Inspectie Leefomgeving en Transport
Ministerie van Infrastructuur en Milieu

Netherlands NSA Annual Report 2013

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Annex E1: List of countries which have awarded Part A to railway undertakings which have applied for Part B in the Netherlands

Annex E2: Safety authorisations under Directive 2004/49/EC

1 Purpose of the report

The purpose of this annual safety report is:

to summarise and quantify the progress made in the safety of the Dutch main-line rail network in 2013, based on the objectives of the Third Rail Safety Framework Document and the European Railway Agency's Common Safety Indicators.

In accordance with the European Railway Safety Directive (2004/49/EC), the Netherlands reports annually in September on trends in the safety of its main-line rail network. The reporting follows the European definitions and indicators agreed between the Member States or prescribed by the European Railway Agency (ERA) in guidelines or regulations[1]. Therefore this annual report on the goals of the three subject areas in the Third Framework Document on Rail Safety (the 'Framework Document') of the Ministry of Infrastructure and the Environment (Ministerie van Infrastructuur en Milieu) – Safe Transport, Safe Working and Safe Living – follows the European approach.

This report has been structured to follow the European template for an NSA annual safety report, EN 2012, version 15.

In line with the European definition of 'significance', the reporting only covers incidents and injuries which meet at least one of the following criteria[2]:
- at least one fatality or one person seriously injured; or
- damage to rolling stock, track, other installations or the environment quantified at EUR 150 000 or more; or
- serious traffic disruption: train services suspended for at least six consecutive hours.

For some themes, the Framework Document does not give an indicator with a (target) value. This annual report cannot therefore provide quantified progress on these themes, which include cohesion between the rail sector and the relevant organisations outside it, at the interfaces of responsibility, innovation and safety management.

This annual reporting is addressed primarily to:
- the Infrastructure and Environment Ministry officer competent for the Third Framework Document on Rail Safety; and
- the ERA, as mandatory annual reporting by the Dutch National Safety Authority (NSA) under Article 18 of the Railway Safety Directive.

The report is published at the following websites:
Dutch: www.ILenT.nl
European: www.era.europa.eu/Search/Key-Documents/Pages/Home.aspx

[1] Including Commission Decision 2009/460/EC on the adoption of a common safety method for assessment of achievement of safety targets and procedure for calculation of Common Safety Indicators (CSIs)
[2] Some goals of the Framework Document do not meet the criteria, but do appear in the annual report. One example is the number of passengers with minor injuries. These goals are not reported to the ERA.

2 Foreword

This is the 2013 annual safety report of the Dutch National Railway Safety Authority (Nederlandse Veiligheidsinstantie Spoor – NSA). The report is the NSA's account of developments in the field of safety on the Dutch network of main railway lines.

The report and its annexes contain quantitative reporting on progress made with safety. Chapters 3 to 5 review the general features of the main-line network, trends in safety and how the NSA is organised. They quantify this safety progress in detail, subdividing it into the three Framework Document themes of Safe Transport, Safe Working and Safe Living.

Major changes to the laws and regulations are summarised in Chapter 6. Chapters 7 and 8 look in more detail at the NSA's supervisory work and the points covered by it, quantifying the results in terms of documents issued (e.g. licences and certificates). Chapter 9 deals with alternative measures taken which differ from the ECM certification approach. Chapter 10 rounds off the report by stating its conclusions.

3 Introduction

3.1 General

Within the prescribed reporting structure of European template EN 2012, version 15, the report quantifies the progress made in safety according to the three themes of the Framework Document: Safe Transport; Safe Working; and Safe Living.

3.2 Rail infrastructure

As of 31 December 2013, the key features of the Dutch main-line rail network were as follows:

Main-line railway network (kilometres)	3063
Main-line train-kilometres (2013)	151 million
Number of main-line railway undertakings carrying passengers	8
Main-line passenger-kilometres (2013)	17.5 billion
Number of main-line rail freight undertakings	22
Freight train-kilometres (2013)	6.9 million
Number of main-line infrastructure managers (subject to licensing)	1
Number of main-line infrastructure managers (other)	1
Number of main-line contractors	20

Compared with 2012, there are no great differences in the size of the network, the undertakings serving it, and railway usage. The one exception is freight transport, which has dropped since 2008 and, in 2013, amounts to just 50% of the number of kilometres in 2012.

Under the Main-Line Railways Modification Decree of 20 December 2004, the Minister of Infrastructure and the Environment defines which stretches belong to the main-line railway network[3]. A map of the Dutch main-line railway network appears in Annex A1 (source: Prorail). Annex A2 summarises which undertakings hold a safety certificate, authorisation or licence, while Annexe A3 lists the railway undertakings and infrastructure manager.

3.3 Quantified general safety trend

Safe Transport

Most of the Safe Transport goals for 2013 have been met. The trend in the total number of accidents, fatalities and serious injuries on the railways has looked quite stable for several years running[4]. There were no passenger fatalities in 2013. Since the 2012 Amsterdam Westerpark accident, the total number of passenger injuries is heading back towards pre-2012 levels, which it has not yet reached. The Amsterdam accident will continue to influence passenger safety indicators for a few years yet.

[3] Examples of rail lines which do not form part of the main line: tram and underground lines; rail lines on company premises and in repair workshops.
[4] Excludes deaths by suicide.

The number of accidents in 2013 involving collisions between, or with, trains is unchanged on 2012. Incidents due to defective rail infrastructure, equipment and rolling stock are likewise unchanged. The one serious incident was a derailment following wheel tyre breakage on a goods train at Borne. Damage amounted to around EUR 3 500 000. No-one was injured.

More attention needs to be paid to incidents involving people who are neither passengers nor directly working to deliver rail transport. A relatively high number of fatalities occurred among level crossing users. These account for around 90% of total railway fatalities in 2013, and represent a missed target in 2013.

Safe Working

The number of serious injuries among drivers and train managers was down in 2013, with zero fatalities. As in 2012, there were no fatal accidents involving workers on the track, though the number of serious injuries was up by around 30% in 2013. To put the rise in perspective, injury numbers have been low in recent years, at 0.03 to 0.01 serious injuries per million train-km.

Though neither the Framework Document nor ERA sets a target for this, in 2013 a record was kept of injuries to registered personnel working on railway property, such as station buildings. The 2013 figure included one fatality (a fall from a building) and six serious injuries.

Safe Living

As a multi-year average, the aim of continuous improvement has been achieved. Nevertheless, the number of fatalities on level crossings has continued to rise, in absolute terms, since 2011. Of the total number of fatalities in the group 'level crossing safety', the largest percentages are motorists (29%) and pedestrians (24%). Incident reports record regular attempts to cross at a level crossing ahead of an oncoming train. The number of unmanned level crossings fell a little in 2013. These now account for around 20% of the total of around 2 500 level crossings.

The number of suicides rose by around 10% in 2013, to 220.

Outside the scope of this theme

In 2012 and 2013 there was no structural measurement of fulfilment of the requirement to hold the required papers. Occasional spot checks revealed no non-conformities.

European position

The Netherlands is the third-safest EU Member State in terms of numbers of fatalities and serious injuries per million (passenger) train-kilometres. This ranking derives from figures for the years 2007 to 2012[5]. Performance over the period 2008 to 2013 will be published in 2015.

There are two other aims in the Framework Document: to rank among the best-performing EU Member States in terms of risk to passengers and of prevention of accidents at work. No conclusive comment can be made on these aims, as the ERA does not supply the information which would be needed to do so.

Licensing

In 2013 licences, certificates and similar authorisations were issued or renewed. A breakdown of the total new licences issued in 2013 appears below:

- licences to operate and rolling stock licences 117
- infrastructure licences 32
- driver's licences 2 695.

[5] Railway Safety Performance in the European Union, ERA, 2014

Supervision

The inspections take account of past safety performance figures measured, and of results of past inspections of the undertakings involved. The result may be to add to, or subtract from, the scope of inspection in specific cases. Various supervisory activities were carried out in 2013, as follows:

- Licensing audits 110
- Property surveys 4 410
- Incident debriefings and accident investigations 1 100
- Refresher audits 70.

4 Organisation

Under the Decree Establishing the Living Environment and Transport Inspectorate (Inspectie Leefomgeving en Transport – ILT)[6], the ILT acts as national safety authority in the terms of the Railway Safety Directive (2004/49/EC: National Safety Authority), save delegation. A summary of its tasks, under Article 16 of Directive 2004/49/EC et seq., is given below:

- bringing sub-systems into service and checking that they are operated and maintained 'well';
- supervising the interoperability constituents;
- authorising the placing in service of new or substantially altered rolling stock;
- issuing, renewing, amending and revoking of safety certificates and of safety authorisations and checking these;
- supervising that rolling stock is duly registered in the national register of vehicles and that the register is accurate and kept up-to-date;
- and promoting and, where appropriate, enforcing the safety regulatory framework, including the system of national safety rules.

The monitoring and development of a regulatory framework is a task of the Director-General for Accessibility (Directeur-Generaal Bereikbaarheid – DGB) at the Ministry of Infrastructure and the Environment.

In total, around 45 full-time equivalents (FTEs) are deployed on the relevant tasks.

In addition to the NSA tasks of the ILT and DGB, the Netherlands has a statutory national Safety Board (Onderzoeksraad voor Veiligheid – OvV), which investigates incident causes, on its own initiative, and independently. After completing its inquiries, the OvV has power to make recommendations to the Infrastructure and Environment Ministry.

Annex B contains the NSA organisation chart.

[6] Article 2.3.a

5 Railway safety trends

5.1 Initiatives to maintain/improve safety performance

Table 1: Some important initiatives resulting from accidents or near-misses

Where	What happened	Action taken
Permanent way	Track workers were inspecting a bridge without a safety foreman. They were in direct danger of being hit by a train.	Penalty recommendation
Permanent way	Tightened supervision in response to several incidents/infringements. Many incidents are due to driver inattention, possibly attributable to a lack of safety culture. The sudden rise is worrying: 15 of the 41 property surveys conducted found infringements.	In the second half of 2014, an extra refresher audit will in any case cover safety culture. Inspection findings will be applicable to the renewal of the safety certificate in 2015.
Permanent way	Collisions with lorries and agricultural vehicles on unsecured level crossings heighten the risk, because the chance of derailment is greater in collisions with this type of road traffic than in other collisions.	Quantified substantiation and consultation with Accessibility Directorate-General to examine possibilities for restricting heavy traffic on this kind of level crossing (unmanned) as far as possible.
Permanent way	Driver passed signal at amber and did not brake hard enough before the next signal.	Fine

Table 2: Some voluntary or safety measures for reasons other than accidents or near-misses [SPW: Railways Act – Spoorwegwet]

Legislation	What happened	Action taken
SPW	Inspection of track contractors. This involved 83 checks of compliance by contractors engaged in activities in the track environment. • 21 incidents involved danger; three of these serious danger; • In 7 incidents there was both a risk to rail traffic and a collision risk for people • Infringements were noted in all safety classes (from track section closure to flagman and lookout for trains/safe working distance).	• In 3 cases, rectification orders were imposed. • In 2 cases, a penalty recommendation was imposed. • In the other situations, a written warning was given. • The reporting was discussed with the industry in the Regulatory Division of the RailAlert Foundation.

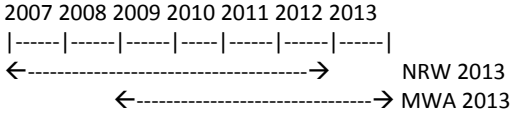
Legislation	What happened	Action taken
SPW	Supervision was tightened as a result of an application for extension of a safety certificate. One point which emerged at audit was that drivers for both undertakings were being temporarily hired/deployed in ignorance of whether these drivers met the statutory requirements.	Extra thematic inspections and self-checking by the company of processes which pose a risk to rail safety.
-	Refresher audits were carried out at about 25 rail maintenance companies. Joint visits and attendance orders for these companies reduce the workload of supervision. The Dangerous Goods and Products and Rail Maintenance Departments (RSP and HR) carry out the joint audits.	The audits led to issue of orders backed by fines for absence of proper asbestos registration. In 2015 Dept. RSP will monitor these companies.
-	A joint inspection was carried out with colleagues from the German Federal Railway Authority (Eisenbahn-Bundesamt – EBA). The ILT was present at inspections at the Emmerich yard, while German colleagues were taken to Venlo for an inspection. This inspection was prompted by the MoU of the European Railway Agency ERA, which requires adjacent countries to harmonise their supervisory work, with compulsory exchange and, where possible, co-operation.	• Joint refresher audit; • New inspection in Venlo in autumn 2014. • Differences in supervision were documented. • Two-day inspection in Rotterdam in 2014.

5.2 Safety indicators

The level of risk present for the various categories exposed (passengers, staff, track workers and outsiders) is measured against variables such as 'numbers of fatal accidents and serious injuries' and 'number of (passenger) train-kilometres travelled'. Trends are assessed against the annual average and/or a weighted average over several years.

The annual averages compare the results of a given year with those from the year or years prior to it. Moving weighted averages (MWA) cover relative average performance over a period, say of seven or five years (see Fig. 1).

Fig. 1. Moving weighted average



NRW 2013	NRV – national reference value 2013

The weighted averages (Common Safety Indicators – CSIs), both for the purposes of the Framework Document and the European objectives, are expressed as the National Reference Value (NRV) and Moving Weighted Average (MWA). The method of calculation of the NRV and MWA is prescribed by the ERA: see Commission Decision 2009/460/EC and Implementation Guidance for CSIs.

The aim is that the MWA should be lower than the NRV: this denotes continuous improvement. Performance in the development of safety is deemed acceptable if an indicator is no more than 20% higher than the figure for the same indicator in the year prior to that under review. Therefore this annual report compares the results for 2013 with 2012. Because some indicators have to count fatalities and serious injuries, the Fatal Weighted Serious Injuries (FWSI) factor is used: number of fatalities + (0.1 x number of serious injuries[7]).

Apart from injury-based indicators, the ERA also requires calculation of economic loss per rail-kilometre travelled. Economic loss may derive from injury, damage to rolling stock, infrastructure and environment, time lost and/or connections missed.

5.3 Sources

The information used to compile the NRV, MWA and FWSI is based on the incident data which the infrastructure manager ProRail, the railway undertakings and other rail system participants report to the ILT. Attention must be paid to contractors working on the track, for example. The ILT also generates its own information from inspections, investigations and analyses, or uses analyses and investigations by third parties such as OvV for this purpose.

In the course of the year, the ILT conducts joint consistency checks with ProRail, as manager of the main-line network, and with Nederlandse Spoorwegen (NS) as the largest passenger carrier. The checks verify and compare incident data to ensure consistent meaning and interpretation of incidents and related data.

The ILT receives carriers' annual (safety) reporting by 30 June each year. The incident data and other figures from these reports are compared with the incident data already known to the ILT and are included in its assessment of safety progress.

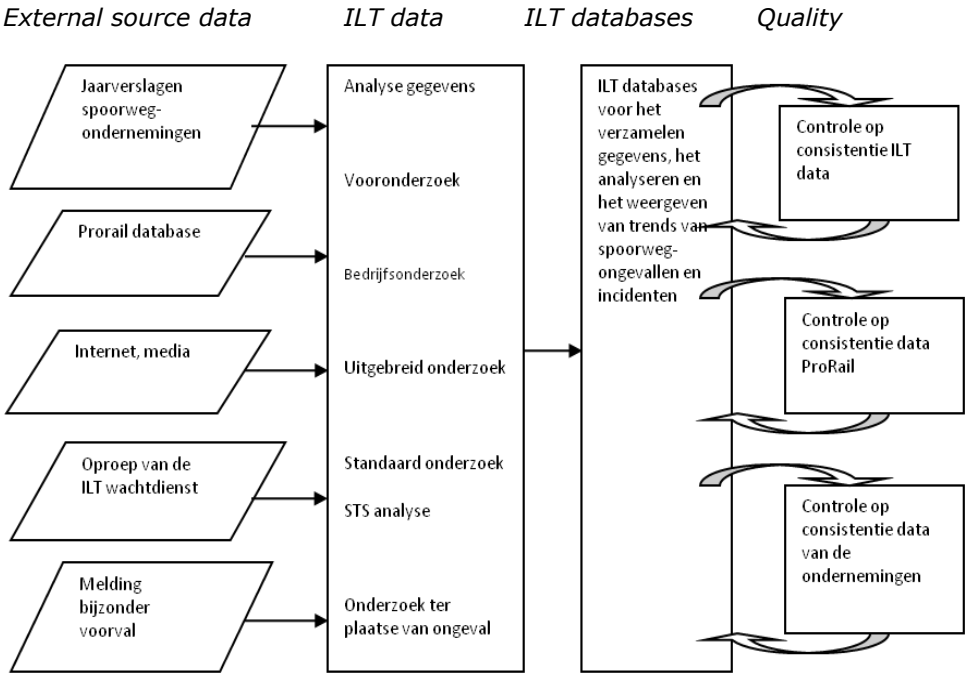
Not all accidents are relevant to reporting on the achievement of the objectives of the Framework Document and CSIs. The CSI Implementation Guidance states that accidents must meet at least one of the following criteria, in order to be relevant:

- there must be at least one fatality or serious injury; or
- the damage to rolling stock, track, other installations or the environment must have been quantified at a minimum of EUR 150 000; or
- there was serious disruption to traffic, with train services suspended for at least six consecutive hours.

Accidents must have occurred on the main line. So accidents at workplaces, sheds etc. do not count. Neither do vandalism, theft, crashes causing no injury and suicide attempts.

[7] A fatality is defined as any loss of life in an accident or within 30 days due to injuries caused by the accident. This does not count suicides. Serious injury means hospitalisation for more than 24 hours, other than for observation.

Fig. 2: Flows of accident, incident and other data



Jaarverslagen spoorweg-ondernemingen	Railway undertakings' annual reporting
Prorail database	
Internet, media	
Oproep van de ILT wachtdienst	Call-out of the ILT standby service
Melding bijzonder voorval	Report of unusual occurrence
Analyse gegevens	Data analysis
Vooronderzoek	Preliminary investigation
Bedrijfsonderzoek	Company investigation
Uitgebreid onderzoek	In-depth investigation
Standaart onderzoek	Standard investigation
STS analyse	SPAD analysis
Onderzoek ter plaatse van ongeval	On-site accident investigation
ILT databases voor het verzamelen gegevensd, het analyseren en het weergeven van trends van spoorweg-ongevallen en indidenten	ILT databases for gathering data, analysing and reflecting trends in railway accidents and incidents
Controle op consistentie ILT data	ILT data consistency check
Controle op consistentie data ProRail	ProRail data consistency check
Controle op consistentie data van de andernemingen	Check of consistency of undertakings' data

5.4 Detailed safety trends

Safe Transport involves infrastructure, rolling stock and the carriage of passengers and freight by rail. Safe Working has to be viewed as a parameter for the provision of transport, while Safe Living emphasises the relation between the railway and the environment. Tables 3, 4, 5 and 6 below present the 2013 trends in terms of these three themes of the Framework Document. Annexes C1 to C3 present the exact numbers of incidents and injuries and the ERA CSIs for various risk categories (passengers, personnel and outsiders) or incidents.

