

# NSA Annual Safety Report Finnish Rail Agency 2007

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## A. NSA ANNUAL SAFETY REPORT – FINNISH RAIL AGENCY

This is a report on Finnish railway safety and the Finnish Rail Agency's activities during 2007, which was the Agency's first whole year of operation. The report is given to the European Rail 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 Finnish Rail Agency during the year 2007.

### A.2. Summary

We had no major railway accidents and no passenger fatalities in Finland during the year 2007. The most serious accident occurred in Joensuu, where an assistant shunter died when a train hit him.

According to the Railway Act the safety certificates for the railway undertakings and the safety authorisations for the infrastructure managers based on the Safety Directive (2004/49/EC) were to be updated before the beginning of May 2007. Finnish Rail agency issued the safety certificate for VR-Group Ltd and the safety authorisation for the Finnish Rail Administration for five years. In addition, three traffic licences were issued for the operation of traffic connected with infrastructure maintenance and eight traffic licences to the heritage railways.

Section 28 (5) of the Finnish Railway Act was amended in 2007. Finnish Rail Agency renewed "Technical regulations relating to train safety" (RVI/1554/412/2007).

## B. INTRODUCTION

### 1. Introduction to the report

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

We had mainly two problems in data collection. The first one was the lack of information on one of the Annual Safety Reports of the stakeholders. The other one was the missing of some data on Common Safety Indicators. The costs caused by the accidents are not yet collected in Finland. It is impossible even to give estimation on accident costs. We will concentrate on making a procedure to collect accident costs with the method described in the recommendation for the revision of Annex 1 of the Safety Directive. We will have amendments in national legislation (revision of Railway Act) at the latest in the beginning of 2009. However we have made some estimation on costs of deaths and costs of serious injuries for the years 2006 and 2007.

Total number of broken rails, 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 have not been delivered to the NSA. After receiving the data it will be immediately delivered to ERA.

Total number of working hours of staff and contractors lost as a consequence of accidents is not yet 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. We will continue the discussions with the stakeholders to fix the problem.

## 2. Railway Structure Information

The map of the Finnish railway network can be found in Annex A.1 on page 14.

We only have one Infrastructure Manager, the Finnish Rail Administration and one Railway Undertaking, VR-Group Ltd, which operates both passenger and freight traffic. The list of Railway Undertakings and Infrastructure Managers is in Annex A.2.

## 3. Summary - General Trend Analysis

In 2007, Finnish Rail Agency issued the first Safety Authorisation and Safety Certificates.

In Finland, Railway Undertakings and heritage railway companies are issued an operating licence by the Ministry of Transport and Communications.

The longer term trends in safety can not be calculated from the CSI yet. Railway safety has remained on about the same level for the last five years when measured with the number of different types of accidents or with the number of fatalities. The number of derailments in train traffic has decreased to almost zero because the track buckles have decreased clearly after the upgrading of tracks.

## C. Organisation

### 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. It gives instructions for health inspections as well as competence requirements and training for staff working on the railways. In 2007, the Finnish Rail Agency also took care of ticket inspections on trains.

The Finnish Rail Agency is led by a director general. Mr Kari Alppivuori was appointed as the director general in July, 2006. 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. There were 71 members of staff, 33 of whom worked in the ticket inspection office.

Organisation of the Finnish Rail Agency remained the same as in 2006. The Agency had two departments: the safety department and the regulation department. The safety department was divided into two units: the Technical Unit and the Supervision and Development Unit. The regulatory body is a separate organisational body, as is the administrative unit. Communications are taken care of by the communications manager.

New organisational structure was prepared, but it came into force only in 2008.

The organisation chart can be found on page 16.

## 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 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 by the NSA and by need of the improvement of safety regulations.

Finnish Rail Agency has set National Safety Targets 2007-2010 for railway stakeholders with the letter dated on January 24<sup>th</sup>, 2007. The NST are general and qualitative. 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.

We set quantitative targets to railway employees, track, rolling stock, traffic control & railway operation and level crossings & trespassers.

The safety regulations needed updating and improving after adopting the new Railway Act and after the establishment of Finnish Rail Agency.

Table D.1.2 – Safety measures with other triggers

<b>Safety measure decided</b>	<b>Description of the trigger of the measures</b>
Safety measure decided by RU and IM	Setting of National Safety Target
Improvement of safety regulations	Update of safety regulations needed after the new Railway Act and the establishment of the NSA

### 2. Detailed data trend analysis

We had no major railway accidents and no passenger fatalities in Finland during the year 2007. The most serious accident occurred in Joensuu, where an assistant shunter died when a train hit him. We had no significant collisions or derailments during 2006 or 2007.

The total number of significant railway accidents was lower during 2007 (21) than during 2006 (52). Part of the decrease 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 number of trespasser accidents was lower in 2007 (9) than in 2006 (17). The figures are quite low and the random variation mainly explains the change.

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 and 11 in 2007.

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 and 3 during 2007. 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. Number of signals passed at danger has remained about 20 during the last five years. We do not have information on the wrong-side signalling failures yet. The discussions with the stakeholders on collecting the data are going on.

The costs caused by the accidents are not yet collected in Finland. It is impossible even to give estimation on accident costs. We will concentrate on making a procedure to collect accident costs with the method described in the recommendation for the revision of Annex 1 of the Safety Directive. We will have amendments in national legislation (revision of Railway Act) at the latest in the beginning of 2009. However we have made some estimation on costs of deaths and costs of serious injuries for the years 2006 and 2007.

Total number of working hours of staff and contractors lost as a consequence of accidents is not yet 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. We will continue the discussions with the stakeholders to fix the problem.

About 75% 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 (estimation 97% of traffic during 2007).

Total number of level crossings has decreased by about 50/year during the last years. At the beginning of 2007 there were still 4382 level crossings on the Finnish rail network. About 80% of the level crossings are passive. 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.

### 3. Results of safety recommendations

Accident Investigation Board Finland completed during 2007 13 investigations on railway accidents or incidents. In those investigations it issued 26 new recommendations. 15 of them concerned the operation rules (directions).

The Accident Investigation Board has yearly a follow-up meeting on all the recommendations issued in railway traffic investigations. The meeting took place on November 7<sup>th</sup>, 2007. The NIB had issued a total of 231 railway related recommendations since the beginning of its work. 63% of them had been implemented and 12% will not be implemented (most of them are outdated).

