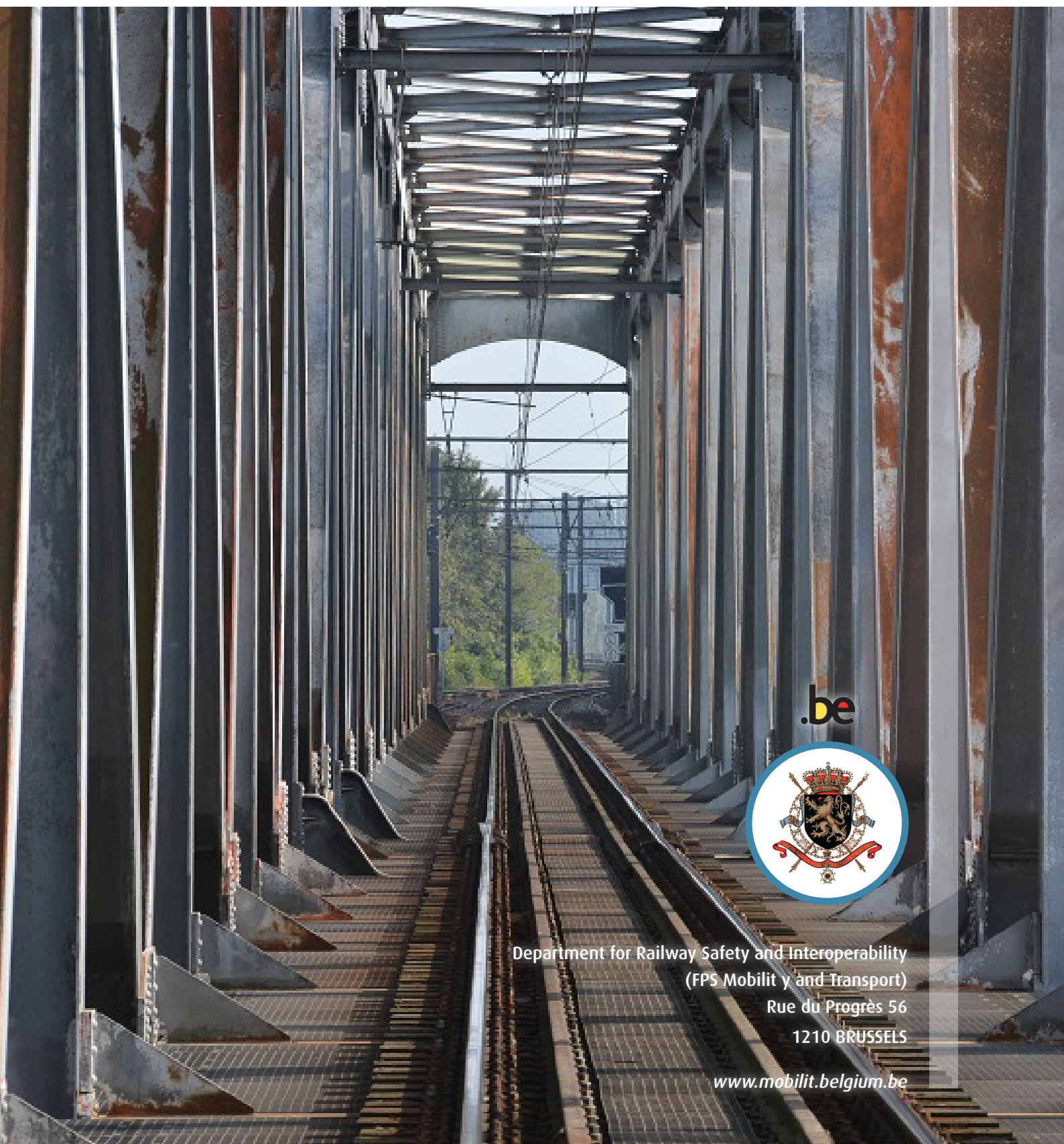


# 2013

## Belgian Safety Authority ANNUAL REPORT



.be



Department for Railway Safety and Interoperability  
(FPS Mobility and Transport)  
Rue du Progrès 56  
1210 BRUSSELS

[www.mobilit.belgium.be](http://www.mobilit.belgium.be)

# TABLE OF CONTENTS

<b>(A)</b> INTRODUCTION	5
<b>(B)</b> GENERAL PERFORMANCE IN SAFETY AND STRATEGY	9
1. MAIN CONCLUSIONS ON THE REFERENCE YEAR	10
2. NATIONAL SAFETY STRATEGY, PROGRAMMES AND INITIATIVES	10
3. EVALUATION OF THE PREVIOUS YEAR	12
4. AREAS OF INTEREST FOR NEXT YEAR	12
<b>(C)</b> DEVELOPMENTS IN SAFETY PERFORMANCE	15
1. DETAILED ANALYSIS OF THE LATEST RECORDED TRENDS	16
2. RESULTS OF SAFETY RECOMMENDATIONS	18
3. MEASURES IMPLEMENTED UNRELATED TO SAFETY RECOMMENDATIONS	19
<b>(D)</b> SUPERVISION	21
1. STRATEGY AND PLAN(S)	22
2. HUMAN RESOURCES	23
3. COMPETENCIES	23
4. DECISION-MAKING	23
5. COORDINATION AND COOPERATION	24
6. CONCLUSIONS DRAWN FROM MEASURES TAKEN	24
<b>(E)</b> CERTIFICATION AND AUTHORISATION	27
1. DIRECTIONS	28
2. CONTACTS WITH OTHER NSAS	28
3. PROCEDURAL ISSUES	29
4. REACTIONS	29
<b>(F)</b> CHANGES TO LEGISLATION	31
1. RAILWAY SAFETY DIRECTIVE (2004/49/EC)	31
2. MAJOR CHANGES IN THE LEGISLATION AND REGULATIONS	31
<b>(G)</b> APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT	33
1. NSA EXPERIENCE	34
2. STAKEHOLDER REACTIONS	39
3. REVISION OF THE NSR TO TAKE ACCOUNT OF THE EC REGULATION ON THE CSM ON EVALUATION AND ASSESSMENT OF RISKS	39
<b>(H)</b> EXCEPTIONS TO THE ECM CERTIFICATION SYSTEM	41
ANNEX A COMMON SAFETY INDICATORS	44
ANNEX B CHANGES TO LEGISLATION	57
ANNEX C NUMBER OF ACTIVE RAILWAY VEHICLES REGISTERED IN THE BELGIAN NATIONAL VEHICLE REGISTER (NVR)	65

## Abbreviations

<b>CCS</b>	Control, Command and Signalling
<b>CSI</b>	Common Safety Indicator
<b>CSM</b>	Common Safety Method
<b>CST</b>	Common safety target
<b>DB Netz AG</b>	Railway infrastructure manager of Deutsche Bahn AG
<b>DeBo</b>	Designated body
<b>DPERP</b>	Department for Public Enterprise and Railway Policy
<b>DRSI</b>	Department for Railway Safety and Interoperability (NSA BE)
<b>EBA</b>	Eisenbahn Bundesamt (ANS DE)
<b>ECM</b>	Entity in charge of maintenance
<b>EPSF</b>	Etablissement Public de Sécurité Ferroviaire (NSA FR)
<b>ERA</b>	European Railway Agency
<b>ERAIL</b>	European Railway Accident Information Links (Flow of information on railway accidents in Europe)
<b>ERTMS</b>	European Railway Traffic Management System
<b>ETCS</b>	European Train Control System
<b>FPS-MT</b>	Federal Public Service Mobility and Transport
<b>IB</b>	Investigation Body
<b>IL&amp;T</b>	Inspectie Leefomgeving en Transport (NSA NL)
<b>IM</b>	Railway Infrastructure manager
<b>MS</b>	Member State
<b>NoBo</b>	Notified Body
<b>NRV</b>	National Reference Value
<b>RSD</b>	Railway Safety Directive 2008/57/EC
<b>NSA</b>	National Safety Authority
<b>NSR</b>	National Safety Rule
<b>NVR</b>	National Vehicle Register
<b>RSD</b>	Railway Safety Directive 2004/49/EC
<b>RU</b>	Railway Undertaking
<b>SMS</b>	Safety Management System
<b>SPAD</b>	Signal Passed At Danger





# INTRODUCTION





The present report, which fulfils the requirement in Article 18 of the Directive 2004/49/EC on safety on the Community's railways, gives information on the development of railway safety in Belgium. This report is based on the common safety indicators, on the amendments made to European and Belgian legislation and regulations on railway safety, on developments in certificates and safety authorisations, on experience in inspection of the infrastructure manager and the railway undertakings as well as the remarks made by the DRSI in its certification, authorisation and supervision activities.

This report is also sent to:

- the State Secretary for Mobility in his competences and to whom the DRSI is attached;
- the president of the Federal Public Service Mobility and Transport;
- the investigation body as well as the whole Belgian railway sector.

This report is also introduced, at its invitation, to the special commission of the Chamber of Representatives of Belgium made responsible for examining the conditions of security of the rail in Belgium.

The present report is also available, as well as its French and Dutch versions, on the website of the DRSI (<http://www.mobilit.belgium.be/fr/traficferroviaire/ssicf/rapports>).

During 2013, the DRSI has revised its organisation in order to reinforce its client orientation and links between certification and supervision activities. The operational activities of the DRSI are currently organised around 4 operational units. These units and their main activities are:

- the «Railway Undertakings» unit responsible for certification Parts A and B as well as supervision activities for railway undertakings active in Belgium (further to publication in June, 2014 of the legislation relating to railway operational safety for museum railway lines, this unit is also currently issuing operating licences and ensuring the supervision of operators of museum railway lines);
- the «rolling stock» unit responsible for authorisation for placing into service of railway vehicles and CCS equipment on board trains, NVR management, monitoring of legislation on dangerous goods transport by rail (RID), as well as carrying out inspections on the ground;
- the «infrastructure» unit responsible for renewal and supervision activities relating to safety authorisation for the infrastructure manager, authorisations for the placing into service of new and refit equipment, sub-systems (infrastructure, overhead contact line power, tunnel and control-command-signalling) and the monitoring of the application of these rules;
- The «safety personnel» unit responsible for processing the application files for the certification of on-board personnel, and the approval of training and psycho-medical centres. This unit is also responsible, in close collaboration with the management, for the DRSI safety policy (analysis of trends via the CSI and annual reports, monitoring of recommendations by the investigation body, etc.).

More information on the organisation of the DRSI is available on its website.





## GENERAL PERFORMANCE IN SAFETY AND STRATEGY

1. Main conclusions on the reference year  
p. 10
2. National safety strategy, programmes and initiatives  
p. 10
3. Evaluation of the previous year  
p. 12
4. Areas of interest for next year  
p. 12





## Ⓑ 1. Main conclusions on the reference year

The year 2013 has confirmed the improving trend in safety performances on the Belgian railway network, a trend which had already been recorded in 2011 and 2012. This improvement is visible for all types of accident and the resulting consequences, with the exception of the category on unauthorised persons in the vicinity of the tracks. For this category of accident, a slight increase in the number of fatalities has been noted, which has already brought the infrastructure manager, with the support of the State Secretary for Mobility, to implement awareness-raising campaigns on the subject and to implement various technical solutions to make accessing infrastructure difficult.

