



*Federal Public Service  
Mobility and Transport*

# **NSA Annual Report 2006**

## **Belgium**

Federal Public Service Mobility and Transport  
DIRECTORATE-GENERAL FOR LAND TRANSPORT  
DEPARTMENT FOR RAILWAY SAFETY AND INTEROPERABILITY  
Rue du Progrès 56  
1210 Brussels

## **A. Scope of the report**

The present report relates the activities of the Department for Railway Safety and Interoperability (DRSI) during the year 2006.

The DRSI is a department of the Directorate-general for Land Transport, which is part of the Federal Public Service Mobility and Transport. In anticipation of the implementation of the EU safety directive, the DRSI has been preparing its task as the coming National Safety Authority.

The tasks of the DRSI are derived from the European safety and interoperability directives and the range of its activities is limited to the Belgium conventional and high-speed railway system.

## **B. INTRODUCTORY SECTION**

### **1. Introduction to the report**

The DRSI has produced this document, which gives an overview of the Belgian railway safety situation. It is intended to be published by the ERA and the Federal Public Service Mobility and Transport where it will be available on its website.

The DRSI was created in July 2005 as a section of the Federal Public Service Mobility and Transport and was attributed its legal tasks as National Safety Authority by Royal Decree of 16 January 2007.

### **2. Railway Structure Information** (annex A)

- Network map
- List of Railway Undertakings and Infrastructure Managers



### **3. Summary – General Trend Analysis**

Over the last three years we can observe the following trends in the field of railway safety:

- the number of collisions of trains decreased;
- the number of derailments of trains remained stable;
- the number of level-crossing accidents remained stable;
- the number of person-related accidents caused by rolling stock in motion remained stable;
- the number of suicides and suicide attempts remained stable;
- the number of fires in rolling stock decreased.

Concerning the delivery of safety certificates (first railway package), there is an increasing number of candidates, which will result in the near future in a more important number of railway operators on the Belgian railway infrastructure.

Over the last years the number of SPADs is increasing. Therefore, efforts will be made in the next year to install TBL1+, ECTS and GSM-R.

### **4. The Safety Directive - Stage of implementation, National basis of implementation, fulfilment of voluntary elements; applicable national legislation**

The transposition of the EU Safety Directive was implemented by the law of 19 December 2006 on safety of the railway exploitation. The law and the first set of Royal Decrees to implement the law came into force on 2 February 2007 (see C2). Therefore, no certification of authorisation for bringing into service was issued on the basis of the Safety Directive during 2006.

In preparation of its task as National Safety Authority, the DRSI has attended the meetings of the Network of NSA and has participated in a great number of working sessions of the European Railway Agency. Based on the figures received from the infrastructure manager, the DRSI has analysed the trends of the existing safety indicators. The DRSI has contributed to the development of the National Safety Rules and has prepared the notifications for the European



Commission. The DRSI has given advice to the Minister and his representative requesting the delivery of certifications introduced by the infrastructure manager and the railway companies (first railway package).

The above-mentioned law of 19 December 2006 transposed the safety directive into national legislation. The law was published on 23 January 2007 in the Belgian Official Journal ("Moniteur belge" – "Belgisch Staatsblad"), and entered into force on 2 February 2007.

This law

- contains the structure of the national safety rules;
- creates the national safety authority and its tasks;
- enumerates the needs of safety systems;
- introduces the safety certificates for the infrastructure manager and the railway operators;
- describes the procedure of putting into service in Belgium of rolling stock which is already in use in one Member state;
- describes the way of investigation of railway accidents and incidents;
- creates the national investigation body;
- creates a legal basis for supervision and inspection of the railway.

Several other royal decrees published on the same day

- designate the Department for Railway Safety and Interoperability within the Directorate-general for Land Transport of the Federal Public Service Mobility and Transport;
- install the Investigation body within the Federal Public Service Mobility and Transport;
- recognise the NMBS as the organisation providing training facilities;
- describe the investigation procedures;
- describe the procedures for obtaining safety certificates and safety agreements;
- enumerate the safety requirements for management systems, staff and rolling stock;
- lay down the procedure for approval and publication of the national safety rules.



## **C. ORGANISATION**

### **1. Introduction to the organisation**

The DRSI was created in July 2005 as a section of the Federal Public Service Mobility and Transport and was attributed its legal tasks as National Safety Authority by Royal Decree of 16 January 2007.

### **2. Organisational flow – relationship (diagram) between the NSAs and other national bodies (such as National Investigation Bodies, National Regulatory Bodies, Ministry of Transport etc.): see annex B.**

## **D. THE DEVELOPMENT OF RAILWAY SAFETY**

### **1. Initiatives to maintain/improve safety performances**

**Table D.1.1** - Safety measures triggered by accidents/precursors to these: not applicable for 2006.

**Table D.1.2** - Safety measures with other triggers: not applicable for 2006.

### **2. Detailed data trend analysis**

Are not available for 2006: CSIs data: figures on

total costs

n°others

n°fatalities employees and others

n°injured persons other

n°of broken wheels

n°of broken axes

costs of casualties and injured persons

cost of replacement or repair of rolling stock, delays and so on, working hours

n°audits



**E. Important changes in legislation and regulation:** not applicable for 2006.

**F. The development of safety certification and authorisation**

**1. National legislation – starting dates – availability**

- 1.1. Starting date for issuing Safety Certificates according to Article 10 of Directive 2004/49/EC: not applicable for 2006.
- 1.2. Starting date for issuing Safety Authorisations according to Article 11 of Directive 2004/49/EC: not applicable for 2006.
- 1.3. Availability of national safety rules or other relevant national legislation to Railway Undertakings and Infrastructure Managers: published by the infrastructure manager INFRABEL.

**2. Numerical data:** see annex E.

**3. Procedural aspects**

- 3.1. Safety Certificates Part A: not applicable for 2006.
- 3.2. Safety Certificates Part B: not applicable for 2006.
- 3.3. Safety Authorisations: not applicable for 2006.

**G. Supervision of Railway Undertakings and Infrastructure Managers**

- 1. Description of the supervision of Railway Undertakings and Infrastructure Managers: not applicable for 2006.



2. Submission of all Infrastructure Managers and Railway Undertakings annual safety reports according to Article 9(4) Safety Directive by the legal deadline: not applicable for 2006.
3. Number of inspections of RUs/IMs for 2006: not applicable for 2006.
4. Number of audits of RUs/IMs for 2006: not applicable for 2006.
5. Summary of the relevant corrective measures/actions (amendment, revocation, suspension, important warning, etc.) related to safety aspects following these audits/inspections: not applicable for 2006.
6. Complaints from IM('s) concerning RU('s) related to conditions in their Part A/Part B Certificate: not applicable for 2006.
7. Complaints from RU('s) concerning IM('s) related to conditions in their authorisation: not applicable for 2006.