Table 3: Safe transport (continuous improvement applies to all goals, unless otherwise stated)

(*) 2012

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Risk to safety of train passengers	Passenger FWSI /year/billion passenger train-km	6.52 (27.46)	7.43 (6.10)	5.35 (6.57)	**Yes**
	Passenger FWSI /year/billion passenger-km	0.05 (0.22)	0.06 (0.05)	0.04 (0.05)	**Yes**
	Number of passengers seriously injured per year	9 (28)			For information
	Number of passenger fatalities per year	0 (1)			For information
	Number of minor passenger injuries/year/billion passenger-km	2.15 (12.8)			**Yes**
Accidents involving passenger, goods and other trains	Total number of accidents/ million train-km	0.24 (0.24)			**Yes**
	Number of train collisions/ million train-km	0.02 (0.02)			**Yes**
	Number of derailments/ million train-km	0.01 (0.00)			**Yes**
	Number of level-crossing collisions/million train-km	0.14 (0.13)			**No**
	Number of personal injuries caused by moving rolling stock /million train-km	0.06 (0.07)			**Yes**
	Number of rolling stock fires/ million train-km	0.01 (0.00)			**Yes** [8]
	Number of other incidents/ million train-km	0.01 (0.02)			**Yes**
	Number of signalling errors/ million train-km[9]				**Yes**
	Number of SPADs (/million train-km)	1.14 (1.17)			**Yes**[10]
	SPAD-related risk	66% (62%)			**No** (Down 75% since 2003)
Rail infrastructure	Number of broken rails/ million train-km	0.36 (0.43)			**Yes**
	Number of bent/buckled tracks/ million train-km	0.04 (0.02)			**No**
Rolling stock	Number of broken wheels on operational rolling stock/ million train-km	0.01 (0.00)			**No**

[8] There was one major fire, but it was due to vandalism and is therefore a matter of security, rather than safety. The fire does appear in the Annexes.
[9] There were no signalling errors, though technical SPADs did occur due to cancelled signals.
[10] The number of SPADs, in absolute terms, has not yet returned to its 2003 level.

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
	Number of axles broken on operational rolling stock/ million train-km	0.01 (0.01)			**Yes**
Railway tunnels	–				
Disaster organisation and crisis management	–				
Security	To be audited in 2014				
Passenger safety from anti-social behaviour	Customer rating of safety from anti-social behaviour: % passengers rating this 7 or higher	79.5 78.5%[11]			**Yes**

There were no passenger fatalities in 2013, though nine passengers were seriously injured. In 2012, the Amsterdam Westerpark accident caused one fatality and 23 serious injuries. Other incidents in 2012 accounted for five seriously injured passengers.

The numbers of collisions between trains, derailments and accidents to people caused by rolling stock are not very different from 2012. In 2013 there were a total of 32 collisions with trains, of which three were 'significant' according to the ERA criteria. Four passengers and three staff-members suffered minor injuries in these collisions.

The number of collisions with people rose from 16 in 2012 to 34 in 2013. This figure may continue to rise in future, as the number of near-misses is also rising. In 2013 at least 248 near-misses were reported in this category. Trespassers on the track and motorists account for half of the near-misses[12].

There were a total of 23 derailments, one of which caused a significant incident near Borne. Sixteen of the 23 derailments are classed as 'other types of incident'. There were no minor injuries due to derailment in 2013.

The 'number of personal injuries caused by rolling stock in motion' refers to people struck by rail vehicles on the move or by an object attached to, or which has become detached or fallen from, a rail vehicle. The number of fatalities fell from two in 2012 to zero in 2013, while the number of serious injuries rose from five in 2012 to nine in 2013.

The number of fires causing a significant incident has been extremely low for years, and there were no fires at all in 2012. In 2013 there was one significant fire, but this was arson and therefore had security rather than rail safety implications (vandalism). It is included in this report because the damage and impact were higher than other incidents, at around EUR 6 000 000. Timetabled services were suspended for more than six hours.

Derailments of works trains, rail vehicles and rakes during marshalling, cranes and ballast packing machines and others also count as 'other types of incident'. In 2013 there were 57 other types of incident, one of which was significant. In 2012 there were four significant incidents of other types.

The agreed targets for SPADs are a 50% reduction on the 266 recorded in 2003 and to limit the risk to 75% of the 2003 level. The number of SPADs roughly flatlined in

[11] The goal under the 2013 Transport Plan is 78.5%. The figure for 2013 was obtained from a letter from NS dated 17 February 2014, ref. NSR/PI&C/2014/MDH/01
[12] Near-misses are not systematically reported as collisions. The true number may therefore actually be higher.

2013 (2012: 170; 2013: 173). The target reduction in number was not achieved in 2013 (though the number in 2013 was about 36% less than in 2003). The risk at the end of 2013 was 66% lower than in 2003: another target not yet reached. However, absolute numbers are declining steadily, and the 2013 figure was around 4% lower than in 2012. The number of SPADs causing potentially serious risk (probability of a fatality) fell from 68 in 2008 to 21 by the end of 2013. The fall is in potentially serious risk and potential risk.

There were 54 broken rails in 2013 (in 2012: 64). One broken point blade caused a derailment of an empty passenger train on 8 June 2013.

No accidents occurred through buckled rails in 2013. There were six buckled rails in 2013 and three in 2012.

As for safety from anti-social behaviour, a target was set with 'customer rating' as the indicator (the percentage of passengers rating safety from anti-social behaviour as seven or higher). This percentage is set in the transport planning cycle between the Infrastructure and Environment Ministry and NS and, in the case of regional rail concessions, between decentralised organs of government and regional transport providers. The ambitious aim for NS in 2013 was a 78.5% customer satisfaction rating. The actual figure of 79.5% meant that this goal was achieved.

There is no known data for other passenger carriers. Therefore the only rating given in relation to this objective is for NS.

Table 4: Safe Working (continuous improvement applies to all goals unless otherwise stated)
(*) 2012

Risk category	Description of indicator	Indicator in figures	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Prevention of accidents at work	Track personnel FWSI/year/ billion train-km	3.31 (5.34)	2.34 (1.89)	3.31 (2.25)	**No** (+ top 4 EU)*
	Number of track worker fatalities	0 (0)			**Yes** (+ target 0)
	Number of shunter fatalities	0 (0)			**Yes** (+ target 0)
	Number of collisions involving track workers	1 (1)			**Yes**
	Number of electrocutions	4 (1)			**No**
	IF rate (# accidents with absence from work > 24h x 1 bn./time worked including temporary hire and subcontractors).	No info			
Training and specialist skills	Percentage fulfilment of the duty of administrative diligence: holding the required papers for skill or medical and psychological fitness.	No info			
	Percentage fulfilment of driver familiarity with routes	No info			

*Top 4 EU was achieved in the period 2007-2012. The 2013 figures are not yet known.

The Framework Document goal for the prevention of accidents at work sets a target of zero fatalities. In 2013 six track personnel were seriously injured. Five were working on the track; one was a driver.

There was no systematic recording of whether the required papers were held in 2012 or 2013. Random checks found no non-conformities.

Table 5: Safe Living (continuous improvement applies to all goals unless otherwise stated.)

(*) 2012

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Frame-work Document goal achieved?
Level crossing safety	Level crossing user FWSI /year/billion train-km	101.01 (92.19)	94.06 (97.84)	92.88 (97.05)	**Yes**
	Level crossing user FWSI/ year/((train-km x number of level crossings)/ rail-km)	138.89 (110.44)	108.2 (106.3)	107.4 (108.7)	**Yes**
Trespassers on the track	Track trespasser FWSI /year /bn. train-km	13.24 (8.02)	7.81 (7.84)	8.24 (7.21)	**No** (+ top 3 EU)
	Number of suicides on the line	220 (202)			(ALARP)
	Number of suicides on the line/bn. train-km	1460 (1350)			(ALARP)
	'Other (third-party)' FWSI/ year/billion train-km	0.00 (8.02)	6.74 (6.76)	5.70 (7.99)	**Yes**
External safety (carriage of dangerous goods)	Number of accidents involving at least one rail vehicle carrying dangerous goods/ million train-km	0.01 (0.03)			**Yes**
	Number of fatalities caused by such accidents per year.	0 (0)			**Yes**

The number of fatalities in level crossing collisions rose from 13 in 2012 to 15 in 2013. The number seriously injured fell from 8 to 4. The total number of collisions on railway level crossings rose from 50 to 65 in 2013.

The number of people in the 'trespasser' category who lost their lives rose from 1 to 2. The number of 'trespassers' seriously injured fell from 2 to 0. The number of suicides on the railway rose from 202 to 220.

The number of people in the 'others' category who lost their lives fell from 1 fatality to none.

The number of incidents in which dangerous goods were released as a result of accidents with trains remained at 0 in 2013, as in 2012.

Table 6: Cross-cutting (P= continuous improvement)

(*) 2012

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Overall	Total FWSI/year/billion train-km (excluding suicides and attempted suicides on the line)		126 (130)	123 (127)	**Yes** (+ top 5 EU)
Integral co-operation at interfaces of responsibility	-				-
Innovation	-				-
Safety management	-				-
Safety culture	Percentage fulfilment of safety regulations (NVW) by track workers	67% (61%)			**Yes**
	Percentage fulfilment of safety regulations (NVW) by shunters	No info.			

An improvement in railway organisations' safety culture must stem from a heightened safety awareness on the part of staff, and from the avoidance of unsafe working practices. The foundation RailAlert has written a manual, the "Framework of Standards for Safe Working" (Normenkader Veilig Werken – NVW), which contains safety rules and contributes to a better safety culture. It has now been updated, and applies to all awarding bodies and contractors/employers who commission or perform activities on or around the railway as part of a planned process. NVW governs the safety-related responsibilities for these activities. As a result, it promotes a higher level of safety for track workers, in terms of collision and electrocution hazards.

No direct quantitative comparison is possible between the compliance percentages from different years relating to the various types of maintenance action. After all, a regulator exercising risk-oriented supervision focuses precisely on those parts where there is suspicion that the actual level of compliance falls short of the desired level. The percentages recorded are therefore indicators of safety culture.

The lawgiver has placed safety from 'other cases of injury' in the context of passenger rights legislation. The aim of the Framework Document is that rail stakeholders should act on safety issues in the rail sector, including those listed in the Document. They have to co-operate on matters arising at the interface between infrastructure and transport. The Safety Directive and the safety management systems of the infrastructure manager and railway undertakings establish this responsibility for co-operation.

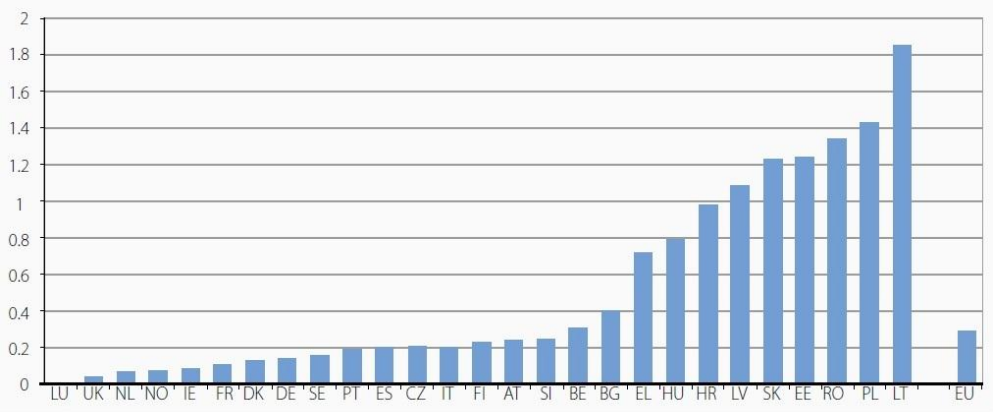
The safest European Member States

The Framework Document lists goals, one of which is to make a continuous effort to belong, at least, to the top three to five EU Member States in terms of safety. This goal relates to the calculated total fatalities and serious injuries as a result of accidents on the railway, involving passengers, personnel, level crossing users, trespassers, others and third parties.

The ERA published figures for railway safety in European countries in 2012[13]. The Netherlands ranked third among the Member States with the fewest fatalities and serious injuries per million train-km (2007-2012).

[13] Railway Safety Performance in the European Union, ERA, 2014.

Fig. 3: Fatalities and weighted serious injuries per million train-km



The number of accidents in Europe was down by about 7% on 2011. In 5% of cases, collisions and derailments caused injury. Furthermore, most casualties were people with no direct involvement in railway traffic, i.e. people crossing a railway and trespassers on the track. The ERA views signals passed at danger as important accident precursors.

Costs of accidents

Directive 2009/149/EC sets out methods of calculation of the following indicators of the economic impact of accidents: value of preventing a casualty (VPC) and value of time[14]. The costs of occurrence of a serious injury in the Netherlands transport system, calculated as per HEATCO, are expressed in EUR million per million train-km: EURm/(m train x km).

The costs of all accidents in 2013 are as follows:

- EUR 17 769 539,-- for rolling stock and infrastructure (including suicides on the line);
- EUR 15 530 270,-- value of time (including suicides on the line); and
- EUR 47 550 350,--[15] capitalised costs of fatalities and serious injuries (excluding suicide and attempted suicide).

The costs of *all* accidents and injuries on the railway in 2013 are capitalised at EUR 80 850 159,--.

Information is scarce for the period pre-2009. Due to the lack of data, the figures up to and including 2010 did not count value of time. The graph of total costs in Annex C2 shows capitalised costs of fatalities and serious injuries but excludes suicides and attempted suicides.

Results of safety warnings

Inspections may find infringements of the laws and regulations and of the safety standards which they prescribe. Where necessary, rail traffic is (temporarily) suspended and/or action taken in the field of administrative law. Where a major hazard exists, the ILT issues a safety warning. For cross-border issues, such as non-conforming vehicles from abroad, the NSAs of other European countries are informed.

[14] Implementation Guidance for use of Common Safety Indicators, v21_1 (ERA/GUI/03-2012), ERA, 6 June 2012
[15] In 2012 an incorrect figure was wrongly reported for this: it should have read EUR 49 900 000.

The ILT also receives reports from railway undertakings and, after assessment, may decide to carry out an inspection or further inspection. It maintains a standby service (24/7) so that it can inspect at any time of day or night. An inspection or further inspection may lead to the next level of supervision and ultimately to the imposition of penalties.

Apart from, or parallel to, an ILT investigation, the Safety Board (OvV) may decide to investigate the circumstances of an incident. The OvV focuses its investigation on establishing the truth and finding lessons to be learned by the railway industry as a whole. The ILT supports the OvV in its investigations on request. In March 2013, the OvV released the report of its investigation into the Maasvlakte train collision. Two goods trains collided and some rakes were derailed. The trains were carrying dangerous and other goods, which were not released. The ILT has not taken any follow-up action.

6 Major changes to the laws and regulations

Table 7: Changes to the laws and regulations published in 2013

Reference	Date of entry into force	Reason for amendment	Description of amendment
Staatscourant (Official Gazette) 2013/ 34587: Regulation amending the Charges Regulation under the Railways Act	1 January 2014	To set new charges	Setting charges for 2014 under the Railways Act Charges Regulation; index-linking and amendment of the Railway Vehicles Commissioning and the 2012 Charges Regulations under the Railways Act
Staatscourant 2013/24216: Policy Rule on Language Skills of Train Drivers under the Railways Act	26 August 2013		The ILT only accepts a driver's linguistic knowledge as 'sufficient' if he meets oral level 3 of the Driver Certification Directive.
Law Gazette (Staatsblad – Stb.) 2013/439	1 January 2014	Implementation of new and amended European rules	Article I, Section J of the Law of 16 December 2010 amending the Railways Act, the Passenger Transport Act 2000 and the Law on Economic Crimes in implementation of Directives 2007/58/EC, 2007/59/EC, 2008/57/EC and 2008/110/EC (Stb. 2011, 218) enters into force on 1 January 2014.

7 Developments in safety certification and authorisation; national legislation, commencement dates and availability

Commencement date for the issue of safety certificates in accordance with Article 10 of Directive 2004/49/EC (Parts A and B)

Law on the Operational Safety of the Railways [Wet over de exploitatieveiligheid van de spoorwegen], of 13 May 2011 [Staatsblad 2011, No 218].

Commencement date for the issue of safety authorisations in accordance with Article 11 of Directive 2004/49/EC

Law on the Operational Safety of the Railways 1 January 2005 [Railways Act 2005].

Making the national safety rules or other relevant legislation available for consultation by the railway undertakings and infrastructure managers.

These are published in the Official Gazette (Staatscourant) and can be consulted in advance by request to the Lawgiver and/or via the website www.wetten.overheid.nl

Numerical data

Table 8: current Part A and B certificates entered on ERADIS

		Total number of certificates	Number of Part A certificates on ERADIS[16]
Number of current Part A safety certificates issued in or before 2013 and valid in 2013		27	27
Number of current Part B safety certificates issued in or before 2013 and valid in 2013	Number of Part B certificates for which Part A was issued in the Netherlands	37	37
	Number of Part B certificates for which Part A was issued outside the Netherlands	10	10

[16] ERADIS is an ERA data information system for certificates issued by the national rail safety authorities.

			A	R	P
Number of current Part A safety certificates issued in or before 2013 and valid in 2013		New certificates	2	1	0
		Amended certificates	0	0	0
		Renewed certificates	25	0	0
Number of new Part B safety certificates granted to railway undertakings and issued in 2013	Part A of which is issued in the Netherlands	New certificates	2	0	0
		Amended certificates	0	0	0
		Renewed certificates	12	0	0
	Part A of which is issued outside the Netherlands	New certificates	4	1	0
		Amended certificates	0	0	0
		Renewed certificates	1	0	0

Procedural aspects

There are three categories of operating licence in the Netherlands:
- the EU operating licence for general carriage of passengers and goods;
- restricted operating licence A for shunting, own transport and involvement in rail traffic without providing transport; and
- restricted operating licence B, for driving within a station and for driverless equipment on decommissioned lines.

The EU licence is valid in all EU countries. A railway undertaking applies for and receives it in the country of its establishment. Category A and B operating licences are only valid within the Netherlands.

The ILT issues the safety certificate to a railway undertaking which has set up a proper and functional safety management system.

Part A of the safety certificate is issued in the country of first establishment of the railway undertaking. Part B is issued in the country or countries in which the undertaking operates.

Part A safety certificates

Reasons for updating/amending Part A certificates (e.g. change in service type, amount of traffic, company size)

No certificates were updated or amended.

Main reasons why average time of issue of Part A certificates exceeds the four months allowed by Article 12(1) of the Railway Safety Directive (only certificates mentioned in Annexe E, and counting from receipt of the necessary information)

Insufficient documentation supplied in support of Part A application.

Summary of requests from other NSAs to check/explain a Part A certificate held by a railway undertaking certified in the Netherlands, but applying for a Part B certificate in another Member State

No such requests were received.

Summary of problems concerning the mutual acceptance of Part A certificates valid throughout the Community

The ILT is not aware of possible problems.

Fees payable on application for a Part A or B certificate

- *Article 6 of the 2012 Charge Regulations under the Railways Act*

  1. A charge as listed in the table below is payable for processing an application for issue of a safety certificate under Article 32 of the Act.

Table 9: safety certificate fees

Safety certificate	Part A	Part B
Safety certificate for a railway undertaking with fewer than 300 staff-members exercising safety functions	EUR 12 476,-	EUR 8 316,-
Safety certificate for a railway undertaking with 300 or more staff-members exercising safety functions	EUR 26 513,-	EUR 17 676,-
Safety certificate for a railway undertaking using the main-line railway at one point for the handover of railway vehicles, driverless equipment or similar vehicles, to perform activities on or near a part of the main-line railway which has been removed from service for the purpose.	EUR 4 763,-	-

  2. A charge as listed in the table below is payable for processing an application for renewal of a safety certificate under Article 32 of the Act.