Finnish Rail Agency did not issue recommendations to Accident Investigation Board Finland.

### E. IMPORTANT CHANGES IN LEGISLATION AND REGULATION

Section 28(5) of the Railway Act (555/2006) was amended in 2007. These amendments entered into force on 1 January 2008.

Under the amended Section 28(5), the Finnish Rail Agency, which is responsible for the safety and interoperability of the rail system, is entitled, if good reason exists, to deviate from the regulations it has issued concerning traffic operation on the railway network, infrastructure maintenance, track equipment, track structures, rolling stock used on the railway network and the use of rolling stock in traffic. Such deviation may be made on condition that it does not endanger the safety of the rail system. As part of its decision, the Finnish Rail Agency may also impose conditions and restrictions aimed at ensuring safety.

Finnish Rail Agency renewed "Technical regulations relating to train safety" (RVI/1554/412/2007). This is not a new regulation but primarily reflects the change from it being a regulation issued by the infrastructure manager to a regulation issued by the national safety authority. The regulation is provisional and will be repealed on the entry into force of new regulations on November 2008 (issued at the beginning of 2008). These regulations cover national rules on railway lines, rolling stock, brakes, speeds, axle loads, train weight, train configuration and museum rolling stock.

### F. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

#### 1. National legislation - starting dates - availability

Finnish Rail Agency issued safety certificates and a safety authorisation for the first time in 2007. According to the Finnish legislation, safety certificates and safety authorisations had to be issued by the end of April, 2007.

##### 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 of other relevant national legislation to Railway Undertakings and Infrastructure Managers (website, paper documentation on request, etc.)**

All Finnish legislation is available up-to-date in the internet on the Finlex website. National safety rules are also published in Finlex. Finnish Rail Agency's rules can be found at <http://www.finlex.fi/fi/viranomaiset/normi/499001/>.

In 2007, Finnish Rail Agency published 7 new rules in Finlex.

## **2. Numerical data (Annex E)**

Finnish Rail Agency received two applications for Safety Authorisations in 2007. One of the applications was cancelled later on.

## **3. Procedural aspects**

### **3.1 Safety certificates Part A**

#### **3.1.1 Reasons for updating/amending Part A certificates**

Finnish Rail Agency issued only new Part A Certificates.

#### **3.1.2. Main reasons if the mean issuing time for Part A Certificates was more than 4 months**

Issuing time for a Part A Certificate did not exceed 4 months.

#### **3.1.3 Overview of the requests from other NSA's to verify/access information relating the Part A Certificate of a Railway Undertaking**

No such requests were addressed to Finnish Rail Agency in 2007.

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

Finnish Rail Agency faced no such problems in 2007.

#### **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**

Problems did not occur. Finnish Rail Agency prepared guidelines for filling in the form.

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

No problems/difficulties occurred.

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

The VR Group did not mention any problems when it was applying for the Part A Certificate.

### **3.1.9 Feedback procedure that allows Railway Undertaking to express their opinion on issuing procedures/practices or to file complaints**

Representatives of the Finnish Rail Agency and those of the Railway Undertaking meet frequently. Feedback is given and received in these occasions. Railway companies are also invited to participate Finnish Rail Agency's customer research. The first customer research was conducted in December, 2007. It will be 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**

Finnish Rail Agency issued only new Part B Certificates in 2007. Therefore, neither updating nor amending was made.

### **3.2.2 main reasons if the mean issuing time for Part B Certificates was more than 4 months**

The issuing time did not exceed 4 months.

### **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 was charged by the hour.

### **3.2.4 Summary of the problems with using the harmonised formats for Part B Certificates**

A Part B Certificate was issued together with the Part A Certificate. Therefore, Finnish Rail Agency does not have

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

A Part B Certificate was issued together with the Part A Certificate.

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

No Railway Undertaking has applied for a Part B Certificate alone.

### **3.2.7 Feedback procedure that allows Railway Undertaking to express their opinion on issuing procedures/practices or to file complaints**

Representatives of Finnish Rail Agency and the VR Group meet regularly and discuss current matters. Feedback is given and received in these meetings.

Railway companies are also invited to participate Finnish Rail Agency's customer research. The first customer research was conducted in December, 2007. It will be 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**

Finnish Rail Agency issued only new Safety Authorisations in 2007. Neither updating nor amending existing Safety Authorisations was made.

### **3.3.2 Main reasons if the mean issuing time for Safety Authorisations was more than 4 months foreseen in Article 12(1) of the Safety Directive**

Issuing time for Safety Authorisations did not exceed 4 months.

### **3.3.3 Summary of the regular problems/difficulties in application procedures for Safety Authorisations**

No problems occurred.

### **3.3.4 Summary of the problems mentioned by Infrastructure Managers when applying for a Safety Authorisations**

Finnish Rail Administration complained only about the price that was charged for issuing the Safety Authorisation.

### **3.3.5 Feedback procedure 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.

Infrastructure manager is invited to participate Finnish Rail Agency's customer research. The first customer research was conducted in December, 2007. It will be 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, which was passed on August 30, 2006, and came into force on September 1, 2006.

Issuing a Safety Authorisation is charged by the hour.

Finnish Rail Agency charged Finnish Rail Administration € 17,088 for issuing the Safety Authorisation.

## **G. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS**

Supervision was carried out following a detailed plan. The RU and IM 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 audited the Finnish Rail Administration's safety management system in March, 2007.

## **H. NSA CONCLUSIONS ON THE REPORTING YEAR – PRIORITIES**

No serious accidents happened on Finnish railways during 2007. However, railway traffic has a potential for major accidents. For example it is possible that at a level crossing a hazardous collision with a gasoline truck occurs. This may end in derailment of passenger train and environmental damage.

Supervision strategy and a detailed plan for supervision has been prepared.

The Railway Act is being updated.