## Ⓑ 2. National safety strategy, programmes and initiatives

Following the tragic accident in Buizingen on 15 February 2010, Infrabel and the SNCB/NMBS have presented their master plan to the Parliament in view of improving railway safety in Belgium. This plan foresees rapid deployment of TBL1+ which, at the end of 2013, would cover just over 93% of the danger points on the network. This deployment should be completed in 2015. Alongside deployment of the TBL1+, Infrabel has launched an ambitious programme of ETCS deployment aimed at covering the whole network by 2022. From 2025 onwards, ETCS should be the only CCS system in operation. By the end of 2015, the Belgian section Antwerp-Athus of corridor 2 North sea-Mediterranean, which links the ports of Antwerp and Rotterdam with Marseille - via Lyon - and with Basel, will be entirely equipped with ETCS.

At the end of 2013, the whole fleet of the SNCB/NMBS used for national services will be equipped with TBL1+.

In line with the Decision 2012/88/EU allowing MSs to take measures at a national level to encourage migration to ERTMS and with the Buizingen Commission's recommendation 1.17 requesting that installation of TBL1+ and ERTMS be encouraged, the Royal Decree of 9 July 2013, published in the Belgian Official Journal on 25 July 2013, has amended the Ministerial Decree of 30 July 2010 on adoption of requirements applicable to rolling stock for use on train paths. This amendment requires that, from 1 January 2016, the «Mémor-Crocodile» system be definitively taken out of service on the lines where ETCS level 1, version 2.3.0d is in service. The information on TBL1+, included in the data package 44 of the ERTMS message, will be maintained, allowing use of TBL1+ on these ERTMS lines. For operation on other conventional lines on the network, Mémor remains sufficient. This legal change has been presented many times since the end of 2013 by the DRSI to the Belgian railway sector, during its consultation meetings. The requirement by 1 January 2016 allows the sector to adapt the equipment used by corridor 2 or one of its sections by equipping it ideally with ERTMS or, for budgetary reasons linked to the age of equipment, with the TBL1+ solution.

Taking into account the experience acquired in 2011 and 2012 by the DRSI in the organisation of its consultation meetings with the sector and in the spirit of continuous improvement, the DRSI has revised the organisation of these meetings by defining them around 2 distinct axes, an operational strategy axis and an information sharing and consultation axis. This recast of consultation meetings will allow the Belgian railway sector, the DPERP of the FPS MT, the IB and the DRSI to meet and establish the priority directions for developing the railway safety policy in Belgium. These meetings should also give all players an opportunity to exchange views and experiences with the development and implementation of the national and European legal framework for railway transport, while also giving these players a forum for exchanging information on their expertise, difficulties and good practices. The DRSI, in its monitoring, promotional and development role for the regulatory framework in the area of safety, is a key player in the implementation and management of this consultation.

Alongside these consultation meetings, the DRSI has also put in place bilateral meetings with the various players in the Belgian railway world. These meetings, which take place at regular intervals (quarterly or at least annually according to the volume of activities), are the chance for these companies and for the DRSI to discuss important topics with an impact on safety or on relations between the DRSI and these undertakings. These meetings also offer parties the opportunity to discuss the development of their safety performance, using the annual report submitted to the DRSI as reference point, and to review the progress of implementing IB recommendations, if these have been made.

Coinciding with these consultation meetings, Infrabel also organises operational meetings (desks) where the operational aspects of the interface between the IM and the RUs are discussed and where the analysis of major incidents, such as SPADs, are made from a safety viewpoint to find the necessary responses. The DRSI also takes part in these meetings.



### ③ 3. Evaluation of the previous year

In terms of safety performance, the year 2013 has confirmed the positive trends already recorded in 2011 and 2012 with the exception of the category of accidents involving unauthorised persons in the vicinity of the tracks.

The certification and supervision activities have also confirmed the difficulty that railway undertakings still encounter today in implementing safety management systems which, as well as providing all the procedures used to ensure safe operations, allow them to understand, evaluate and continuously improve their activities and the processes supporting them. The supervision activities have also highlighted problems with the interfaces between undertakings.

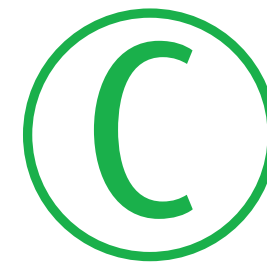
### ④ 4. Areas of interest for next year

The observations made by the DRSI in the course of its certification activities have led the DRSI to propose assistance in the implementation or revision of SMS, to applicants for the safety certificate Part A or B. This takes shape in the regular revisions of the SMS for undertakings who make a new application. This will also lead the DRSI to review its application guides and to propose that the sector organises specific workshops linked to these activities.

Particular attention is currently paid to monitoring activities (audits, supervision or inspections), and management of interfaces between undertakings.







## DEVELOPMENTS IN SAFETY PERFORMANCE

1. Detailed analysis of the latest recorded trends  
[p. 16](#)
2. Results of safety recommendations  
[p. 18](#)
3. Measures implemented unrelated to safety recommendations  
[p. 19](#)





## © 1. Detailed analysis of the latest recorded trends

The figures relating to the common safety indicators have developed in a very positive way over the last three years, it is only in the precursors to accidents that there has been a slight increase in broken rails and the buckling of rails. However this positive trend should be nuanced as the figures with regard to the train-km travelled have decreased. The train-km travelled have fallen over the last three years from 101 million train-km in 2011, to 99 million train-km in 2012 and 97 million train-km in 2013; a decrease of about 2% per year.

### 1. Number of deaths/serious injuries

The total number of deaths has decreased over the last three years from 27 in 2011, to 18 in 2012 and 15 in 2013. This is a respective decrease of 33% in 2012 and a decrease of 45% in 2013 in comparison with 2011. The total number of serious injuries has decreased over the last three years from 22 in 2011, to 14 in 2012 and to 11 in 2013. This is a respective decrease of 37% in 2012 and a decrease of 50% in 2013, in comparison with 2011.

The number of victims linked to accidents from unauthorised persons circulating on railway land has, on the contrary, increased, and has already led the infrastructure manager to launch awareness-raising campaigns on the dangers of walking along the tracks without permission and to investigate the possible technical solutions restricting or making it more difficult to access infrastructure for unauthorised persons.

### 2. Number of serious accidents.

The total number of serious accidents in the last three years has decreased from 51 in 2011, to 36 in 2012 and 32 in 2013. This is a respective decrease of 29% in 2012 and of 37% in 2013 in comparison with 2011.

27 of these 32 accidents were collisions between people and vehicles at level crossings (13) and people walking on the tracks (14), therefore accidents with an external cause and with relatively little risk for passengers and RU and IB staff. Only 1 accident was a collision between two trains (compared with 3 collisions in 2012). Four of these accidents were derailments (compared with 2 derailments in 2012), which thankfully did not result in injuries. As mentioned above, an increase in the number of casualties involving unauthorised persons on the network has been recorded. The year 2013 has also recorded a reduction in the number of accidents and victims at level crossings.

### 3. Precursors to accidents

The number of SPADs has decreased in the last three years from 91 in 2011 to 75 in 2012 and 56 in 2013. This spectacular reduction is the result of a series of measures taken by the IM and the RUs, combined with the technical help provided to the driver by the installation of TBL1+ and ETCS.

An increase in the number of broken rails was recorded in 2013. This increase can be explained in part by the low temperatures recorded in January and March 2012 and occurs mainly around old exothermic (aluminothermic) welding points. This trend, already recorded in 2011 and 2012, has led Infrabel to acquire new ultrasound equipment and to carry out preventive grinding. The effectiveness of these seemingly appropriate measures will be closely followed by the DRSI over the next few years.

There was also in 2013 an increase in the number of track buckles. This parameter includes all track deformation leading to exploitation constraints and has increased steadily over the last three years.

A major cause are subgrade instability due to temporarily loss of soil strength after works, and/or due to muddy zones, subgrade deterioration and poor drainage.

The infrastructure manager shall perform an analysis and prepare an action plan.

The number of signalling failures undermining safety has greatly reduced in comparison with the number recorded in 2012. This reduction was expected considering that the high number recorded in 2012 was due to a common cause identified amongst others by the IB in the course of its investigation of the accident in Godinne (see report 2012 for more information). Of the 4 signalling failures affecting safety recorded in 2013, 1 was due to a signal failure and 3 to temporary speed reduction signals which had been badly placed on the ground.

### 4. Costs of serious accidents

The cost of accidents which are shown in the tables of this annual report, give the impression of a spectacular increase. However, nothing is further from the truth as the figures from 2011 and 2012 are estimates from only a few undertakings. Most of the RUs did not have figures for these years. From 2013 onwards these figures come from all the undertakings and will also be compared in the future.



## 5. Technical safety of infrastructure and its application, security management:

At the end of 2013, 51.2 % (or 2201 km/line) of the rail network was equipped with the system TBL1+, in comparison with 34.1 % a year earlier. This represents just over 93% of danger points<sup>1</sup>.

At the end of 2013, 12.6 % (or 818 km/line) of the rail network was equipped with an cab signalling system (ETCS, TBL2 or TVM430).

In 2013, infrastructure equipping with TBL1+ and ETCS was carried out more quickly by the IM than in previous years. Engineering teams have now gained some experience to reduce the time required for preparatory work and studies.

The IM reduces the number of level crossings each year by building bridges and tunnels. In 2011 there were 1595, 1590 in 2012 and 1581 at the end of 2013.

The above figures relate to four years instead of five years. The reason being that the figures for 2009 were partly drawn up by the SNCB/NMBS-Holding Company according to the old legislation and partly by the NIB according to the CSI definitions. In addition, the figures for 2010 with the accident in Buizingen had a significant impact on the figures for accident victims so that each trend would be greatly influenced.

## ② 2. Results of safety recommendations

When the IB takes the decision to open an investigation, it regularly organises coordination meetings with the parties concerned by the event subject to the enquiry. In accordance with the coordination procedure which links the DRSI to the IB, the DRSI takes part in all these meetings. When an investigation is completed and recommendations are made by the IB, the DRSI ensures the follow-up to the implementation of measures linked to these recommendations. This follow-up is done via annual bilateral meetings or via specific meetings on this subject. Every year in June, the DRSI submits its follow-up report to these recommendations to the IB.

The details of the IB's recommendations, measures put in place as well as the status of these measures and the comment of the DRSI are given in the report of the IB available on its website.

<sup>1</sup> This percentage corresponds to the level of coverage of dangerous points on the network expressed in terms of effectiveness and which takes into account, amongst others, the number of trains, the number of passengers and the speed of trains at each point

## ③ 3. Measures implemented unrelated to safety recommendations

Following the loss of a piece of under-carriage fairing, coming undoubtedly from a train of type V250 FYRA, and from numerous other technical reliability problems following the placing into service of these trains on 9 December 2012, on 18 January 2013, the DRSI prohibited the use of these V250 trains in commercial passenger traffic on the high-speed line No 4 (Antwerp - border with the Netherlands). Test journeys, without passengers, remain permitted.