Table 10: safety certificate renewal fees

Renewed safety certificate	Part A	Part B
Renewed safety certificate for a railway undertaking with fewer than 300 staff-members exercising safety functions	EUR 9 779,-	EUR 6 239,-
Renewed safety certificate for a railway undertaking with 300 or more staff-members exercising safety functions	EUR 13 380,-	EUR 7 381,-
Renewed safety certificate for a railway undertaking using the main-line railway at one point for the handover of railway vehicles, driverless equipment or similar vehicles, to perform activities on or near a part of the main-line railway which has been removed from service for the purpose.	EUR 4 763,-	-

- *Article 7 of the 2011 Charge Regulation under the Railways Act*

  A charge as listed in the table below is payable for processing an application for amendment of a safety certificate under Article 33(6) of the Act.

Table 11: safety certificate amendment fees

Safety certificate amendment	Part A	Part B
Amendment of a safety certificate for a railway undertaking with fewer than 300 staff-members exercising safety functions	EUR 6 239,-	EUR 4 159,-
Amendment of a safety certificate for a railway undertaking with 300 or more staff-members exercising safety functions	EUR 9 357,-	EUR 6 239,-
Amendment of a safety certificate for a railway undertaking using the main-line railway at one point for the handover of railway vehicles, driverless equipment or similar vehicles, to perform activities on or near a part of the main-line railway which has been removed from service for the purpose.	EUR 1 587,-	-

Summary of problems using harmonised formats for Part A certificates, especially with regard to the categories for the type and scope of service

The ILT is not aware of apparent problems.

Summary of Community problems/difficulties for the ILT with procedures for the application of Part A certificates

The ILT is not aware of possible problems.

Summary of problems reported by railway undertakings with applications for Part A certification

The ILT is not aware of possible problems.

Feedback procedure (e.g. questionnaire) for railway undertakings to give their opinions of the issue procedures/practice or record complaints

The ILT conducts a six-monthly customer satisfaction survey.

Part B safety certificates

Reasons for updating/amending Part B certificates (e.g. change of service type, scale of traffic, lines to be operated, type of rolling stock, crew category etc).

No certificates have been updated or amended.

Main reasons why average time of issue of Part B certificates exceeds the four months allowed by Article 12(1) of the Railway Safety Directive (only certificates mentioned in Annexe E, and counting from receipt of the necessary information)

Insufficient documentation supplied in support of Part A application.

Application fees for a Part B certificate

See Table 9.

Summary of problems using harmonised formats for Part B certificates, especially with regard to the categories for the type and scope of service

The ILT is not aware of possible problems.

Summary of Community problems/difficulties for the ILT with procedures for the application of Part B certificates

The ILT is not aware of possible problems.

Summary of problems reported by railway undertakings in connection with applications for Part B certification

The ILT is not aware of possible problems.

Feedback procedure (e.g. questionnaire) for railway undertakings to give their opinions of the issue procedures/practice or record complaints

The ILT conducts a six-monthly customer satisfaction survey.

Safety authorisations

There is only one infrastructure manager in the Netherlands subject to the rules on safety authorisations, and this is ProRail. ProRail's safety authorisation was issued in 2011 for a three-year term.

Reasons for updating or amending safety authorisations

No authorisations have been updated or amended.

Main reasons why the time taken to issue the safety authorisations exceeds the four months prescribed in Article 12(1) of the Railway Safety Directive (only those listed in Annex E, and after receipt of all necessary information)

No comment.

Summary of the problems or difficulties that regularly arise in connection with application procedures for safety authorisations

The ILT is not aware of possible problems.

Summary of problems reported by infrastructure managers in connection with applications for safety authorisation

The ILT is not aware of possible problems.

Feedback procedure (e.g. questionnaire) for infrastructure managers to give their opinions of the issue procedures/practice or record complaints

The ILT conducts a six-monthly customer satisfaction survey, the last of which was dated 2011 and the results of which were reported in 2012. Satisfaction with procedures is generally (very) high. There was less satisfaction with the information provided at the time of application.

Does the NSA charge for issuing safety authorisation for infrastructure? (yes/no and charge)

No

8 Supervision of railway undertakings and infrastructure managers

8.1 Audits/inspections/checklists

The infrastructure manager and railway undertakings in the Netherlands are under the supervision of the ILT. The purpose of this supervision is to ensure safe railway transport, in which attention must be paid to the authorisation and certification (licensing) of operators and vehicles and the application of the laws and regulations (the Railways Act, the Working Conditions Act and the relevant European regulations) concerning infrastructure, personnel, rolling stock and safety processes.

Rail supervision takes the form of supervision of the system, based on the target regulation established in the Railways Act. The aim is to ensure that those involved in the railway are able to exercise control through their safety management systems.

The supervision covers the following:
- rail infrastructure;
- the manager of the rail infrastructure;
- the operators providing transport via the rail infrastructure;
- certain officials whose work involves them with the rail infrastructure;
- the vehicles running on the rail infrastructure;
- entries of vehicles on the register;
- companies which test infrastructure, vehicles or people; and
- companies which provide training and may administer examinations.

The ILT is responsible for supervising the undertakings. This takes the form of issuing and revoking licences and certificates or the imposition of penalties. The ILT checks compliance by means of subject inspections and/or audits. The ILT makes a distinction between the following types of undertaking subject to supervision:
- railway undertaking;
- infrastructure manager;
- testing institution (medical-check-up);
- testing institution (psychological check-up);
- testing authority (infrastructure and/or rolling stock);
- examining body;
- training institution;
- assessment authority;
- maintenance company;
- entity in charge of maintenance;
- staff provider/agency;
- contractor (if it holds a safety certificate); and
- shunting company (if it holds a safety certificate).

The ILT's full multi-year programme and the responsibility for it are set out in the ILT Multi-Year Plan and ILT Annual Report, both of which are published annually (www.ilent.nl)

8.2 Focal points for the Netherlands railway NSA

The priorities for the ILT's supportive supervision are based on risks, socio-political problems, the aims of national and European policies and the results of its own inspections.

The audits involve an assessment of whether the safety management systems of companies actually work in practice (management of specific sub-sections). Where infringements of the laws and regulations are found, enforcement measures are taken.

Subject inspections look at whether infrastructure, operations (including transport management, train departure processes and personnel) and vehicles comply with the laws and regulations. The ILT also inspects track activities to ensure compliance with the Working Conditions Act.

In 2013 at least the following subjects were important to railway safety:

- *Signals passed at danger (SPAD)*

Most collisions between trains in the last ten years, in which passengers have been seriously injured, have been the result of driving past a stop signal (a red signal or a stop board). Human error partly accounts for this (observation, anticipation and distraction). Technical (including automatic train control systems) and other means can significantly reduce the risk of a SPAD.

- *Inspection of the expertise of train service providers*

In 2012 the ILT carried out an inspection of the expertise and safety culture of train service providers, prompted by the findings of two accident investigations which had flagged a number of problems in need of improvement. By means of a thematic inspection of the expertise of train service providers, in 2013 the ILT probed how far the relevant undertaking has implemented improvements in the light of the findings and conclusions from 2012. It also examined how far previous promises to improve had been acted on. The conclusion was that progress had been made in areas such as safety communication, but the situation with regard to 'non-conformity to rules' had not been sufficiently improved. However no decision has yet been made to conduct a follow-up inspection based on these findings.

- *Tightened supervision*

On 21 April 2012 two passenger trains collided near Amsterdam Westerpark. The ILT published the results of its investigation on 11 December 2012.

It found that both the carrier and the manager had breached the Railways Act. Neither organisation's safety management system, required by the Railways Act, met the requirements, because neither organisation took sufficient account of safety risks in its distribution of capacity (timetabling or timetable adjustment).

Because of the infringements noted, it was decided to place both undertakings under tightened supervision. The aim of this is to monitor and assess the activities carried out by both companies to rectify the infringements, in the light of their promises. Tightened supervision applied throughout 2013.

- *Baseline measurement of railway network quality*

In 2013 the ILT inspected the physical quality of railway infrastructure in five concession areas: Gelre, Eemland, Zeeland, Rotterdam and the Betuweroute. In these areas, more than 2 500 inspections of rail and points structures, level crossings, train protection, power supply (including catenary), bridges and tunnels took place. Physical quality was established by checking the infrastructure against a set of management standards, applied by the manager, to manage its infrastructure. In 85% of cases, the infrastructure complied with these standards.

The inspection came in response to a recommendation of the temporary Parliamentary Commission on Rail Maintenance and Innovation (the Kuiken Temporary Commission of February 2012). This was that an independent body should assess the physical quality of the Dutch railways once every five years. The approach of the inspection was designed to allow representative conclusions to be drawn about the physical quality of each area's railway infrastructure. The areas were selected to give a picture of the Dutch rail network as a whole. The ILT also designed the research to be repeatable every five years. Because this was the first in a series of inspections, it counted as the baseline measurement.

- *Automatic train control*

The entire Dutch main-line network is equipped with an automatic train control (ATC) system. Such systems play an important role in reducing the numbers of SPADs. The Cabinet has decided to implement the European Train Control System ERTMS further from 2016, partly in response to the reporting of the Kuiken Temporary Commission. The measures in response to the Amsterdam Westerpark collision include extra signals equipped with the improved version of the Dutch ATC system, pending full introduction of ERTMS.

8.3 Authorisations, audits and inspections

Table 12: rail transport authorisations

Number of rail transport authorisations	Implementation
Operating and equipment authorisations	117
Infrastructure authorisations	32
Driver licences	2 695
% settled in standard time	90

In April 2012 the European legislation was implemented into Dutch law (the Interoperability Directive 2008/57). The authorisation to commission main-line rail infrastructure is based on this (the infrastructure licence). Practice will show the infrastructure modifications for which an information file must be considered. Based on that file, the ILT determines whether authorisation is required. New main-line railways always require authorisation.

Since 4 October 2011, the ILT has been the designated body to safeguard the rights of passengers in rail transport and to advise them about their obligations. Most complaints relate to inadequate or refused compensation for delays or cancellations or for missed connections with subsequent transport, due to delay or cancellation.

Table 13: complaints relating to passenger rights

Passenger rights in rail transport	Complaints lodged
Number of complaints	47
% settled within standard time	95

Not all applications for authorisation yet comply with EU Regulation 1158/2010. Regulation 1158/2010 is much more binding than earlier regulations containing instructions on applications. If authorisation applications do not meet the requirements of the Regulation, an authorisation may not be granted or extended in time, if at all. In view of the importance of a good authorisation application for both undertakings and the ILT, the ILT organised an explanatory conference for the sector in February 2013.

Table 14: numbers of rail transport supervisory actions

Rail transport supervision	Number carried out
Subject inspections	4 409
Incident settlement and accident investigation	1 100
Refresher audits	70

8.4 Annual reports of the infrastructure manager and railway undertakings

The infrastructure manager, railway undertakings and railway works contractors submit their safety reports to the Minister of Infrastructure and the Environment by 30 June of the current year (as per Article 9(4) of the Railway Safety Directive). There is one infrastructure manager (ProRail) with its (part-owned) subsidiary Keyrail, 22 freight carriers, 8 passenger carriers and 20 contractors holding a safety certificate in 2013 with an obligation to report on their safety management systems and incidents on the railways.

8.5 Complaints

No complaints were received in 2013.

9 Alternative measures due to differences from ECM certification approach

The Common Safety Method (CSM) spells out, in 'whereas' clause 6 and Article 1.3 of Commission Regulation 1077/2012, what the approach of the EU Commission is: to state where the responsibilities lie. The risk analysis and assessment should be based on our supervisory activities and addressed to the Minister. The ILT is familiar with the system of bi-monthly policy signals, which deal with the adequacy of policymaking, legislation and regulation and other subjects.

Regulation 402/2013 establishes a Common Safety Method for risk evaluation and assessment in the terms of Article 6(3)(a) of Directive 2004/49/EC of the European Parliament and of the Council.

No experience has been gained with interface management in the application of CSM in relation to risk analysis and assessment.

The NSA has no ongoing trials of risk evaluation and assessment. At inspections, the undertakings are instructed in the importance of carrying out risk analyses and assessments whenever major organisational changes take place.

There is no procedure, such as a questionnaire, that would give railway undertakings and infrastructure managers the opportunity to state what their experience has been of the European rules for CSM in risk management.

The national regulation introducing the European rules on CSM for risk management will not be revised.

At the end of 2012 Commission Regulation 1077/2012 was published. This came into force on 7 June 2013 and contains a common safety method for supervision by national safety authorities after issue of a safety certificate or authorisation (CSM on supervision).

10 Conclusions for reporting year 2013

There was no great change from previous years in the features of the main-line railway, the use made of it and the undertakings in 2013. The exception is the number of kilometres of the carriage of goods, which has been rising since 2008.

In the context of these features, progress in safety on the railway has been relatively stable in recent years. The trend in the number of passenger injuries, infrastructure incidents and incidents involving track workers is positive. Most goals of the Third Framework Document on Rail Safety for 2013 have been achieved. In terms of injuries on the railway, the Netherlands is one of the safest countries in Europe.

Points for attention since 2011 have been the resumed rise in the number of incidents and injuries on level crossings, and the number of trespassers injured on the line. There are no indications of a positive trend on these points during the coming period. This may possibly place (further) pressure on the achievement of targets.

In addition to its regular supervision, in 2013 the ILT took its supervision of the general state of safety further on various points, and consolidated it. These included the inspection of the physical quality of infrastructure and the tightened supervision of the largest carrier of passengers and of the manager of the main infrastructure. The focus on these issues has resulted in further improvement of the prevailing safety culture within the undertakings, while the ILT sharpens its focus on the safety performance of railway undertakings.

There has been no relative fall in the costs of damage yet. The costs deriving from fatalities have stabilised over the past four years, while the costs due to serious injuries have risen in relative terms. On this count, too, the accident near Amsterdam continues to make itself severely felt.

Annex A1: Main-line rail network

Annex A2: Undertakings in the railway sector in the Netherlands holding a safety certificate, authorisation or licence.

Annex A3: Railway undertakings and infrastructure managers

Annex B: NSA Organisation chart

Annex C1: Key figures

Annex C2: Safety indicators

Annex C3: Meeting of the objectives for the risk categories from the Third Framework Document on Rail Safety

Annex D: Important changes to the laws and regulations

Annex E1: List of countries where railway undertakings, which have applied for Part B in the Netherlands, obtained part A

Annex E2: Safety authorisations under Directive 2004/49/EC

Annex A1: main-line railway network

Source: Prorail

Key

	Single track
	Twin tracks
	Three or more tracks
O	Station/junction
75	Distance in kilometres

Den Haag Centraal	The Hague Central
Hoek van Holland Haven	Hook of Holland Harbour

Annex A2: Undertakings holding a safety or other certificate, licence or authorisation

Name of keeper of railway vehicle(s)	Number of vehicles on NVR[17]
AAE Cargo AG	625
Alpha Trains	2
Arriva Openbaarvervoer NV	353
Atir-Rail	41
BASF SE	126
Bentheimer Eisenbahn AG	1
BGTransport DVVO	248
Carlo Vanoli AG Bauunternehmung Thalwil	4
Connexxion NV	50
Corus Steel	6
CRS-Continental Rail Services BV	1
DB Schenker Rail Deutschland AG	659
DB Schenker Rail Nederland NV	51
DB(L) Schenker Rail Nederland NV	980
Eiffage Rail Deutschland GmbH	1
Ermewa s.a.s	240
ERS Railways	4
Eurailscout Inspection & Analysis	3
Euro-Express Treincharter	97
GATX Rail Austria GmbH	1 085
GATX Rail Germany GmbH	3 031
GE Capital Rail Services GmbH & Co KG	250
Herik Rail Events BV	5
Railway Museum (Het Spoorwegmuseum)	21
Historisch Streekvervoer Achterhoek	2
HSA Beheer NV	137
HSL Logistik BV (NL)	1
Kockums Industrier AB	1
Kurt Nitzer GmbH & Co. KG	15
Lloyds Register Rail Europe BV	1
LOCON Benelux BV	17
NACCO S.A.S	1 464
NedTrain BV	18
NS Internationaal BV	63
NS Reizigers BV	3 317
On Rail Gesellschaft für Eisenbahnausr. mbH	1 385
ORV On Rail Gesellschaft für Vermietung und Verwaltung von Eisenbahnwaggons mbH	220
Railinsight BV	4

[17] NVR = National Vehicle Register for rail vehicles. N.B: the true figures may be higher than quoted here, due to a backlog in data input.

RailMotion AG	242
RailReLease BV	43
Rotterdam Rail Feeding	21
Shunter BV	27
Spitzke Logistik GmbH	3
Stichting DE III	1
Stichting Mat'64	2
Stichting Stadskanaal Rail	17
Stoom Stichting Nederland	7
Stoomtram Hoorn Medenblik	7
Strukton Rail Materieel	178
Swietelsky Baugesellschaft m.b.H	15
Syntus BV	88
Veluwsche Stoomtrein Maatschappij	19
Veolia Transport Rail BV	85
Voestalpine Railpro BV	1 532
VolkerRail Materieel	15
VolkerRail Materieel & Logistiek BV	68
VPS Verkehrsbetriebe Peine-Salzgitter GmbH	58
VTG Austria GmbH.	871
VTG Deutschland GmbH	884
Wagon Care	172
WASCOSA AG	596
South Limburg Steam Company (Zuid-Limburgse Stoom Maatschappij)	2

The total number of railway vehicles belonging to Dutch railway undertakings, infrastructure managers and other organisations, and entered on the national railway vehicle register as of 31 December 2013, was 19 482.

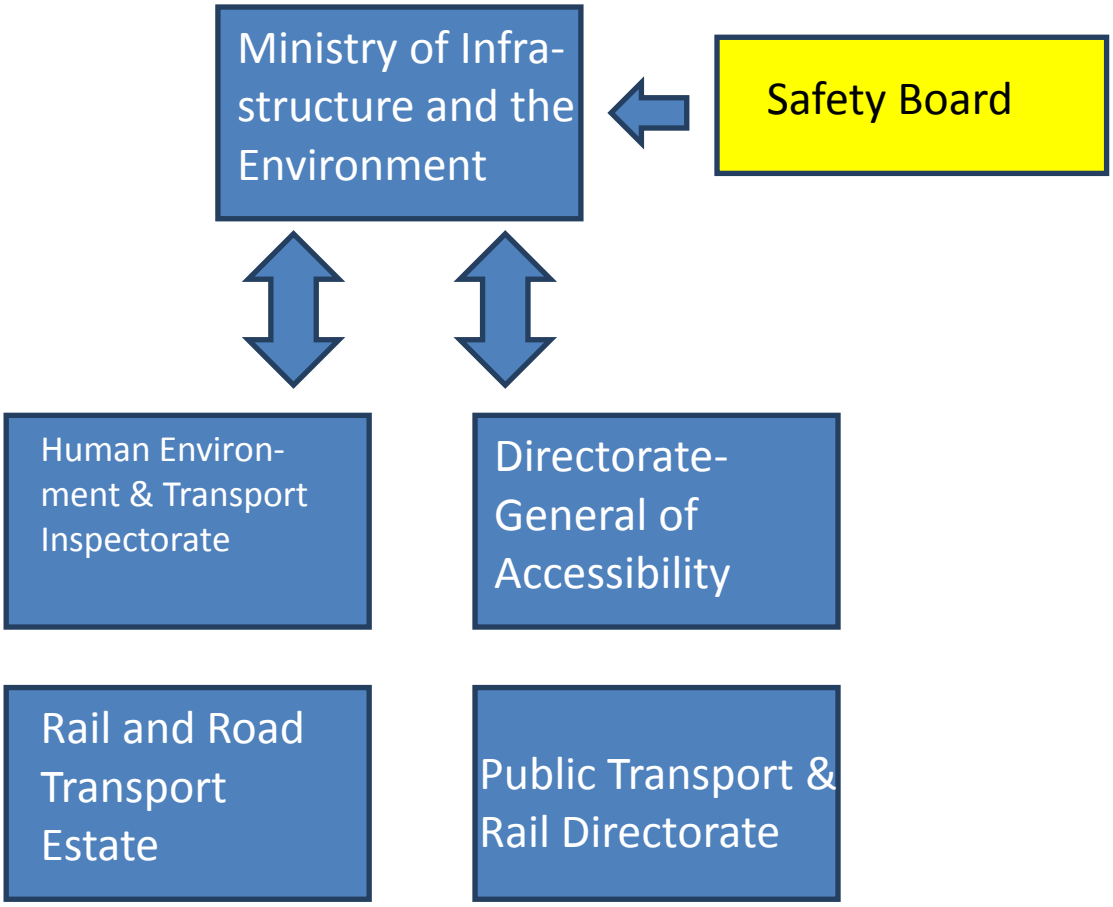
In 2013 47 new rolling stock authorisations were registered in the NVR. 32 railway vehicle authorisations lapsed, mostly due to expiry of the issued authorisation.

