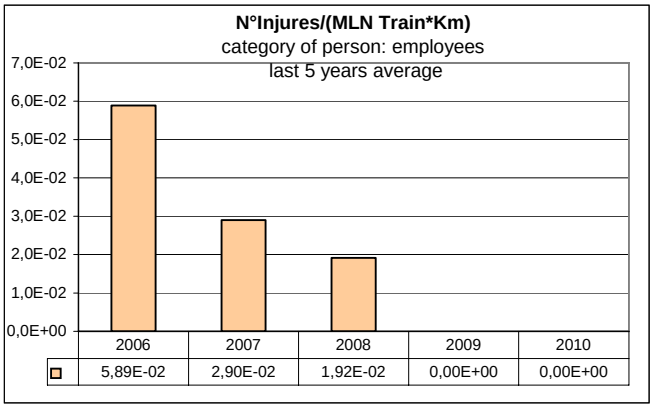
Injures divided by category of people involved

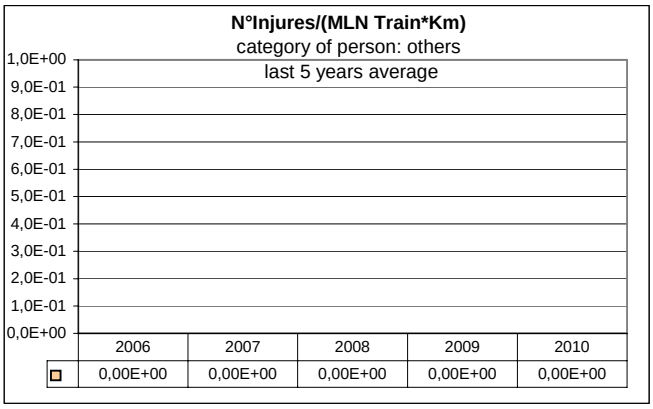












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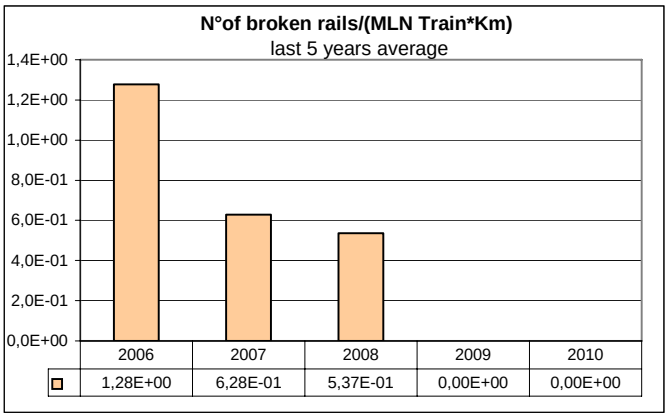
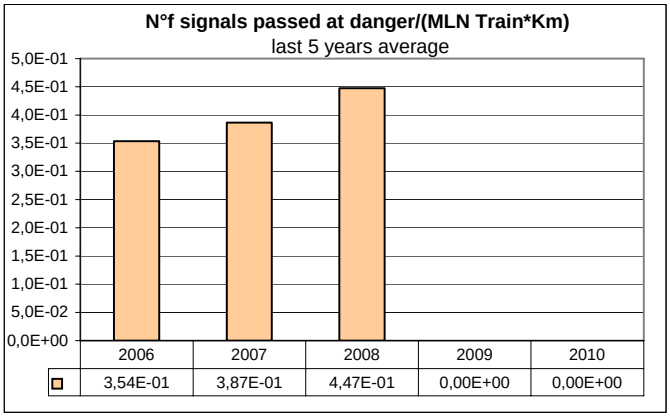
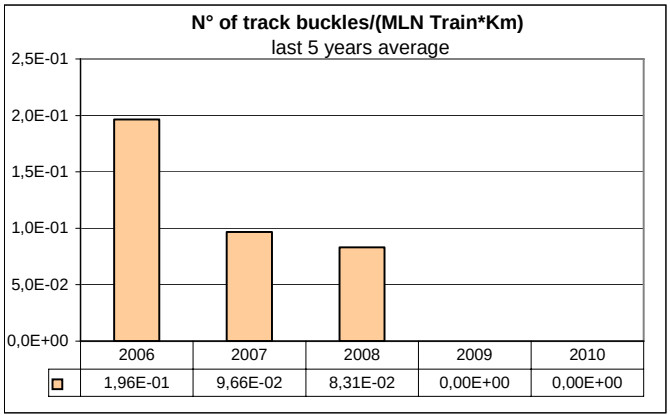
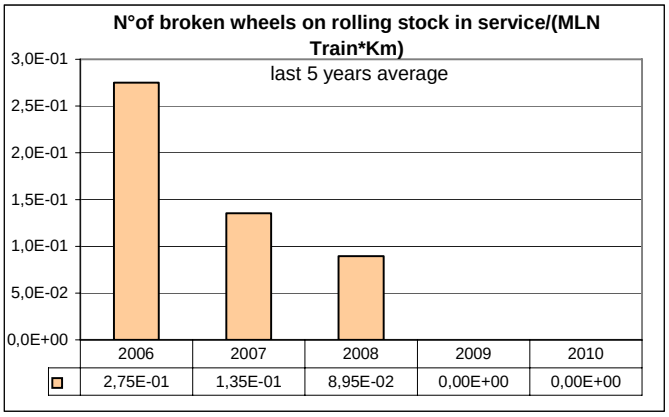
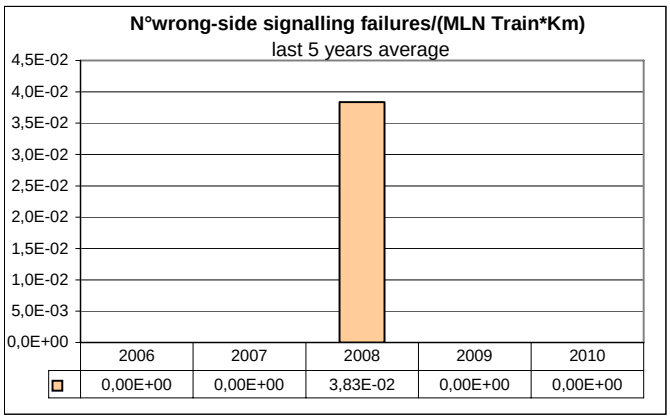
Precursors to accidents