## **I. SOURCES OF INFORMATION**

Finnish Rail Agency's Annual report 2007  
Safety Report of the VR-Group Ltd.  
Safety Report of Finnish Rail Administration  
Finnish Rail Agency's documents

## J ANNEXES

### ANNEX A: Railway Structure Information

- Network Map

- Infrastructure Manager

- Railway Undertaking

### ANNEX B: Organisation charts

- Finnish Rail Agency

- Relationship with other bodies

### 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

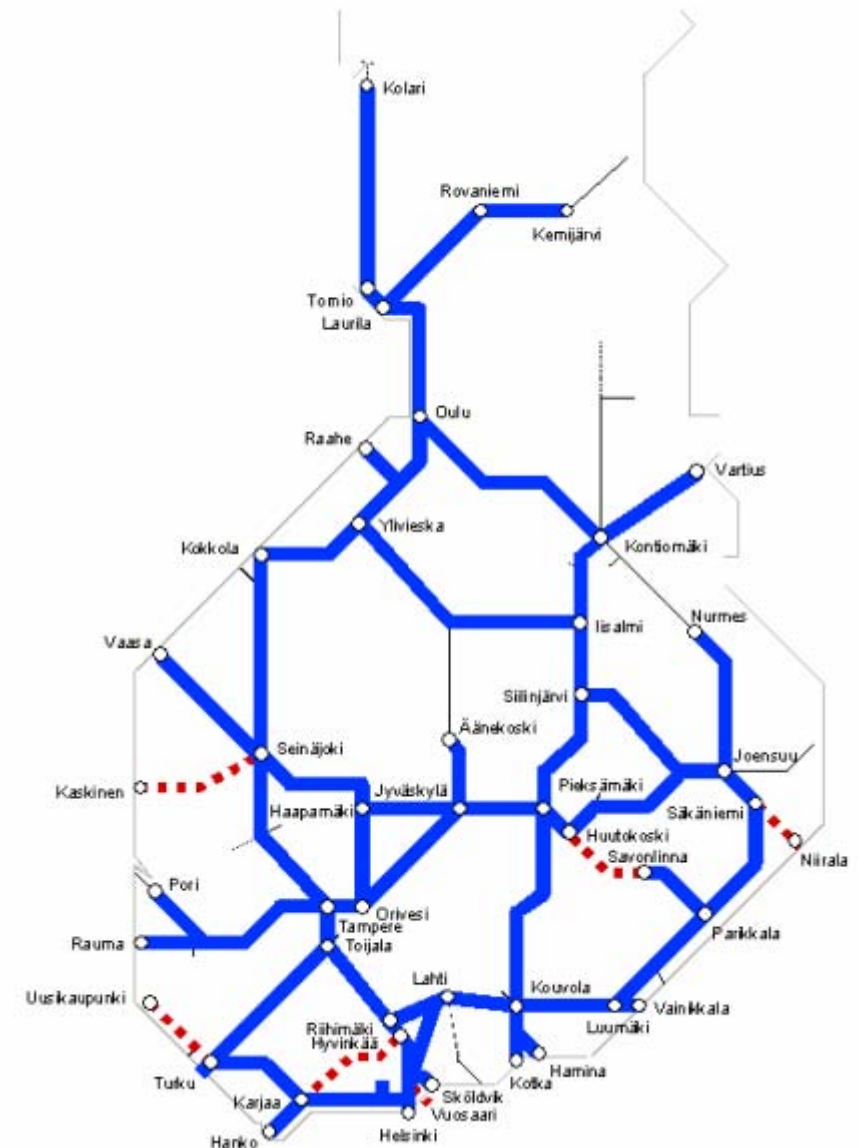
## ANNEX A: Railway Structure Information

### A.1. Network map

**Blue line** = Automatic train protection system complete

**Red dotted line** = Phase III of automatic train protection system under construction

**Grey line** = No automatic train protection system



## A.2. List of Railway Undertakings and Infrastructure Managers

### A.2.1. Infrastructure Manager(s)

Name	Address	Website/Network Statement Link	Safety Authorisation (Number/Date)	Start date of 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 Signals
Finnish Rail Administration	PO Box 185, FI-00101 Helsinki	<a href="http://www.rhk.fi">www.rhk.fi</a>	RVI/1228/310/2006 April, 27 <sup>th</sup> , 2007	January 1 <sup>st</sup> , 1995	5,899 km	3,047 km	570 km/5,329 km	0 km	Bombardier	4,334	11,000