Annex A3: Railway undertakings and infrastructure managers 2013

Infrastructure managers			
Name	**Postal address**	**Postcode + place**	**Website**
ProRail	Moreelsepark 3	3511 EP Utrecht	www.prorail.nl
Keyrail	Develsingel 11	3333 LD Zwijndrecht	www.keyrail.nl

Railway undertakings			
Name		**Postal address**	**Postcode + place**
Arriva Personenvervoer Nederland BV		P.O. Box 626	8440 AP Heerenveen
BAM Rail BV		P.O. Box 3172	4800 DD Breda
NMBS Logistics NV (Belgium)		Hallepoortlaan 40	1060 Brussels
Captrain Belgium (Belgium)		Italiëler 2	2000 Antwerp
Connexxion Openbaar Vervoer NV		P.O. Box 224	1200 AE Hilversum
CrossRail Benelux NV		Luchthavenlei 7	2100 Deurne
DB Regio NRW GmbH (Germany)		Willi Becker Allee 11	40227 Düsseldorf
DB Schenker Rail Nederland NV		P.O. Box 2060	3500 GB Utrecht
Euro-Express Treincharter BV		Burgemeestersrand 57	2625 NV Delft
ERS Railways BV		P.O. Box 59018	3008 PA Rotterdam
Eurailscout Inspection & Analysis BV		P.O. Box 349	3800 AH Amersfoort
HSA Beheer NV		P.O. Box 767	1000 AT Amsterdam
HSL Logistiek BV		Bruistensingel 160-A	5232 AC `s-Hertogenbosch
HTRS Nederland BV		P.O. Box 59179	3008 PD Rotterdam
KombiRail Europe BV		P.O. Box 540	3190 AL Hoogvliet (Rotterdam)
Lloyd's Register Rail Europe BV		P.O. Box 2016	3500 GA Utrecht
Locon Benelux		Noordzeelaan 20 B	8017 JW Zwolle
LTE Netherlands BV		Moezelweg 151	3198 LS Rotterdam
NS Internationaal		P.O. Box 767	1000 AT Amsterdam
NS Reizigers BV		P.O. Box 2025	3500 HA Utrecht
NedTrain BV		P.O. Box 2167	3500 GD Utrecht
PKP Cargo SA		Grójecka 17	PL 02-021 Warsaw
Railinsight		Oudegracht aan de Werf 366	3511 PK Utrecht
RheinCargo (Germany)		Harry-Blum-Platz 2	50678 Cologne
Rotterdam Rail Feeding BV		Europaweg 855	3199 LD Rotterdam
Rail Transport Service Austria GmbH		Puchstraße 184b	A-8055 Graz
Rurtalbahn Benelux BV		P.O. Box 59169	3008 PD Rotterdam
Shunter Tractie BV		P.O. Box 5185	3000 AD Rotterdam
Spitzke Spoorbouw BV		Peppelkade 3	3992 AL Houten
Strukton Rail Materieel BV		P.O. Box 1281	5200 BH 's-Hertogenbosch
Syntus BV		P.O. Box 17	7000 AA Doetinchem
TrainGroup BV		Nicolaas Beetslaan 76	2985 VH Ridderkerk
Veolia Transport Rail BV		P.O. Box 1533	6201 BM Maastricht
VolkerRail Nederland BV		P.O. Box 240	4130 EE Vianen
Zuid Limburgse Spoorwegmaatschappij		P.O. Box 21071	6369 ZH Simpelveld

Annex B: NSA Organisation Chart



Annex C1: Key Figures

Heading	Figure	Source
Train-km	1.497E+08	2013: figures from annual reports and ProRail statement
Passenger train-km	1.44E+08	2013: figures from annual reports and ProRail statement
Passenger-km	1.75E+10	2013: figures from annual reports of the railway undertakings
Number of level crossings	2 541	ProRail Statement
Number of kilometres of track	3 063	ProRail Statement
Number of kilometres of line	7 033	ProRail Statement
Percentage of main line railway with ATC	100%	ProRail Statement
Percentage of train-km using ATC or ERTMS on the (main) line	100%	Carriers' Statement

Annex C2: Safety Indicators

(*) 2012

Passengers injured

Passengers	Fatalities	Serious injuries
Total	0 (1)	9 (28)

Injuries to all categories of people on and around the track (excluding suicides)

Category of person	Fatalities	Serious injuries	Minor injuries
Passengers	0 (1)	9 (28)	37 (204)
Railway staff	0 (0)	5 (9)	16 (27)
Level crossing users	17 (13)	4 (8)	16 (8)
Trespassers on the line	2 (1)	0 (2)	8 (1)
Others	0 (1)	0 (2)	3 (0)
Total (European definition)	19	19	80

Incidents (excluding suicides)

Type	Total (ERA 'significant')	Other accident
Collision	3 (3)	17 (14)
Derailment	1 (0)	7 (12)
Level crossing accident/collision	21 (19)	551[18] (50)
Personal injury caused by rolling stock	9 (5)	41 (5)
Rolling stock fire	1 (0)	8 (6)
Other accident type	1(3)	57 (55)
Collision with objects	0	108
Collision with animals	0	395

Near-misses

Near-miss of	
Infrastructure worker	6 (10)
Trespassers	78
Other person	12
Pedal cyclist	31
Moped	0
Motorcycle	4
Motor scooter	5
Car	48
Van	4
Lorry	24
Bus	1
Train	7
Other vehicles	13 (4)
Machine	5 (2)
Construction materials on the track	10 (0)
Total	107

Injuries to level crossing users

Mode of transport	Collision	Fatal injury	Serious injury	Minor injury
Pedestrian	15 (14)	7 (4)	2 (2)	3 (3)
Bicycle	10 (14)	4 (3)	1 (0)	1 (4)

[18] Figure includes 39 collisions with road traffic, 10 trespassers along the line, objects and animals.

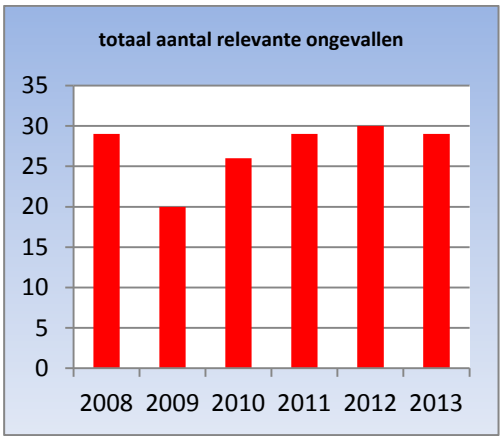
Mode of transport	Collision	Fatal injury	Serious injury	Minor injury
Moped	0	0	0	0
Motorcycle	1	0	0	1
Motor scooter	2	1	0	0
Car	18	5	1	2
Van	2	0	0	1
Lorry	4	0	0	2
Bus	0	0	0	0
Other mode of transport	9 (4)	0 (3)	0 (1)	0 (0)
Total	61	17	4	10

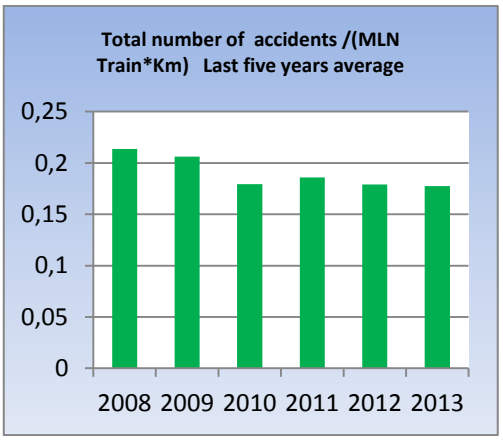
The 2012 totals for persons in charge of a motor vehicle were: 20 collisions, 3 fatalities, 5 serious injuries and 1 minor injury.

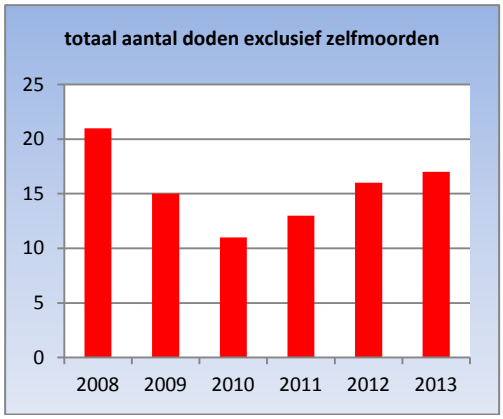
Staff injuries

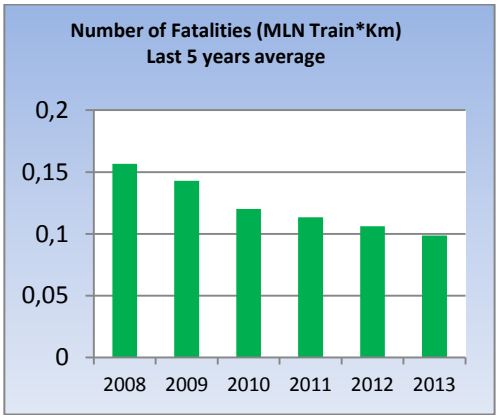
Railway personnel	Fatalities	Serious injuries
Track workers working on the line	0	5
Contractor personnel not working on the line	1	6
Shunters	0	0
Train drivers	0	0
Train managers	0	1
Other	0	0
Total	1	12

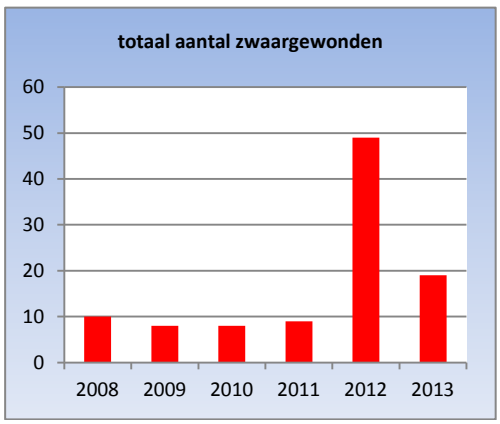
Totals

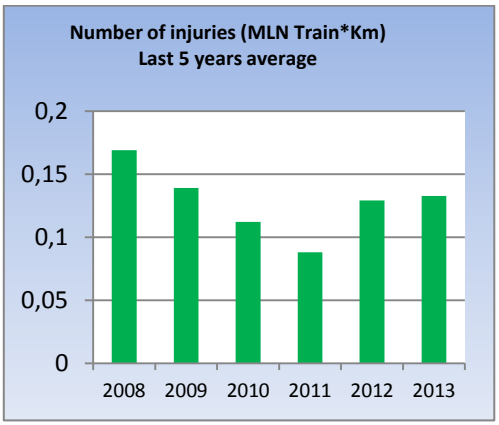




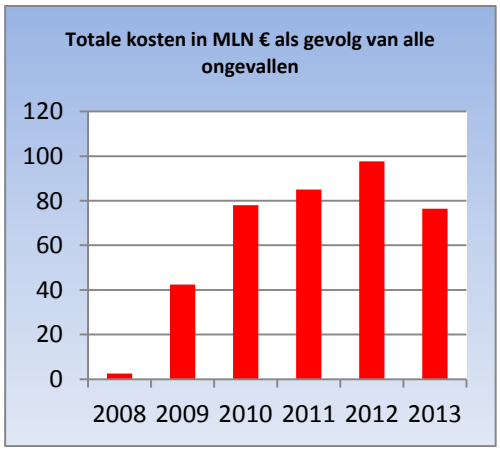

totaal aantal doden exclusief zelfmoorden
25
20
15
10
5
0
2008
2009
2010
2011
2012
2013

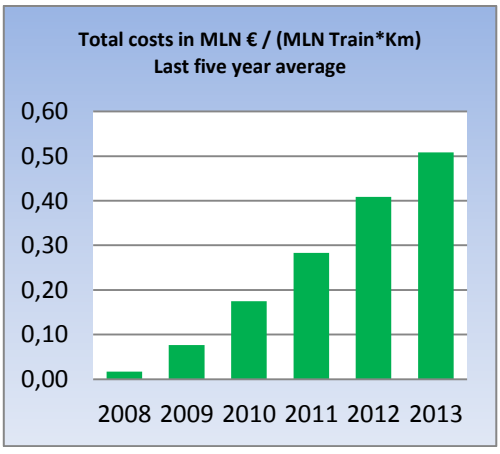

Number of Fatalities (MLN Train*Km)
Last 5 years average
0,2
0,15
0,1
0,05
0
2008
2009
2010
2011
2012
2013

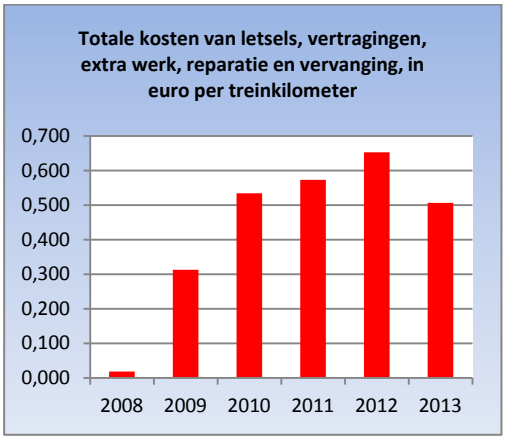

totaal aantal zwaargewonden
60
50
40
30
20
10
0
2008
2009
2010
2011
2012
2013


Number of injuries (MLN Train*Km)
Last 5 years average
0,2
0,15
0,1
0,05
0
2008
2009
2010
2011
2012
2013

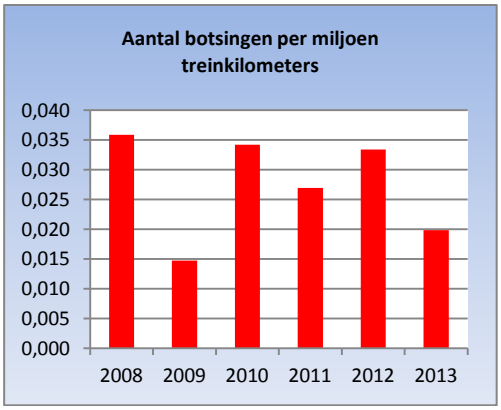
.

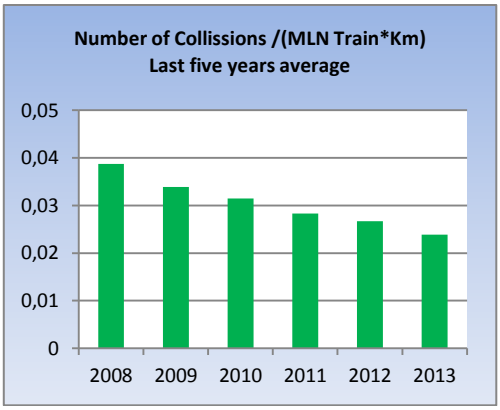

Totale kosten in MLN € als gevolg van alle ongevallen
120
100
80
60
40
20
0
2008 2009 2010 2011 2012 2013

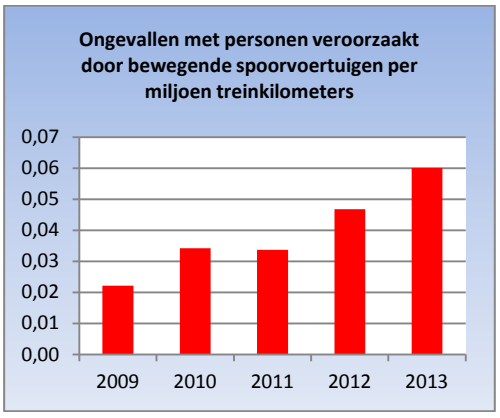

Total costs in MLN € / (MLN Train*Km)
Last five year average
0,60
0,50
0,40
0,30
0,20
0,10
0,00
2008 2009 2010 2011 2012 2013

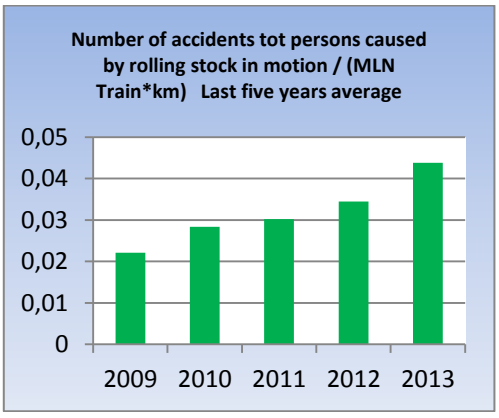

Totale kosten van letsels, vertragingen, extra werk, reparatie en vervanging, in euro per treinkilometer
0,700
0,600
0,500
0,400
0,300
0,200
0,100
0,000
2008 2009 2010 2011 2012 2013

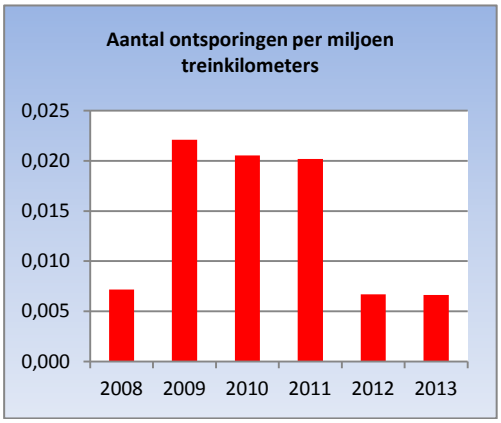
Accidents

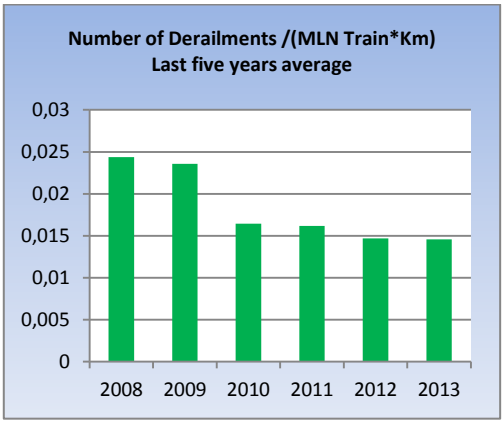

Aantal botsingen per miljoen treinkilometers
0,040
0,035
0,030
0,025
0,020
0,015
0,010
0,005
0,000
2008 2009 2010 2011 2012 2013