#### **H. Conclusions – Priorities – Results of safety recommendations**

As the safety directive came only into force at the beginning of 2007, the report concerning 2006 contains no items on the bringing into service of subsystems, nor the delivery of safety certifications and safety agreements. The report contains information on the activities of the DRSI and its position as Belgian NSA from 2 February 2007 on.

The Belgian safety level is high. The main objective of the DRSI is to maintain this high level. The Belgian infrastructure manager plans important investments (installing the train protection system ETCS) to increase the safety level.

On the basis of the gained experience the DRSI will draw up its strategic plan, which will describe the further development of the department. The increasing number of operators will increase the number of demands for certifications and authorisations for bringing into service rolling stock. The DRSI as a section of the Federal Public Service Mobility and Transport will also contribute to the development of the national safety rules (which have to be approved by the Minister of Mobility). The DRSI will also actively participate in the interoperability activities of the European Commission.



Disposing of the necessary human resources is the most important challenge of the DRSI. The imposed follow-up of all legal prescriptions necessitates the recruitment of staff either from the SNCB-group or from the public function. As both the European Commission and the European Railway Agency are located in the vicinity of our Department, they are, especially in the field of contracting qualified personnel, big competitors who can often offer much better conditions to the applicants.

### **I. 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

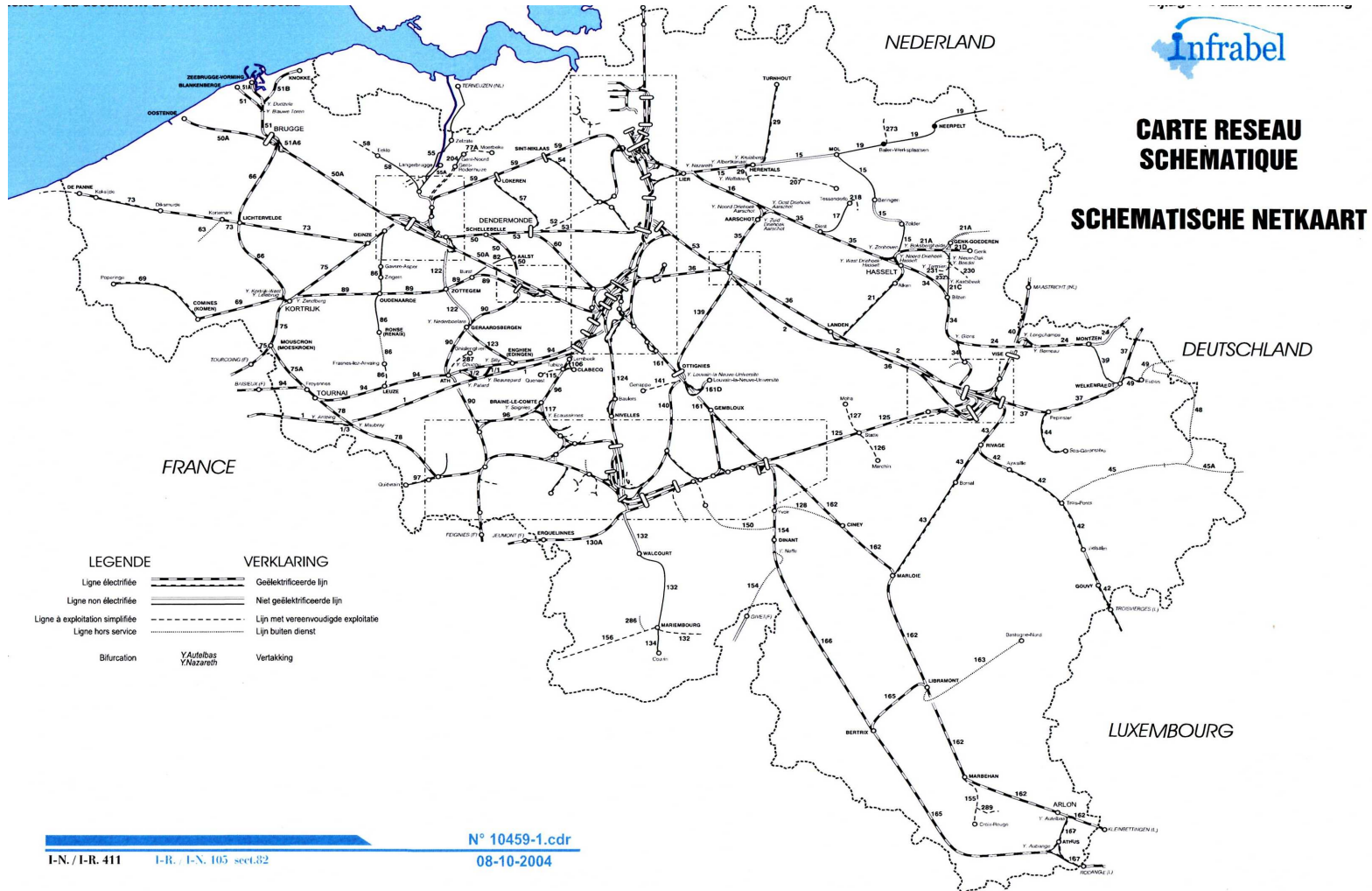
ANNEX E: The development of safety certification and authorisation –  
Numerical Data

