INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P.

RAIL TRANSPORT

ANNUAL SAFETY REPORT 2013

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INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P.

CONTENTS

A. – Introduction

A.1 – Objectives and Scope

The main aim of this report is to detail the activities carried out by the IMT, I.P. in 2013, in its role as the National Safety Authority for railways, with respect to initiatives for improving rail system safety; publication of the relevant legislation; provision of certification and safety authorisations for undertakings and the associated supervision of their activities. It also provides evidence of progress in passenger and freight railway safety performance and management on the National Railway Network.

In addition to disclosing these activities, Annex C to the report also contains the Common Safety Indicators (CSIs) listed in the Annex to Decree-Law 62/2010, which are used to measure and assess safety performance.

The data published in this report were taken from the annual safety reports of rail transport and infrastructure management undertakings, submitted to the IMT, I.P. in accordance with the provisions of Article 66-C of the above-mentioned Decree Law, as well as from statistics supplied by Statistics Portugal (Instituto Nacional da Estatística- INE).

Accident data was checked for consistency, and underwent final validation using a transparent participatory process involving rail transport undertakings and the infrastructure manager, all of whom were given the opportunity to correct and amend the data, thereby ensuring the reliability of the data presented.

This report will be distributed in the following manner:
- Directly to the following recipients:

- Ministry of the Economy;
- European Railway Agency;
- Gabinete de Investigação de Segurança e de Acidentes Ferroviários - GISAF [rail safety and accident investigation bureau];
- Infrastructure manager and rail transport undertakings.

- It will also be made available to the public via the IMT, I.P. website.

This report does not include transportation that uses other guided transport systems such as metros, light rail, miniature trains, trams and passenger cableways.

A.2 – Organisational changes

The approval of Decree Law No 236/2012 of 31 October defined the organisational structure to arise from the merger of the INIR and IPTM into the IMTT, and led to a process of consolidation at the IMT, I.P., which continued throughout 2013.

Staff from the defunct IPTM and INIR were integrated into the structure of the IMTT, which itself remained unchanged in 2013. The organisational chart for this year is presented in annex B.

The portion of the IMT I.P. structure dedicated to railway matters, and in particular those relating to safety, underwent no significant organisational changes in 2013.

In order to fulfil its responsibilities with respect to road, rail and maritime transport and infrastructure throughout Portugal, the IMT, I.P. had a total of 820 employees on 31/12/2013.

For the specific purpose of regulating safety on guided transport systems such as railways, metros, light railways, miniature trains, trams and cableways, the IMT, I.P. has a Railway Infrastructure and Equipment Department, which is part of the Directorate for Technical Regulation and Safety Services, which at the end of 2013 employed:

- 1 Department Head;
- 4 Senior Technical Officers.

It must be noted that after a two-year period in which the bureau had been inactive, in 2013 a new Director was appointed to the Gabinete de Investigação de Segurança e de Acidentes Ferroviários (rail safety and accident investigation bureau, GISAF).

B – Summary of performance and safety strategy

B.1 – Main conclusions

The number of incidents that occurred in 2013 was higher than in 2012, with a rise in the number of accidents and deaths, although the figure remained below the average over the last ten years. The drop in the number of accidents began in 2011, a year which saw the lowest figures since the start of record-keeping following the harmonised methodology developed by the European Railway Agency, which passed into law with the publication of Directive 2009/149/EC and its subsequent transposition into Portuguese legislation by Decree Law No 62/2010.

In terms of safety performance, 2013 was worse than 2012, and 2012 in turn was worse than 2011, aggravated by decreases in both freight and passenger railway activity. The reversal of the trend is due primarily to the increase in accidents outside the sphere of core railway activity, specifically in the interface of the system with third parties, such as train collisions with trespassers on railway property and with persons failing to obey the rules of use at level crossings.

The number of accidents arising from normal system activity, measured in deaths and injuries to passengers and rail staff, remains very low, and there is no evidence that this is set to rise.

The number of suicides decreased in 2013 relative to 2012 and is within the average range for the last ten years.

The trend in accident precursors over the last two years has risen even more than the number of accidents, with a sharp and substantial worsening, mainly with respect to track buckling. This is a sign of problems with maintenance and upkeep for this fundamental aspect of rail transport safety.

The year under review was marked by two accidents that received a great deal of media coverage, but fortunately their consequences in terms of personal injury were very low. No deaths or serious injury resulted, although material damage was high, particularly in the case of the Alfarelos accident.

The first of these accidents took place at Alfarelos station on 21 January, the result of a collision between a regional train that was stopped at the entrance to the station, and an intercity train travelling in the same direction. Due to a lack of adhesion to the track the second train was unable to come to a stop before hitting the rear end of the stationary train.

The second accident consisted of a series of two consecutive derailments on the Cascais line on 8 February, resulting from a technical failure on a railcar bogie that caused serious damage to trackside equipment, and which in turn led to the derailment of the other railcar.

Lessons learnt from both accidents resulted in improvements to existing procedures and the introduction of new ones in order to prevent the reoccurrence of identical situations in the future.

The reversal of the downwards trend in the number of accidents and dangerous situations that could lead to accidents deserves in-depth consideration by everyone involved in the railway system in order to identify the corrective measures that are most appropriate from a technical and economic viewpoint. Both undertakings and public entities must share the goal of reversing this negative trend.

B.2 – National strategy on safety, initiatives and other relevant facts

The well-known financial constraints that Portugal has been dealing with over the last few years have prevented the completion of many projects that were already planned and the launch of new ones. In the area of safety, however, and in particular with respect to infrastructure, in 2013 it was possible to continue with the programme to reduce the number of level crossings. Improvements were made, and seven level crossings were eliminated. This work will continue in accordance with the new objectives laid out for 2014-2020.