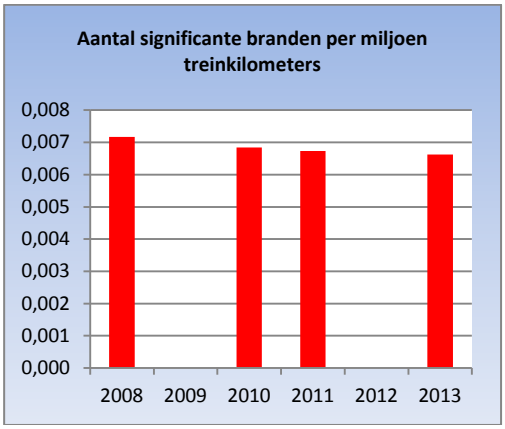

Number of Collissions /(MLN Train*Km) Last five years average
0,05
0,04
0,03
0,02
0,01
0
2008 2009 2010 2011 2012 2013

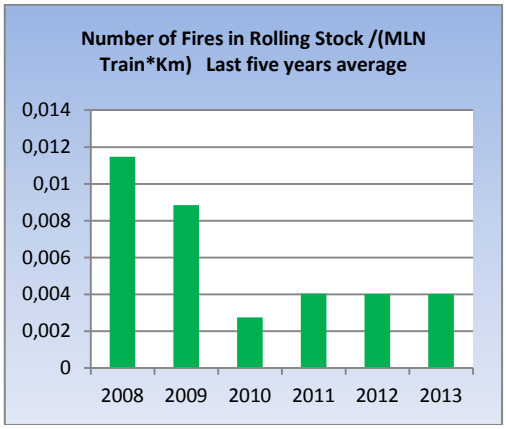

Ongevallen met personen veroorzaakt door bewegende spoorvoertuigen per miljoen treinkilometers
0,07
0,06
0,05
0,04
0,03
0,02
0,01
0,00
2009 2010 2011 2012 2013

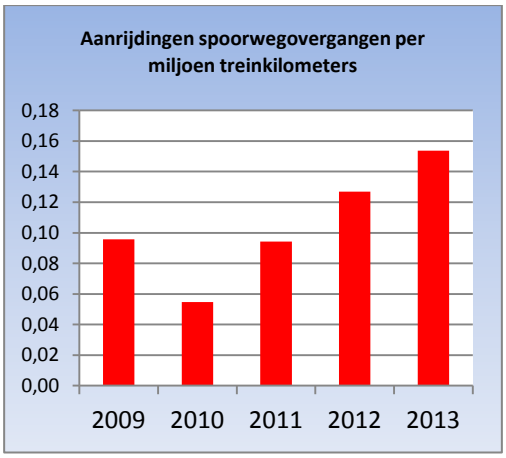

Number of accidents tot persons caused by rolling stock in motion / (MLN Train*km) Last five years average
0,05
0,04
0,03
0,02
0,01
0
2009 2010 2011 2012 2013

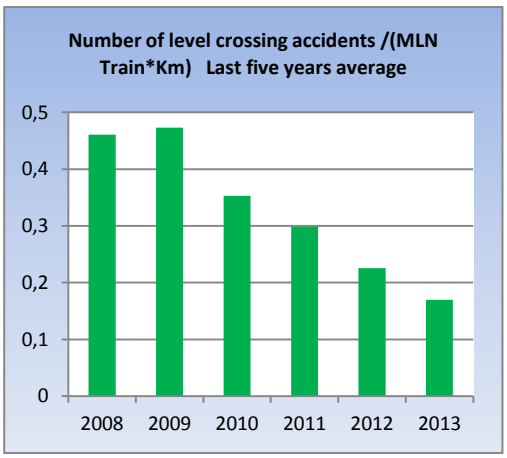

Aantal ontsporingen per miljoen treinkilometers
0,025
0,020
0,015
0,010
0,005
0,000
2008 2009 2010 2011 2012 2013

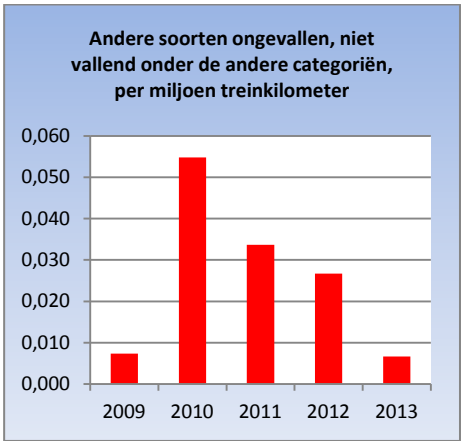

Number of Derailments /(MLN Train*Km) Last five years average
0,03
0,025
0,02
0,015
0,01
0,005
0
2008 2009 2010 2011 2012 2013

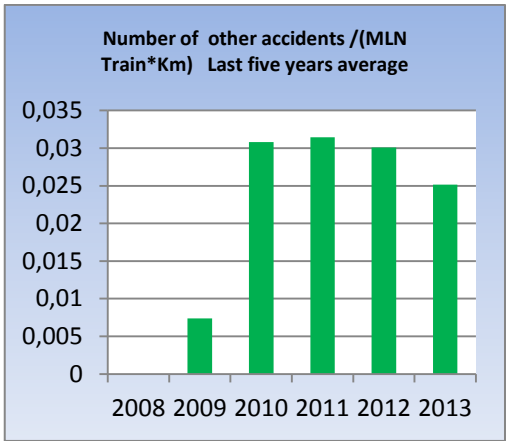

Aantal significante branden per miljoen treinkilometers
0,008
0,007
0,006
0,005
0,004
0,003
0,002
0,001
0,000
2008 2009 2010 2011 2012 2013


Number of Fires in Rolling Stock /(MLN Train*Km) Last five years average
0,014
0,012
0,01
0,008
0,006
0,004
0,002
0
2008 2009 2010 2011 2012 2013

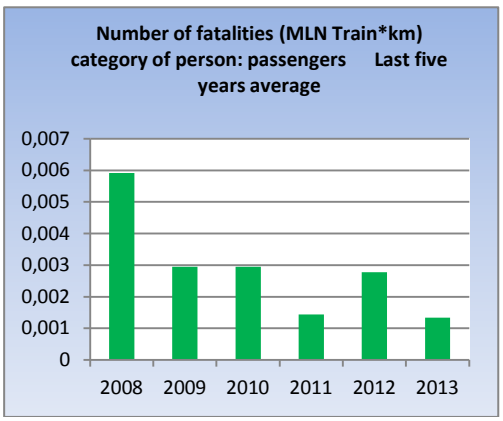

Aanrijdingen spoorwegovergangen per miljoen treinkilometers
0,18
0,16
0,14
0,12
0,10
0,08
0,06
0,04
0,02
0,00
2009 2010 2011 2012 2013

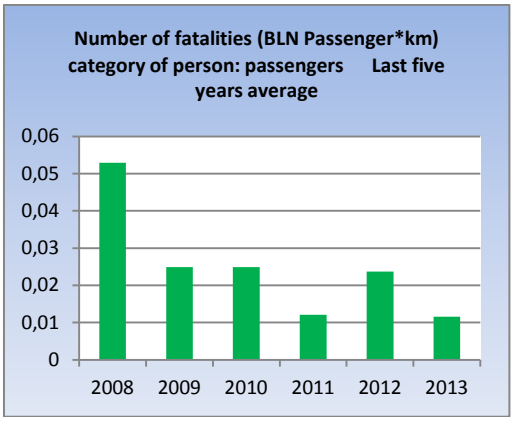

Number of level crossing accidents /(MLN Train*Km) Last five years average
0,5
0,4
0,3
0,2
0,1
0
2008 2009 2010 2011 2012 2013

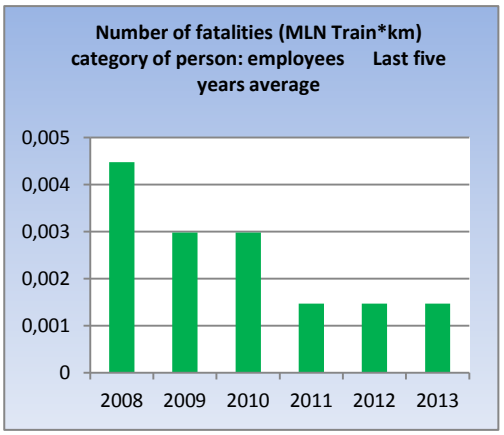


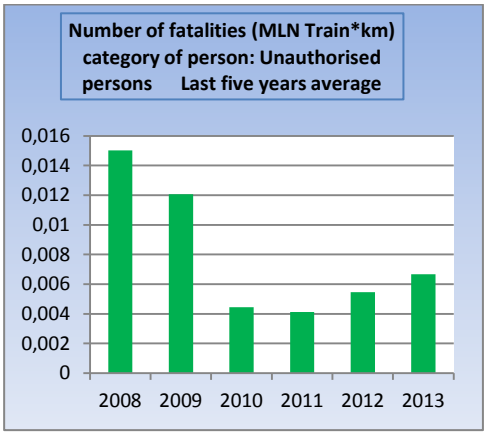


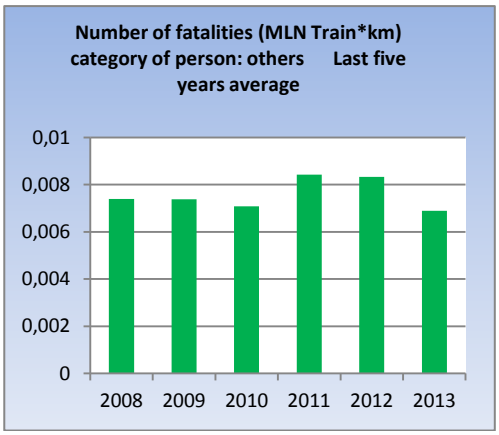
Fatal accidents, by category of casualty

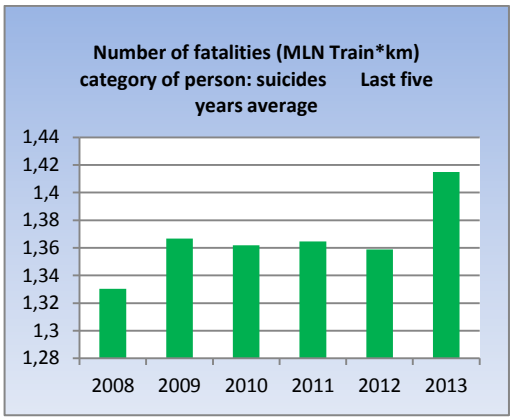




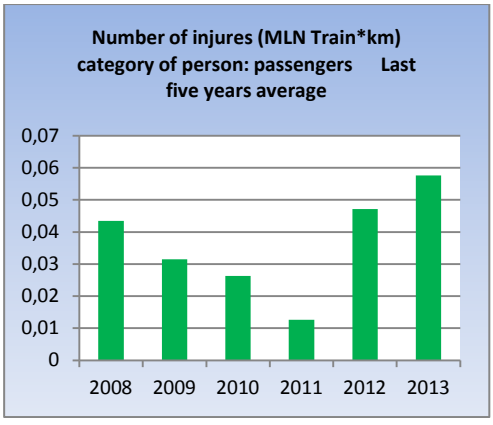


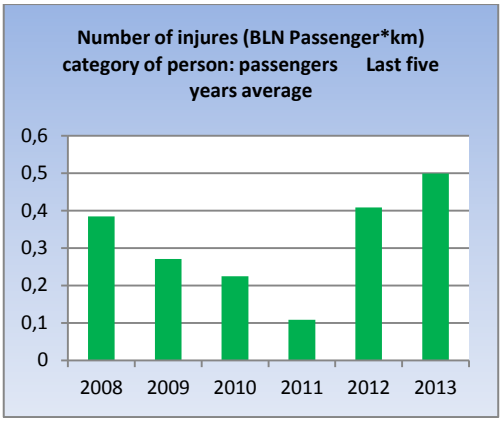


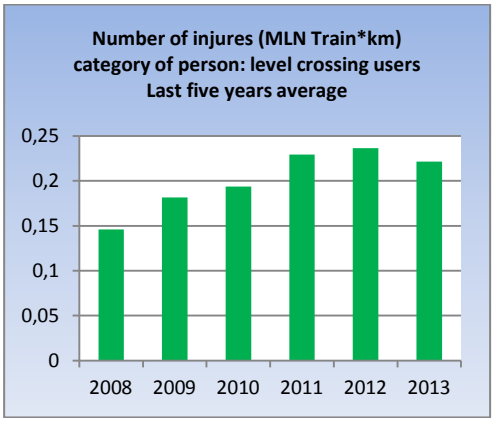


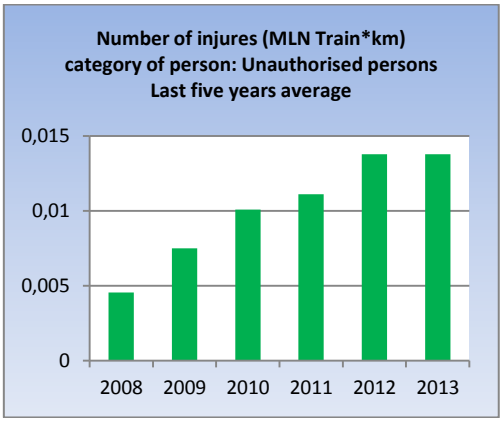


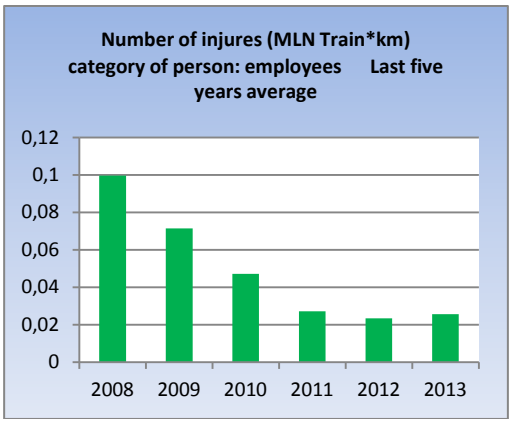
Injuries, by categories of casualties

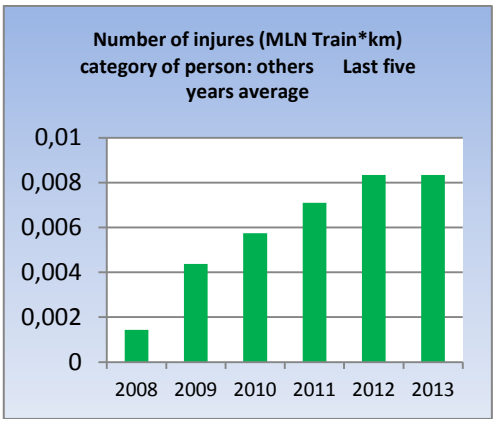




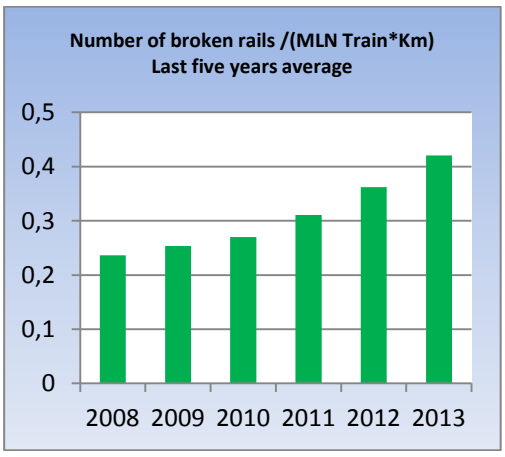


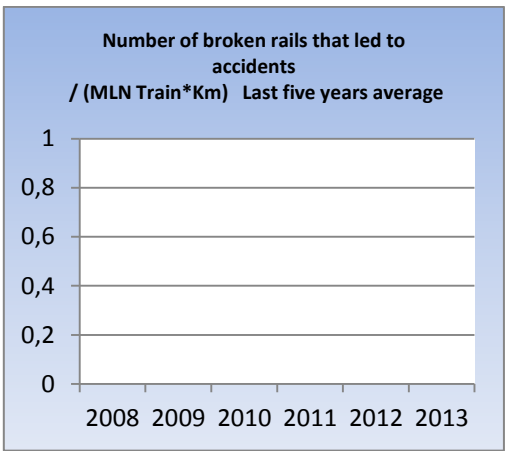


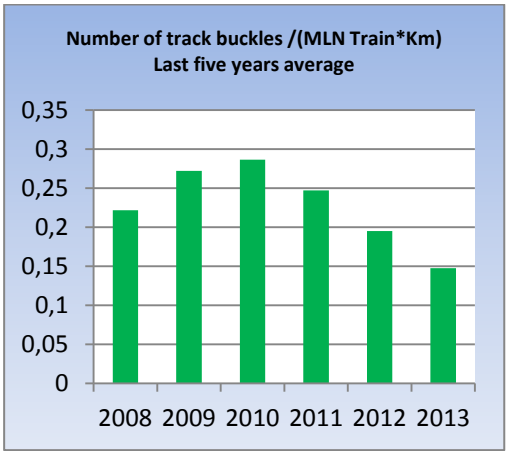


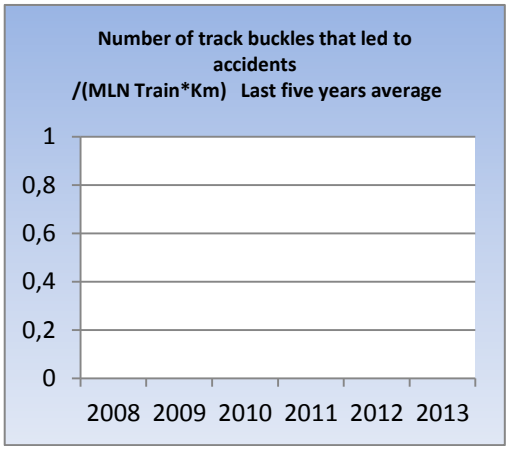


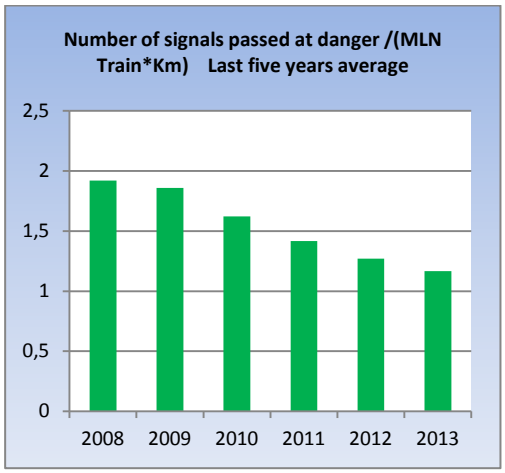
Accident precursors

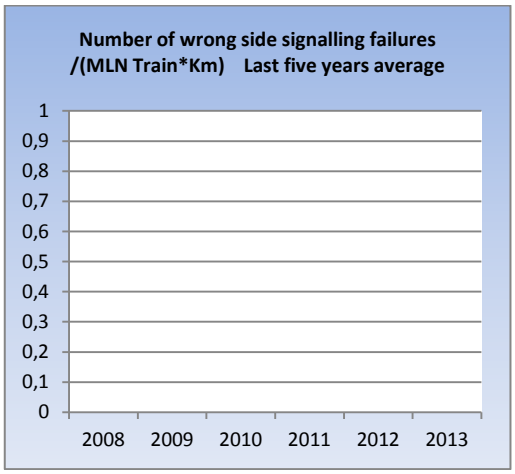




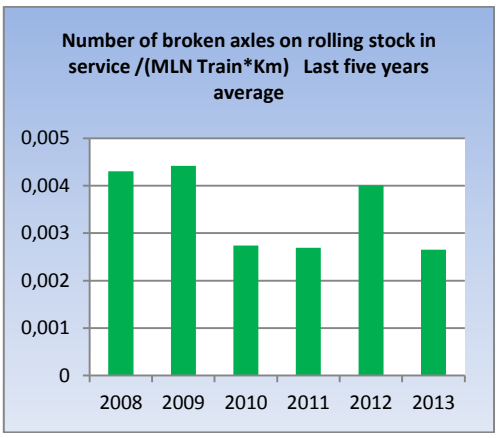

Number of track buckles /(MLN Train*Km) Last five years average
0,35
0,3
0,25
0,2
0,15
0,1
0,05
0
2008 2009 2010 2011 2012 2013