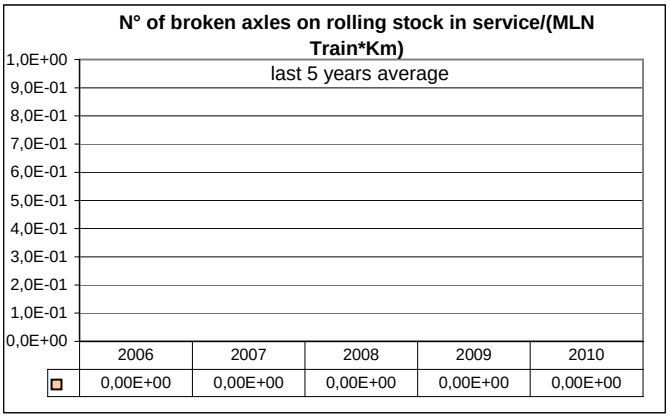












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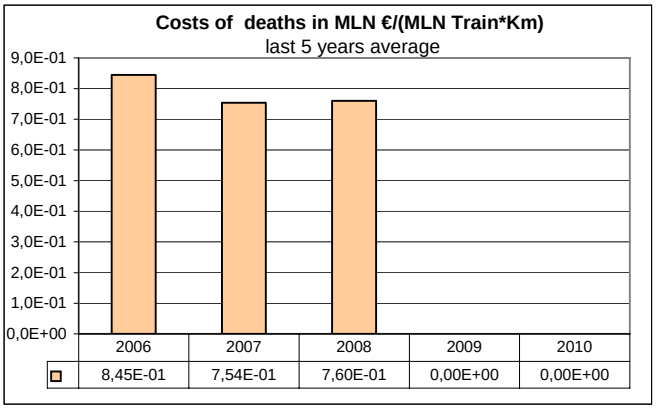
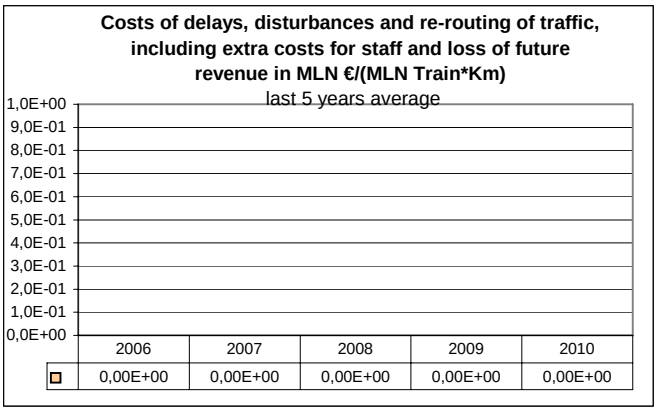
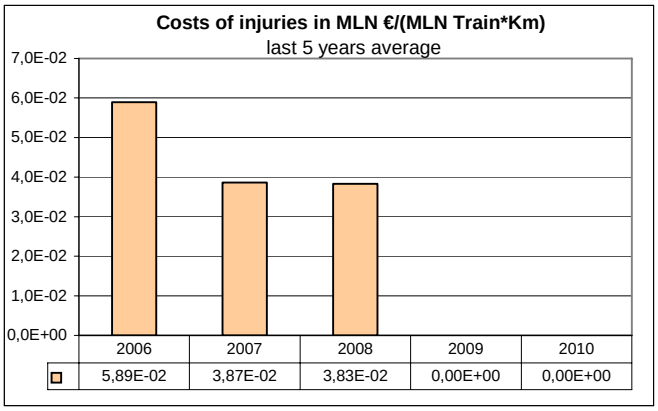
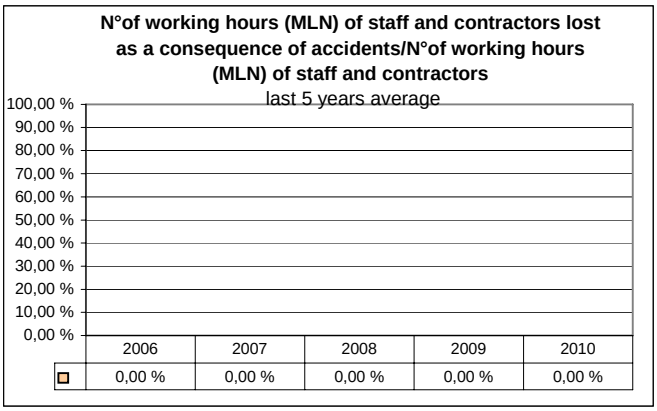