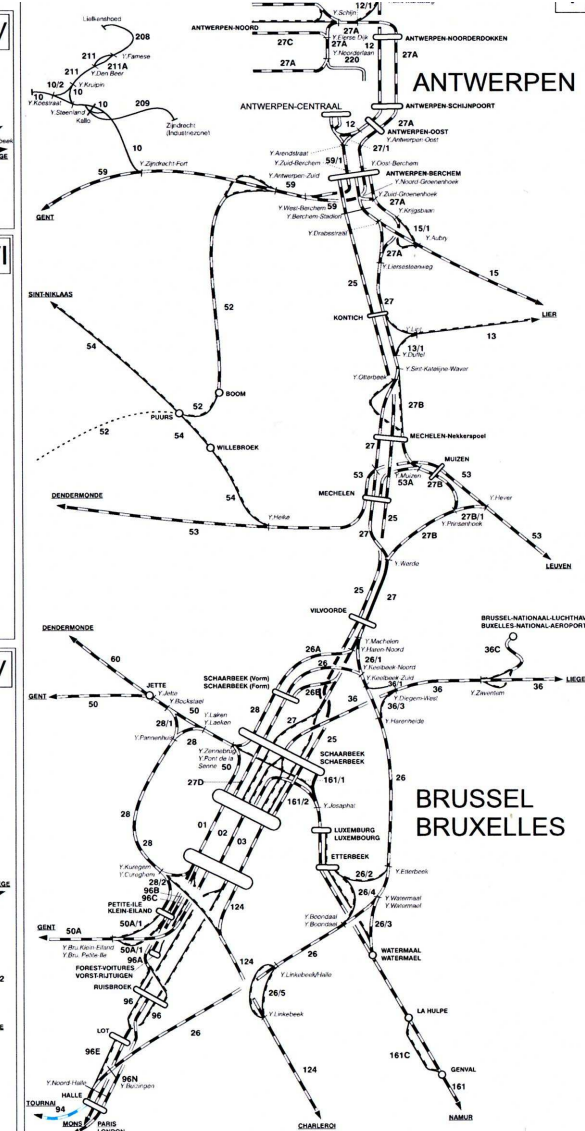
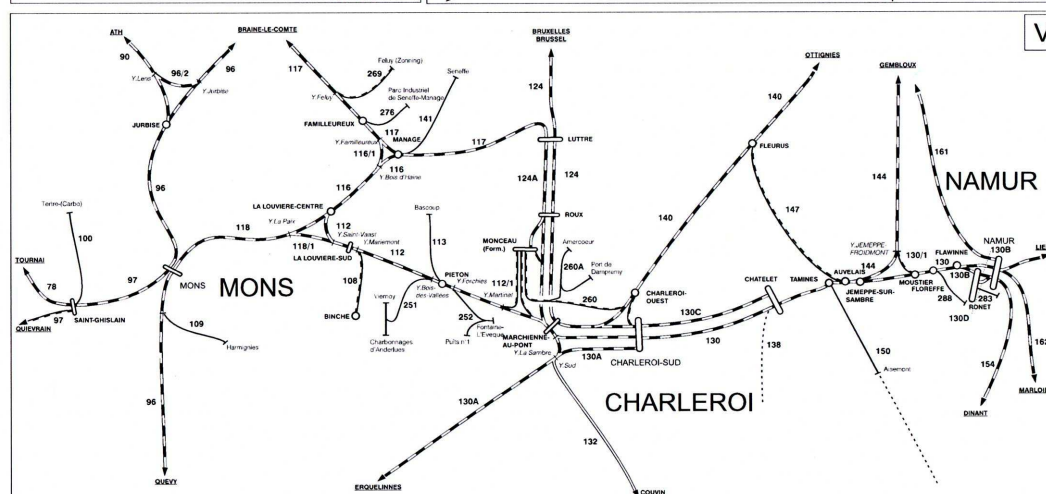
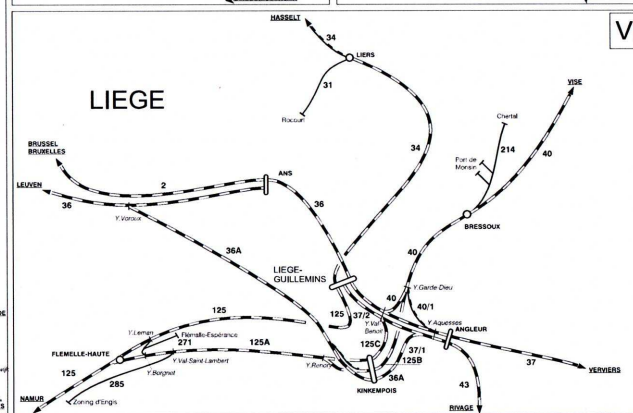
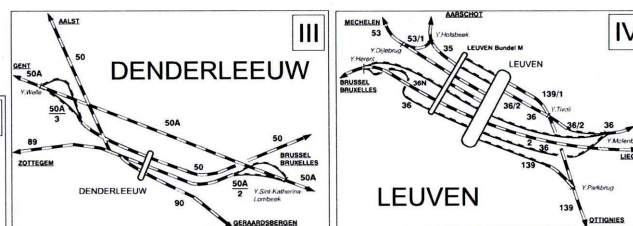




## ANNEX A: Railway Structure Information

### Network map





## **List of Railway Undertakings and Infrastructure Managers**

### **Infrastructure Manager** (as per 31 December 2006)

Name : **Infrabel**

Address : Barastraat 110, B - 1070 Brussels

Website : [www.railaccess.be](http://www.railaccess.be)

### **Railway Undertakings** (as per 31 December 2006)

#### **a. transport of passengers and freight**

Name : **NMBS** – Nationale Maatschappij der Belgische Spoorwegen

**SNCB** – Société nationale des Chemins de fer belges

Address : Frankrijkstraat 85, B - 1060 Brussels

Website : [www.nmbs.be](http://www.nmbs.be); [www.sncb.be](http://www.sncb.be)

Safety Certificate 2001/14/EC : C001-1

Valid till : 26 February 2007

#### **a. transport of freight**

Name : **DLC** – N.V. Dillen & Le Jeune Cargo

Address : Velodroomstraat 121, B - 2850 Boom

Website : [www.dlcargo.com](http://www.dlcargo.com)

Safety Certificate 2001/14/EC : C002-4

Valid till : 10 January 2009

Name : **SNCF** – Société nationale des Chemins de fer français

Address : 34 rue du Commandant Mouchotte, F – 75699 Paris Cédex 14

Website : <http://fret.sncf.com>

Safety Certificate 2001/14/EC : C003

Valid till : 7 April 2008



Name : **Rail4Chem Benelux B.V.**

Address : Moezelweg 136A, 3198 LS Europoort, NL - Rotterdam

Website : [www.rail4chem.com](http://www.rail4chem.com)

Safety Certificate 2001/14/EC : C004-1

Valid till : 17 September 2009

Name : **Trainsport AG**

Address : Betriebszentrum E40, B - 4730 Lichtenbusch/Raeren

Website : [www.trainsport.com](http://www.trainsport.com)