On 29 August 2013, in a bid to promote the development and efficiency of the National Railway Network, the government created a working group to present recommendations for infrastructure investments with a high added value (Infra-estruturas de Elevado Valor Acrescentado - GT IEVAS). In 2014 the group presented its conclusions, which served as the foundation to create the transport and infrastructure strategic plan (Plano Estratégico de Transportes e Infraestruturas - PETI).

Implementation of this plan will have a positive impact on safety, given that infrastructure modernisation enables modern command and control systems to be installed on lines which previously had none, and for railway operating conditions to be improved, such as the elimination of LCs and improvements to station crossings.

There continues to be a firm intention to move forward in terms of railway system safety and to comply consistently with the safety objectives outlined in European Community legislation for Portugal, within existing limitations.

Another noteworthy development in 2013 is the start of the process of certifying entities in charge of wagon maintenance, and consolidation of the risk analysis procedure, which resulted in an increase in the number of risk analyses carried out by the infrastructure manager and rail transport undertakings in the context of the implementation of significant changes.

B.3 – Priority areas to be developed over the next year

In 2014/15, the IMT, I.P. will intensify its supervision of undertakings that it oversees, applying the supervisory strategy developed in the context of implementing Commission Regulation (EU) No 1077/2012.

Another priority for the IMT, I.P. is continuing the process of revising the technical legislation that makes up railway safety regulations, in order to simplify and better fit that legislation to the legal framework of both Portugal and the European Union.

C – Development of railway safety

C.1 – Analysis of indicators

The data presented in this report were calculated and analysed based on the common European definitions and methods developed by the European Railway Agency and set out in Directive 2009/149/EC of 27 November, which amends Annex 1 of Directive 2004/49/EC (Railway Safety Directive), transposed into national law by Decree Law No 62/2010 of 9 June.

This section of the report provides a detailed analysis of trends in the Common Safety Indicators over the 10-year period from 2004 to 2013.

It will also provide an analysis of rail system safety performance in 2013 through comparison with the previous year's data and the average of the last five years.

Annex C contains tables of numerical data, ratios and definitions used in calculating the Common Safety Indicators for 2013.

The overall assessment generally shows that the number of accidents in 2013 was higher than in 2012, confirming the reversal of the sharp downwards trend seen in recent years, reaching its lowest point in 2011. In comparison with the previous year (2012), the number of accidents increased by 12 units (+33%), a figure that is 9% higher than the average for the last five years. The number of fatalities increased by 2 units (+ 8.3%), however, which is 3.7% lower than the average over the last five years.

The most positive aspect to emerge from this analysis is that there were no fatalities amongst railway employees (for the third year in a row), and suicides decreased by 19% relative to 2012, a figure that is 15% lower than the average for the last five years.

The process of reducing the number of level crossings and improving traffic conditions continues, with the elimination of another seven LCs. This means that for the first time the number of LCs with some kind of active protection (manual or automatic) surpassed those with passive protection (436 vs. 434). Unfortunately, this reduction did not translate into a decrease in the number of fatalities at level crossings; this figure increased by 25% over 2012, although it was lower than the average over the last five years (-9%).

The following charts and graphs for the various indicators provide a clear and intuitive view of change in the area of safety over the last ten years.

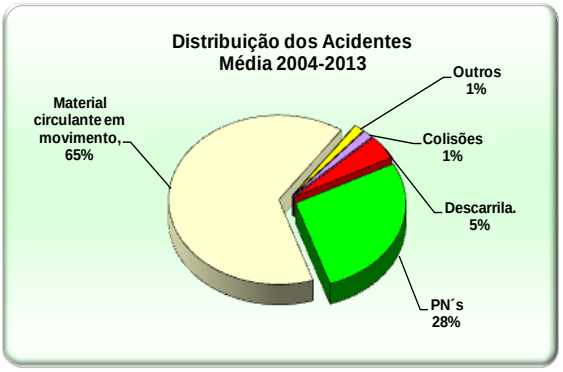
C.1.1 – Number of accidents

Type of Accident	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total number of accidents	**115**	**87**	**89**	**93**	**73**	**43**	**42**	**27**	**36**	**48**	**44**
Train collisions, including collisions with obstacles within the clearance gauge	1	1	3	3	0	0	2	1	1	1	**1**
Train derailments	3	1	9	3	3	1	3	2	0	4	**2**
Accidents at level crossings, including those involving pedestrians	33	22	22	27	20	15	14	7	11	12	**13**
Accidents to persons caused by rolling stock in motion, excluding suicides	78	63	55	56	49	27	22	17	23	31	**28**
Fires on rolling stock	0	0	0	0	0	0	0	0	0	0	**0**
Other accidents	0	0	0	4	1	0	1	0	1	0	**1**
Suicides	**25**	**39**	**40**	**52**	**50**	**69**	**51**	**42**	**58**	**47**	**54**

The number of accidents in 2013 increased relative to 2012 (+33%), and was higher than the average for the previous five years (+9%) owing mainly to accidents involving persons caused by rolling stock in motion (+ 34.7%) as accidents at level crossings (+9%).

Over the last 10 years in both Portugal and the rest of Europe, most railway accidents consistently fall into two categories: accidents to persons caused by rolling stock in motion, and accidents at level crossings.

Analysis of the adjacent chart shows that accidents caused by activities intrinsic to railway operations (such as collisions, derailments and fires on rolling stock) represent only a small proportion of the total (6%), confirming their low volume and relatively stable frequency over time.



Distribuição dos Acidentes Média 2004-2013	Average distribution of accidents 2004-2013
Material circulante em movimento	Rolling stock in motion
Outros	Others
Colisões	Collisions
Descarrila.	Derailment
PN's	LCs

For the tenth year running, no accidents were reported due to fires on rolling stock.

The breakdown of accidents and their relative weightings remained practically unchanged when compared to the previous year, with 65% reflecting accidents to persons caused by rolling stock in motion and 28% reflecting accidents at level crossings.