### A.2.2. Railway Undertaking(s)

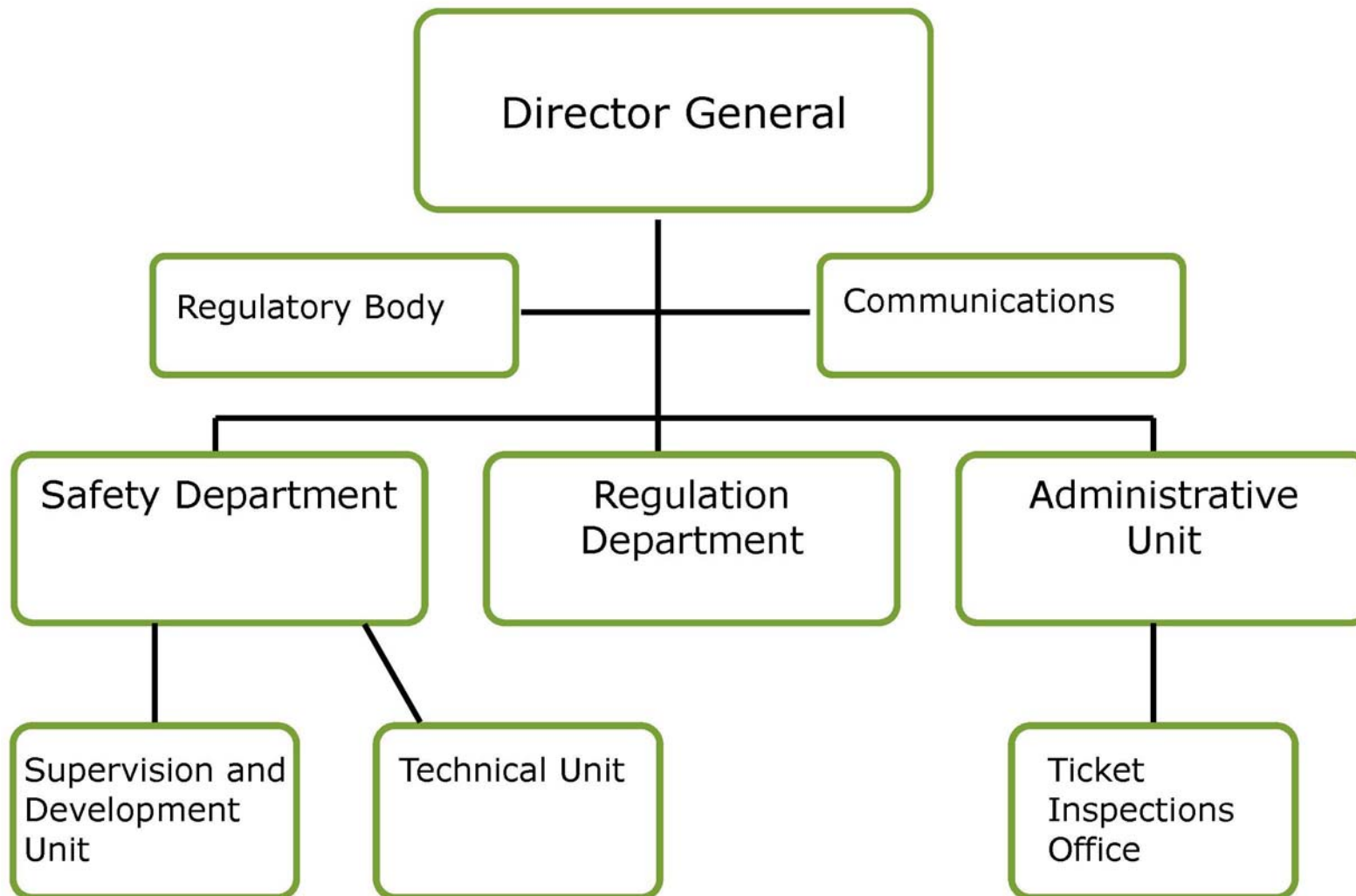
Name	Address	Website	Safety Certificate 2001/14/EC (Number/Date)	Safety Certificate A-B 2004/49/EC (Number/Date)	Start date of commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multiple Unit-sets	Number of Coaches/Wagons	Number of train drivers/safety crew	Volume of passenger transport	Volume of freight transport
VR Group	PO Box 488, FI-00101 Helsinki	<a href="http://www.vr.fi">www.vr.fi</a>	RVI/1219/310/2006 April 27 <sup>th</sup> , 2007	RVI/1219/310/2006 April 27 <sup>th</sup> , 2007	July 1, 1995 as VR-Group	Freight, passenger	532	384	13,103	1,839/	66.7 million trips	40.3 millions of tons

#### Abbreviations:

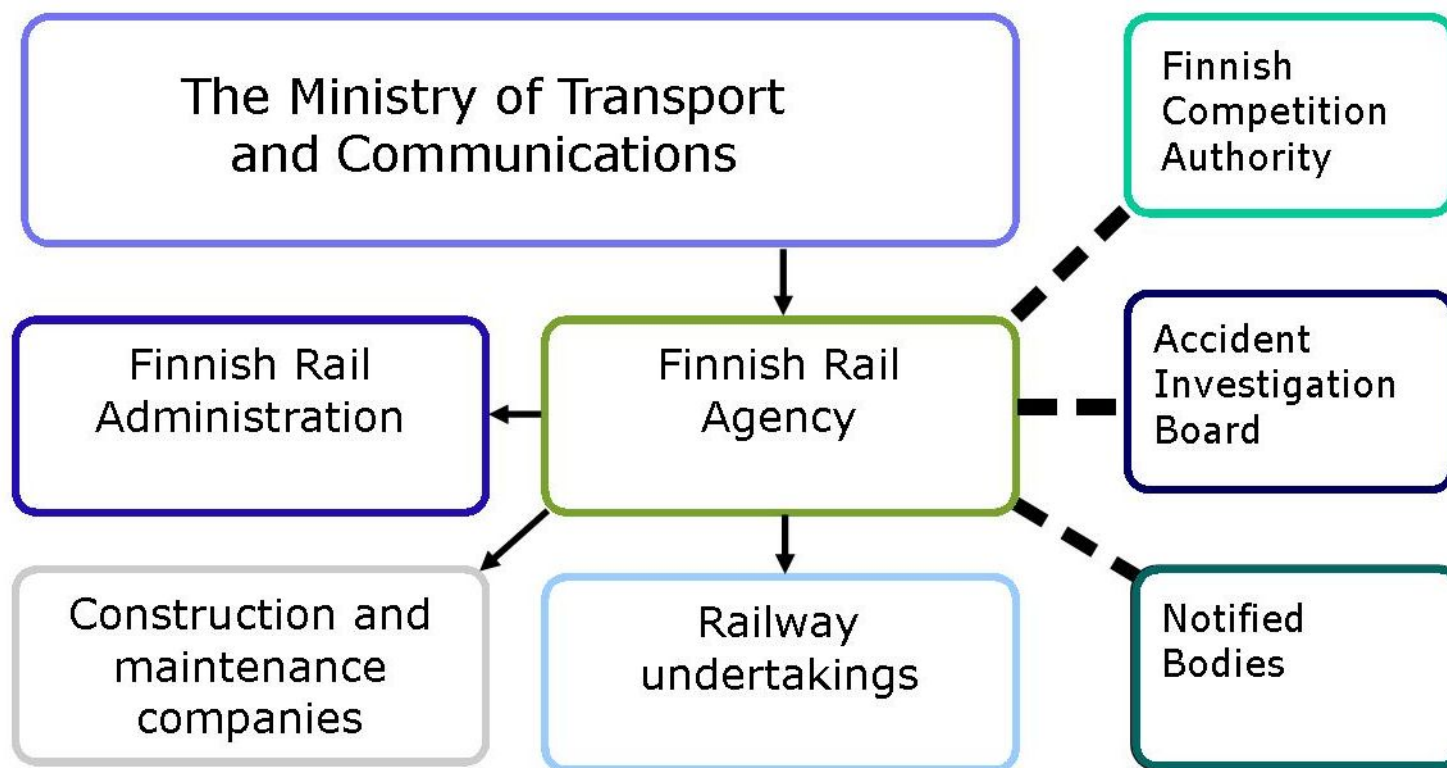
HSL = High Speed Line (Definition acc. Directive 96/48/EC)  
 ATP = Automatic Train Protection  
 LC = Level Crossing