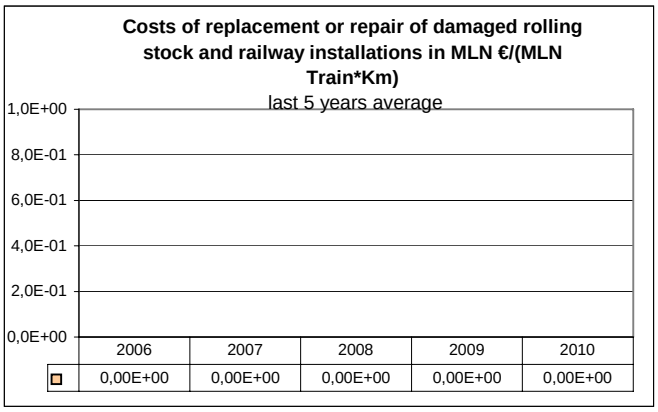
Cost of all accidents, number of working hours of staff and contractors lost as a consequence of accidents











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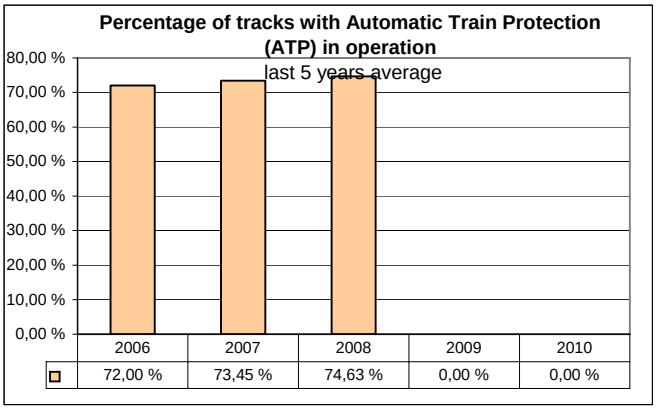