Page 11 presents charts indicating changes and trends in the accident pattern over the 2004-2013 period.

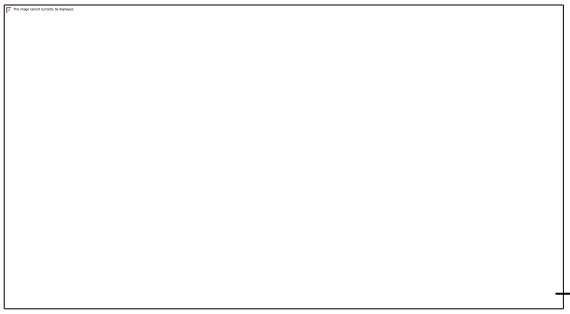
Analysis of these charts continues to show a clear trend towards lower total accident figures, mainly due to a reduction in the number of the most frequent types of accident: those to persons caused by rolling stock in motion and accidents at level crossings.

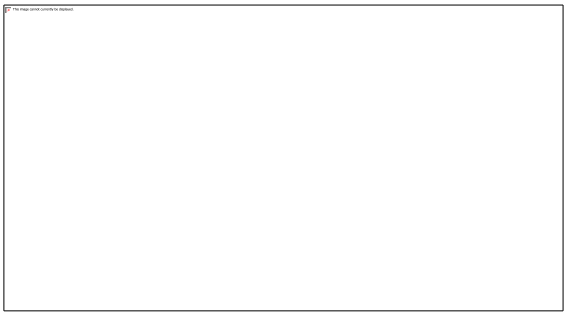
The number of accidents reached its lowest point in 2011 before trending back up over the last two years. As the dataset is still small (10 years), it is not possible to predict whether this renewed upward trend is consistent or natural fluctuation due to external factors, given that the most frequent accidents referred to above are extrinsic to the railway.

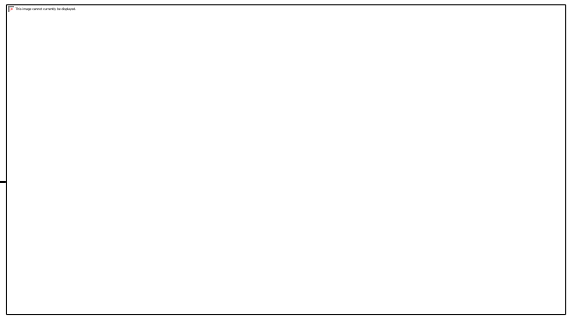
It is also clear from these charts that the drop in the number of accidents at level crossings reflects the positive impact of the infrastructure manager's accident prevention and crossing improvement programme, as well as media public awareness campaigns that have been carried out, even if these campaigns have not had the desired effect in the last two years, as shown by the increased number of accidents that have occurred since the low point of 2011.

The frequencies of other significant accident types that do not fall within the main categories remain below the threshold of statistical significance.

With respect to suicides, which are analysed in depth in section C.1.3., 2013 was better than 2012, with a 19% drop, and 13% lower than the average over the previous 5 years.







C.1.2 – Fatalities

C.1.2.1 – Fatalities per type of accident

Type of Accident	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total for all accidents	**72**	**47**	**53**	**58**	**42**	**32**	**22**	**14**	**24**	**26**	**27**
Train collisions, including collisions with obstacles within the clearance gauge	0	0	0	0	0	0	0	0	0	0	**0**
Train derailments	3	0	0	3	1	0	0	0	0	0	**0**
Accidents at level crossings, including those involving pedestrians	26	11	18	20	15	17	11	4	8	10	**11**
Accidents to persons caused by rolling stock in motion	43	36	35	35	26	15	11	10	16	16	**16**
Fires on rolling stock	0	0	0	0	0	0	0	0	0	0	**0**
Other accidents	0	0	0	0	0	0	0	0	0	0	**0**

In 2013, the number of fatalities resulting from railway accidents continued to reverse the strong downwards trend that was seen between 2007 and 2011, rising by 8.3% relative to 2012; nevertheless it remains 3.8% below the average for the previous five years.

In Portugal, as in other European countries, the overwhelming majority of fatalities (97%) involve people using railway property improperly, either by trespassing or by failing to observe the rules at level crossings. In 2013, as in 2012 and 2011, the only fatalities that occurred were in these two categories, evidencing the high degree of safety that the rail system offers to its users and staff.

The accidents resulting in the most fatalities are, on average, those caused by rolling stock in motion (almost two-thirds) and those occurring at level crossings (one-third).

Once again, in 2013 there were no fatalities as a result of derailments or collisions.

Although these types of accidents attract intense media attention and have a high degree of social impact, they accounted for only 1.7% of fatalities over the last 10 years, with no fatalities whatsoever being recorded in the last five years due to this type of accident, which is intrinsically related to railway activity.

C.1.2.2 – Fatalities by category of person

Category of person	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total of all categories	**72**	**47**	**53**	**58**	**42**	**32**	**22**	**14**	**24**	**26**	**27**
Passengers	0	0	0	1	3	0	1	0	0	1	**1**
Employees	3	2	1	5	1	1	1	0	0	0	**1**
LC users	26	11	18	20	15	17	11	4	8	10	**11**
Unauthorised persons	43	33	34	32	23	14	9	10	16	14	**14**
Others	0	1	0	0	0	0	0	0	0	1	**0**

The number of people killed in railways accidents in 2013, as mentioned previously, rose 8.3% relative to 2012, although the figure remained lower than the average for the previous 5 years.

Contributing to this rise is the significant increase in the category of LC users (+25%), versus a drop in the number of unauthorised persons killed (-12.5%) relative to 2012; both figures remain equal to or lower than the average for the previous 5 years.

2013 was the third consecutive year in which there were no accident-related fatalities amongst rail staff.