The authorisation which was issued to the applicant (specifically the manufacturer AnsaldoBreda) on 14 September 2012 for these trains of type V250 FYRA was temporary and accompanied by a series of measures to be implemented according to a schedule accepted by common agreement between the applicant and the DRSI. All measures have not been implemented, for various reasons. The trains of type V250 FYRA have not been permitted for use in Belgium since 30 April 2013.





## SUPERVISION

1. Strategy and plan(s)  
p. 22
2. Human resources  
p. 23
3. Competencies  
p. 23
4. Decision-making  
p. 23
5. Coordination and cooperation  
p. 24
6. Conclusions drawn from measures taken  
p. 24





## ① 1. Strategy and plan(s)

The DRSI's supervision activities are divided between the different operational units. Every year in September, based on amongst other things, the analysis of annual reports sent by the RUs and the IM, the monitoring of safety indicators, the IB's recommendations and on the monitoring and recording of events affecting safety, the DRSI identifies the themes to be focussed on during the following year; themes which are also communicated to the sector. These themes are translated afterwards by each unit into their own supervision plans.

For 2013, the main themes under consideration were:

- consultation on railway safety with a major section devoted to the structures put in place for analysis of signals passed at danger;
- the management of interfaces between the safety management systems of Infrabel and the SNCB/NMBS;
- the effectiveness of the SMS regarding feedback;
- the composition of trains;
- the safety roles other than drivers and conductors;
- the application and effectiveness of internal rules;

## ② 2. Human resources

In 2013, more or less 7.5 FTEs (Full Time Equivalents) have been dedicated to supervision activities, which represents more or less 25% of the operational personnel of the DRSI.

## ③ 3. Competencies

The system put in place by the DRSI to manage the competencies required runs along two major lines.

The first line involves the mentoring of new personnel by qualified personnel, involving training on the ground in the handling of the dossiers which are submitted to the DRSI.

The second line put in place by the DRSI involves offering personnel training where they take part in training sessions relating, for example, to audits or risk analysis.

## ④ 4. Decision-making

The decision-making criteria are based on the principles in the Regulations 1158/2010, 1169/2010 and 1077/2012 as well as on the resulting internal procedures.

Every major stage of a supervision activity, identified in the internal procedures, is subject to a reporting procedure to the unit management, checking that regulations and procedures are being followed, as well as coherence in the classification of non-conformities, which is prior to formal validation.

A draft report including non-conformities found during supervision activities is sent to the undertaking under supervision in order to give them the opportunity to react. If necessary, a meeting is organised to finalise the supervision activity.

Following this, the DRSI regularly monitors the implementation of various measures put in place by the undertaking in order to remove any non-conformities identified.

In 2013, the DRSI has not been subject to any complaints by RUs or the IM in relation to its supervision activities.



## ⑤ 5. Coordination and cooperation

No coordination or cooperation agreement on supervision activities with the NSAs in other MSs was in place in 2013. Cooperation has however since been initiated with France and Luxembourg in the first half of 2014.

## ⑥ 6. Conclusions drawn from measures taken

The undertakings limit themselves generally to measures which focus on the non-conformity identified by performing the necessary curative actions. However this completely disregards the indicator or warning role that this non-conformity may have had in relation to areas not covered in the NSA check. This observation is reinforced by the fact that the monitoring activities put in place in the different undertakings are still too unstructured and lack a global vision.

This lack of proactivity and vision in the monitoring roles by undertakings is worrying and is subject to continuous attention by the DRSI.

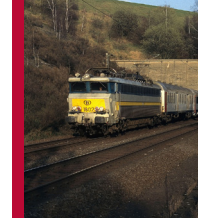






## CERTIFICATION AND AUTHORISATION

1. Directions  
p. 28
2. Contacts with other NSAs  
p. 28
3. Procedural issues  
p. 29
4. Reactions  
p. 29







## ⑤ 1. Directions

In 2013, 3 Part A and 7 Part B certificates have been issued or renewed. 16 RUs are authorised to operate in Belgium (6 with Part A and B and 10 with only Part B issued by the DRSI). A quantitative change is not envisaged in the short term.

In terms of quality, we have been called upon to orient ourselves increasingly towards an approach which is more adapted to the RU. It seems there is a great difference between RUs in terms of being operational with SMS. In this context, the ratio between accompanying the RU in its application for certification and the definitive assessment of the application file can vary considerably. An improvement in the DRSI guide for obtaining a safety certificate is now envisaged so as to have an effective tool to aid the DRSI and the RU in this approach.

## ⑤ 2. Contacts with other NSAs

In the context of its certification and authorisation activities, the DRSI has not had or made any particular requests in 2013 from other NSAs except in the certification dossier from «The Factory» (Thalys). In the context of this dossier, «The Factory» would like to obtain Part A and B certificates from the DRSI and a Part B in France from the EPSF. The EPSF and the DRSI have now, with the agreement of «The Factory», decided to investigate the dossier in close collaboration so as to ensure a common approach and to avoid any redundant applications by «The Factory». This coordination also allows the 2 NSAs to exchange their good practices and their expertise in the area on a concrete dossier. It is ultimately envisaged to put in place cooperation agreements between the DRSI and the EPSF based on the experience gained on this dossier. This coordination has also been extended to supervision activities.

In the context of the dossier on trains type V250 FYRA, following the decision by the DRSI to forbid the commercial circulation of these trains, coordination meetings between the DRSI and IL&T have been put in place.

The DRSI also provided assistance to the EBA and DB Netz for the concept and approval process of the TBL1 + on the section of line Hergenrath - central station of Aix-la-Chapelle (Aachen Hbf). TBL1 + is in operation since December 15, 2013.

## ⑤ 3. Procedural issues

As mentioned in E.1, assistance from the DRSI is necessary for undertakings before issuing any safety certificates. The 4 months that an NSA has to issue a certificate are for the moment purely theoretical, while the undertakings acquire the necessary expertise in SMS. In the handling of different dossiers, it also seems that certain criteria in European Regulations 1158/2010/EC and 1169/2010/EC are not sufficiently clear and are now subject to different interpretations. The DRSI will on its side clarify these points in its application guides, but will also participate in the working group put in place by the ERA on this subject to add its experience to it.

## ⑤ 4. Reactions

Currently, there are no formal mechanisms intended for undertakings and the DRSI has not yet noticed the need, as the analysis of a certification dossier is done on the basis of a constructive exchange allowing the undertaking as well as the NSA to express themselves openly on difficult points. This approach requires frequent contact with the undertaking as well as a clear and precise argument and justification from the NSA, but with the advantage of helping the undertaking to recognise the necessary improvements to its dossier.

This exchange also allows the NSA to improve its communication towards undertakings and to regularly question itself.

If the RU considers that our decision is not pertinent, it is possible to dispute the decision in court.





## CHANGES TO LEGISLATION

### 1. Railway Safety Directive (2004/49/EC)

#### 1. legislation in force transposing this Directive

Law of 30 August 2013 on the Railway Code, *BOJ*, 20 December 2013.

#### 2. State of the transposition of amendments to the RSD/1/ at the end of the year 2013 (table 1 of Annex B).

### 2. Major changes in the legislation and regulations

(Table 2 of Annex B)

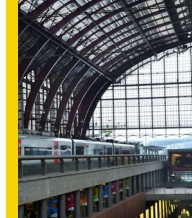




## APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT

1. NSA experience  
p. 34
2. Stakeholder reactions  
p. 39
3. Revision of the NSR to take account of the EC Regulation on the CSM on evaluation and assessment of risks  
p. 39





## ① 1. NSA Experience

At this stage, in the context of SMS direction on certification or supervision activities, this element is handled in a general way as with any other process or procedure in an SMS manual even if, for the DRSI, the process of managing changes is obviously one of the key processes in an SMS. This process of managing changes is not currently envisaged within the specific activities and the experience of the DRSI in the area remains limited. The existence of a harmonised process at a European level facilitates the evaluation that an NSA must do even if this regulation only gives the major principles of a risk assessment.

The Law of 30 August 2013 on the Railway Code as well as the Royal Decree of 1 July 2011 setting the procedure and the means of making the request and of obtaining the authorisation for entry into service of the sub-systems and vehicles foresees that the applicants for authorisation for entry into service submit a design dossier to the DRSI. This dossier allows the DRSI to decide, amongst other things, if authorisation is necessary. In the context of these authorisations, the applicants include preliminary evaluations via CSMs (see Article 4 of the Regulation (EC) 352/2009). This evaluation is one of the elements which is a basis for the DRSI to decide on the need or not for an authorisation for entry into service based on the proposal made by the applicant. In general, the DRSI validates the proposals made.

The table below includes, as an example, the proposals made in the context of authorisations for entry into service for new or modified rolling stock. In 2013, 17 dossiers were submitted to the DRSI concerning rolling stock, for which the CSM for the evaluation and assessment of risks have been applied. For all these cases, the amendment has been judged non-significant.

Designation of the type of vehicle	Vehicle category	Authorisation No	Authorisation category	Uses of the XA	Use of the CSM	Description of the amendment(s)
TRAXX F140MS versionKF (D-A-B-NL)	Locomotive	AMS not required	Refit	No	No	Installation of an electrical energy meter
ES64F4-VL (BR 189)	Locomotive	BE 51 2011 0010	Authorisation expired	NA	NA	The vehicle is no longer authorised in Belgium
ES64U4-H/H1 (HLE18/19 SNCB)	Locomotive	AMS not required	Renewal/Refit	No	Yes	New software E.1. (correction of bugs)

ES64U4-H/H1 (HLE18/19 SNCB)	Locomotive	AMS not required	Renewal/Renefit	No	No	New model of contact shoe for pantographs and new control card for lights
HLE13	Locomotive	BE 51 2013 0001	Refit	No	Yes	TBL1+ activation
I11 BDx	Steering carriage	BE 52 2013 0001	Refit	No	No	TBL1+ activation
BB36000	Locomotive	AMS not required	Refit	No	Yes	Improvement of reliability in winter conditions
TRAXX F140 DE variante E (D-B-NL)	Locomotive	BE 51 2013 0002		Yes	No	Vehicle partially conforms to TSI: TSI PRM, TSI Noise, TSI Tunnel and TSI CCS
TRAXX F140 DE variante F (F-B-NL)	Locomotive	BE 51 2013 0003		Yes	No	Vehicle partially conforms to TSI: TSI PRM, TSI Noise, TSI Tunnel and TSI
Euro 4000 type II	Locomotive	AMS not required	Renewal/ Refit	No	Yes	New software for the braking control system
HLD 77	Locomotive	AMS not required	Refit	No	Yes	Installation of a telematics system
V250 Fyra	Electric rail car	AMS not required	Renewal/refit	No	Yes	Draining of the undercarriage, aerodynamic profiling on the roof and marker lights
V250 Fyra	Electric rail car	BE 51 2012 0007	Authorisation expired	NA	NA	Authorisation limited in time; commercial passenger service not allowed
V250 Fyra	Electric rail car	AMS not required	Renewal/ Refit	No	Yes	New software baseline 9
V250 Fyra	Automotrice	AMS not required	Renewal/ Refit	No	yes	Micro switch for retractable steps
V250 Fyra	Electric rail car	BE 51 2012 0007	Authorisation expired	NA	NA	The vehicle is no longer authorised in Belgium