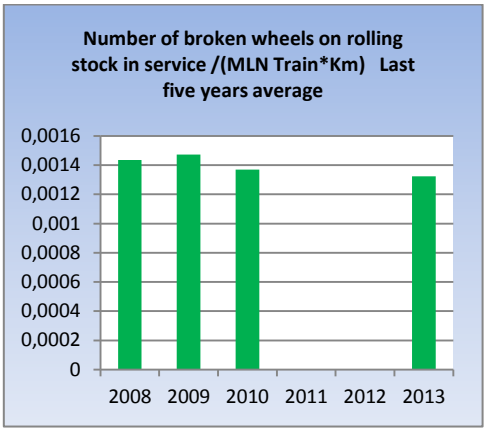

Number of track buckles that led to accidents /(MLN Train*Km) Last five years average
1
0,8
0,6
0,4
0,2
0
2008 2009 2010 2011 2012 2013


Number of signals passed at danger /(MLN Train*Km) Last five years average
2,5
2
1,5
1
0,5
0
2008 2009 2010 2011 2012 2013

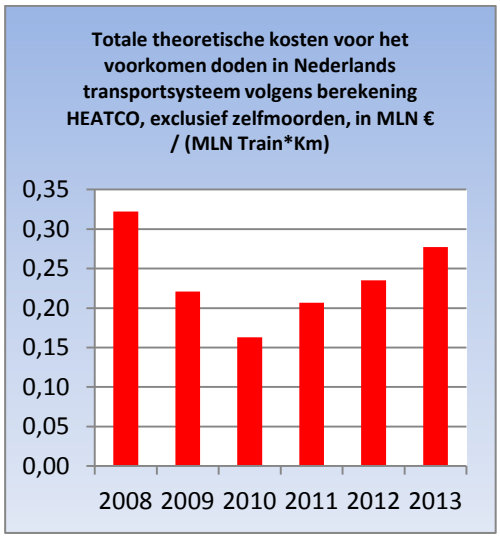

Number of wrong side signalling failures /(MLN Train*Km) Last five years average
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
2008 2009 2010 2011 2012 2013

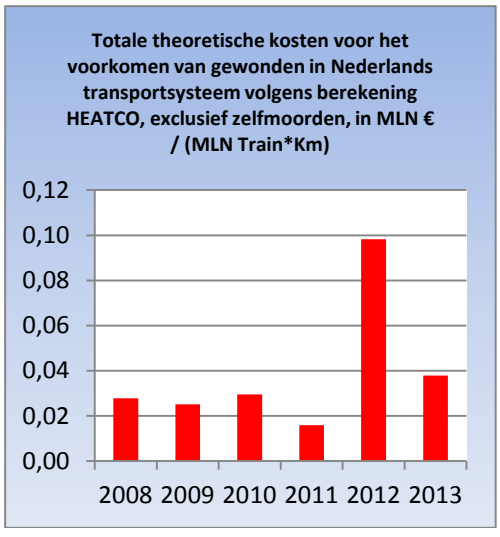

Aantal gebroken assen van operationeel rollend materieel dat geleid heeft tot een incident, per miljoen treinkilometers
0,008
0,007
0,006
0,005
0,004
0,003
0,002
0,001
0,000
2008 2009 2010 2011 2012 2013

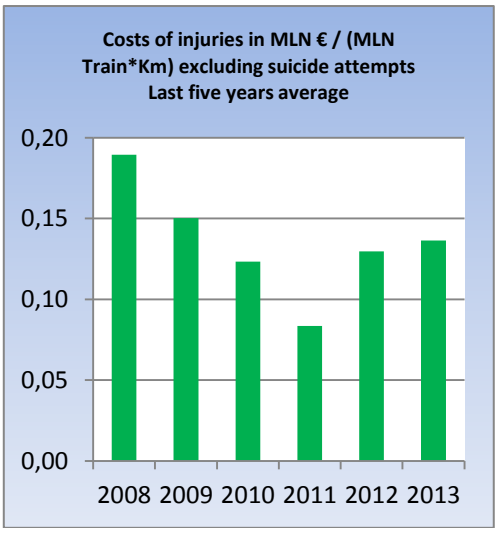

Number of broken axles on rolling stock in service /(MLN Train*Km) Last five years average
0,005
0,004
0,003
0,002
0,001
0
2008 2009 2010 2011 2012 2013



Costs of all accidents; number of working hours lost by employees and contractors due to accidents

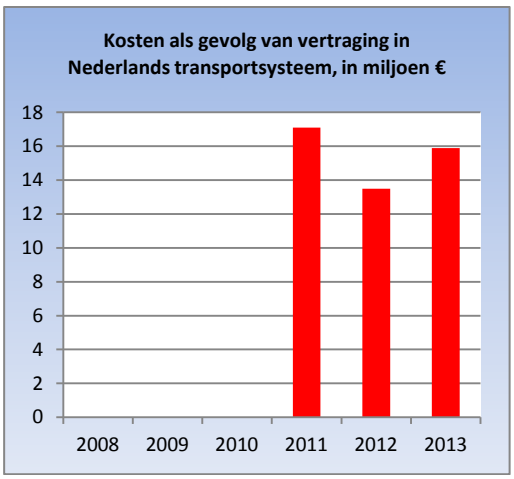


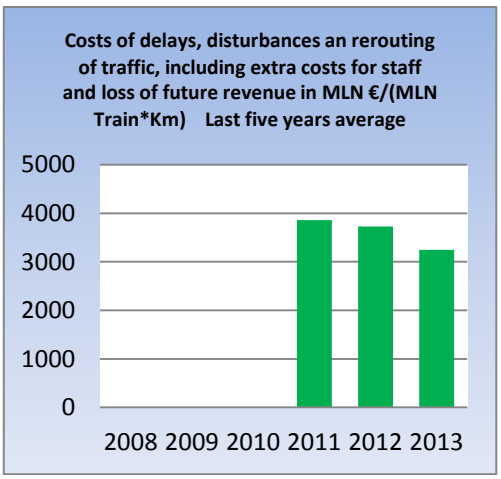





Kosten van vervanging en reparatie van materieel en spoorweginstallaties als gevolg van alle ongevallen, in euro per treinkilometer
0,400
0,350
0,300
0,250
0,200
0,150
0,100
0,050
0,000
2008 2009 2010 2011 2012 2013


Costs of replacement or repair of damaged rolling stock and railway installations in MLN € / (MLN Train*Km) Last five year average
0,35
0,30
0,25
0,20
0,15
0,10
0,05
0,00
2008 2009 2010 2011 2012 2013

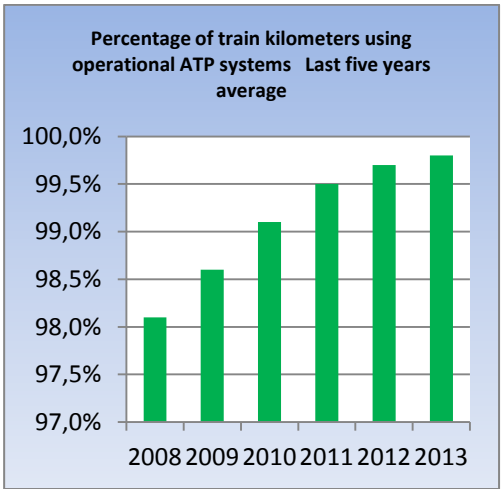

Kosten als gevolg van vertraging in Nederlands transportsysteem, in miljoen €
18
16
14
12
10
8
6
4
2
0
2008 2009 2010 2011 2012 2013

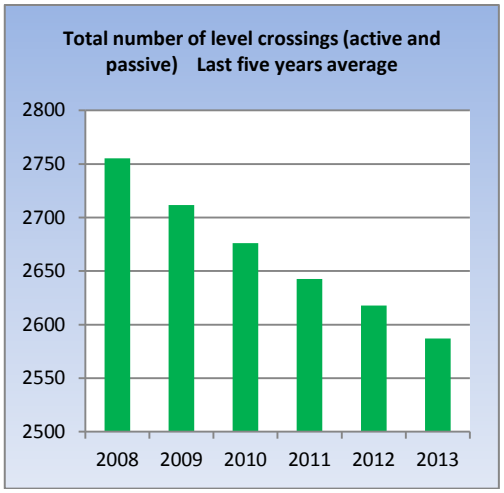

Costs of delays, disturbances an rerouting of traffic, including extra costs for staff and loss of future revenue in MLN €/(MLN Train*Km) Last five years average
5000
4000
3000
2000
1000
0
2008 2009 2010 2011 2012 2013

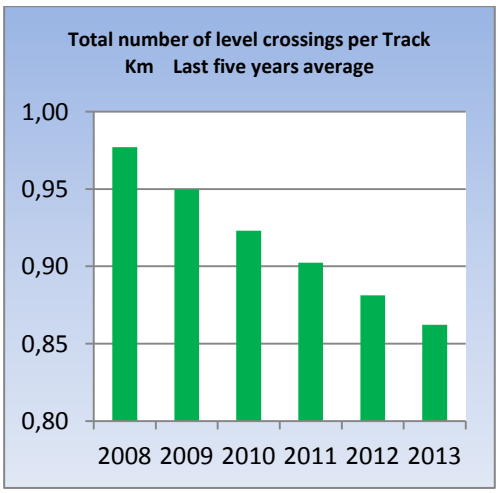

Aantal verloren miljoenen werkuren voor personeel en aannemers als gevolg van ongevallen
25
20
15
10
5
0
2008 2009 2010 2011 2012 2013

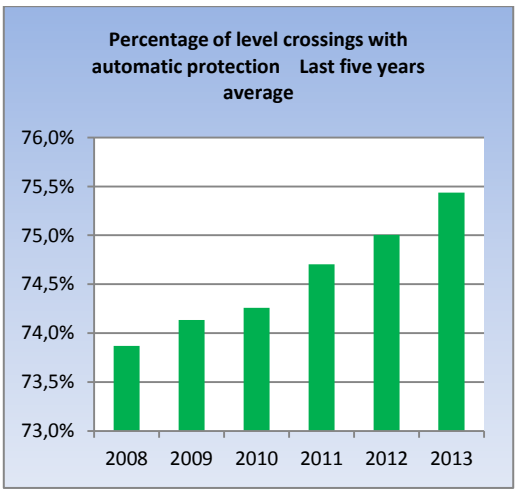

Number of working hours (MLN) of staff and contractors lost as a consequence of accidents / Number of working hours (MLN) of staff and contractors Last five years average
12
10
8
6
4
2
0
2008 2009 2010 2011 2012 2013

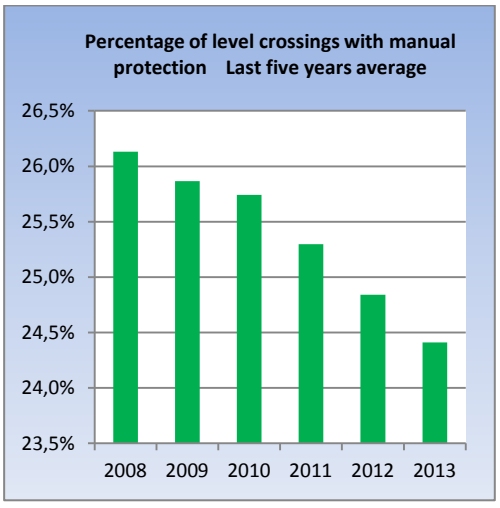
Technical safety of infrastructure and its implementation; safety policy

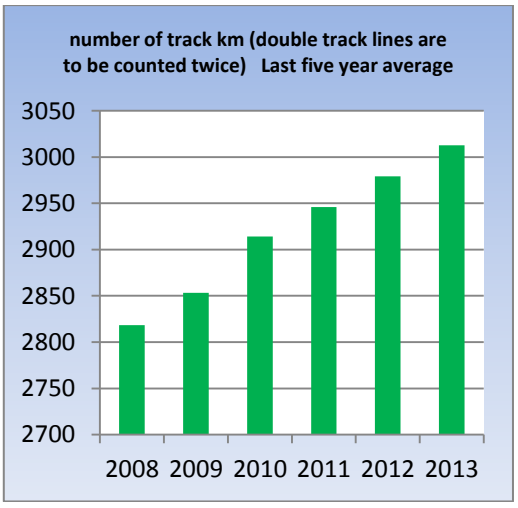












Annex C3: Meeting of the objectives for the risk categories from the Third Framework Document on Rail Safety[19]

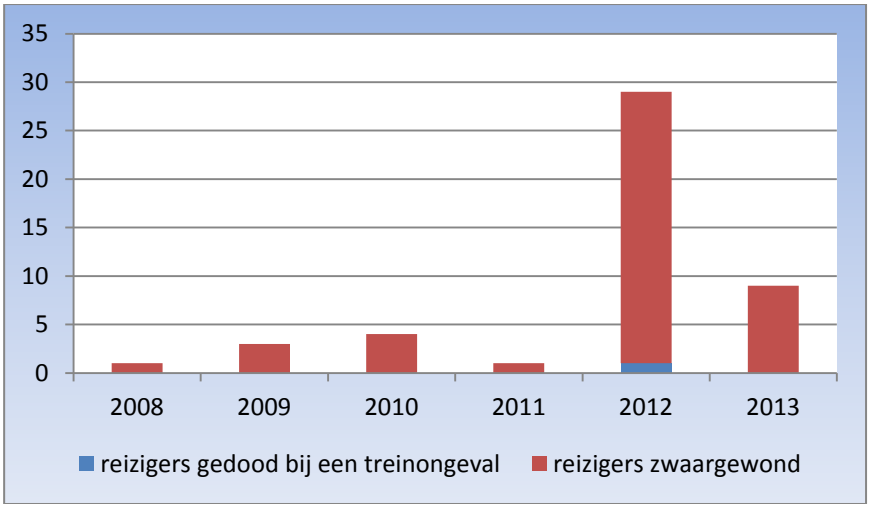
Safe transport (continuous improvement applies to all objectives unless otherwise stated)

(*) 2012

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Risk to safety of train passengers	Passenger FWSI /year/billion passenger train-km	6.52 (27.46)	7.43 (6.10)	5.35 (6.57)	**Yes**
	Passenger FWSI /year/billion passenger-km	0.05 (0.22)	0.06 (0.05)	0.04 (0.05)	**Yes**
	Number of passengers seriously injured per year	9 (28)			For information
	Number of passenger fatalities per year	0 (1)			For information
	Number of minor passenger injuries/year/billion passenger-km	2.15 (12.8)			**Yes**
Accidents involving passenger, goods and other trains	Total number of accidents/ million train-km	0.24 (0.24)			**Yes**
	Number of train collisions/ million train-km	0.02 (0.02)			**Yes**
	Number of derailments/ million train-km	0.01 (0.00)			**Yes**
	Number of level-crossing collisions/million train-km	0.14 (0.13)			**No**
	Number of personal injuries caused by moving rolling stock /million train-km	0.06 (0.07)			**Yes**
	Number of rolling stock fires/ million train-km	0.01 (0.00)			**Yes**
	Number of other incidents/ million train-km	0.01 (0.02)			**Yes**
	Number of signalling errors/ million train-km[20]				**Yes**
	Number of SPADs (/ million train-km)	1.14 (1.17)			**Yes**[21]

[19] Quoted results may differ slightly from those shown in previously published reporting. The reason is that track incidents form the background to the figures. More detailed analyses of these may lead to data recategorisation and therefore differences in NRVs, MWAs and FWSIs.
[20] There were no signalling errors, but there were 'technical SPADs' due to revoked signals given.
[21] A reduction in absolute terms in the number of SPADs to its 2003 level has not yet been achieved.

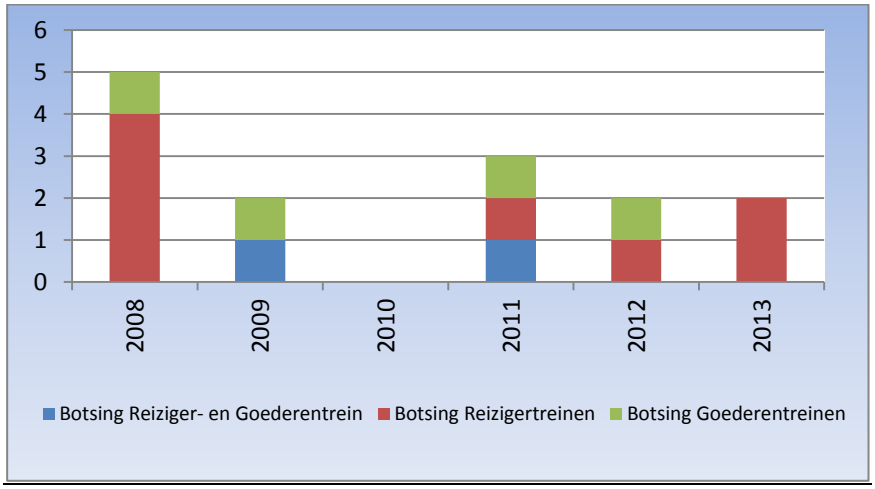
Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
	SPAD-related risk	66% (62%)			**No** (Down 75% since 2003)
Rail infrastructure	Number of broken rails/ million train-km	0.36 (0.43)			**Yes**
	Number of bent/buckled tracks/ million train-km	0.04 (0.02)			**No**
Rolling stock	Number of broken wheels on operational rolling stock/ million train-km	0.01 (0.00)			**No**
	Number of axles broken on operational rolling stock/ million train-km	0.01 (0.01)			**Yes**
Railway tunnels	–				
Disaster organisation and crisis management	–				
Security	To be audited in 2014				
Safety of passengers from anti-social behaviour	Customer rating of safety from anti-social behaviour: % passengers rating this safety at 7 or higher	79.5% [22]			**Yes**



Graph 1: Passenger fatalities and serious injuries

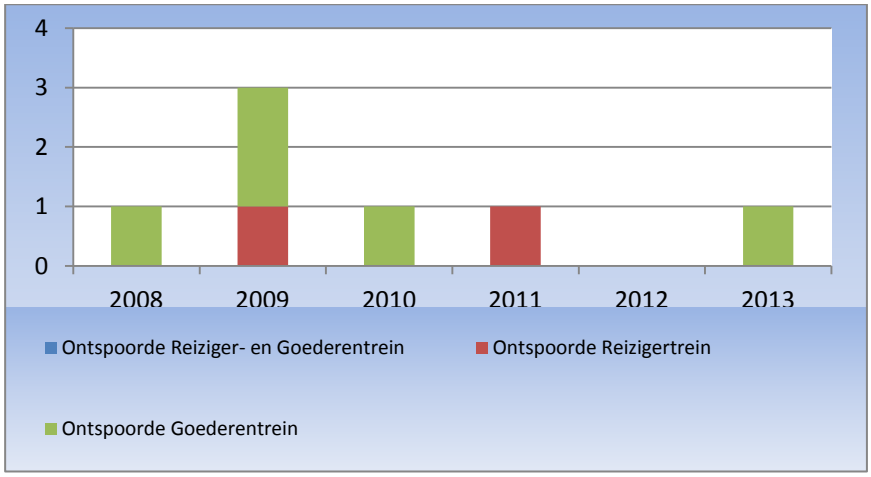
Reizigers gedood bij een treinongeval	Passengers killed in a train accident
Reizigers zwaargewond	Seriously injured passengers

[22] Objective of 2013 Transport Plan is 78.5%. 2013 figure from letter from NS dated 17 February 2014, NSR/PI&C/2014/MDH/01.