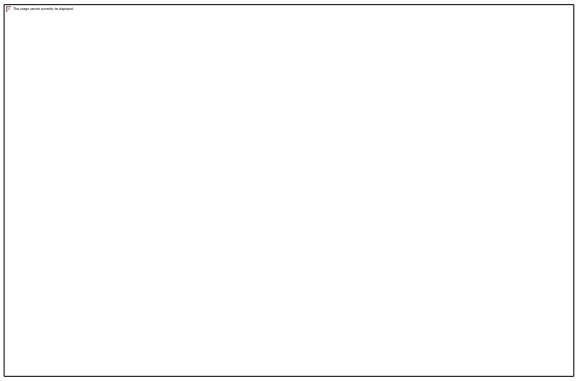
The following trends in the number of fatalities were seen in 2013 versus 2012:

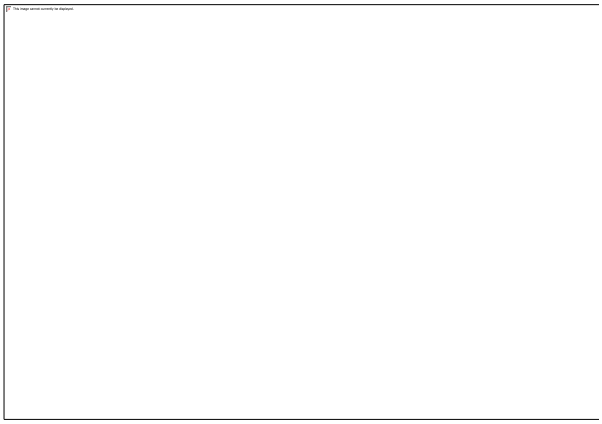
Passenger: (+1)
Employees: unchanged (0)
LC users: (+2)
Unauthorised persons (-2)
Other persons: (+1)
Total: +2

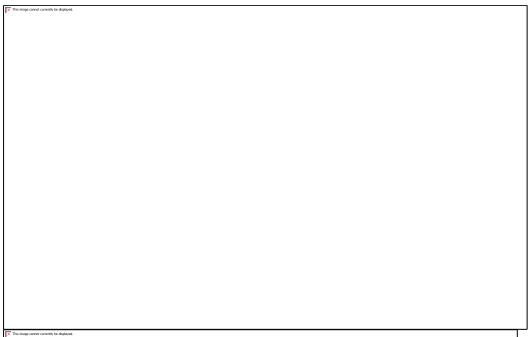
The average breakdown over the past ten years shows that the overwhelming majority (95%) of fatal accidents involve the two categories of persons external to railway operations – 'unauthorised persons on railway property' and 'LC users'.

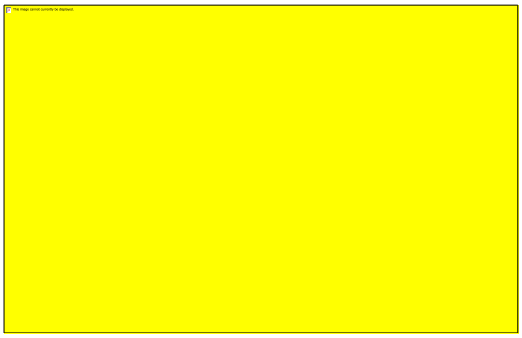
Records show that rail transportation is particularly safe for users, as only 2% of people killed in railway accidents are passengers.

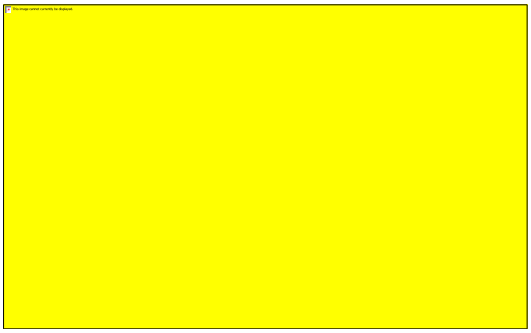
The long-term trend shows a clear and consistent drop in the number of fatalities due to railway accidents over the last ten years (see charts on next page), which is obviously very positive and correlates directly with the measures taken to reduce the number of level crossings and modernise those that remain, as well as with improvements to the management of risks associated with traffic safety whether through new regulatory requirements or the introduction and improvement of technical systems.

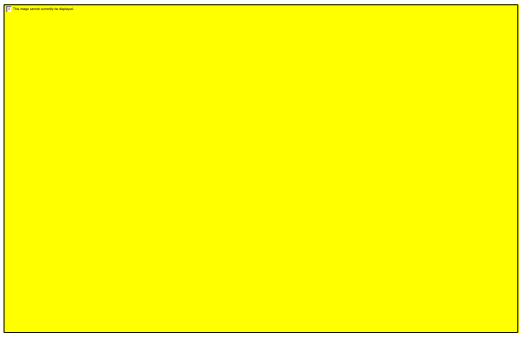








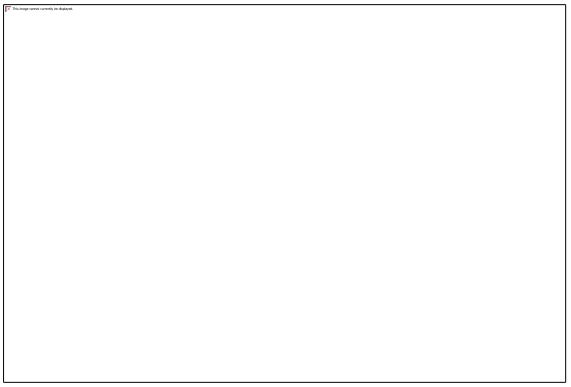




C.1.3 – Suicides

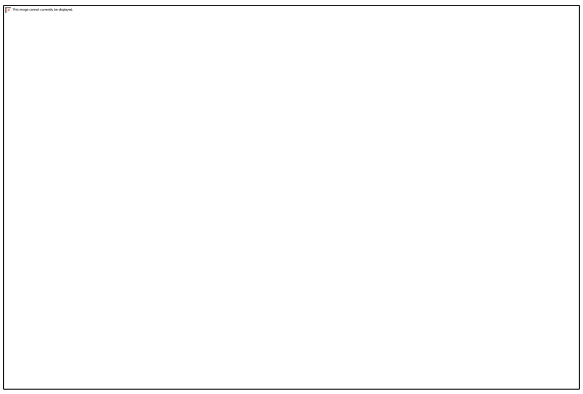
It must be noted that suicides are not classified as accidents as they are voluntary and deliberate acts, carried out with the intention of harming those who commit them. However, despite not being considered accidents, suicides are a personal and social tragedy and are also, on various levels, a major cause of disruption to rail transport.