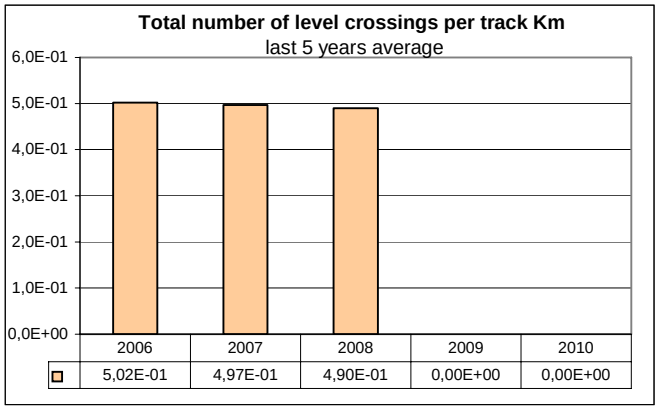

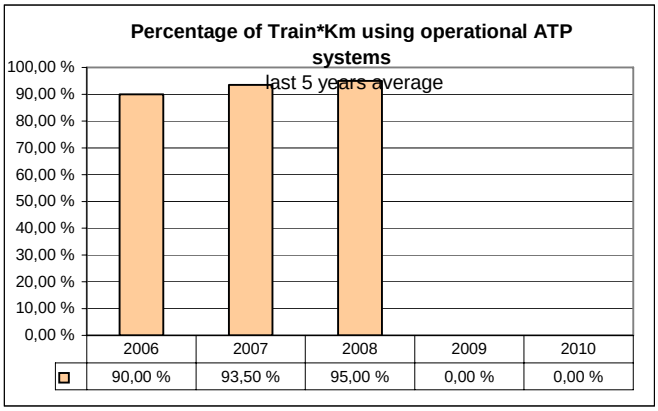

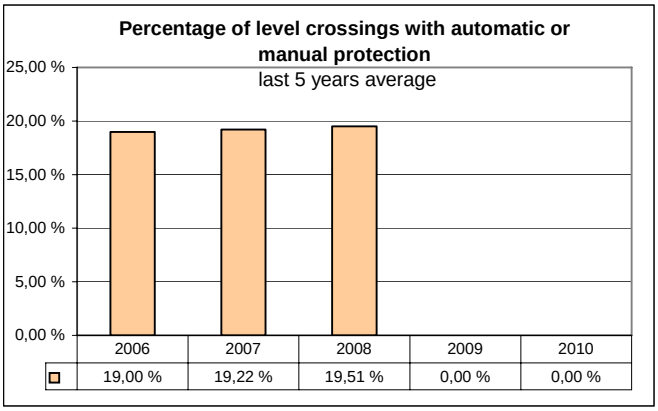

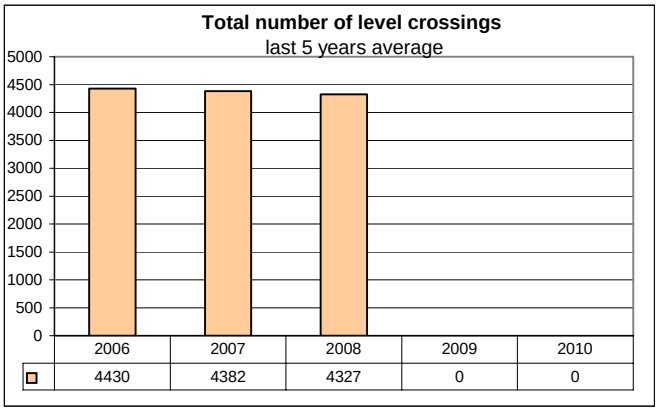

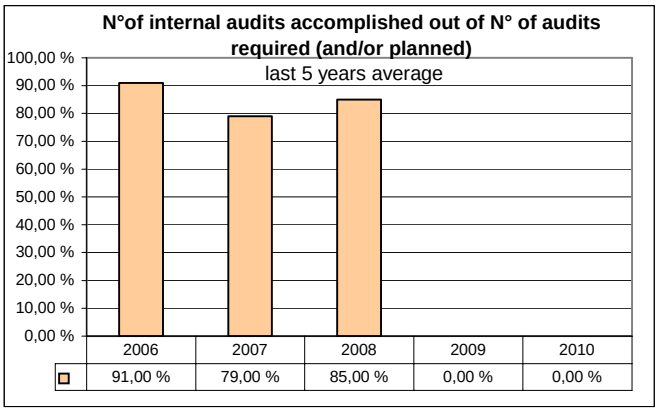

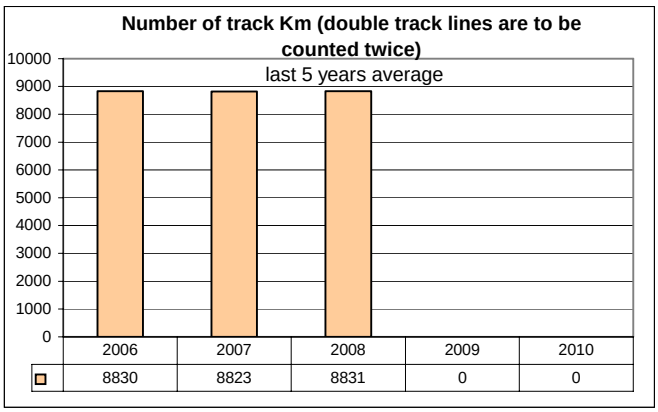

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C.2 Definitions used in the annual report

National definitions and missing data

Suicides: national definition, an estimate from the RU (VR LTD), based on their information from the police. The police send the NSA information on the accidents investigated as suspected suicides. However we do not get the final information on the cause of the death. The causes of deaths have in the official statistics a class called a suicide done by throwing oneself under a moving vehicle. Most of these suicides are railway suicides but not all. Railway suicides cannot be found in the official death cause statistics as its own class. The NSA will continue the cooperation with the police and Statistics Finland.

Level crossing accidents: Level crossing accidents reported are significant accidents. In addition we had during the year 2007 49 non-significant level crossing accidents. Level crossing users include the pedestrians.

Missing data:

Costs caused by accidents

Costs caused by accidents are not yet collected in Finland. We will concentrate on making a procedure to collect accident costs with the method described in the revision of Annex 1 of the safety directive.

We have made some estimation on costs of deaths and costs of serious injuries. The basic values are estimated for the Ministry of Transport and Communications by the Finnish Road Administration. The values are based on the willingness to pay principle.