Thalys PBA	Electric rail car	BE 51 2011 0016	Renewal/Refit	No	No	Circulation with ETCS on lines 25 and 27 (Machelen-Duffel section)
Thalys PBKA	Electric rail car	BE 51 2011 0017	Renewal/Refit	No	No	Circulation with ETCS on lines 25 and 27 (Machelen-Duffel section)
ICE3M series 406	Electric rail car	BE 51 2012 0006	Refit	No	Yes	ETCS integrated with the VTS (ETCS phase 2); new software 18.00, 18.01 and 18.02
ICE3M series 406	Electric rail car	BE 51 2012 0006	Renewal/Refit	No	Yes	New software 18.03, 18.04 and 18.16
ICE3M series 406	Electric rail car	AMS not required	Refit	No	Yes-	MIP platform, Railnet 2.0 (Internet on the train); optimisation of compressed air system
M6 A, M6 B, M6 BD	Car	BE 52 2011 0001	Refit	No	Yes	Increase in the maximum speed from 160km/h to 200km/h
ICRm NS	Car	AMS not required	Upgrade of the existing fleet	No	No	Upgrade of the existing fleet
M4, M5	Pilot car	AMS not required	Refit	No	Yes	Installation of universal multiplexing already used by the SNCB/NMBS on other types of vehicles
AM08, single voltage 3kV and double voltage 3kV/25kV	Electric rail car	AMS not required	Renewal/ Refit	No	Yes	New software 1.1.6

AM08, single volt 3kV	Electric rail car	BE 51 2011 0014	Renewal/ Refit	No	Yes	Changes to the brake control valve to stop the alarm as well as the primary suspension, new software 1.2.6, 1.2.7, 1.2.8 and 1.2.9
AM08, double voltage variation 3kV/25kV	Electric rail car	BE 51 2012 0001	Renewal/Refit	No	Yes	Changes to the brake control valve to stop the alarm as well as the primary suspension, new software 1.2.6, 1.2.7, 1.2.8 and 1.2.9
TBL1+ stand-alone versions 24V, 72V, 110V	On-board part of the CCS sub-system	BE 51 2011 0013	Refit	No	Yes	Additional function «TBL1++», addition to locomotive series
Wagon Sggn 80' Tatrava-gonka 33 56 4576 000 - 0 ➔ 249- 3	Wagon	AMS not required	Renewal/Refit	No	No	Corrective factor
Wagon Sggn 80' Tatrava-gonka 33 54 4576 001- 0 ➔ 250 - 3	Wagon	AMS not required	Renewal	No	No	Corrective factor
Wagon Sggn 80' Tatrava-gonka 33 54 4576 251- 0 ➔ 550 - 6	Wagon	AMS not required	Refit	No	No	Corrective factor





Wagon Sggn 80' Tatrava- gonka 33 54 4576 551 - 4 → 650 - 4	Wagon	AMS not required	Renewal	No	No	Corrective factor
Wagon Sggn 80' Tatrava- gonka 37 80 4576 001- 0 → 250 - 3	Wagon	AMS not required	Refit	No	No	Corrective factor
Hupac - codification	Wagon	AMS not required	Renewal	No	No	Corrective factor
Rail grinder RR 16 MS 4	Special vehicle	BE 54 2013 0001	First	No	No	No evaluation with regard to TSI

In Annex C there is a preview of the number of active vehicles which are registered in Belgium in the NVR.

In the context of its supervision activities, the DRSI has made, with the help of an external consultant, an audit on the handling of interfaces between the SMS of two undertakings, in order to ensure that the different parties collaborate in the context of the management of risks to interfaces. In the context of this audit, the SMS of two undertakings have been analysed and two projects they cooperated on were also analysed. Without being exhaustive in the SMS analysis, it has emerged that the undertakings concerned must clarify and identify the external and internal roles and responsibilities in their risk management processes, for the risk management of interfaces as well as planning common risk analysis at the very beginning of the project. It should be noted that these two points are requirements in the European Regulation 402/2013/EC on the CSCs on risk assessments. The review of the two projects that these two undertakings collaborated on has shown that this cooperation was in place on the ground. This cooperation, which was effective on the ground, should therefore be rapidly translated in the SMS of these two undertakings.

## ② 2. Stakeholder reactions

Beyond discussions on the assessments that the DRSI carries out in its certification and supervision activities, the DRSI has not put in place any processes allowing the RUs or the IM to share their experiences with the EC regulations on risk evaluation and assessment. At this stage, the DRSI considers that if an RU or the IM wishes to share their experiences on problems encountered on this subject, the consultation meetings or bilateral meetings (see B.2) are the adequate forums. In these meetings, to date, no specific comment has been made on this subject.

## ③ 3. Revision of the NSR to take account of the EC Regulation on the CSM on evaluation and assessment of risks

In Belgium, there is no NSR which covers the area of CSM on risk evaluation.





Schaarbeek

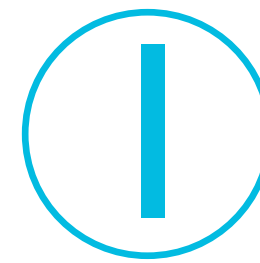


# EXCEPTIONS TO THE ECM CERTIFICATION SYSTEM

Not applicable for the DRSI.

In Belgium, the certification of ECMs is permitted by accredited bodies (by Belac) for product certification (according to the standard EN ISO/CEI 17065). To date, Belgorail is the only Belgian body with approval to certify ECMs. In 2013, there have been no exceptions to the certification schema.





## ANNEXES

### **ANNEX A:** COMMON SAFETY INDICATORS

**p. 44**

### **ANNEX B:** CHANGES TO LEGISLATION

**p. 56**

### **ANNEX C:** Number of active railway vehicles registered in the Belgian national vehicle register (NVR)

**p. 65**





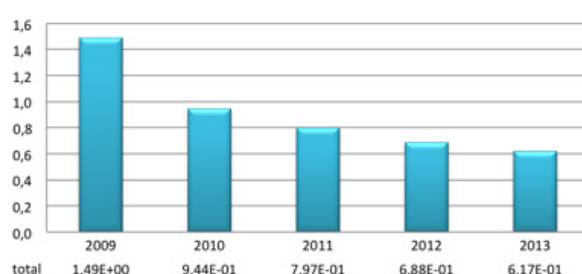


## ANNEX A: Information on the Belgian railway sector

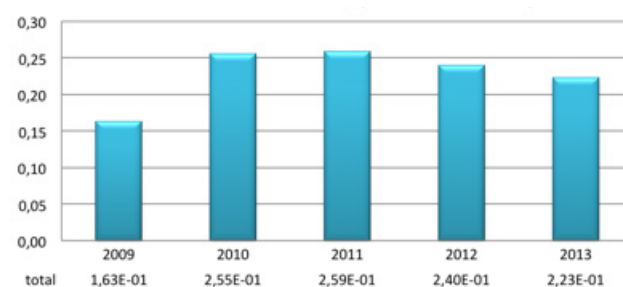
### 1. COMMON SAFETY INDICATORS

#### 1. View of all indicators

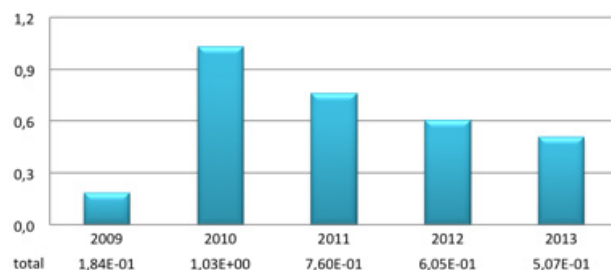
Total number of accidents / (MLN train\*km)



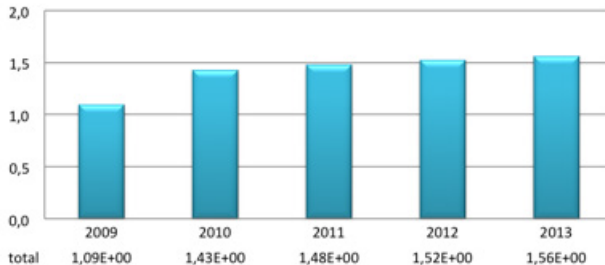
Number of fatalities / (MLN train\*km)



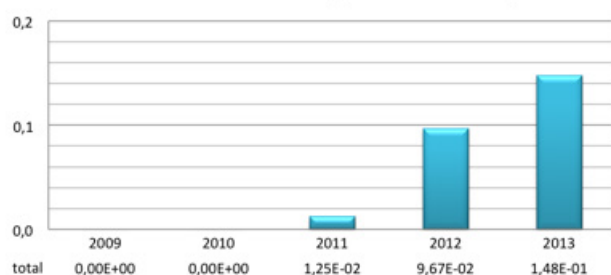
Number of injuries / (MLN train\*km)



Total number of precursors / (MLN train\*km)



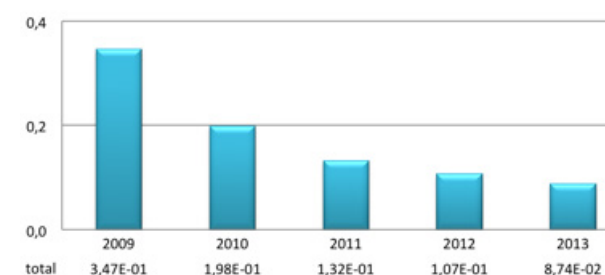
Total costs in MLN € / (MLN train\*km)



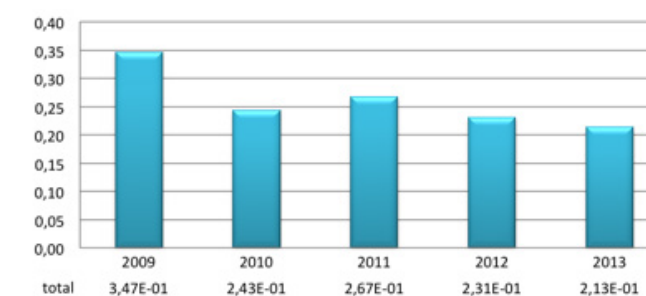
2009: values for 2009  
 2010: average values for 2009 and 2010  
 2011: average values for 2009, 2010 and 2011  
 2012: average values for 2009, 2010, 2011 and 2012  
 2013: average values for 2009, 2010, 2011, 2012 and 2013