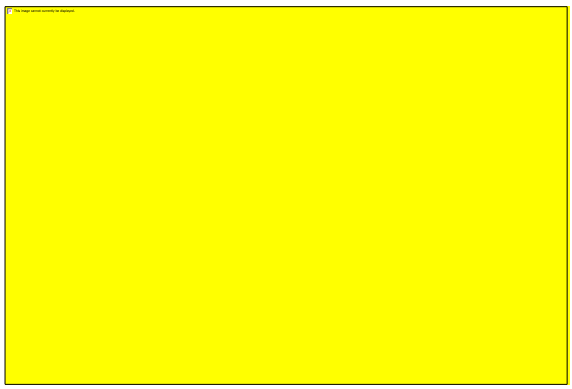
The data reveals that suicides peaked in 2009 and then decreased significantly in subsequent years, although in 2012 a renewed upward trend was recorded that did not continue over into 2013. Analysis of the charts shows that in relation to both total number of fatalities and of suicides, the trend is downwards, although development is irregular.



An interesting statistic for assessing the impact of suicides on the rail system is to see how far these contribute to total fatalities on railway property. The chart shows that, on average, the number of suicides exceeds fatalities from accidents. (55% suicide vs 45% accident).

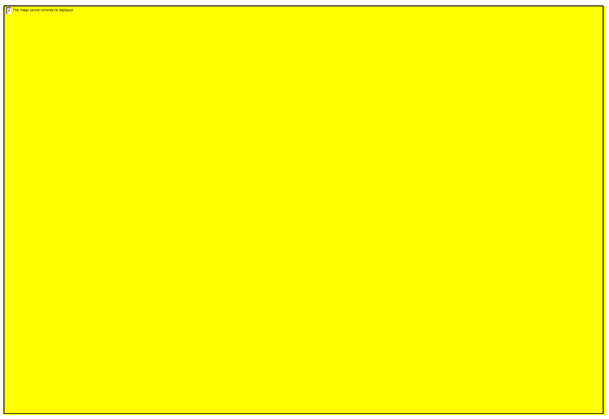
Another interesting observation is that the total number of fatalities on railway property (accidental deaths + suicides) has risen and fallen over the years, with the lowest number of fatalities on railway property occurring in 2011. After this low point the figure rose, but at a slower rate than that initially recorded at the start of the data series.





C.1.4 – Serious Injuries

Category	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total injuries (all categories)	**50**	**44**	**33**	**34**	**39**	**18**	**16**	**10**	**16**	**14**	**20**
Passengers	11	7	8	5	6	4	3	2	3	3	**4**
Employees	3	0	2	2	2	2	2	0	0	0	**1**
LC users	12	15	9	8	10	5	3	3	5	5	**5**
Unauthorised persons	24	22	12	18	20	7	8	5	7	5	**9**
Others	0	0	2	1	1	0	0	0	1	1	**0**



The number of serious injuries has fallen significantly and consistently over the past ten years.

In 2013 a drop of 12.5% was recorded when compared to 2012 (+60%), remaining below the average for the previous 5 years.

Broken down by category, the distribution pattern for serious injuries is similar to that for fatalities, with the overwhelming majority of injuries suffered by unauthorised persons and level-crossing users (75%).

Average distribution over the last 10 years (2004 to 2013) continues to show the existence of a not-insubstantial percentage of injured passengers (18%), in contrast to fatalities in which passengers represent only 2% of the total.

C.1.5 – Risk to society

Category of person	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total for all accidents	**2.03**	**1.32**	**1.43**	**1.5**	**1.1**	**0.83**	**0.59**	**0.4**	**0.68**	**0.71**	**0.72**
Passengers	0.03	0.02	0.02	0.04	0.09	0.01	0.03	0.01	0.01	0.03	**0.03**
Employees	0.09	0.05	0.03	0.13	0.03	0.03	0.03	0	0	0	**0.02**
LC users	0.72	0.32	0.48	0.51	0.38	0.43	0.28	0.12	0.23	0.29	**0.29**
Unauthorised persons	1.19	0.9	0.9	0.82	0.6	0.36	0.25	0.28	0.45	0.36	**0.39**
Others	0	0.03	0.01	0	0	0	0	0	0	0.03	**0**

A useful method for analysing overall trends in railway accidents and the risks to which society is exposed by rail transport involves calculating a standard index that takes into account the number of fatalities and severe injuries during the year, and distances travelled by trains.

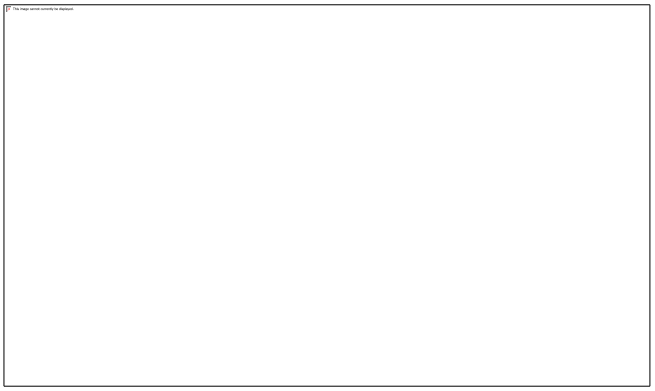
This indicator is calculated by dividing the total number of fatalities and weighted serious injuries (FWSI) by the distance in millions of train-kilometres travelled during the year in question. For the purposes of calculating the index, one weighted serious injury is regarded as statistically equivalent to 0.1 fatalities.