Change of GDP 2005 -> 2006 +4.9%, 2006 -> 2007 +4.5% and 2007 -> 2008 +1.0%

Fatality 2005, basic value: 1 752 000 €
Fatality 2006: 1 837 848 €
Fatality 2007: 1 920 551 €
Fatality 2008: 1 939 757 €

Serious injury 2005, basic value: 227 000 €
Serious injury 2006: 238 123 €
Serious injury 2007: 248 839 €
Serious injury 2008: 251 327 €

Costs of replacement or repair of damaged rolling stock and railway installations is not yet collected in Finland. There are some estimates on the costs but they are not systematically made for all accidents. The actual costs can be available several months after the accident and are not always added to the accident statistics.

Costs of delays, disturbances and re-routing of traffic, including extra costs for staff and loss of future revenue is not collected.

Total number of wrong-side signalling failures, Total number of broken wheels on rolling stock in service, Total number of broken axles on rolling stock in service

Total number of wrong-side signalling failures, total number of broken wheels on rolling stock in service and total number of broken axles on rolling stock in service are missing for the moment. The data has not been delivered to the NSA. After receiving the data it will be immediately delivered to ERA.

Working hours

Total number of working hours of staff and contractors lost as a consequence of accidents is not collected in Finland. We have had discussions on this and the general estimation was just that the number of working hours lost as a consequence of accidents is low.