## ANNEX B: Organisation chart(s) of the National Safety Authority

### B.1. Chart: Internal organisation



## B.2. Chart: Relationship with other National Bodies

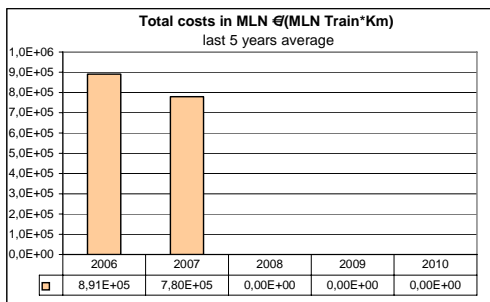
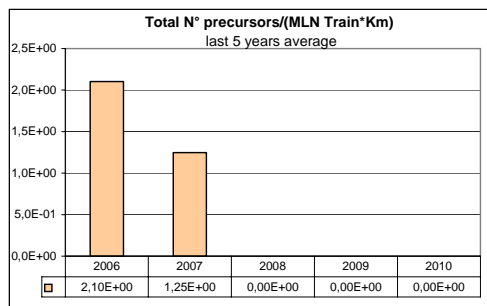
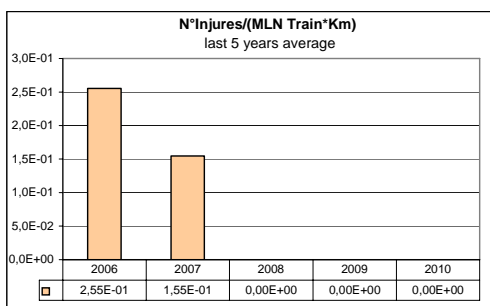
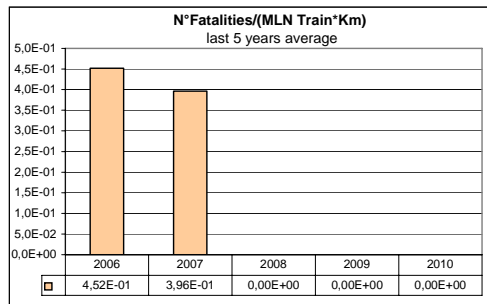
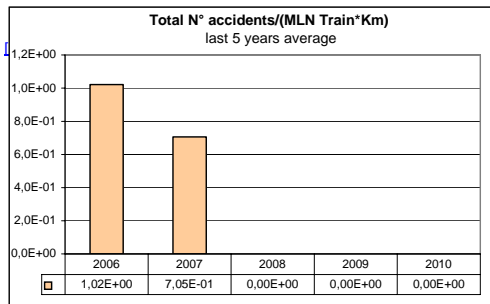


## ANNEX C - CSIs data

pages 18 to 24

### C.1. CSIs data

*Performances at a glance*



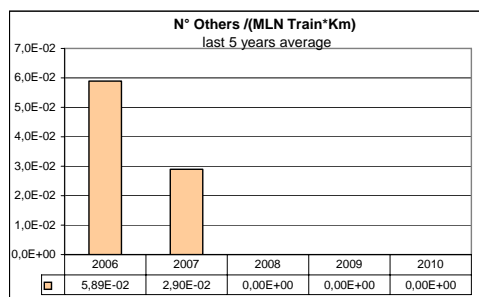
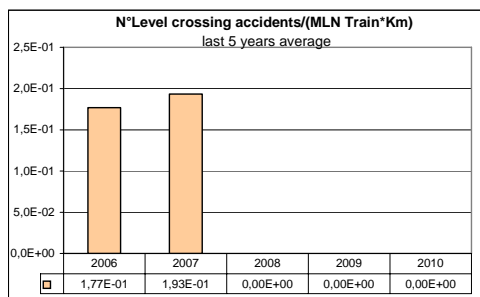
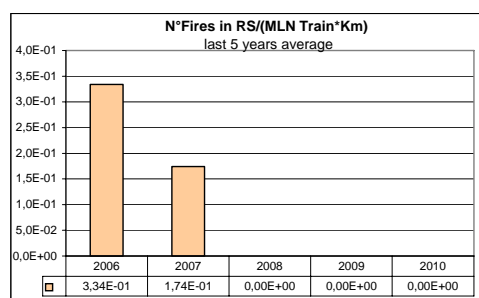
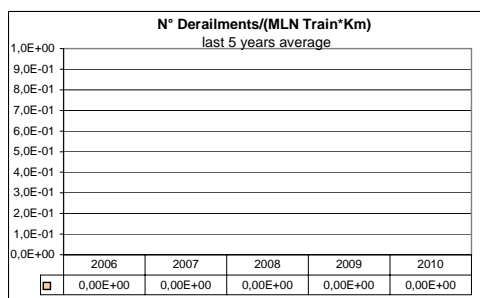
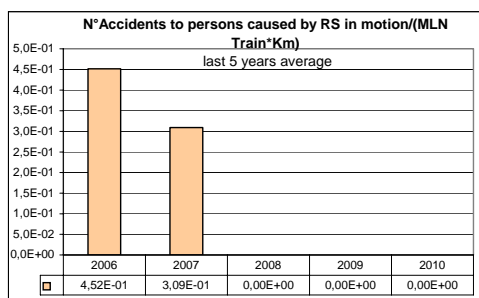
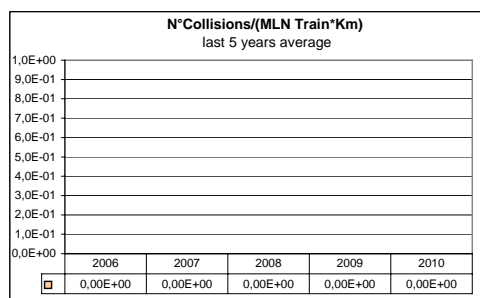
2007 report: values related to 2006.