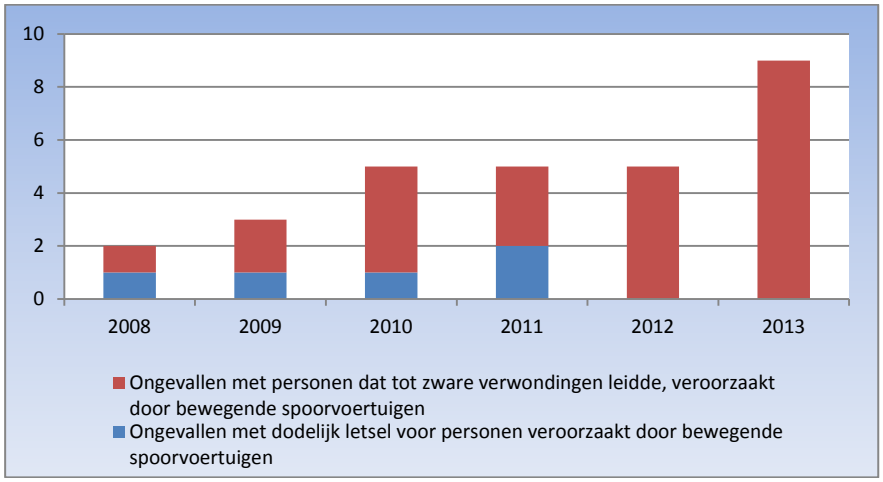
Graph 2: collisions with trains

Botsing Reiziger en Goederentrein	Collisions between a passenger train and a goods train
Botsing Reizigertreinen	Collisions between passenger trains
Botsing Goederentreinen	Collisions between goods trains



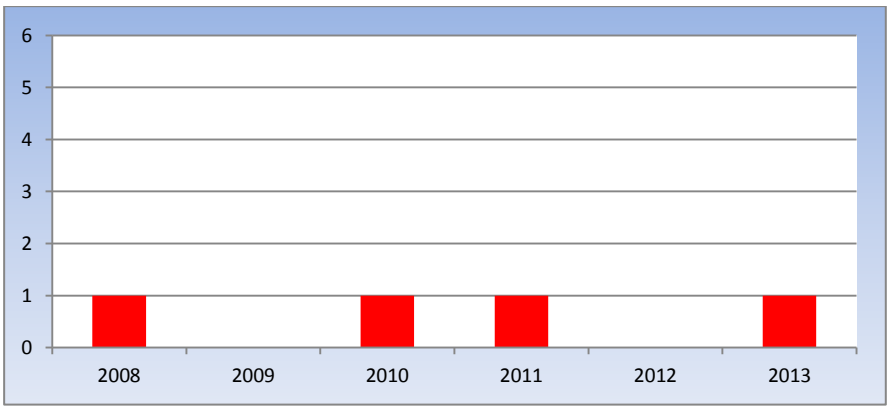
Graph 3: derailments

Ontsppoorde Reiziger- en Goederentrein	Derailed passenger and goods trains
Ontspoorde Reizigertrein	Derailed passenger trains
Ontspoorde Goederentrein	Derailed goods trains

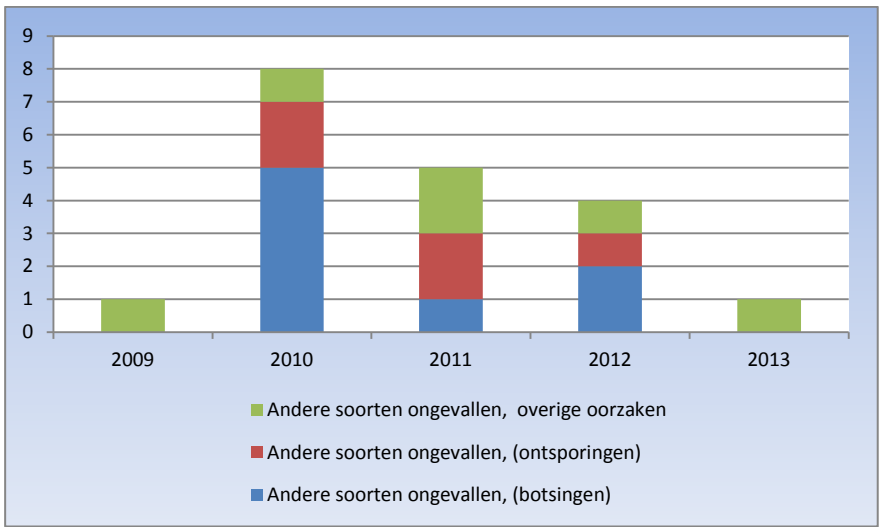


Graph 4: accidents caused to people by rolling stock in motion

Ongevallen met personen dat tot zware verwondingen leidde, veroorzaakt door bewegen de spoorvoertuigen	Accidents with serious personal injury caused by railway vehicles in motion
Ongevallen met dodelijk letsel voor personen veroorzaakt door bewegende spoorvoetuigen	Fatal accidents caused by railway vehicles in motion

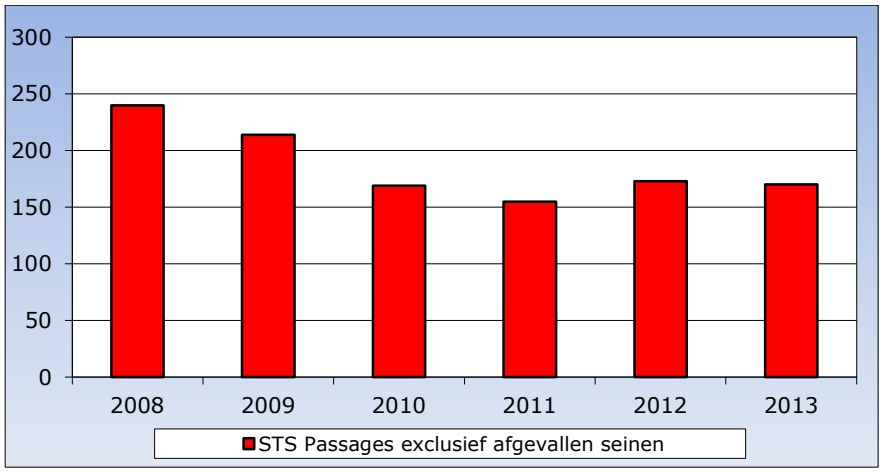


Graph 5: fires



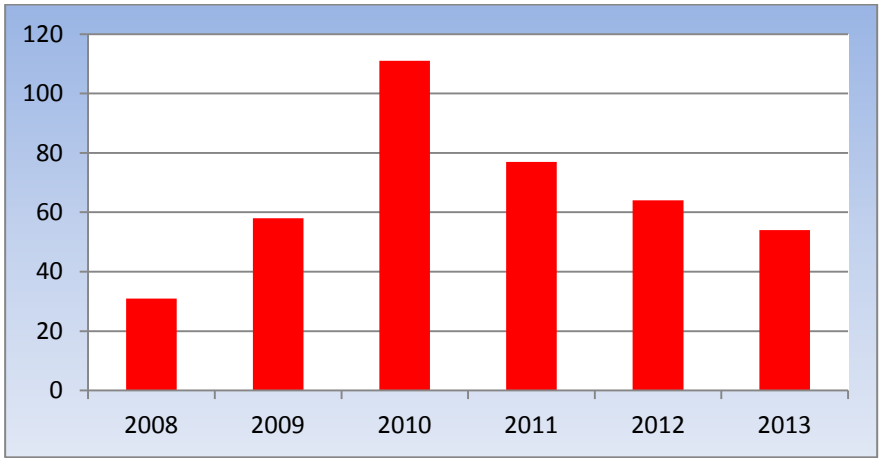
Graph 6: other types of accident

Andere soorten ongevallen (botsingen)	Other types of accident (collisions)
Andere soorten ongevallen (ontsporingen)	Other types of accident (derailments)
Andere soorten ongevallen, overige oorzaken	Other types of accident, other causes

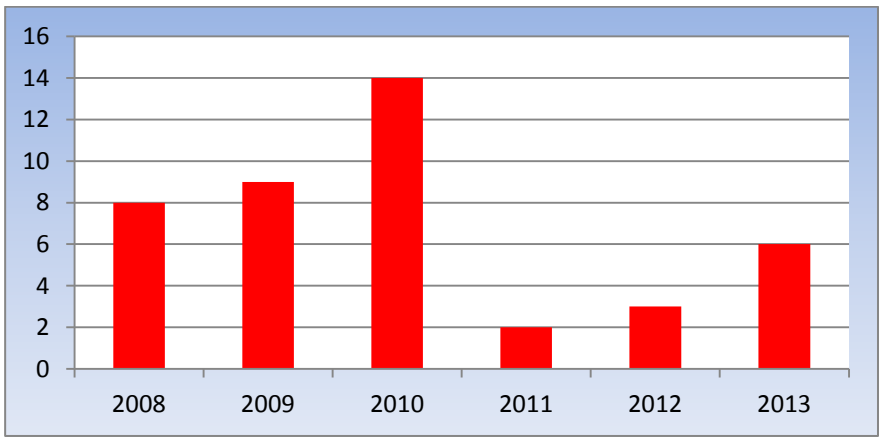


Graph 7: Signals passed at danger

STS Passages exclusief afgevallen seinen	SPADs except tripped signals



Graph 8: broken point blades



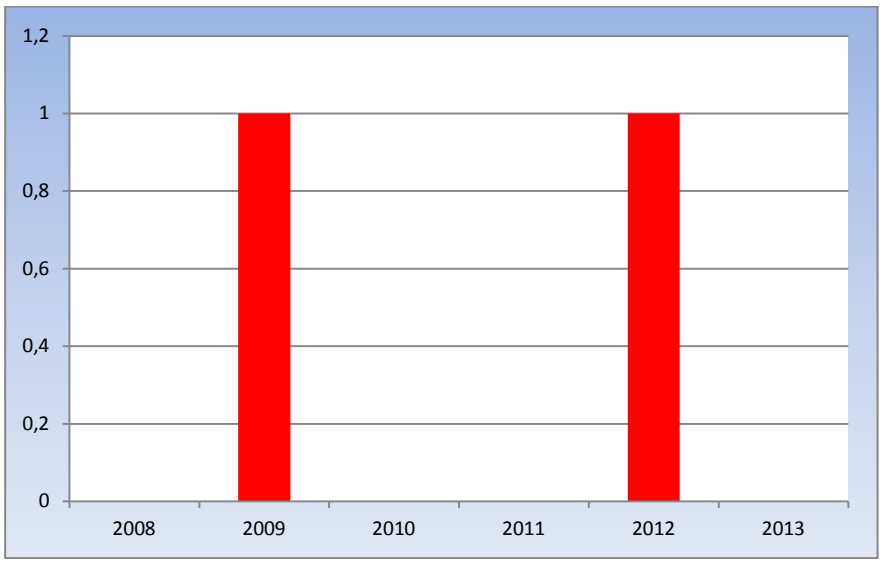
Graph 9: buckling of track

Safe working (continuous improvement applies to all goals unless otherwise stated)
(*) 2012

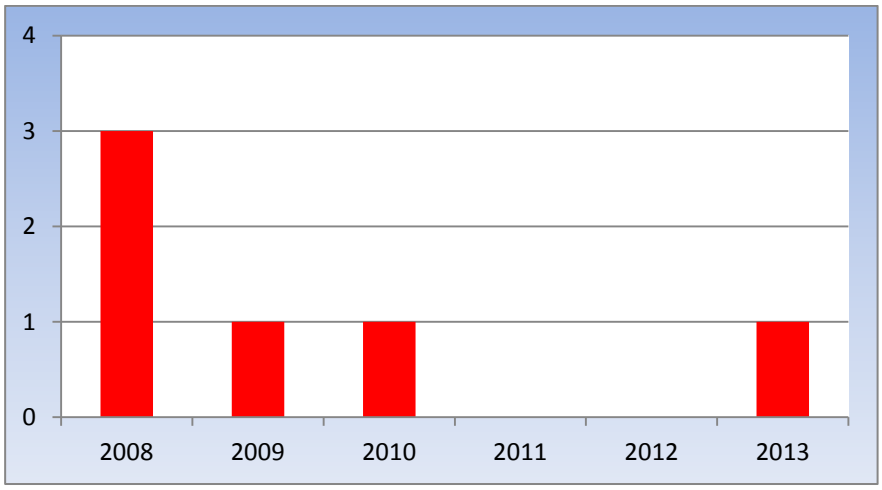
Risk category	Description of indicator	Indicator in figures	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Prevention of accidents at work	Track personnel FWSI/year/ billion train-km	3.52 (5.34)	2.34 (1.89)	3.31 (2.25)	**No** (+ top 4 EU)*
	Number of track worker fatalities	0 (0)			**Yes** (+ target 0)
	Number of shunter fatalities	0 (0)			**Yes** (+ target 0)
	Number of collisions involving track workers	1 (1)			**Yes**
	Number of electrocutions	4 (1)			**No**
	IF rate (# accidents with absence from work > 24h x 1 bn./time worked including temporary hire and subcontractors).	No info.			

Risk category	Description of indicator	Indicator in figures	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Training and specialist skills	Percentage fulfilment of the duty of administrative diligence: holding the required papers for skill or medical and psychological fitness.	No info.			
	Percentage fulfilment of driver familiarity with routes	No info.			

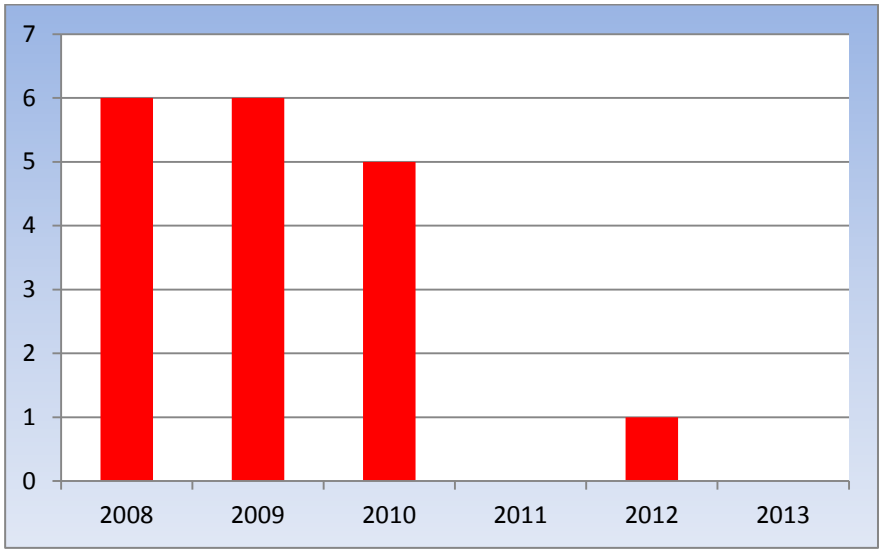
*Top 4 EU was achieved in the period 2007-2012. 2013 figures not yet known.



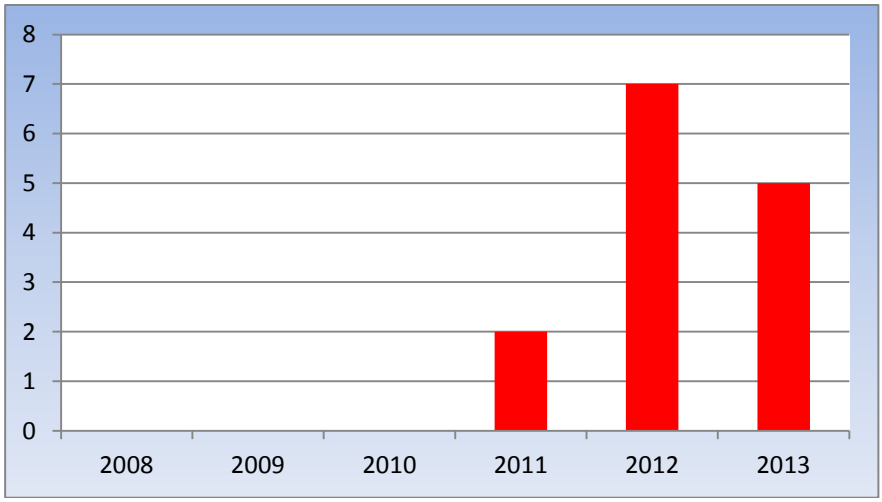
Graph 10: Driver injuries



Graph 11: Train manager injuries



Graph 12: Shunter injuries



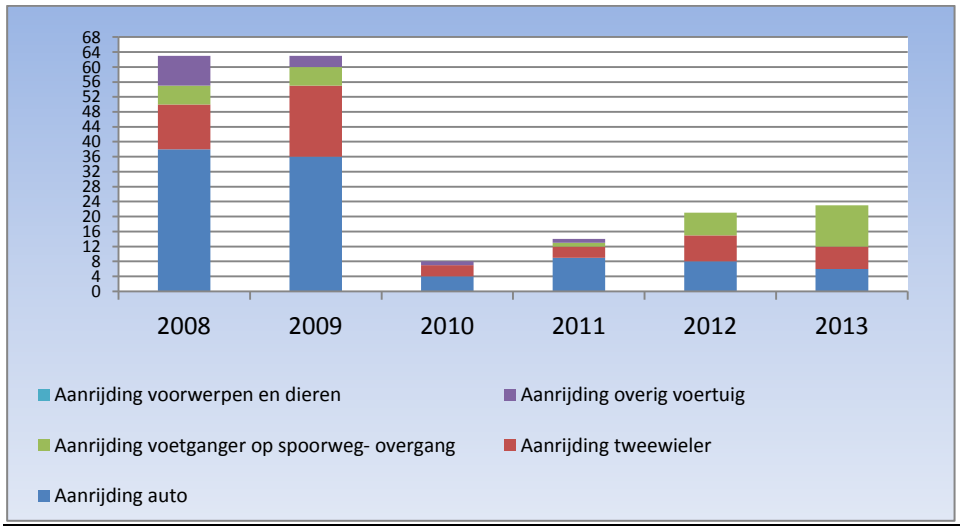
Graph 13 Track worker injuries

Safe living (continuous improvement applies to all goals unless otherwise stated.)