### 2. Accidents by type

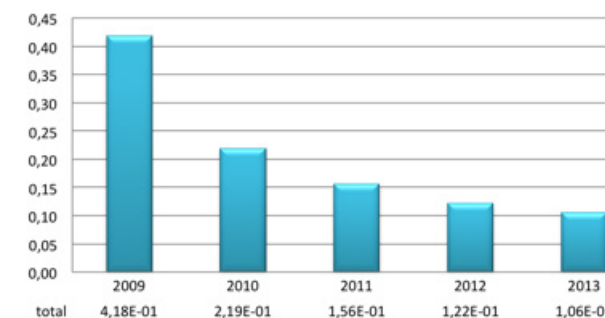
Number of collisions / (MLN train\*km)



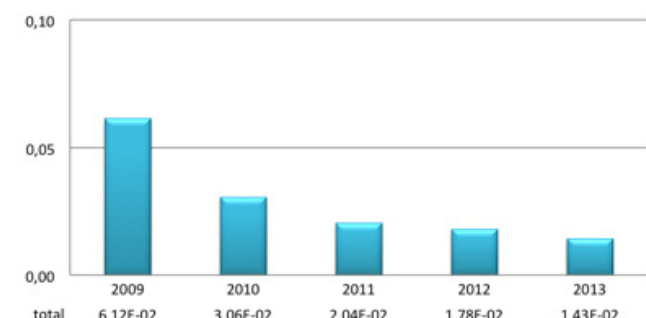
Number of accidents to persons caused by rolling stock in motion / (MLN train\*km)



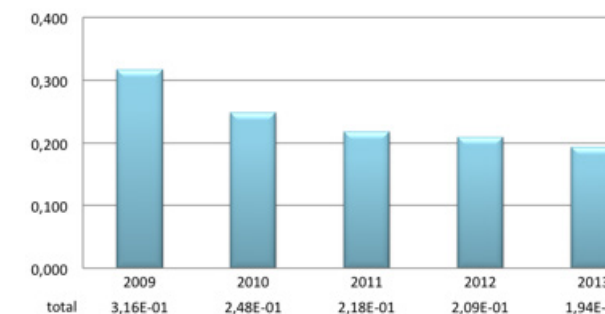
Number of derailments / (MLN train\*km)



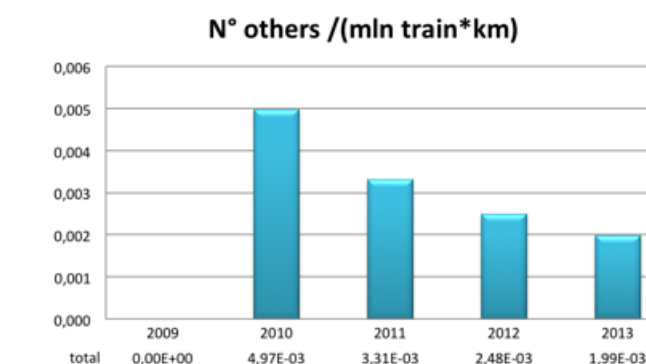
Number of fires in rolling stock / (MLN train\*km)



Number of level crossing accidents / (MLN train\*km)



Number of others / (MLN train\*km)



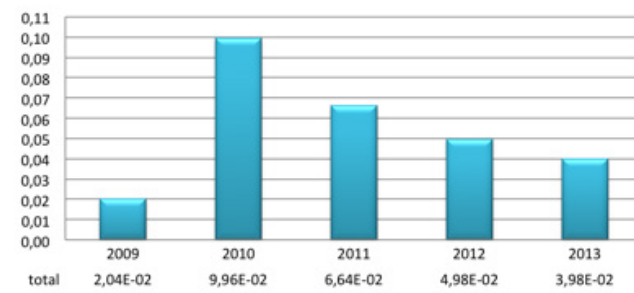
2009: values for 2009  
 2010: average values for 2009 and 2010  
 2011: average values for 2009, 2010 and 2011  
 2012: average values for 2009, 2010, 2011 and 2012  
 2013: average values for 2009, 2010, 2011, 2012 and 2013



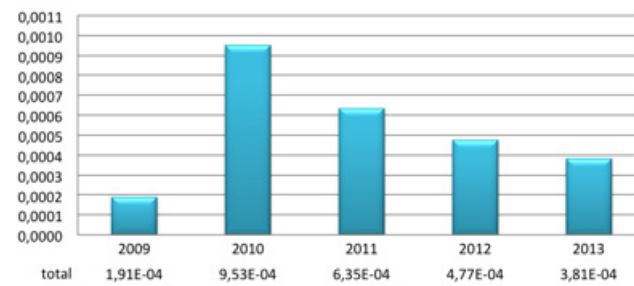


### 3. Deaths per category of person

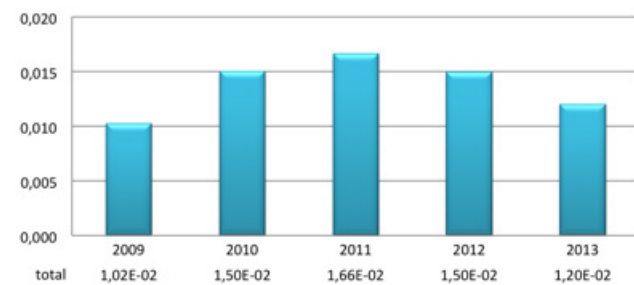
Number of fatalities / (MLN train\*km)  
Category de person : passengers



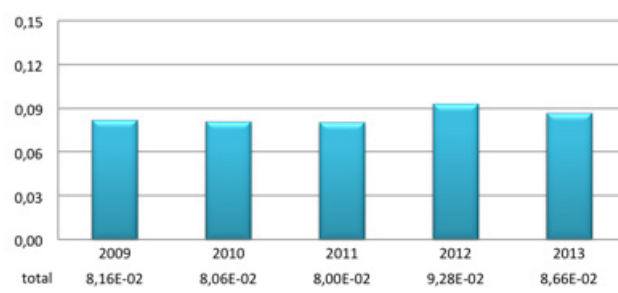
Number of fatalities / (BLN passenger\*km)  
Category de person : passengers



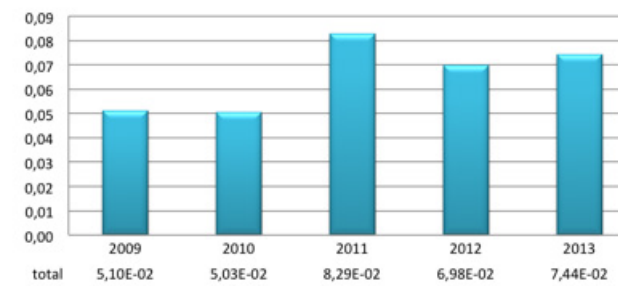
Number of fatalities / (MLN train\*km)  
Category de person : employees



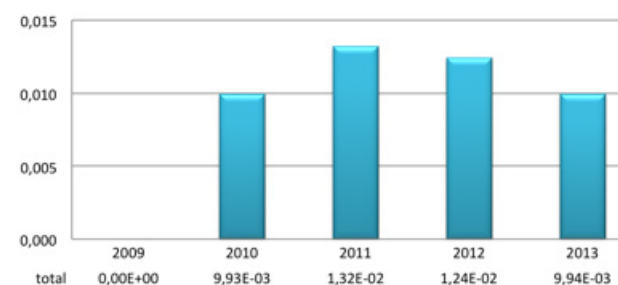
Number of fatalities / (MLN train\*km)  
Category de person : level crossing users



Number of fatalities / (MLN train\*km)  
Category de person : unauthorised persons



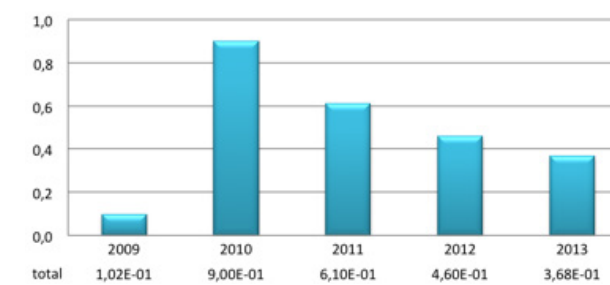
Number of fatalities / (MLN train\*km)  
Category de person : others



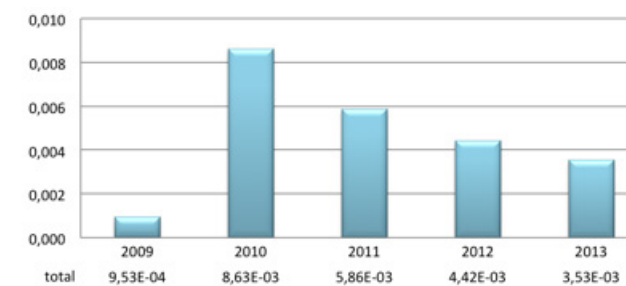
2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013

### 4. Injuries by category of person

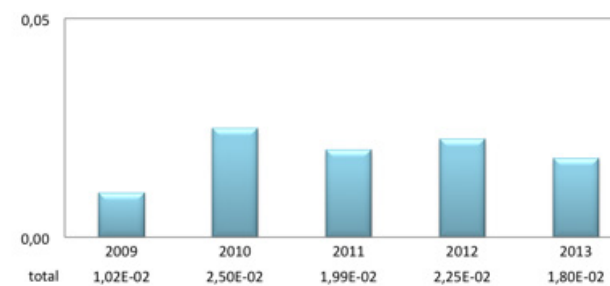
Number of injuries / (MLN train\*km)  
Category de person : passengers



Number of injuries (BLN passenger\*km)  
Category de person : passengers

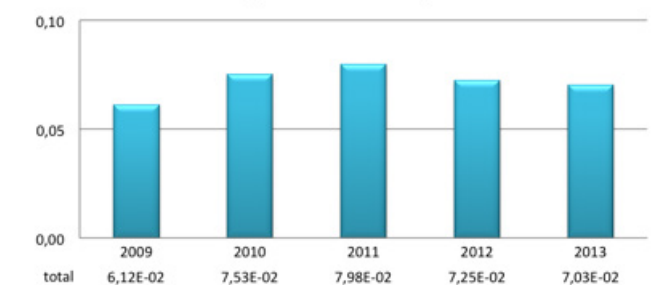


Number of injuries / (MLN train\*km)  
Category de person : employees

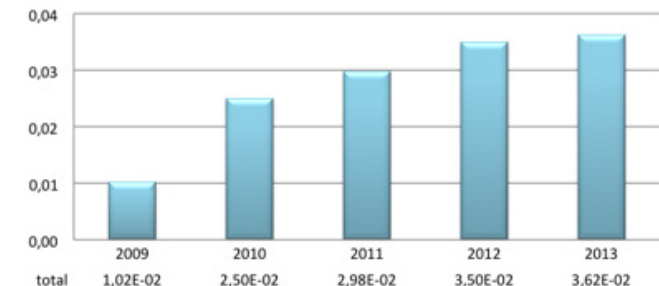


2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013

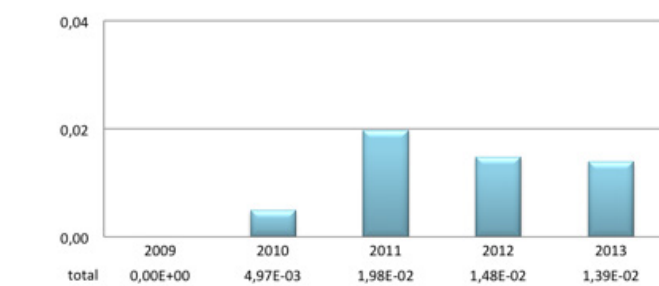
Number of injuries / (MLN train\*km)  
Category de person : level crossing users