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



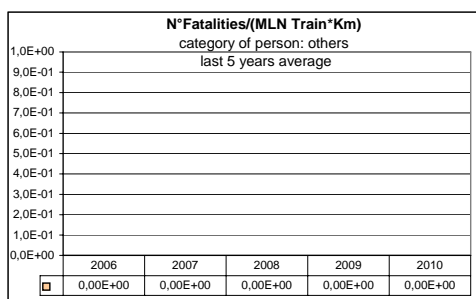
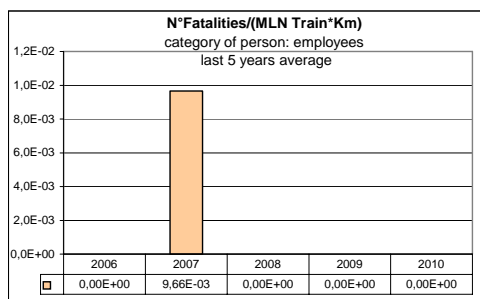
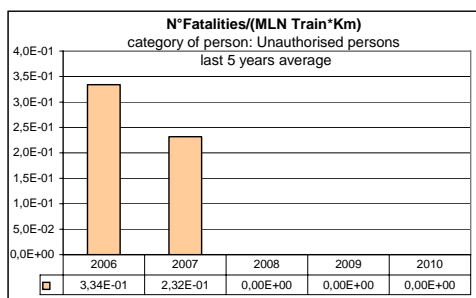
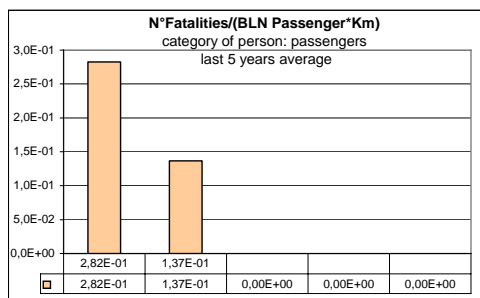
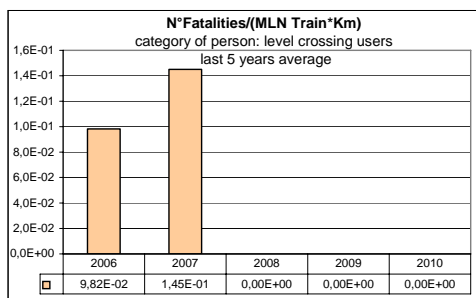
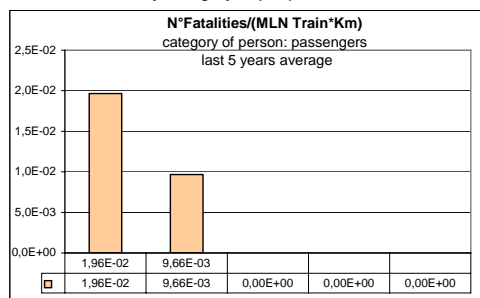
2007 report: values related to 2006.

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

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.

Fatalities divided by category of people involved



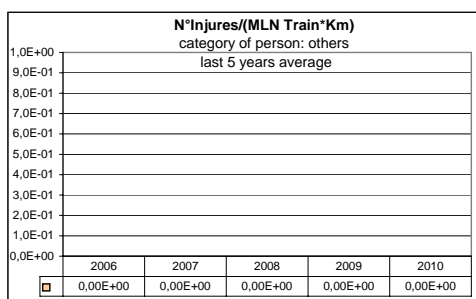
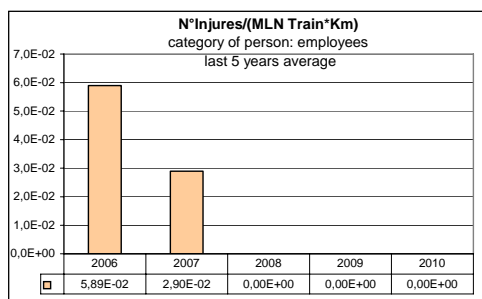
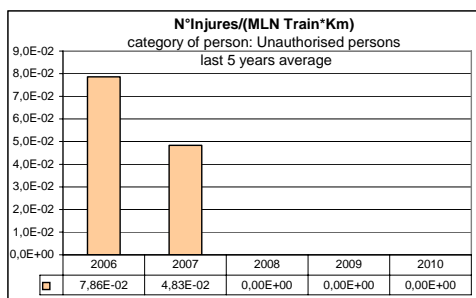
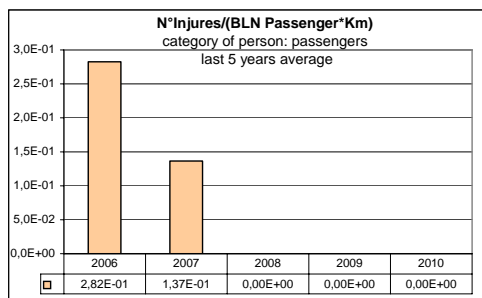
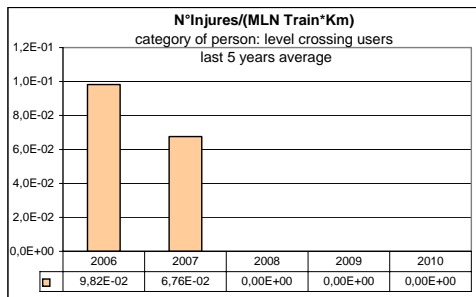
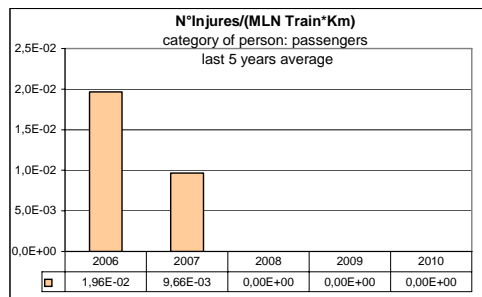
2007 report: values related to 2006.

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.