Safety Certificate 2001/14/EC : C005

Valid till : 10 December 2009



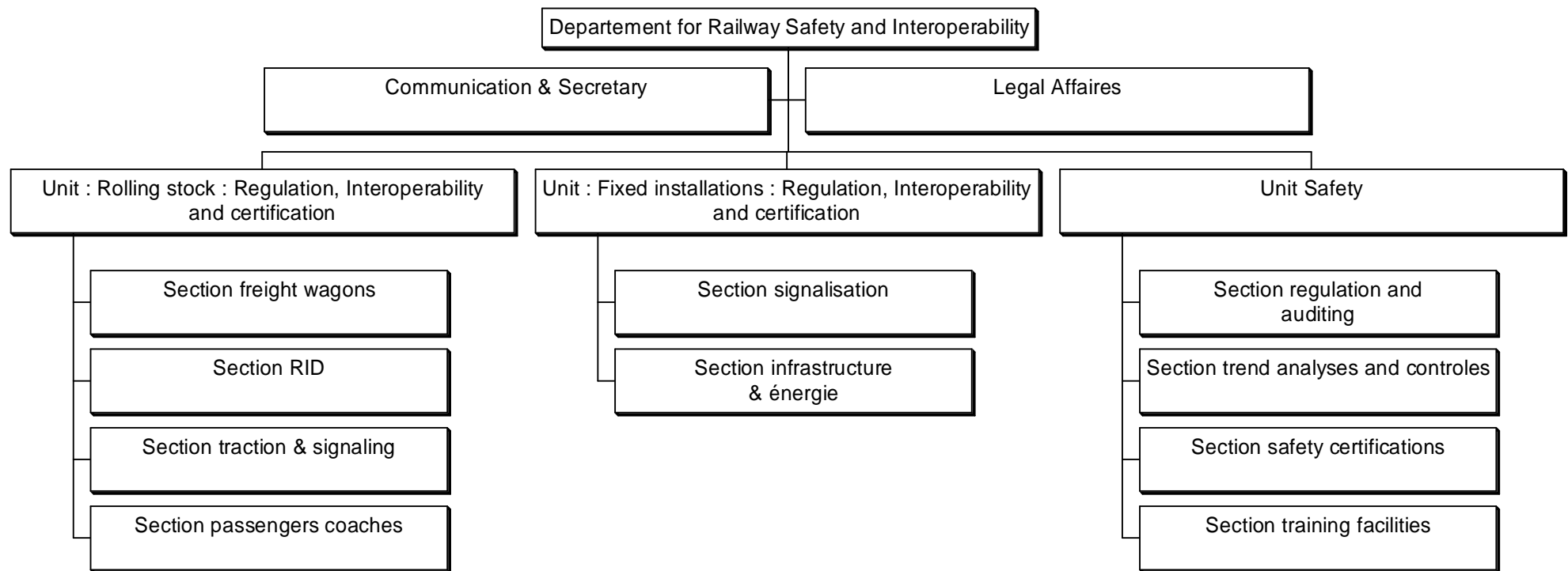
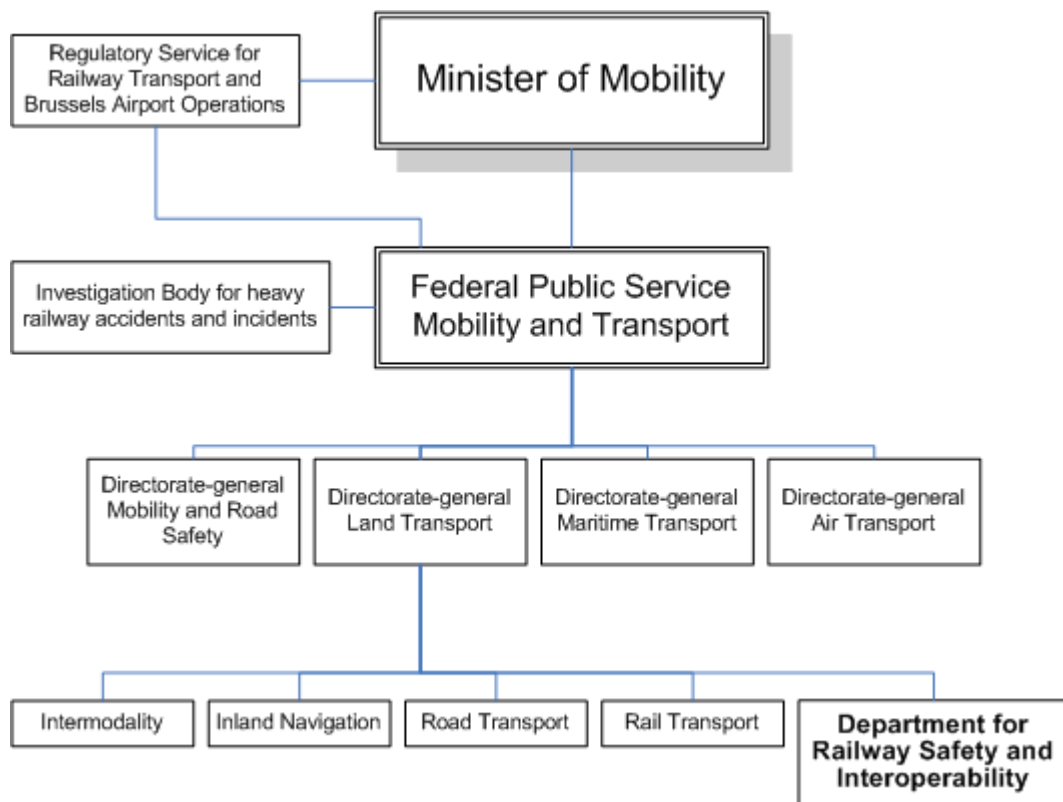
**ANNEX B: Organisation chart(s) of the National Safety Authority**Chart: Internal organisation

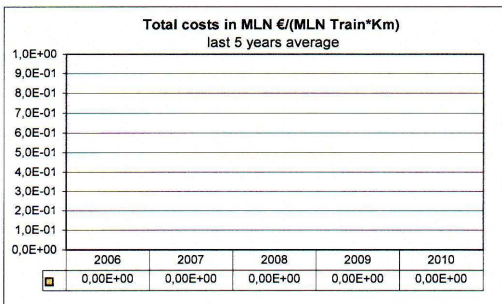
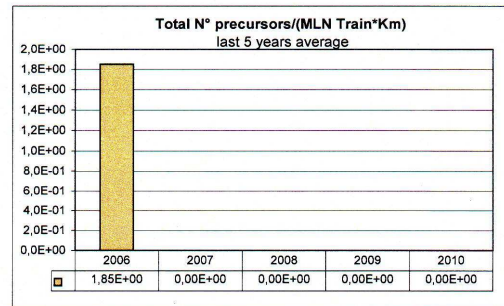
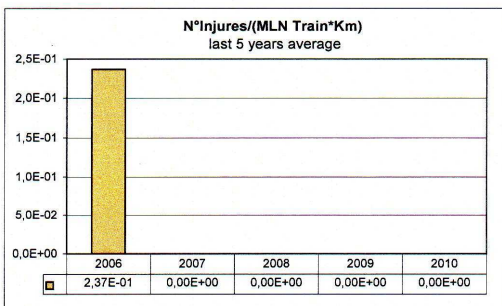
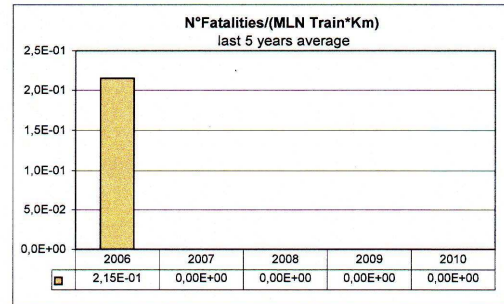
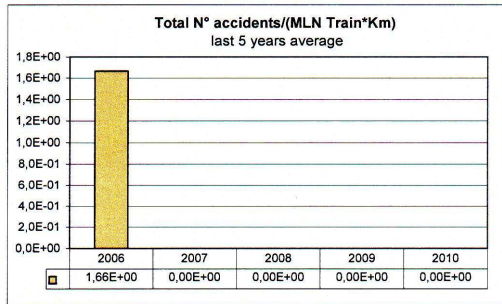
Chart: Relationship with other National Bodies