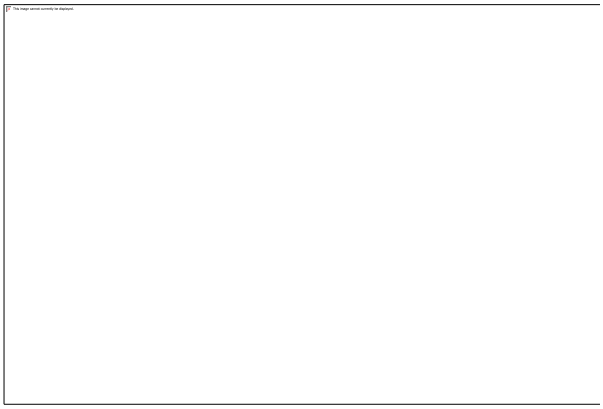
The trend indicates a clear reduction over the past ten years in the overall risk to society posed by the railway network, as shown in the first chart on the next page, although 2012 and 2013 have not been positive years.

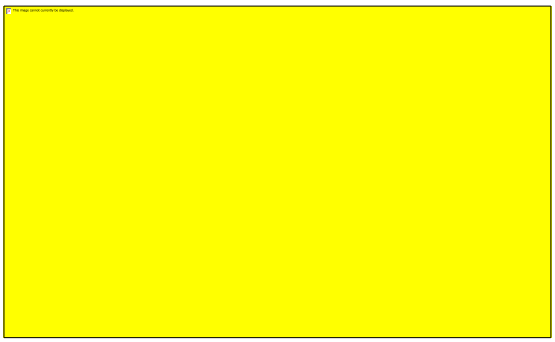
In 2013, the only figures that were higher than the average for the previous five years were those in the ‘Others’ category.

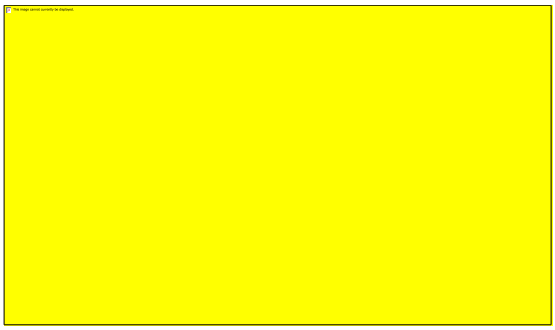
The various risk categories are shown in the respective charts, indicating a clear downward trend in the risk for category 'Unauthorised persons on railway premises' and now also for 'LC users'.

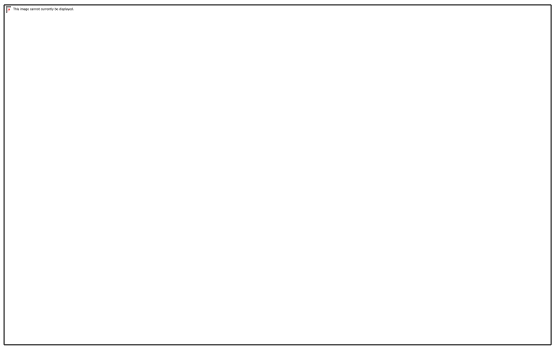
As the charts show the individual categories represented to the same scale, it is clear that the contribution made by passengers, employees and others, when compared to the overall risk, is small (see chart below).

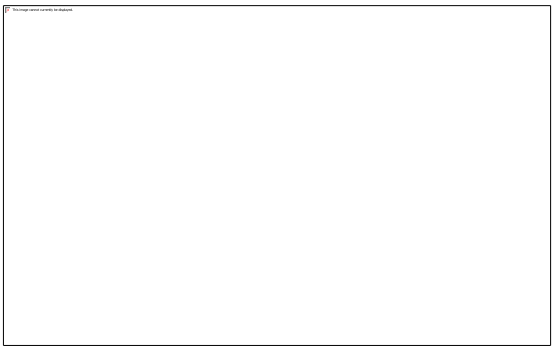


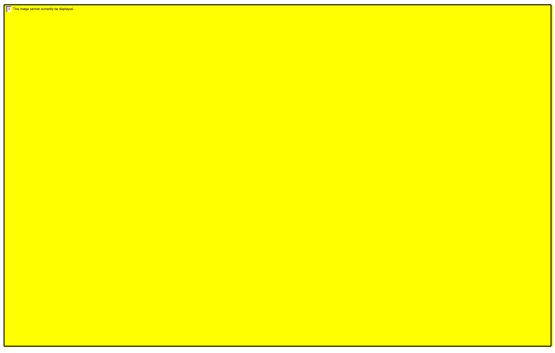












C.1.6 – Accident precursors

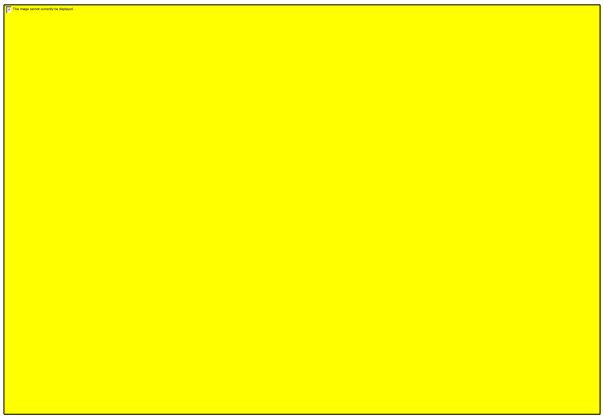
Accident precursors	2006	2007	2008	2009	2010	2011	2012	2013	5 Year Average
Total no of incidents and near misses	**168**	**100**	**94**	**91**	**114**	**68**	**146**	**179**	**103**
Broken rails	45	39	33	35	50	21	45	29	**36.8**
Track buckling	95	40	37	44	56	24	76	121	**47.4**
Failures in lineside signals	0	0	0	0	1	0	0	0	**0.2**
Signals passed at danger (SPAD)	24	20	24	12	6	22	25	26	**17.8**
Broken wheels on rolling stock in operation	1	0	0	0	0	0	0	1	**0**
Broken axles	3	1	0	0	1	1	0	2	**0.4**