*Injures divided by category of people involved*



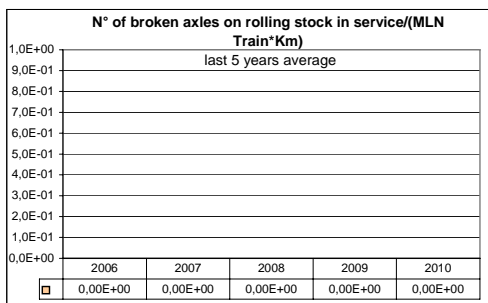
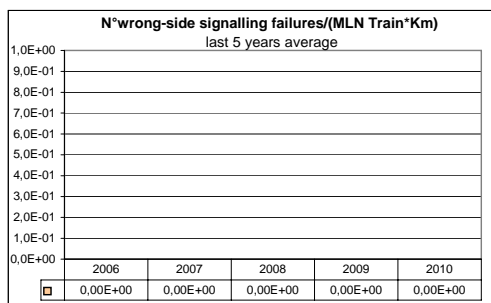
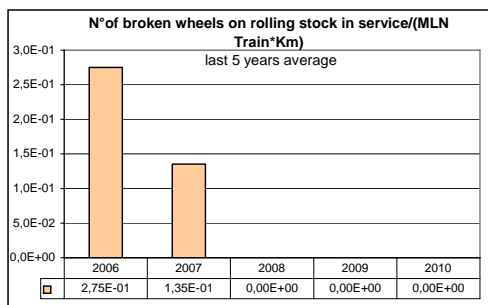
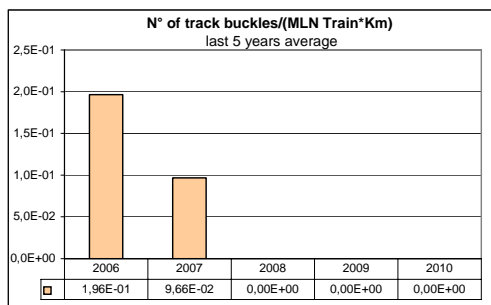
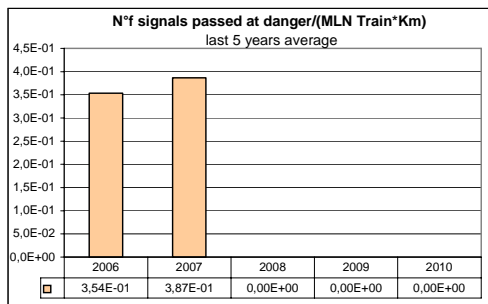
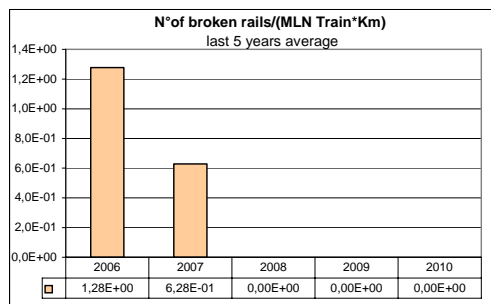
2007 report: values related to 2006.

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.

## Precursors to accidents



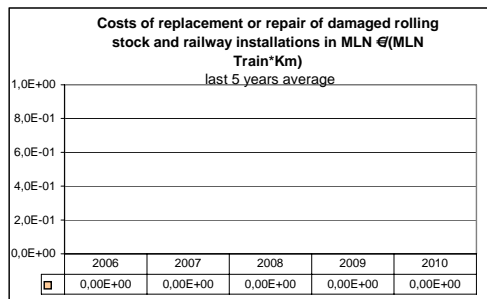
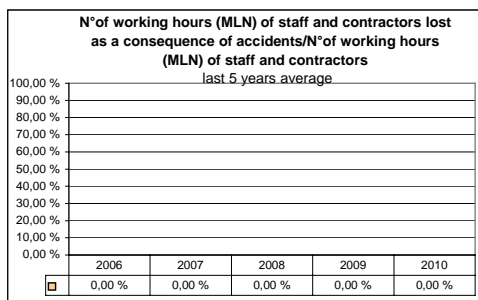
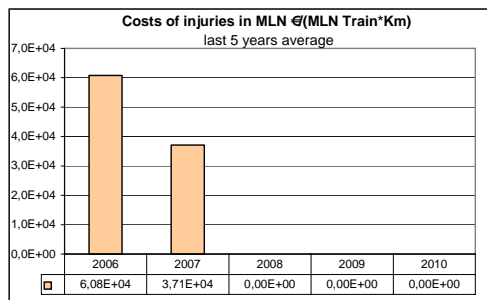
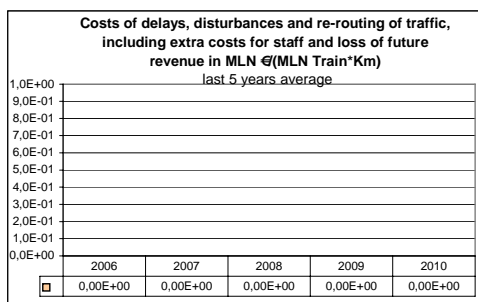
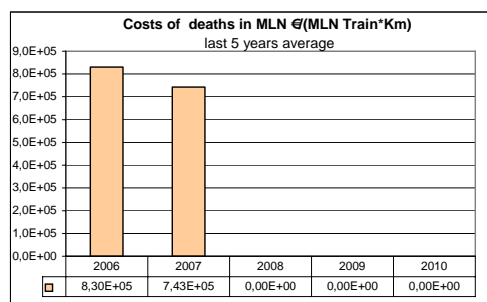
2007 report: values related to 2006.

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.