(*) 2012

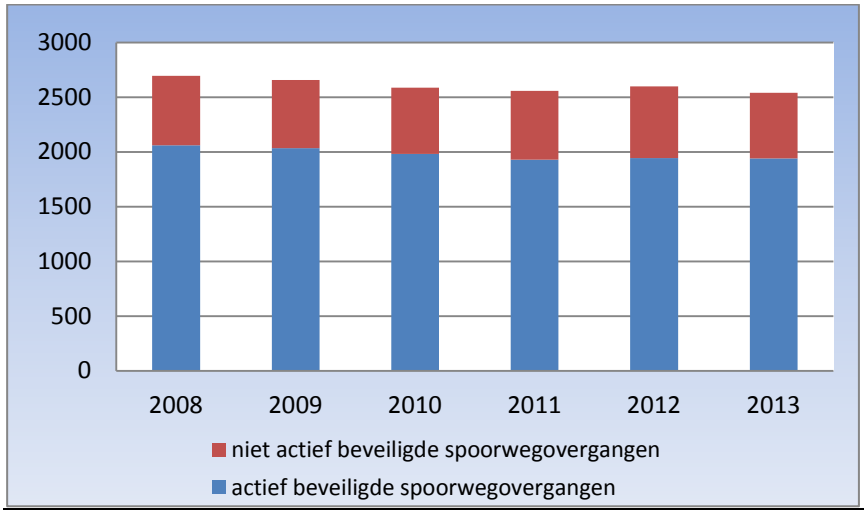
Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Frame-work Document goal achieved?
Level crossing safety	Level crossing user FWSI /year/billion train-km	101.01 (92.19)	94.06 (97.84)	92.88 (97.05)	**Yes**
	Level crossing user FWSI/ year/((train-km x number of level crossings)/ rail-km)	138.89 (110.44)	108.2 (106.3)	107.4 (108.7)	**Yes**

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Frame-work Document goal achieved?
Trespassers on the track	Track trespasser FWSI /year /bn. train-km	13.24 (8.02)	7.81 (7.84)	8.24 (7.21)	**No** (+ top 3 EU)
	Number of suicides on the line	220 (202)			(ALARP)
	Number of suicides on the line/bn. train-km	1 460 (1 350)			(ALARP)
	'Other (third-party)' FWSI/ year/billion train-km	0.00 (8.02)	6.74 (6.76)	5.70 (7.99)	**Yes**
External safety (carriage of dangerous goods)	Number of accidents involving at least one rail vehicle carrying dangerous goods/ million train-km	0.01 (0.03)			**Yes**
	Number of fatalities caused by such accidents per year.	0 (0)			**Yes**



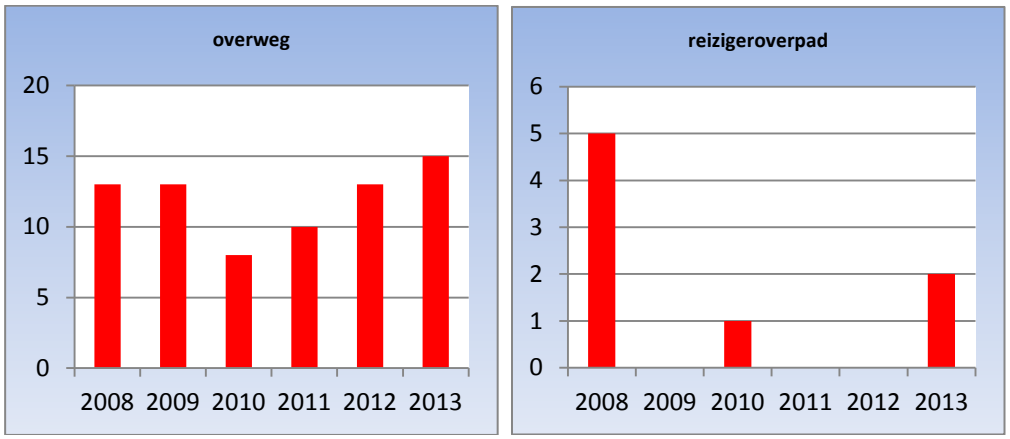
Graph 14: collisions

Aanrijding voorwerpen en dieren	Collision with objects and animals
Aanrijding voetganger op spoorweg- overgang	Collision with pedestrian at a level crossing
Aanrijding auto	Collision with a car
Aanrijding overing voertuig	Collision with another vehicle
Aanrijding tweewieler	Collision with a cycle



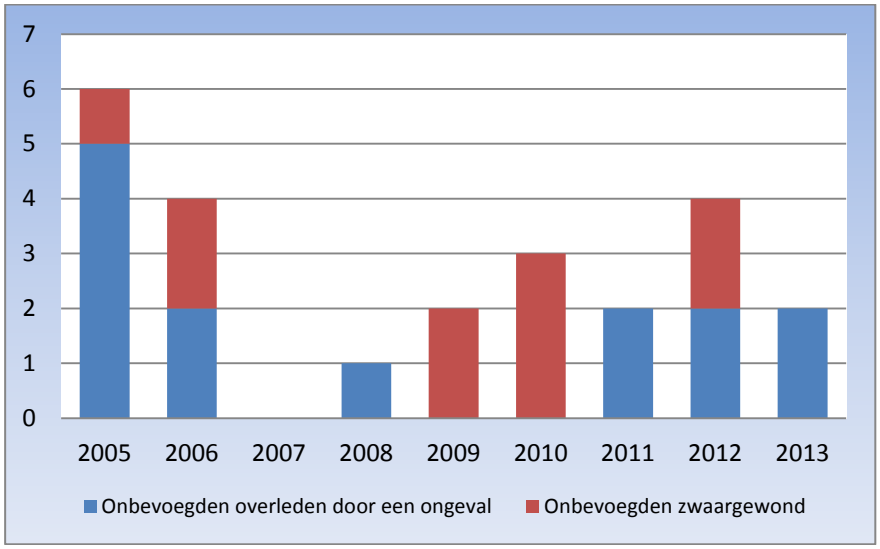
Graph 15: numbers of actions and level crossings not actively secured

Niet actief beveiligde spoorwegovergangen	Level crossings not actively secured
Actief beveiligde spoorwegovergangen	Actively secured level crossings



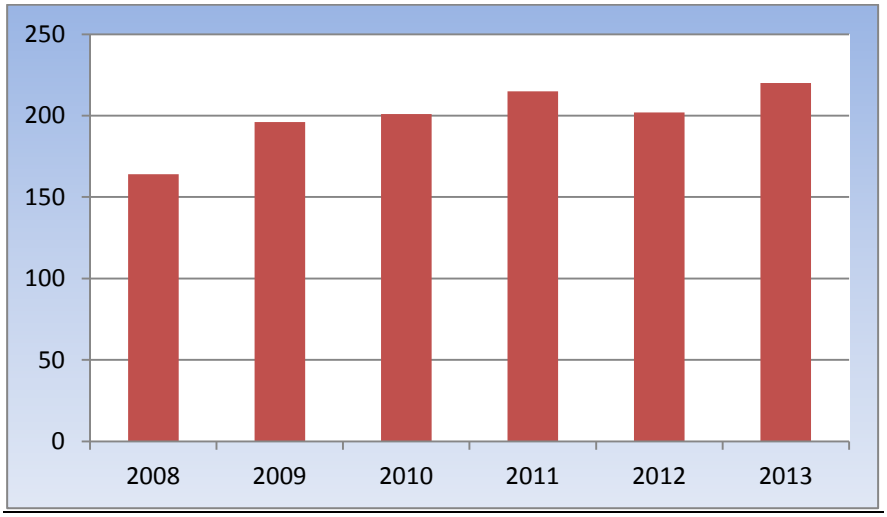
Graphs 16 and 17: level crossing users killed in an accident with a train or on a pedestrian crossing at a station.

Overweg	Level crossing
reizigeroverpad	Pedestrian crossings

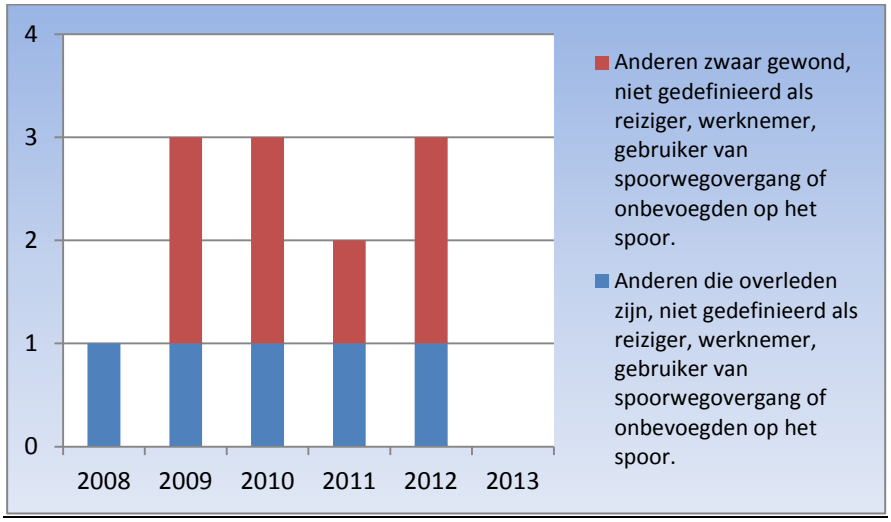


Graph 18: trespassers

Trespassersn overleden door een ongeval	Trespassers killed in accidents
Trespassersn zwaargewond	Seriously injured trespassers



Graph 19: suicides



Graph 20: Others

Anderen zwaar gewond, niet gedefinieerd als reiziger, werknemer, gebruiker van spoorwegovergang of Trespassersn op het spoor.	Others who are severely injured and not defined as passengers, employees, level crossing users or trespassers on the track.
Anderen die overleden zijn, niet gedefinieerd als reiziger, werknemer, gebruiker van spoorwegovergang of onbefoegden op het spoor.	Other deaths not defined as passengers, employees, level crossing users or trespassers on the track.

The indicators do not count minor injuries, because the European definitions only consider fatalities and the seriously injured. Nevertheless, to gain a full picture of trends on the main-line railway as a whole, it is important to include minor injuries and near-misses. These may highlight (possible) new risks. Pro-active follow-up can then prevent a negative safety trend. The same applies to the scope of topics in the Framework Document. This is not concerned only with fatalities and serious injuries, but with the public at large.

Table: injuries to people on and around the track

Group of people	Fatalities	Serious injuries	Minor injuries
Passengers	0	9	37
Railway staff	0	6	16
Level crossing users	15	4	16
Trespassers on the track	2	0	8
Others	0	0	3
Total (European definition)	17	19	80

Table: near-misses

Near-miss of	
Infrastructure workers	6
Trespassers	78
Other persons	12
Cyclists	31
Moped riders	0
Motorcyclists	4
Motor scooter riders	5
Cars	48
Vans	4
Lorries	24
Buses	1
Trains	7
Other vehicles	13
Machinery	5
Track construction materials	26
Total	264

Cross-cutting (P= continuous improvement)

(*) 2012

Risk category	Description of indicator	Indicator	NRV 2007 - 2012	MWA 2009 - 2013	Framework Document goal achieved?
Overall	Total FWSI/year/billion train-km (excluding suicides or attempted suicides on the railway)		126 (130)	123 (127)	**Yes** (+ top 5 EU)
Integrated cooperation on common areas of responsibility	-				-
Innovation	-				-
Safety management	-				-
Safety culture	Percentage compliance with safety rules (NVW) by track workers	67% (61%)			**Yes**
	Percentage compliance with safety rules (NVW) by shunters	No info.			

Annex C4: Terms and abbreviations

Others (third parties)
All persons not defined as 'passengers', 'employees including contractors' personnel', 'level crossing users' or 'trespassers on the railway estate'.

Other types of accident
All accidents not mentioned elsewhere (train collisions, train derailments, accidents at level crossings, accidents caused to persons by rolling stock in motion and rolling stock fires).

ATC
Automatic train control. ATC acts automatically to halt the train if the detected movement of the train does not meet one or more set restrictions.

Audit (European definition)
A systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

Fatality (European definition)
Any person killed immediately in an accident, or dying within 30 days as a result of it, excluding suicides.

Accidents caused to persons by rolling stock in motion
Accidents caused to one or more persons who are struck by a railway vehicle or by an object attached to it, or that has become detached from it. This includes persons who fall from railway vehicles while travelling on board or otherwise, or who are hit by loose objects.

Significant accident
An accident involving at least one moving rail vehicle, resulting in at least one fatality or serious injury or causing total damage amounting to at least EUR 150 000 or serious traffic disruption (at least six consecutive hours of suspension of train service). This does not include accidents in workshops, warehouses and store rooms.

Line-km (also: track-km)
Line-kilometre means the length, measured in kilometres, of a Member State's railway network, the scope of which is laid down in Article 2 of Directive 2009/149/EC. For multiple-track railway lines, only the distance between origin and destination is to be counted.

Track buckles (also: rail buckling)
Flaws affecting track continuity and geometry. They may lead to closure of the track or to immediate speed restrictions to maintain safety.

Minor injury
Any person injured in an accident and admitted to hospital for less than 24 hours, except attempted suicides.

Accident to a person
Accidents caused to persons by rolling stock in motion, who are hit by an object attached to, or which has become detached or has fallen from, a railway vehicle.

Passenger-km
The unit of measurement representing the carriage of a passenger by rail over a distance of one kilometre. Only the distance travelled in the territory of the reporting country is counted.

Train
A single railway vehicle or a rake hauled by one or more locomotives or electric railcars, or one railcar 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 a train.

Train-km
The unit of measurement representing one kilometre travelled by a train. Where available, this is the actual distance travelled, so that the standard distance between origin and destination is not used. Only the distance travelled in the territory of the reporting country is counted.

Train passenger
Any person travelling by rail, other than a crew-member, including passengers attempting to board/alight from a moving train.

Suicide
An act of deliberate self-harm resulting in death, as recorded and classified by the competent national authority.

Serious injury
Anyone injured in an accident who is admitted to hospital for more than 24 hours, except attempted suicides.

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route)
ALARP	As low as reasonably practicable
Arbo	Working Conditions Act (Arbeidsomstandighedenwet)
ATBVV	Automatic train control, advanced version
BD	Out of service
bn.	Billion (10^9)
CSI	Common Safety Indicator
CSM	Common Safety Method
DGB	Directorate-General for Accessibility at the Ministry of Infrastructure and the Environment
ECM	Entity in charge of maintenance
EC	European Community
ERA	The European Railway Agency
FWSI	Fatalities and Weighted Serious Injuries
ILT	Human Environment and Transport Inspectorate (Inspectie Leefomgeving en Transport) at the Ministry of Infrastructure and the Environment

ISZW	Social Affairs and Employment Inspectorate (Inspectie van Sociale Zaken en Werkgelegenheid)
km	Kilometre
LOD	Enforcement order
m.	Million
MO/PO	Medical check-up/psychological check-up
MWA	Moving Weighted Average
NRV	National Reference Value
NSA	National safety authority
NSR	Dutch Railways – Passenger Division (Nationale Spoorwegen Reizigers)
NVW	Framework of Standards on Safe Working (Normenkader Veilig Werken)
OvV	Dutch Safety Board (Onderzoeksraad voor Veiligheid)
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail (Règlement concernant le transport international ferroviaire des marchandises dangereuses)
RI&E	Risk inventory and assessment
SPAD	Signal passed at danger
SPW	Railways Act
VPC	Value of preventing a casualty

Annex D: Major amendments to laws and regulations

Reference	Date of entry into force	Reason for amendment	Description of amendment
Staatscourant (Official Gazette) 2013/ 34587: Regulation amending the Charges Regulation under the Railways Act	1 January 2014	To set new charges	Setting charges for 2014 under the Railways Act Charges Regulation; index-linking and amendment of the Railway Vehicles Commissioning and the 2012 Charges Regulation under the Railways Act
Staatscourant 2013/24216: Policy Rule on Language Skills of Train Drivers under the Railways Act	26 August 2013		If the ILT imposes an order with periodic penalty payment because a driver's language skills are insufficient, such order is imposed on those under whose responsibility the driver carries out a duty.
Stb. 2013/439	1 January 2014	Implementation of new and amended European rules	Article I, Section J of the Law of 16 December 2010 amending the Railways Act, the Passenger Transport Act 2000 and the Law on Economic Crimes in implementation of Directives 2007/58/EC, 2007/59/EC, 2008/57/EC and 2008/110/EC (Stb. 2011, 218) enters into force on 1 January 2014.

Annex E1: List of countries in which railway undertakings applying for a Part B certificate in the Netherlands obtained their Part A

Name of railway undertaking	EU Member State in which Part A safety certificate was issued
NMBS Logistics NV	Belgium
Captrain Belgium	Belgium
Crossrail Benelux NV	Belgium
DB Regio AG	Germany
RheinCargo GmbH & Co KG	Germany
Heavy Haul Power Int.	Germany
TX Logistik	Germany
PKP Cargo S.S.	Poland
RTS Austria	Austria
SBB Cargo	Switzerland
Arriva Personenvervoer Nederland BV	Netherlands
BAM Rail BV	Netherlands
Connexxion Openbaar Vervoer NV	Netherlands
DB Schenker Rail Nederland NV	Netherlands
ERS Railways BV	Netherlands
Eurailscout Inspection & Analysis BV	Netherlands
Euro-Express Treincharter BV	Netherlands
HSA Beheer NV	Netherlands
HSL Logistiek BV	Netherlands
HTRS Nederland BV	Netherlands
KombiRail Europe BV	Netherlands
Lloyd's Register Rail Europe BV	Netherlands
Locon Benelux BV	Netherlands
LTE Netherlands BV	Netherlands
NedTrain BV	Netherlands
NS Reizigers BV	Netherlands
Rotterdam Rail Feeding BV	Netherlands
Rurtalbahn Benelux BV	Netherlands
Shunter Tractie BV	Netherlands
Spitzke Spoorbouw BV	Netherlands
Strukton Rail Materieel BV	Netherlands
Syntus BV	Netherlands
TrainGroup	Netherlands
Veolia Transport Rail BV	Netherlands
VolkerRail Nederland BV	Netherlands
Zuid Limburgse Stoomtrein Maatschappij (South Limburg Steam Train Company)	Netherlands

Annex E2: Safety authorisations under Directive 2004/49/EC

	Total number of safety authorisations
.1 Number of safety authorisations valid in 2013 and previous years which were still current at the end of 2013	**1**

		A	R	P
.2 Number of applications for infrastructure manager safety authorisations accepted and issued in 2013	New certificates	0	0	0
	Amended certificates	0	0	0
	Renewed certificates	1	0	0

A = Application accepted; certificate issued in 2013.
R = Application rejected; no certificate issued in 2013.
P = Application pending; certificate not yet issued in 2013.

	Total number of rejected applications for safety authorisations
.3 Number of applications for infrastructure manager safety authorisations rejected in 2013	0

Procedural aspects – Part A and B safety certificates

		New	Amended	Renewed
Average time from receipt of a Part A application until issue		52 weeks		30
Average time between receipt of Part B application until issue	where Part A was issued in the Netherlands	52 weeks	0	30
	where Part A was issued outside the Netherlands			30

Procedural aspects – Safety authorisation of the infrastructure manager

	New	Amended	Reissue
Average time between receipt of an application for a safety authorisation and issue	-	-	0

Numbers of train driver licences issued in 2013

	Decision to accept application	Decision to reject application	Decision not to proceed with application
January	432	6	15
February	429	5	5
March	362	3	2
April	232	2	0
May	315	0	8
June	112	0	20
July	174	1	9
August	301	0	0
September	91	0	7
October	69	0	0
November	84	0	2
December	94	0	0
Total	**2 695**	**17**	**68**