## 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.

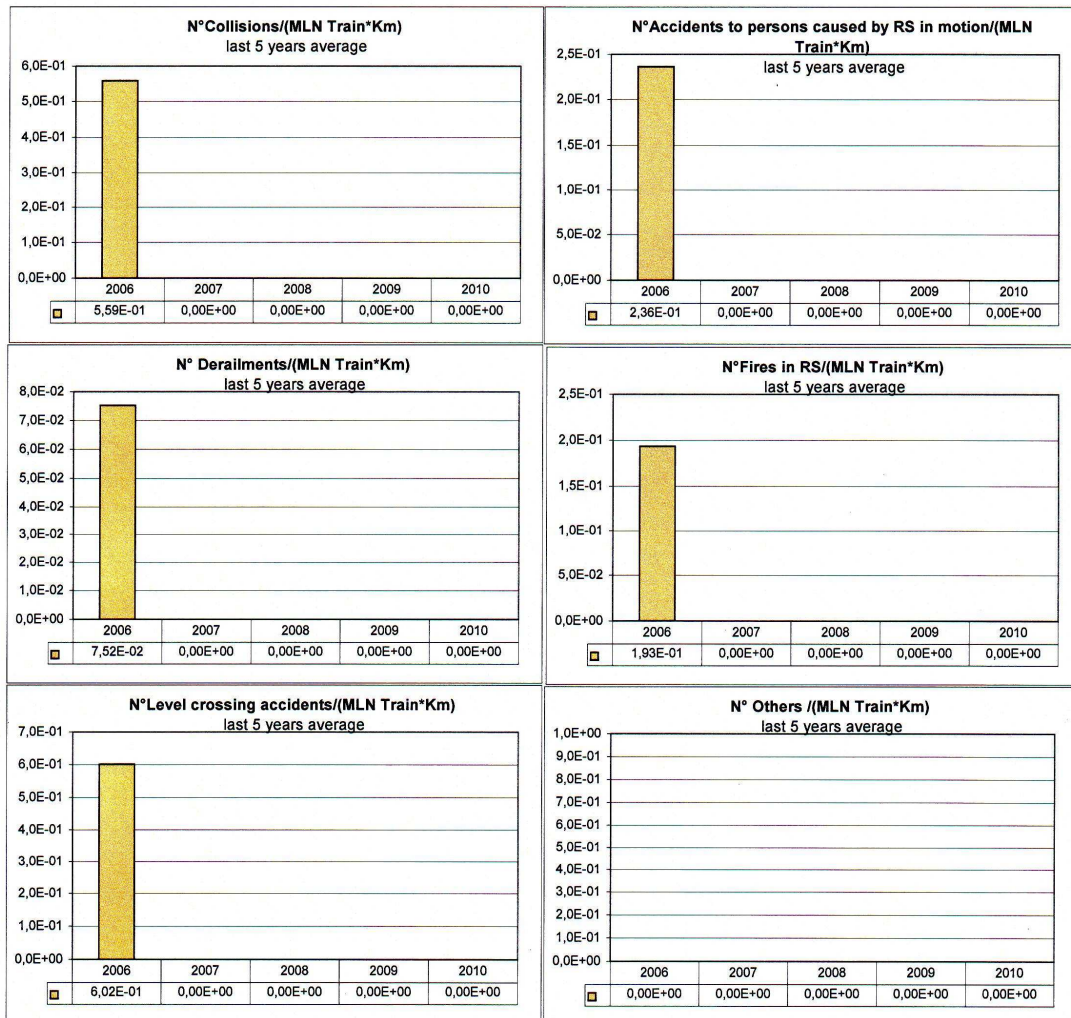
2009 report: values related to the average among 2006, 2007, 2008 and 2009.





## Accidents divided by type

### 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.

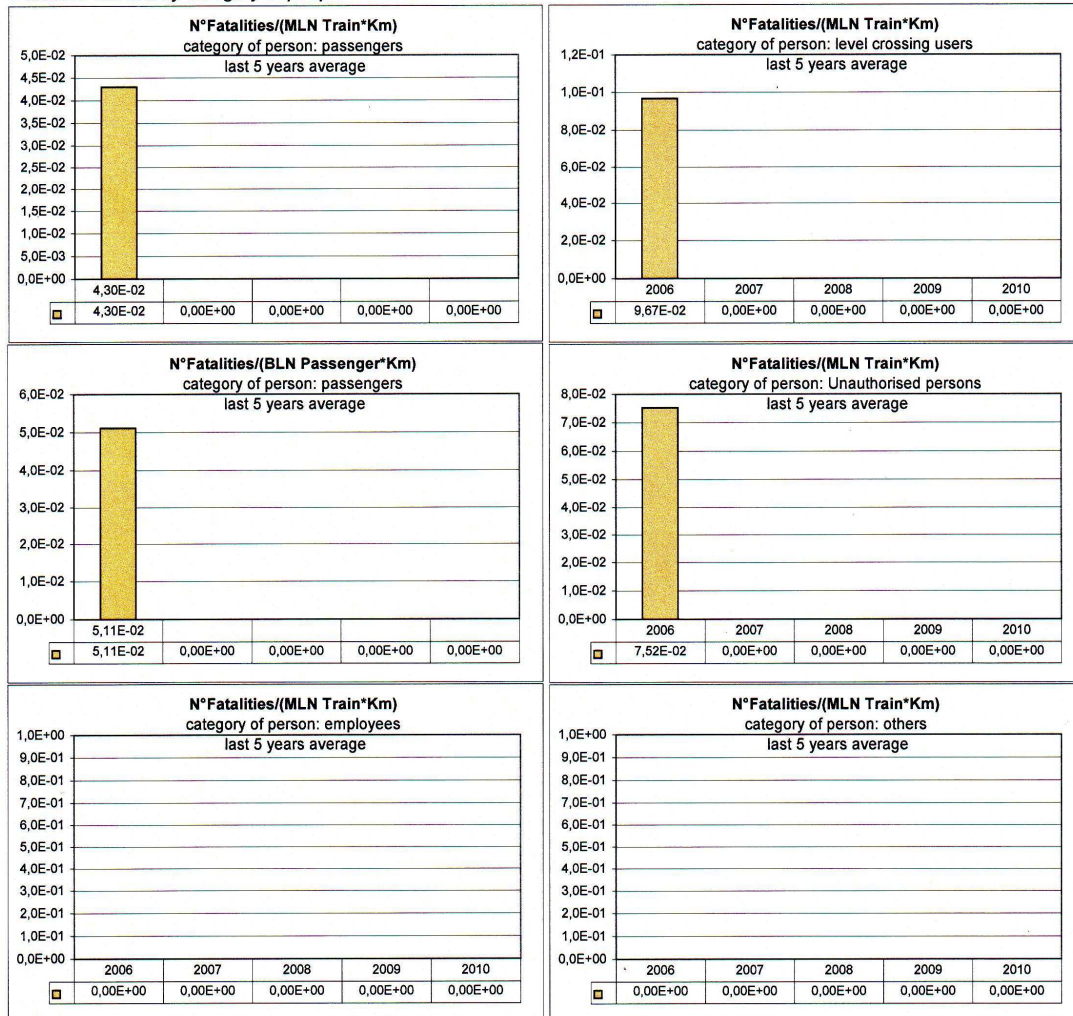
2009 report: values related to the average among 2006, 2007, 2008 and 2009.