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

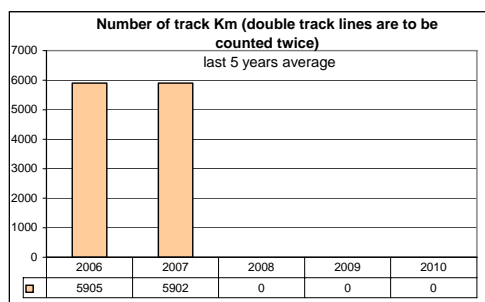
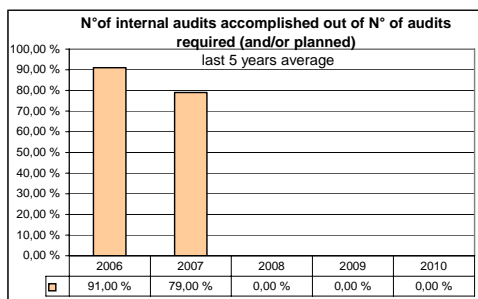
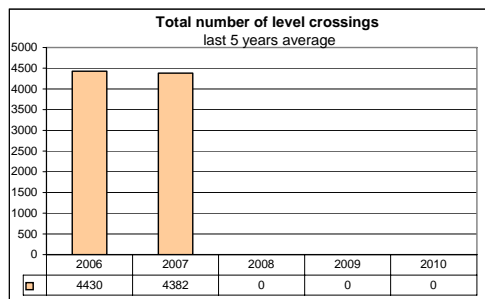
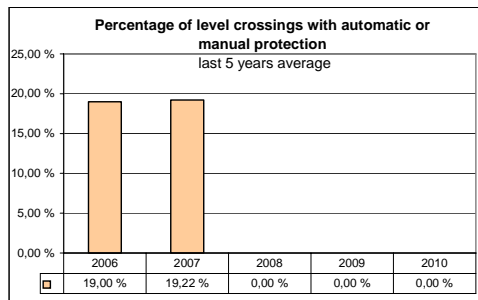
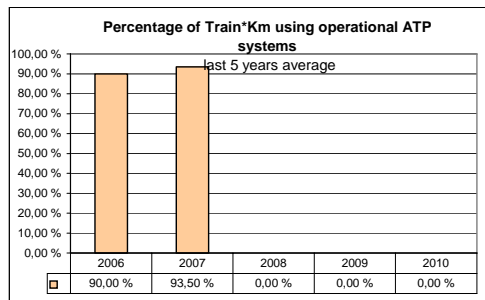
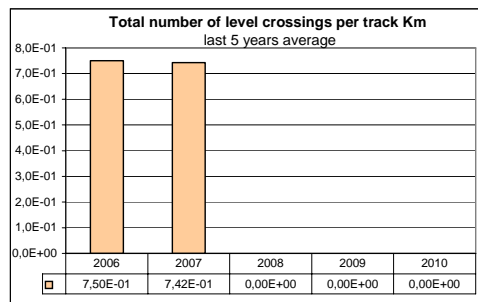
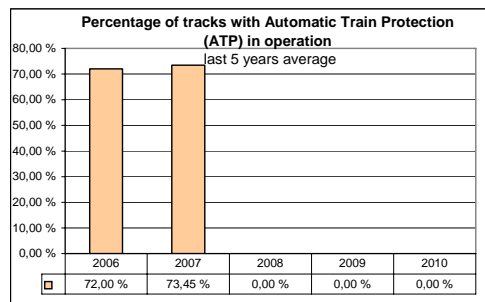


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## Information on 2007 CSI data and definitions applied: pages 25 - 26

There are two national definitions in 2007 CSI data. Other definitions are according to the Annex 1 of the Safety Directive.

**Suicides:** national definition, An estimate from the RU (VR LTD), based on their information from the police. Finnish Rail Agency will contact the Police department of the Ministry of domestic affairs and agree on getting the information of the railway accidents investigated by the police. This includes the railway suicides. After that the definition of the Annex 1 of the railway safety directive will be used.

**Level crossing accidents:** Level crossing accidents reported are now significant accidents. In addition we had during the year 2007 37 non-significant level crossing accidents. Level crossing users include the pedestrians.

**Missing information:**

### **Costs caused by accidents**

The costs caused by the accidents are not yet collected in Finland. It is impossible even to give estimation on accident costs. We will concentrate on making a procedure to collect accident costs with the method described in the recommendation for the revision of Annex 1 of the Safety Directive. We will have amendments in national legislation (revision of Railway Act) at the latest in the beginning of 2009.

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% and 2006 -> 2007 +4.5%

Fatality 2005, basic value: 1 752 000 €

Fatality 2006: 1 837 848 €

Fatality 2007: 1 920 551 €

Serious injury 2005, basic value: 227 000 €

Serious injury 2006: 238 123 €

Serious injury 2007: 248 839 €

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. During autumn 2008 we will have discussions on collecting this data.

**Total number of broken rails, 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 broken rails, 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 have 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 is low. We will continue the discussions with the stakeholders to be able to collect this data.

## 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
<b>General national railway safety legislation</b>	NONE			
Legislation concerning the national safety authority	Section 28 (5) of the Finnish Railway Act	1.1.2008	Right for deviation from the national rules. Amendment to existing legislation.	Under the amended section 28 (5), the Finnish Rail Agency, which is responsible for the safety and interoperability of the rail system, is entitled, if good reason exists, to deviate from regulations it has issued concerning traffic operation, infrastructure maintenance, track equipment, track structures, rolling stock used on the railway network and the use of rolling stock in traffic. Such deviation may be made on condition that it does not endanger the safety of the railway system. As part of its decision, the Finnish Rail Agency may also impose conditions and restrictions aimed at ensuring safety.
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	NONE			
<b>National rules concerning railway safety</b>				
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	Technical regulations relating to train safety (RVI/1554/412/2007)	7.1.2008	This is not a new regulation but primarily reflects the change from it	The regulation is provisional and will be repealed on the entry into

			being a regulation issued by the infrastructure manager to a regulation issued by the national safety authority.	force of new regulations on November 2008 (issued at the beginning of 2008). These regulations cover national rules on railway lines, rolling stock, brakes, speeds, axle loads, train weight, train configuration and museum rolling stock.
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 2007	being licensed in your Member State	1
	being licensed in another Member State	0

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

		New	Updated / amended	Renewed
E.2.1. Number of valid Safety Certificates <b>Part A</b> held by Railway Undertakings in the year 2007	being registered in your Member State	1	0	0
	being registered in another Member State	0	0	0

		New	Updated / amended	Renewed
E.2.2. Number of valid Safety Certificates <b>Part B</b> held by Railway Undertakings in the year 2007	being registered in your Member State	1	0	0
	being registered in another Member State	0	0	0

			A	R	P
E.2.3. Number of applications for Safety Certificates <b>Part A</b> submitted by Railway Undertakings in year 2007	being registered in your Member State for	new certificates	2	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	being registered in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

			A	R	P
E.2.4. Number of	being registered in	new certificates	2	0	0

applications for Safety Certificates <b>Part B</b> submitted by Railway Undertakings in year 2007	your Member State for	updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	being registered in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

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

### 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 2007 being registered in your Member State	1	0	0

		A	R	P
E.3.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2007 being registered in your Member State	new authorisations	1	0	0
	updated / amended authorisations	0	0	0
	renewed authorisations	0	0	0

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 <b>Part A</b> in year 2007 for Railway Undertakings	being registered in your Member State	4 months	0	0
	being registered in another Member State	0	0	0

#### 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 <b>Part B</b> in year 2007 for Railway Undertakings	being registered in your Member State	4 months	0	0
	being registered in another Member State	0	0	0

#### 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 2007 for Infrastructure Managers	being registered in your Member State	4 months	0	0
	being registered in another Member State	0	0	0