ANNEX D: IMPORTANT CHANGES IN LEGISLATION AND REGULATION

	Legal reference	Date legislation comes into force	Reason for introduction (Additionally specify new law or amendment to existing legislation)	Description
General national railway safety legislation	NONE			
Legislation concerning the national safety authority	NONE			
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	Sections 14, 15 (2) and 16 (1) of the Decree (750/2006, amendment 454/2008) concerning the Safety and Interoperability of the Railway System	1.7.2008	Amendment to the existing legislation.	The amendment concerns the EC verification and the declaration of verification, to be exact the intermediate statement verification, the technical file accompanying the declaration of verification and the monitoring powers of the notified bodies. The amendment implements the Commission directive 2007/32/EC.
National rules concerning railway safety				
Rules concerning national safety targets and methods	NONE			
Rules concerning requirements on safety management systems and safety certification of Railway Undertakings	NONE			
Rules concerning requirements on safety management systems and Safety Authorisation of Infrastructure Managers	NONE			
Rules concerning requirements for wagonkeepers	NONE			
Rules concerning requirements for maintenance workshops	NONE			

Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between Railway Undertakings, registration systems and requirements on testing procedures	NONE			
Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	NSA regulation (RVI/478/410/2008) concerning the signs of the track. NSA regulation (RVI/362/431/2008) concerning the safety devices in the railway system. NSA regulation (RVI/363/412/2008) concerning the train's ability to brake, the inspection of brake and the brake test.	1.6.2008 1.8.2008 1.11.2008 1.11.2008	Repealed and updated the NSA regulation (RVI/1720/090/2007) concerning the signs of the track. Repeals and updates the norm concerning the same questions given by the IM before the establishment of the NSA. Repeals and updates the norm concerning the same questions given by the IM before the establishment of the NSA.	The NSA regulation concerned the signs of the track and the questions relating to their form and positioning. The regulation is repealed by the NSA regulation (RVI/148/410/2009), which came into force in 1.3.2009. The NSA regulation concerns the basic principles of various safety devices, questions related to signal box and provisions concerning the introduction of a train protection device. Furthermore the regulation includes provisions concerning the positioning of the safety devices. The NSA regulation includes the provision concerning the train's ability to brake and its effect to the allowed speed of the train. The regulation also includes provisions

	NSA regulation (RVI/474/412/2008) on communication in the railway system.	1.11.2008	Repeals and updates the NSA regulation (RVI/2239/412/200) on communication in the railway system.	concerning the relationship between the train's ability to brake and the size of the train. Furthermore the regulation includes provisions concerning inspection of brakes and the brake test. The regulation includes common provisions concerning the communication in the railway system: the language to be used, the speed of the speech and the identification and the recording of the message. The regulation includes also the requirements concerning the forms of the messages and a provision concerning the communication in the state of emergency.
	NSA regulation (RVI/479/412/2008) on operating and track-working in the railway system.	1.11.2008	Repeals and updates the NSA regulation (RVI/2237/412/2007) on operating and track-working in the railway system.	The NSA regulation concerns the operating, shunting and track-working. The regulation includes the requirements for starting the operation, requirements for the speed of the operation and the responsibilities
	NSA regulation (RVI/480/412/2008) concerning the speed-restriction signal, signals and signs connected to the operation.	1.11.2008	Repeals and updates the NSA regulation (RVI/2238/412/2007) concerning the speed-restriction signal, signals and signs connected to	

			the operation.	connected to the operation. The regulation includes also provisions concerning the operation in special circumstances as in cases where the train formation breaks in two during the operation.
	NSA regulation (RVI/725/412/2008) on the allowed size of the load, the weight of the train and the train-formatting.	1.11.2008	Repeals and updates the norm concerning the same questions given by the IM before the establishment of the NSA.	
	NSA regulation (RVI/295/411/2008) on the museum train traffic.	1.1.2009	Repeals the NSA regulation (RVI/1266/412/2007) concerning the museum train traffic during the warning sign of forest fire and the norm concerning the questions given by the IM before the establishment of the NSA.	The NSA regulation concerns various sings and signals connected to the operation and their positioning. It includes the requirements for the sings and signals and the information concerning the obligatory nature of the various sings and signals.
	NSA regulation (RVI/301/412/2008) concerning the operating without a train protection device.		New regulation.	The NSA regulation concerns the allowed size of the load, the weight of the train and the train-formation. The regulation includes provisions connected to the speed of the train with certain loads and provisions for counting the weight of the train. Furthermore the regulation concerns the questions how various wagons should