## Fatalities divided by category of people involved

Fatalities divided by category of people involved



2007 report: values related to 2006.

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

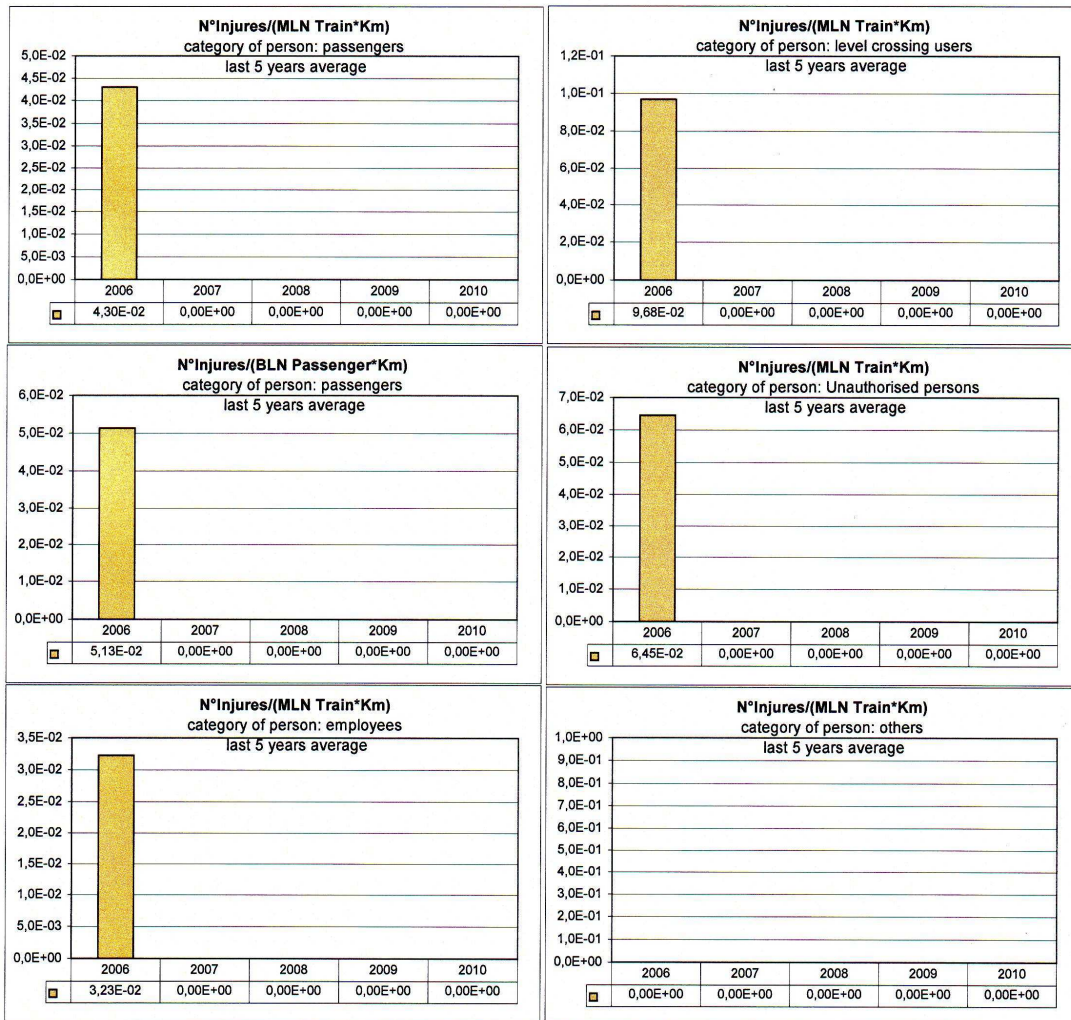
2008 report: values related to the average among 2006, 2007 and 2008.

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



## Injures divided by category of people involved

### Injures divided by category of people involved



2007 report: values related to 2006.