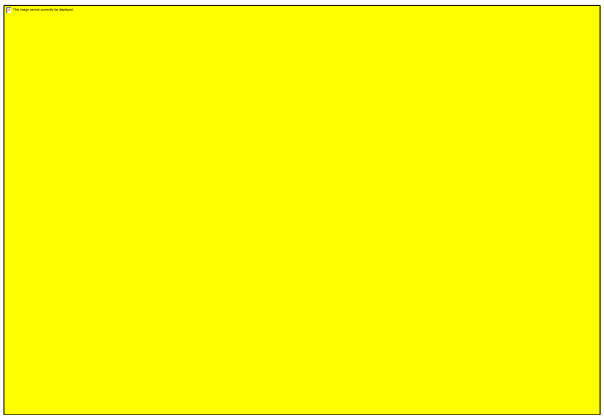
After falling continually since 2006, in 2010 there was a reversal to the trend for total accident precursors, accentuated by the negative result registered in 2012. Figures worsened in 2013, a year in which the total number of precursors rose by 22.6% relative to 2012, and which stands at 74% above the average for the previous 5 years.

In relation to the average distribution of accident precursors for the 2006-2013 period, there are three main categories: track buckles, broken rails and SPADs.

Relative to track buckles, the significant increase recorded over the last two years needs to be looked at in depth and corrected as a matter of urgency, as it indicates deterioration in the conditions of circulation on the National Railway Network which is possibly due to a lack of maintenance.

It should also be pointed out that in the case of SPADs, the negative trend that began in 2011 continued in 2013, with a rise of 4% in comparison to 2012. Of all the years with data collected to date, 2012 was again the one in which most incidents of this type were recorded.





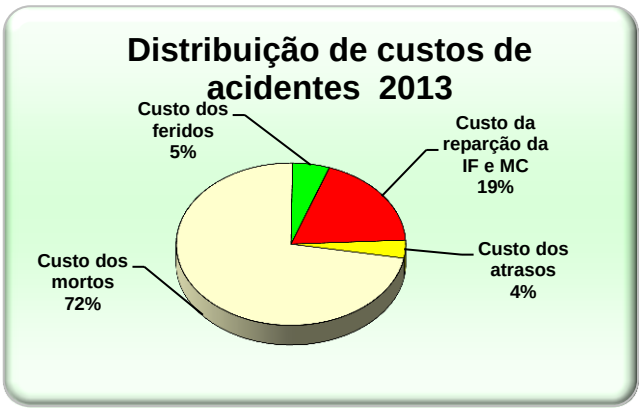
C.1.7 – Cost of accidents

Cost of accidents (in millions of Euros)	2006	2007	2008	2009	2010	2011	2012	2013	Average
Total cost	**52.11**	**60.25**	**47.69**	**33.59**	**26.29**	**15.75**	**24.96**	**33.49**	**36.56**
Fatalities	47.24	54.96	40.54	30.32	21.2	13.41	22.27	**24.26**	**31.59**
Serious injuries	3.93	4.31	5.03	2.28	2.06	1.28	1.99	**1.748**	**2.81**
Cost of replacing or repairing damaged rolling stock and infrastructure	n.a.	n.a.	0.75	0.6	2.243	0.69	0.24	**6.286**	**1.80**
Cost of delays	0.94	0.98	1.37	0.39	0.79	0.38	0.46	**1.196**	**0.81**

The cost of accidents was determined using the method developed by the ERA for calculating the Common Safety Indicators. Using this methodology the cost of accidents is evaluated from the point of view of the costs that society as a whole would have saved if the accidents causing deaths, injuries and delays in passenger and freight rail traffic had been prevented (see details in Annex C).

Values were calculated from the figures defined for Portugal in the corresponding ERA tables, corrected on a linear basis by the growth factor of per capita GDP between 2002 and 2013.

Given that in 2013 there was again an increase in accidents relative to 2012, with the respective increase in personal injuries and material damages, the cost of accidents to society grew substantially relative to 2012 (+38%).



Distribuição de custos de acidentes 2013	Breakdown of accident costs in 2013
Custo dos feridos	Cost of injuries
Custo dos mortos	Cost of fatalities
Custo da reparção da IF e MC	Cost of repairs to infrastructure and rolling stock
Custo dos atrasos	Cost of delays

C.1.8 – Indicators for technical safety of the infrastructure

Technical characteristics of tracks	2006	2007	2008	2009	2010	2011	2012	2013
% of lines with Automatic Train Protection (ATP) operational	50.3%	50.8%	51.3%	51.3%	52.6%	58.6%	64.5%	64.8%
% of train-kilometres travelled using operational ATP systems	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	88.9%	87.6%
Total number of level crossings	1297	1266	1229	1191	1107	1049	877	870
Number of LCs per kilometre of track	0.37	0.36	0.35	0.34	0.31	0.3	0.27	0.27
Number of LCs per kilometre of line	0.46	0.45	0.43	0.42	0.39	0.375	0.345	0.342
% of level crossings with automatic or manual protection	39.3%	38.2%	37.3%	39.7%	41.9%	43.6%	49.6%	50.1%

The indicators on the technical safety of infrastructure show a slight improvement in technical safety conditions in 2013 relative to previous years, particularly noticeable in the reduced number of LCs and increased coverage of the CONVEL speed control system, although this was not directly reflected in a decrease in the number of accidents. The following chart confirms that in relation to the 'Level Crossings' category, which has recorded the greatest improvement thanks to major government spending on LC eliminations and technical advances, the reduction in the number of level crossings in 2013 did not lead to a decrease in the accident rate. In fact the opposite is true, as a rise was recorded compared to the low point of 2011 as well as to 2012.