Number of injuries / (MLN train\*km)  
Category de person : unauthorised persons



Number of injuries / (MLN train\*km)  
Category de person : others

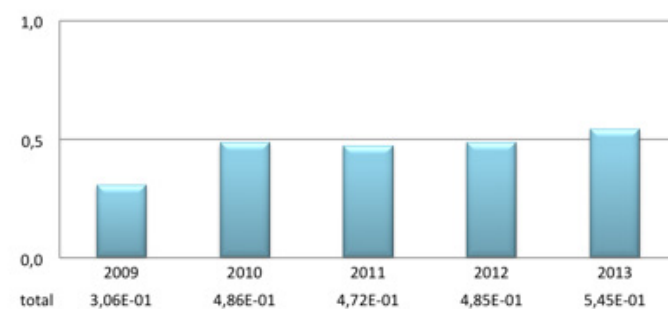




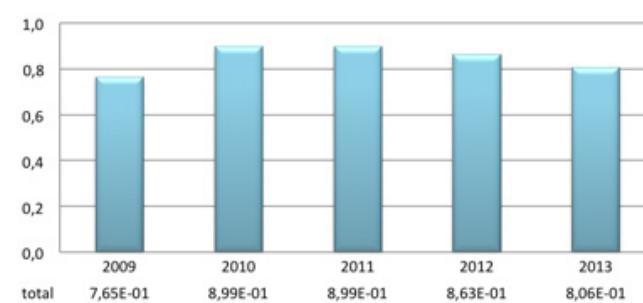


## 5. Precursors of accidents

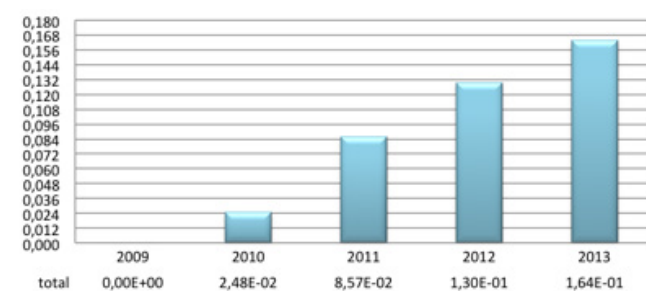
Number of broken rails / (MLN train\*km)



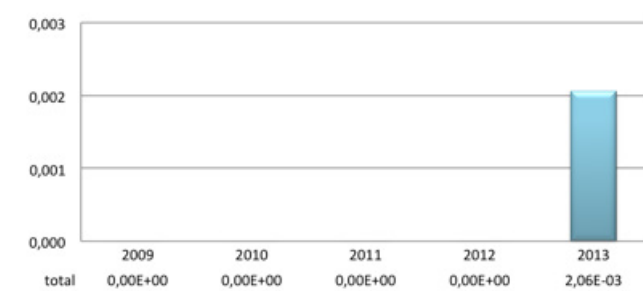
Number of signals passed at danger / (MLN train\*km)



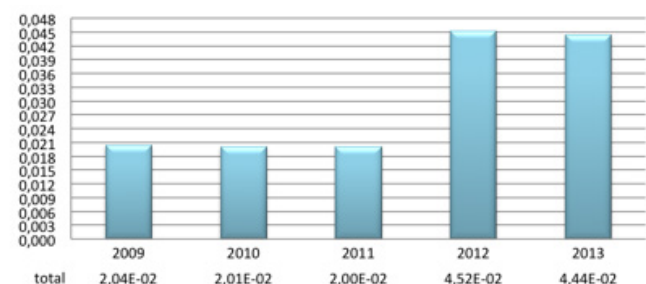
Number of track buckles / (MLN train\*km)



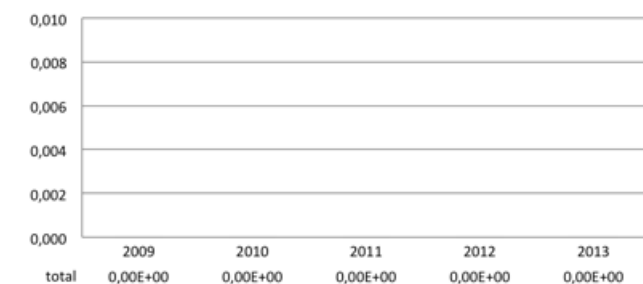
Number of broken wheels on rolling stock in service / (MLN train\*km)



Number of wrong-side signalling failures / (MLN train\*km)



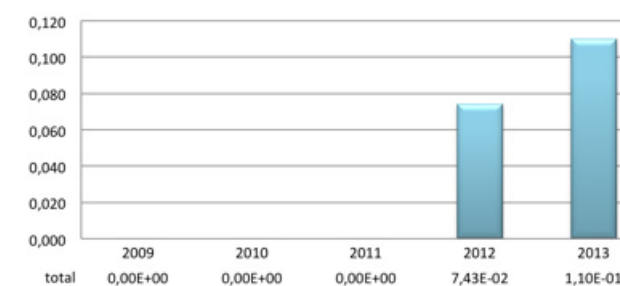
Number of broken axles on rolling stock in service / (MLN train\*km)



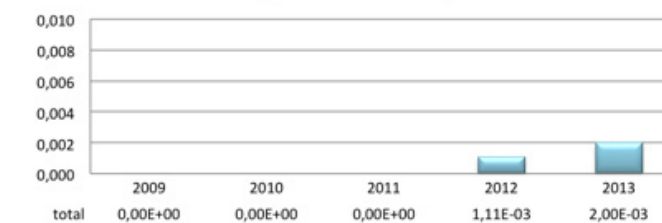
2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013

## 6. Cost of all accidents, number of hours of work lost by the workforce and contractors due to accidents

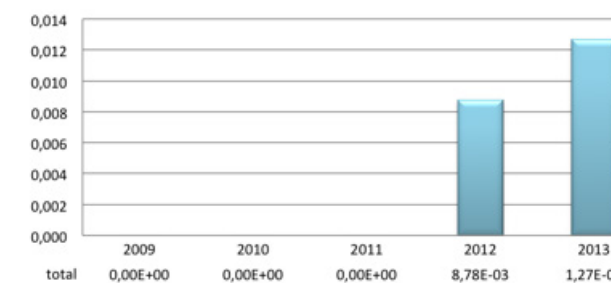
Costs of deaths in MLN € / (MLN train\*km)



Costs of delays, disturbances and re-routing of traffic, including extra costs for staff and loss of future revenue in MLN € / (MLN train\*km)



Costs of injuries in MLN € / (MLN train\*km)



Number of working hours (MLN) of staff and contractors lost as a consequence of accidents / Number of working hours (MLN) of staff and contractors



Costs of replacement or repair of damaged rolling stock and railway installations in MLN € / (MLN train\*km)



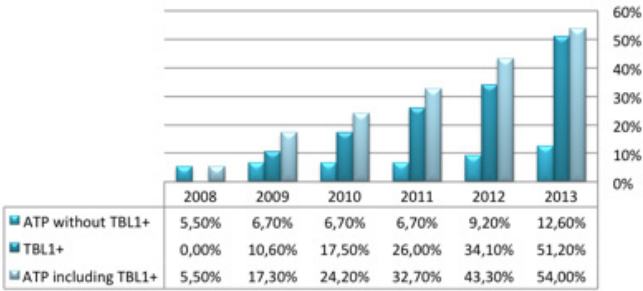
2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013



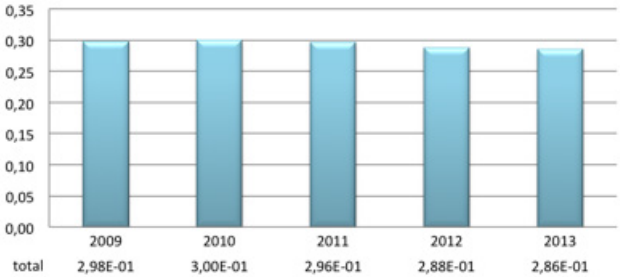


## 7. Technical infrastructure safety and its implementation, safety management

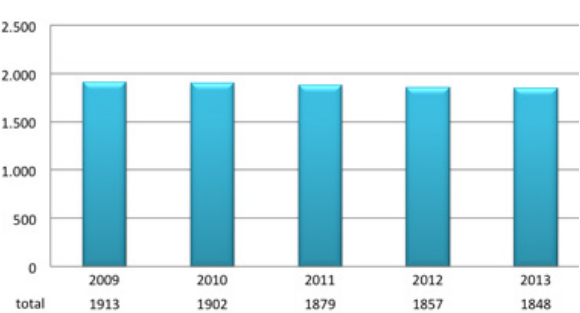
Percentage of tracks with Automatic Train Protection (ATP) in operation



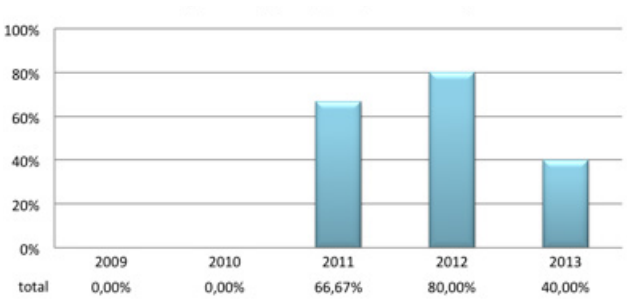
Total Number of level crossings per track km



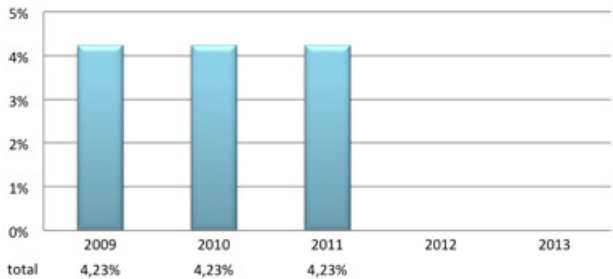
Total number of level crossings / (MLN train\*km)



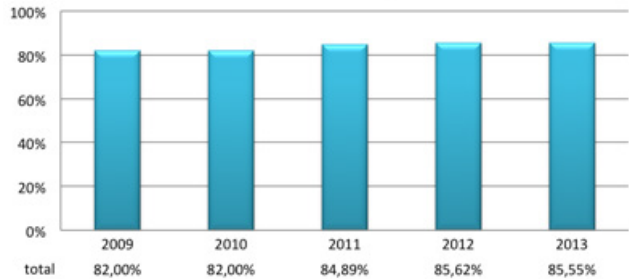
Number of internal audits accomplished out of number of audits required (and/or planned)