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

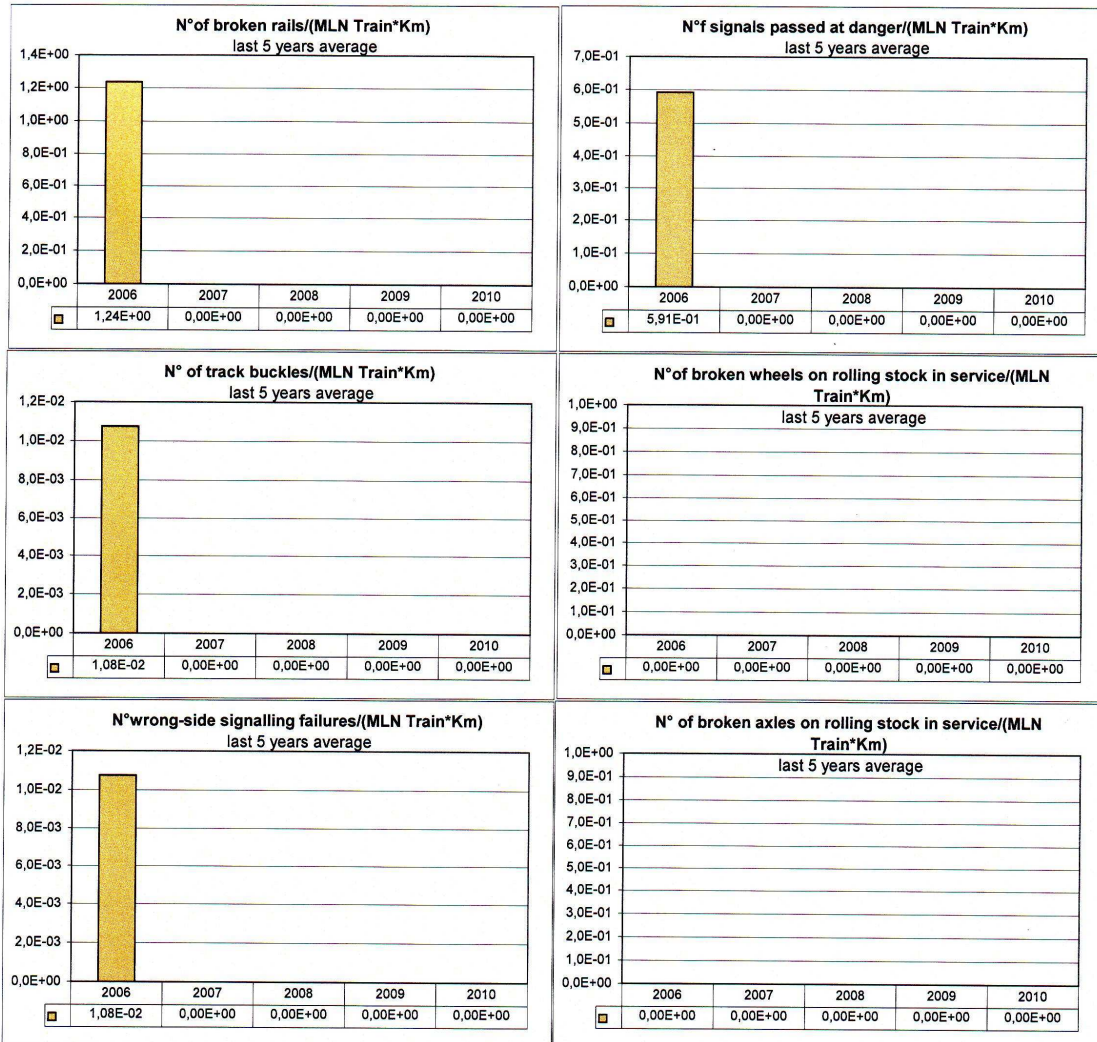
2008 report: values related to the average among 2006, 2007 and 2008.

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



## Precursors to accidents

### 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.

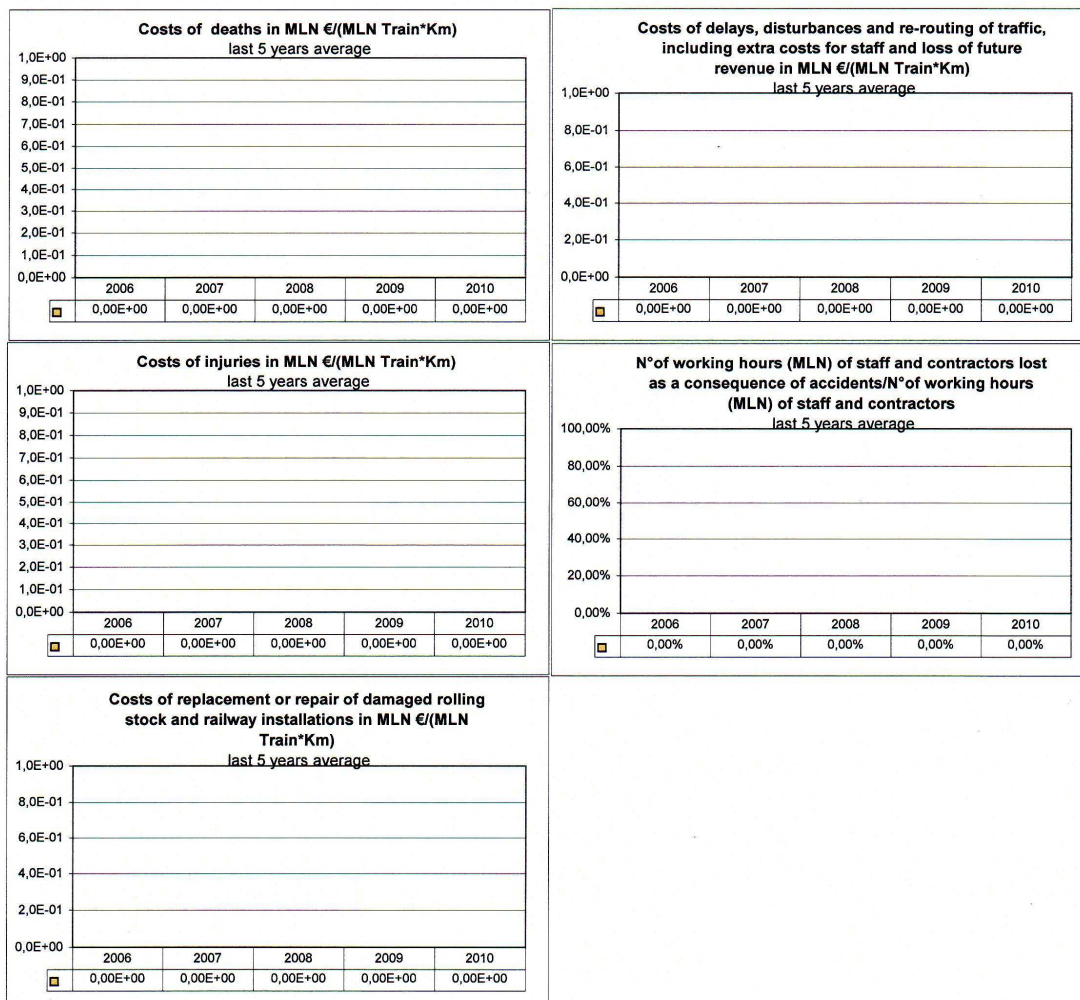
2009 report: values related to the average among 2006, 2007, 2008 and 2009.





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

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



2007 report: values related to 2006.