				be placed in the formatting of trains and what should be done if a wagon is for instance damaged. The NSA regulation concerns the operation with museum trains in low volume cases where the entity responsible for the operation does not pursue for commercial profit. The regulation includes provisions concerning both the operation and the vehicles as requirements for safety devices, registration and signs to be used. The NSA regulation concerns the operation without a train protection device with locomotives equipped with the device. According to the regulation the operation without the device is allowed only in cases where the NSA entitles the operator to deviate form the obligation to operate with the train protection device. According to the regulation the NSA

				can entitle time-limited deviation only in exceptional cases, for instance when the device is damaged and it cannot be repaired due to the shortage of spear parts. The entitlement has to be made under the requirements of the Railway Act and it cannot be granted for passenger traffic or commercial freight traffic.
Rules laying down requirements on additional internal operating rules (company rules) that must be established by the Infrastructure Managers and Railway Undertakings	NONE			
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification	NONE			
Rules concerning the investigation of the accident and incidents including recommendation	NONE			
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	NONE			
Rules concerning requirements for authorisation of placing in service the infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level crossing, platforms, etc.)	NONE			

ANNEX E: THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION – NUMERICAL DATA

E.1. Safety Certificates according to Directive 2001/14/EC

Number of Safety Certificates issued according to Directive 2001/14/EC, held by Railway Undertakings in year 2008	being licensed in your Member State	-
	being licensed in another Member State	-

E.2. Safety Certificates according to Directive 2004/49/EC

		New	Updated / amended	Renewed
E.2.1. Number of valid Safety Certificates Part A held by Railway Undertakings in the year 2008	being registered in your Member State	-	-	-
	being registered in another Member State	-	-	-

		New	Updated / amended	Renewed
E.2.2. Number of valid Safety Certificates Part B held by Railway Undertakings in the year 2008	being registered in your Member State	-	-	-
	being registered in another Member State	-	-	-

			A	R	P
E.2.3. Number of applications for Safety Certificates Part A submitted by Railway Undertakings in year 2008	being registered in your Member State for	new certificates	-	-	-
		updated / amended certificates	-	-	-
		renewed certificates	-	-	-
	being registered in another Member State for	new certificates	-	-	-
		updated / amended certificates	-	-	-
		renewed certificates	-	-	-

			A	R	P
E.2.4. Number of applications for Safety Certificates Part B submitted by Railway Undertakings in year 2008	being registered in your Member State for	new certificates	-	-	-
		updated / amended certificates	-	-	-
		renewed certificates	-	-	-
	being registered in another Member State for	new certificates	-	-	-
		updated / amended certificates	-	-	-
		renewed certificates	-	-	-

A = Accepted application, certificate is already issued
R = Rejected applications, no certificate was issued
P = Case is still pending, no certificate was issued so far

E.2.5. List of countries where RUs applying for a Safety Certificate Part B in your Member State have obtained their Safety Certificate Part A

N/A

E.3. Safety Authorisations according to Directive 2004/49/EC

	New	Updated / amended	Renewed
E.3.1. Number of valid Safety Authorisations held by Infrastructure Managers in the year 2008 being registered in your Member State	-	-	-

		A	R	P
E.3.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2008 being registered in your Member State	new authorisations	-	-	-
	updated / amended authorisations	-	-	-
	renewed authorisations	-	-	-

A = Accepted application, authorisation is already issued
R = Rejected applications, no authorisation was issued
P = Case is still pending, no authorisation was issued so far

E.4. Procedural aspects – Safety Certificates part A

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part A in year 2008 for Railway Undertakings	being registered in your Member State	-	-	-
	being registered in another Member State	-	-	-

E.5. Procedural aspects – Safety Certificates part B

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part B in year 2008 for Railway Undertakings	being registered in your Member State	-	-	-
	being registered in another Member State	-	-	-

E.6. Procedural aspects – Safety Authorisations

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Authorisation in year 2008 for Infrastructure Managers	being registered in your Member State	-	-	-
	being registered in another Member State	-	-	-