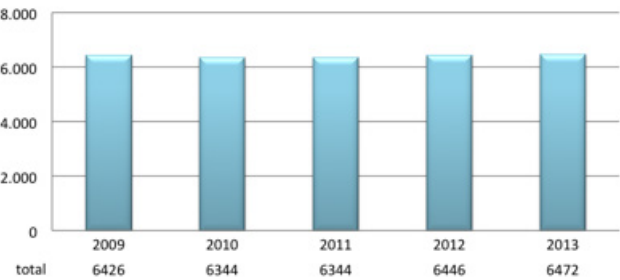
Percentage of train\*km using operational ATP systems



Percentage of level crossings with automatic or manual protection



Number of track km (double track lines are to be counted twice)



2009: values for 2009  
 2010: average values for 2009 and 2010  
 2011: average values for 2009, 2010 and 2011  
 2012: average values for 2009, 2010, 2011 and 2012  
 2013: average values for 2009, 2010, 2011, 2012 and 2013

2009: values for 2009  
 2010: average values for 2009 and 2010  
 2011: average values for 2009, 2010 and 2011  
 2012: average values for 2009, 2010, 2011 and 2012  
 2013: average values for 2009, 2010, 2011, 2012 and 2013





## 2. ABSOLUTE CSI-DATA

Number of accidents and Train*Km								
Type of accidents								
Year	Passagers	Derail-ments	level crossing accidents	Accidents to persons caused by RS in motion	Fires in RS	Others	Total	Train* Km (Mio)
2006	84	7	56	22	18	0	187	93
2007	77	17	76	30	17	1	218	94
2008	94	21	56	25	24	0	220	93
2009	34	41	31	34	6	0	146	98
2010	5	2	18	14	0	1	40	101
2011	0	3	16	32	0	0	51	101
2012	3	2	18	12	1	0	36	99
2013	1	4	13	14	0	0	32	97

N° of injures, Train*Km and Passenger*Km								
Category of persons								
Year	Passengers	Employees	Level crossing users	Unau- thorised persons	Others	Total	Passenger Km (BLN)	Train* Km (MLN)
2006	63	14	14	6	9	106	9607	93
2007	96	27	25	4	1	153	9932	94
2008	36	28	16	2	1	83	10403	93
2009	10	1	6	1	0	18	10493	98
2010	171	4	9	4	1	189	10491	101
2011	3	1	9	4	5	22	9494	101
2012	1	3	5	5	0	14	9493	99
2013	0	0	6	4	1	11	10886	97

N° of fatalities, Train*Km and Passenger*Km								
Category of persons								
Year	Passengers	Employees	Level crossing users	Unau- thorised persons	Others	Total	Passenger Km (BLN)	Train* Km (MLN)
2006	4	0	9	7	0	20	9607	93
2007	9	3	19	7	1	39	9932	94
2008	2	1	10	8	0	21	10403	93
2009	2	1	8	5	0	16	10493	98
2010	18	2	8	5	2	35	10491	101
2011	0	2	8	15	2	27	9494	101
2012	0	1	13	3	1	18	9493	99
2013	0	0	6	9	0	15	10886	97

N° of precursors and Train*Km								
Year	Number of broken rails	Number of track buckles	Number of wrong-side signalling failures	Number of signals passed at danger	Number of broken wheels on rolling stock in service	Number of broken axles on rolling stock in service	Total	Train*Km (MLN)
2006	115	1	1	55	0	0	172	93
2007	98	0	1	81	1	0	181	94
2008	281	0	1	97	1	0	380	93
2009	30	0	2	75	0	0	107	98
2010	67	5	2	104	0	0	178	101
2011	45	21	2	91	0	0	159	101
2012	52	26	12	75	0	0	165	99
2013	76	29	4	56	1	0	166	97





Cost of all accidents, safety hours								
Type of accident								
Year	Costs of deaths in MLN €	Costs of injuries in MLN €	Costs of replacement or repair of damaged rolling stock and railway installations in MLN €	Costs of delays, disturbances and rerouting of traffic, including extra costs for staff and loss of future revenue in MLN €	Total costs in MLN €	Total number of working hours of staff and contractors lost as a consequence of accidents	Total number of working hours	Train* Km (MLN)
2006								93
2007								94
2008								93
2009								98
2010								101
2011					3,785			101
2012	29,502	3,486	1,271	0,441	34,700	NA	NA	99
2013	24,585	2,739	6,352	0,538	34,214	NA	NA	97

Technical safety of infrastructure and its implementation, management of safety								
Type of accident								
Year	Percentage of tracks with Automatic Train Protection (ATP) in operation	Percentage of Train* Km using operational ATP systems	Total number of level crossings	Number of track Km (double track lines are to be counted twice)	Total number of level crossings per track Km	Percentage of level crossings with automatic or manual protection	N° of audits accomplished/ N° of audits required (and/or planned)	Level crossings with protection
2006	see CSI in graphic	3,87%	2037	6212	3,28E-01	79,19%	0,00%	
2007		3,87%	1957	6212	3,15E-01	80,79%	0,00%	
2008		3,87%	1929	6282	3,07E-01	81,00%	0,00%	
2009		4,23%	1913	6426	2,98E-01	82,00%	0,00%	
2010		4,23%	1902	6344	3,00E-01	82,00%	0,00%	
2011		4,23%	1879	6344	2,96E-01	84,89%	66,67%	1595
2012			1857	6446	2,88E-01	85,62%	80,00%	1590
2013			1848	6472	2,86E-01	85,55%	40,00%	1581





## ANNEX B: CHANGES TO LEGISLATION

Table 1

AMENDMENTS TO RSD	Transposed (Y/N)	Legal reference	Date of entry into force
Directive 2008/57/EC	Y	Law of 30 August 2013 on the Railway Code, BOJ, 20 December 2013.	1 January 2014
Directive 2008/110/EC	Y	Law of 30 August 2013 on the Railway Code, BOJ, 20 December 2013.	1 January 2014
Directive 2009/149/EC of the Commission	Y	Law of 30 August 2013 on the Railway Code, BOJ, 20 December 2013.	1 January 2014

Table 2

LEGISLATION AND REGULATIONS	Legal reference	Date of entry into force	Description of change	Reasons for the change
Concerning the NSA	Law of 30 August 2013 on the Railway Code, BOJ, 20 December 2013 and Law of 30 August 2013 inserting a title 7/1 in the Law of 30 August 2013 on the Railway code, concerning the areas covered under Article 77 of the Constitution, BOJ, 30 October 2013.	1 January 2014	Repeal and replacement of the Law of 4 December 2006 on the use of railway infrastructure, of the Law of 19 December 2006 on railway operational safety and of the Law of 26 January 2010 on the interoperability of the railway system.	Considering the increasing number of legislative and regulatory measures and the need for them to be easy to read, it is indispensable that a revision of said provisions is done at regular intervals. The general objective of the Code involves creating a coherent and easily readable body of legislation, ensuring harmonisation of the terminology used and the fields of application. Changes have also been made to take into account comments from the European Commission.





Legislation on the NoBos, DeBos, ABs, third party entities for registration, examination, etc.	Royal Decree of 8 December 2013 on the criteria for designating and the means of submitting an application for the designation of bodies responsible for carrying out the procedure for checking sub-systems with reference to the safety rules, BOJ, 23 December 2013.	1 January 2014	Repeal and replacement of the Royal Decree of 25 November 2010 on the criteria for designating and the means of submitting an application for the designation of bodies responsible for carrying out the procedure for checking sub-systems with reference to the national safety rules in use - content unchanged.	Change of the legal basis which required that the Ministerial Decree is transformed into a Royal Decree.
	Royal Decree of 8 December 2013 laying down the means of submitting an application for approval to notify bodies under Article 201 of the Railway Code, BOJ, 23 December 2013.	1 January 2014	Repeal and replacement of the Ministerial Decree of 25 November 2010 laying down the means of submitting an application for approval to notify bodies under Article 52 of the Law of 26 January 2010 on the interoperability of the railway system within the European Community - content unchanged.	Change of the legal basis which required that the Ministerial Decree is transformed into a Royal Decree
	Royal Decree of 21 December 2013 amending the Railway Code, for the extension of competences to the regulatory body, BOJ, 22 January 2014.	1 January 2014	Amendment of Articles 62 and 63 of the Railway Code.	This Royal Decree forms part of a larger reform of the legal structures of the SNCB/NMBS Group and aims to extend the duties of the supervisory body.

Concerning RUs/IMs/ECMs	Royal Decree of 5 June 2013 amending the Royal Decree of 13 June 2010 setting the amount of the fee payable by the holder of a safety authorisation and by holders of a Part B safety certificate using the Belgian railway network, by way of contribution to the supervision costs by the Safety Authority for the safety of railway transport and the development of regulation, BOJ, 25 June 2013.	1 January 2014	Amendment of Article 1 of the Royal Decree of 13 June 2010 to foresee the amount of the fee for 2013 as well as the mechanism for indexation of this fee in the future.	To foresee the amount of the fee intended to supply the fund for railway safety authority operations. An mechanism for indexation is at present planned to avoid an annual amendment to this Decree to adapt the fee.
	Royal Decree of 5 June 2013 amending the Royal Decree of 17 June 2010 setting the amount of the fee payable by the holder of a safety authorisation and by holders of a Part B safety certificate using the Belgian railway network, by way of contribution to the supervision costs by the Safety Authority for the safety of railway transport and the development of regulations, BOJ, 25 June 2013.	1 January 2014	Amendment of Article 1 of the Royal Decree of 17 June 2010 to foresee the amount of the fee for 2013 as well as the mechanism for indexation of this fee in the future.	To foresee the amount of the fee intended to supply the fund for the railway investigation body's operations. An mechanism for indexation is at present planned to avoid an annual amendment to this Decree to adapt the fee.