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

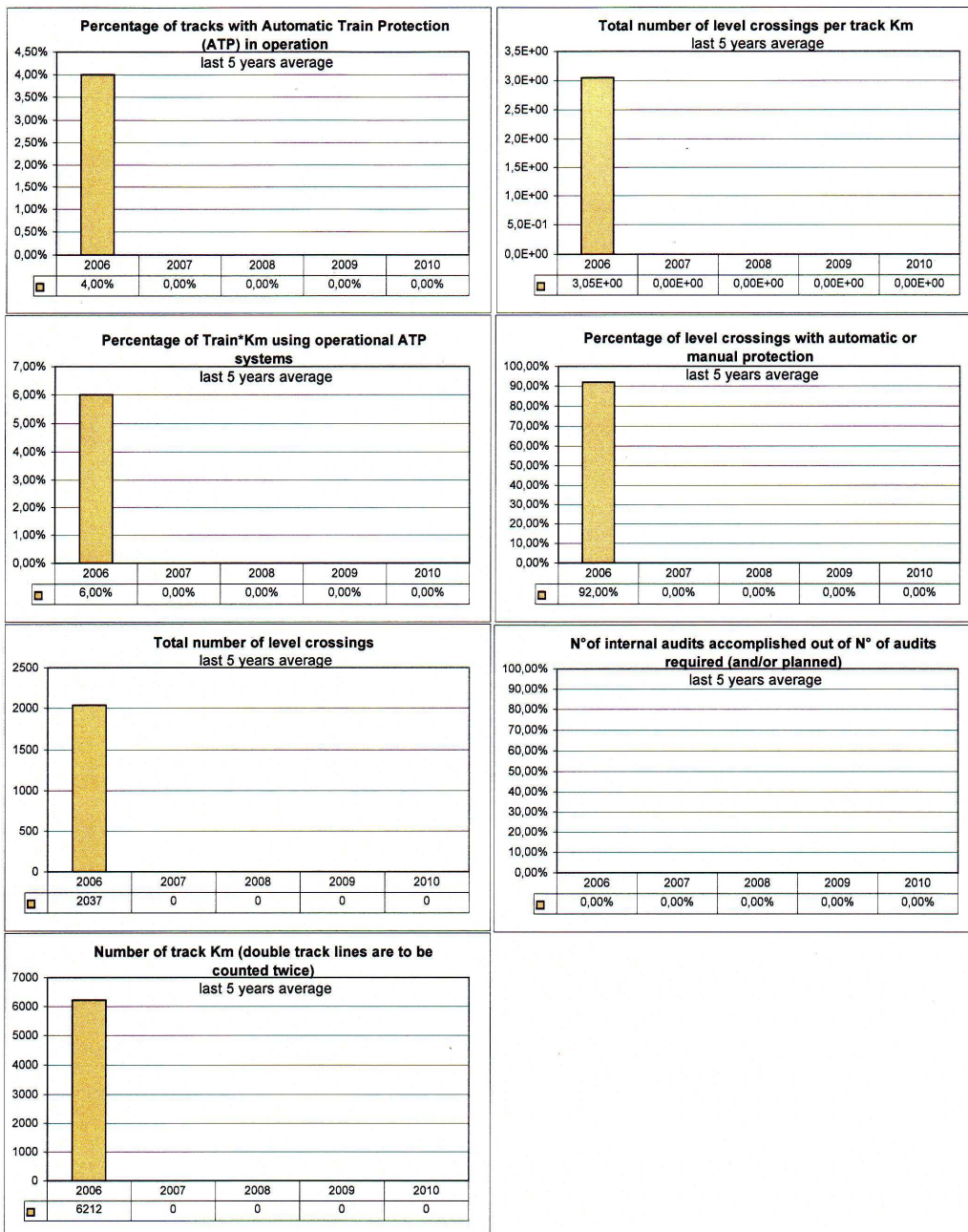
2008 report: values related to the average among 2006, 2007 and 2008.

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



## Technical safety of infrastructure and its implementation, management of safety

### Technical safety of infrastructure and its implementation, management of safety



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.



## **Definitions used in the annual report**

### **Definitions in Regulation 91/03 to be applied:**

#### ***deaths (killed person)***

means any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides

#### ***injures (seriously injured person)***

means any person injured who was hospitalized for more than 24 hours as a result of an accident, excluding attempted suicides

#### **passenger-km**

means the unit of measure representing the transport of one passenger by rail over a distance of one kilometre. Only the distance on the national territory of the reporting country shall be taken into account

#### ***rail passenger***

means any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark/disembark onto/from a moving train are included

#### **suicide**

means an act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority

#### **significant accident**

means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded

#### ***train***

means one or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point. A light engine, i.e. a locomotive travelling on its own, is not considered to be a train

#### **train\*Km**

means the unit of measure representing the movement of a train over one kilometre. The distance used is the distance actually run, if available, otherwise the standard network distance between the origin and destination shall be used. Only the distance on the national territory of the reporting country shall be taken into account

## **National definitions**

The used definitions are different from the ERA-vision (WG Definitions CSIs – Annex 1 - version 0.6) in the next cases:

1. boundaries of the railway system;
2. collision: includes also the cases of collision between vehicles, between a train and a maintenance machine and between maintenance machines;
3. train: includes also the locomotive travelling on its own and light engines;
4. broken rails: include all kind of damaged rails;
5. suicides are recorded and classified by the infrastructure manager;



The current railway system includes the infrastructure of:

- the sets of tracks of the workshops for the maintenance and the repair service of rolling stock;
- industrial track connection, track connection of a “work area”, private-owned stations and reserved tracks (only if the staff, the installations or the rolling stock of an operator or IM is involved in an accident);
- lines under construction, if linked as a work basis with the rail network.

### **Abbreviations**

DRSI	Department for Railway Safety and Interoperability
CSI	Common Safety Indicator
ERA	European Railway Agency
LC	Level Crossing
MLN	$10^6$
BLN	$10^9$
NSA	National Safety Authority
RS	Rolling Stock
RU	Railway Undertaking
IM	Infrastructure Manager



**ANNEX D: Important changes in legislation and regulation**

Annual report: not applicable for 2006

General national railway safety legislation: not applicable for 2006

National rules concerning railway safety: not applicable for 2006

General national railway safety legislation: not applicable for 2006

National rules concerning railway safety: not applicable for 2006





## **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 2006 being licensed	in your Member State	2
	in another Member State	1

E.2. Safety Certificates according to Directive 2004/49/EC: not applicable for 2006

E.3. Safety Authorisations according to Directive 2004/49/EC: not applicable for 2006

E.4. Procedural aspects – Safety Certificates part A: not applicable for 2006

E.5. Procedural aspects – Safety Certificates part B: not applicable for 2006

E.6. Procedural aspects – Safety Authorisations: not applicable for 2006