	Royal Decree of 8 December 2013 establishing the format for the identity card to be used by staff members of the infrastructure manager responsible for reporting certain risks for railway safety, BOJ, 23 December 2013..	1 January 2014	Replacement of the Royal Decree of 10 January 2010 assigning the role of criminal investigation officer to certain agents of the railway infrastructure manager responsible for checking the application of various laws and regulations in the area of railway transport, which has been repealed by another Royal Decree of 8 December 2013.	The Railway Code, contrary to prior legislation, no longer assigns the role of criminal investigation officer to the agents of the infrastructure manager, but it does foresee the issuing of identity cards.
	Royal Decree of 8 December 2013 setting the minimum amounts for civil liability insurance for operation on railway infrastructure, BOJ, 23 December 2013.	1 January 2014	Repeal and replacement of the Royal Decree of 23 May 2008 setting the minimum amounts for civil liability insurance for operation on the railway infrastructure - content unchanged.	Following replacement of the Law of 19 December 2006, the Royal Decree of 23 May 2008 was replaced by a new Royal Decree containing a reference to the Railway Code.
	Royal Decree of 21 December 2013 amending the Railway Code concerning access to the « traffic control» and signalling boxes of the infrastructure manager, BOJ, 22 January 2014.	1 January 2014	Insertion in Title 3, chapter 3, of the Railway Code of a section 3/1 on access to traffic control and signal boxes.	This Royal Decree is part of a larger reform of the SNCB/NMBS Group's legal structures and is aimed at allowing railway undertakings, in a non-discriminatory way, to be present in the traffic control and in the signal boxes of the infrastructure manager.
				It also establishes the mechanism by which the infrastructure manager carries out, in a non-discriminatory way, the priorities suggested by the railway undertakings concerning their own trains, except for reasons of operational safety or in case of conflict with priority rules fixed by the public authority.
	Royal Decree of 21 December 2013 amending the Railway Code concerning the services to provide to railway undertakings, BOJ, 22 January 2014.	1 January 2014	Amendment of Article 3 (addition of two definitions), Article 9 (restriction of its field of application) and insertion of Article 9/1 on services to provide to railway undertakings in the Railway Code	This Royal Decree is part of a larger reform of the SNCB/NMBS Group's legal structures and partially transposes the Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area

Implementation of other EU requirements (if concerning railway safety).	Royal Decree of 11 February 2013 amending the Royal Decree of 22 June 2011 laying down the rules on medical and psychological examinations at a professional level for train drivers and train conductors as well as criteria for the recognition of persons and centres responsible for these exams, BOJ, 26 February 2013.	8 March 2013	Amendment of the Royal Decree of 22 June 2011 laying down the rules on medical and psychological examinations at a professional level for train drivers and train conductors as well as criteria for the recognition of persons and centres responsible for these exams.	Targets: - making formal corrections, - specifying the required diploma for carrying out the psychological examinations and - adding a recognition procedure for centres recognised in other Member States.
	Royal Decree of 7 March 2013 determining the rules of procedure for the application of Article 30(2) of the Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on the rights and obligations of railway passengers, BOJ 25 March 2013.	4 april 2013	Establishment of the procedure intended to allow passengers to make complaints to the authority responsible for implementing Regulation 1371/2007/EC as well as the handling of this complaint.	Carrying out the competence entrusted to the King by Article 2, paragraph 2, of the law of 30 December 2009 on various measures, BOJ, 31 December 2009.
	Royal Decree of 9 July 2013 amending the Annex of the Ministerial Decree of 30 July 2010 on the adoption of requirements applicable to rolling stock for the use of train paths, BOJ, 25 July 2013.	4 August 2013	Amendment of points 12.2.d and 12.2.e of the Annex of the Ministerial Decree of 30 July 2010 on adoption of the requirements applicable to rolling stock for the use of train paths	This amendment is based in particular on Article 7.3.3 of Annex III of Decision 2012/88/EU of the Commission of 25 January 2012 on the Technical Specification for Interoperability concerning the subsystems « control, command and signalling» of the trans-European railway system, which enables Member States to submit new requirements at a national level, so as to encourage the operation of vehicles equipped with ERTMS and to allow existing national systems to be taken out of service. The target is therefore to accelerate the dismantling of MEMOR on lines equipped with ETCS and so to encourage the equipping of vehicles with ERTMS.



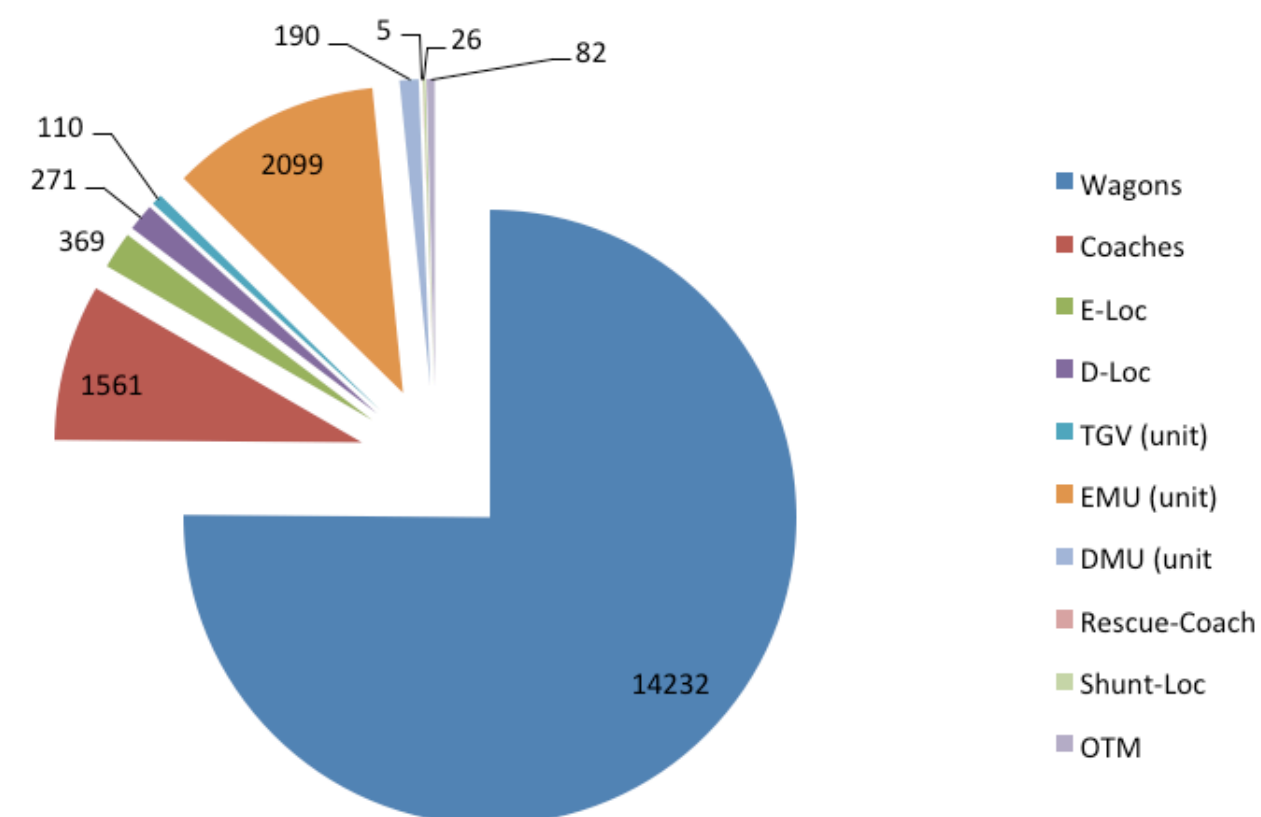
	Royal Decree of 9 July 2013 amending the Annex of the Ministerial Decree of 30 July 2010 on the adoption of requirements applicable to rolling stock for the use of train paths, BOJ, 25 July 2013.	4 August 2013	Amendment of points 12.2.d and 12.2.e of the Annex of the Ministerial Decree of 30 July 2010 on adoption of the requirements applicable to rolling stock for the use of train paths	This amendment is based in particular on Article 7.3.3 of Annex III of Decision 2012/88/EU of the Commission of 25 January 2012 on the Technical Specification for Interoperability concerning the subsystems « control, command and signalling» of the trans-European railway system, which enables Member States to submit new requirements at a national level, so as to encourage the operation of vehicles equipped with ERTMS and to allow existing national systems to be taken out of service. The target is therefore to accelerate the dismantling of MEMOR on lines equipped with ETCS and so to encourage the equipping of vehicles with ERTMS.
	The Royal Decree of 9 July 2013 determining the requirements for the employment of safety personnel, BOJ, 22 October 2013..	1 January 2013	Repeal and replacement of: <ul style="list-style-type: none"> <li>1. the Royal Decree of 16 January 2007 on the safety requirements and procedures applicable to railway infrastructure managers and railway undertakings;</li> <li>2. the Royal Decree of 15 May 2011 determining the requirements for the employment of safety personnel.</li> <li>3. Annex 1, part 3, point 3.2.2 and part 4 of the Ministerial Decree of 26 July 2007 on adoption of specifications for tourist operations with historic stock on railway infrastructure;</li> <li>4. the Ministerial Decree of 9 June 2009 on adoption of specifications for safety personnel.</li> </ul>	This Royal Decree aims to bring together and to clarify the requirements applicable to security personnel, in particular in the context of the European train driver licence

	Royal Decree of 30 July 2013 amending the Royal Decree of 22 June 2011 laying down the rules on medical and psychological examinations at a professional level for train drivers and train conductors as well as criteria for the recognition of persons and centres responsible for these exams, BOJ, 29 August 2013.	8 September 2013	Amendment of the Royal Decree of 22 June 2011 laying down the rules on medical and psychological examinations at a professional level for train drivers and train conductors as well as criteria for the recognition of persons and centres responsible for these exams.	Update of various legislative references now rendered obsolete following other amendments.
	Royal Decree of 30 August 2013 designating the authority responsible for the application of Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on the rights and obligations of railway passengers, BOJ, 16 September 2013.	26 September 2013	Repeal and replacement of the Royal Decree of 7 May 2010 designating the authority responsible for the application of Regulation (EC) No 1371/2007 of the European Parliament and the Council of 23 October 2007 on the rights and obligations of railway passengers.	Designation of the supervising official of the administration in charge of railway transport responsible for the application of Regulation 1371/2007/EC.
	I Royal Decree of 6 September 2013 amending the Royal Decree of 12 September 2011 on providing training services to train drivers and the recognition of training centres, BOJ, 23 December 2013.	2 January 2014	Amendment of the Royal Decree of 12 September 2011 on providing training services to train drivers and for the recognition of training centres	Transposition of Decision 2011/765/EU of the Commission of 22 November 2011 on the criteria for recognition of training centres giving training courses for train drivers, the criteria for recognising examiners responsible for evaluating train drivers and the criteria for the organisation of exams under Directive 2007/59/EC of the European Parliament and of the Council.
	Royal Decree of 21 December 2013 on adaptation of regulations on the carriage of dangerous goods by road or by railway to scientific and technical developments, BOJ, 22 January 2014.	1 March 2014	Amendment: <ul style="list-style-type: none"> <li>- of the Royal Decree of 29 June 2003 on training of drivers of transport units carrying dangerous goods by road other than radioactive materials;</li> <li>- of the Royal Decree of 28 June 2009 on carriage of dangerous goods by road or by railway, with the exception of explosive or radioactive materials</li> </ul>	Transposition of Directive 2012/45/EU of the Commission of 3 December 2012 on the second adaptation of the Annexes of Directive 2008/68/EC of the European Parliament and of the Council on inland carriage of dangerous goods to scientific and technical developments.





**ANNEX C: NUMBER OF ACTIVE RAILWAY VEHICLES REGISTERED IN THE BELGIAN NATIONAL VEHICLE REGISTER (NVR)**





Kingdom of Belgium  
National Safety Authority

*Department for Rail Safety and Interoperability*



**Department for Railway Safety and Interoperability**

**(FPS MOBILITY AND TRANSPORT)**

Rue du Progrès 56

1210 BRUSSELS

***[www.mobilit.belgium.be](http://www.mobilit.belgium.be)***