C.2 – Initiatives to uphold or improve safety arising from accident investigation recommendations

The IMT, I.P. as the National Safety Authority and therefore the entity that receives the recommendations made by the National Investigation Body (GISAF), has no initiatives to report for 2013 as it did not receive any recommendations from that investigative body.

C.3 – Other initiatives for to uphold or improve of safety

The principal initiatives related to maintaining and improving rail transport safety that are not the direct result of railway accidents investigated by the National Investigation Body are presented on table C.3.1

Safety initiative	Reason
Continuation of the safety improvement programme for level crossings, eliminating 8 and reclassifying 4 level crossings	Elimination/reduction in the number of accidents associated with the use of level crossings.
Improvements to the conditions for line crossings at 25 stations and stops.	Elimination/reduction in accidents associated with line crossing at stations
Creation of a triggering and reporting procedure for deteriorated wheel/rail adherence conditions.	Mitigation of risks of collision/derailment and identification of the locations where adherence has deteriorated.
Creation of a standard to govern the circulation of special motor vehicles on the National Rail Network.	Creation of a clear framework for the inclusion of the circulation of special motor vehicles on lines that are open for railway operation.

Table C.3.1 – Principal safety initiatives adopted for other reasons

D – SUPERVISION OF RAIL TRANSPORT UNDERTAKINGS AND THE INFRASTRUCTURE MANAGER

D.1 – Description of supervision

A variety of procedures are used in supervising the activities of the infrastructure manager and railway undertakings:

- analysis of occurrences recorded in the daily traffic report drawn up by REFER;
- planned monitoring activities;
- monitoring initiated after analysis of events relating to accidents or incidents, claims/complaints or recommendations made by a board of enquiry;
- audits of Safety Management Systems.

Monitoring is always carried out by IMT, I.P. staff, who may ask staff from the undertakings under inspection for assistance in carrying out the work necessary for such monitoring.

During 2013 a legal framework was developed to implement the supervisory strategy in accordance with EU Regulation 1077/2012; implementation will commence in 2014.

D.2 – Supervision carried out

Supervision of activities carried out by the undertakings in 2013 entailed daily monitoring of occurrences relative to railway operations, the holding of meetings, and inspections to evaluate rail transport undertaking' compliance with the rules of operation.

E – DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

E.1 – Legal framework and support

Decree Law No 231/2007, which introduced the amendments to Decree Law No 270/2003 necessary for the transposition of Safety Directive 2004/49/EC of 29 April 2006, went into effect on 14 June 2007. Thus, starting on that date a new system began to be used for safety certification of railway undertakings, and the infrastructure manager needed to have a safety authorisation in order to carry out its activities.

The manner in which Safety Certification and Authorisation procedures can be instituted are outlined in IMT regulations numbers 442/2010 and 443/2010, respectively.

The relevant legal documentation for instituting safety authorisation and certification procedures, as well as a list of railway legislation and regulations, is available on the IMT, I.P. Web site, and applicants can request documentation on safety regulations can also from this institution.

Other supporting documentation that may be needed for applications can be found on the Network Directory (published by REFER).

Applications for Safety Certificate Part A, confirming the existence of an approved safety management system, are assessed according to criteria harmonised at the European level. They were developed by a specific European Railway Agency working group, ultimately resulting in the publication of Commission Regulation No 1158/2010/EU, with the Common Safety Method for assessing the conformity of safety certificates.

Applications for safety certificate Part B are examined according to assessment criteria in European Commission (EC) Regulation No 653/2007 of 13 June (on the use of a common European format for safety certificates) and the previously mentioned Regulation 1158/2010/EU.

Applications for safety authorisations are examined on the basis of Regulation 1169/2010/EU on the Common Safety Method for assessing conformity with the requirements for obtaining safety authorisations.

E.2 – Procedures and contacts with other safety authorities

Portugal issued its first Railway Safety Certificate in 2007 in response to an application submitted by the rail transport undertaking Fertagus on 10 November 2006. The certificate was issued on 10 May 2007 under the safety certification system introduced by the original Decree Law No 270/2003, which transposed Directive 2001/14/EC of 26 February.

The IMT, I.P. issued first Part A and Part B safety certificates under the new legal system in 2008, and this process continued in 2009 following to the founding of a new undertaking (CP Carga) and the development and geographical expansion of the activities of another undertaking (TAKARGO).

The safety certification process for all railway undertakings was completed in 2011 with the issue of Part A and Part B safety certificates to CP-Comboios de Portugal and FERTAGUS, and the issue of the Part A and Part B safety authorisation to REFER.

In 2013 one Part A Safety Certificate renewal was issued, along with one Part B Safety Certificate renewal.

This year no safety certification applications from rail transport undertakings from other member states were received.

In 2013 one rail transport undertaking holding a Part A Safety Certificate issued in Portugal applied for and obtained a Part B Safety Certificate in Spain.

F - AMENDMENTS TO LEGISLATION AND REGULATIONS

F.1 – National Legislation

Safety Directive 2004/49/EC and its later amendments have been transposed in their entirety into Portuguese legislation by means of the Decree Laws that are listed in the table in Annex D.

The most significant change to the regulatory framework for safety in 2013 was the publication of Law No 67/2013 of 28 August: framework law for independent administrative entities charged with the regulation of economic activity in the private, public and cooperative sectors, which establishes the IMT, I.P. as a regulator and defines its restructuring, with the AMT no being its successor in matters of economic regulation.

F.2 – Technical Safety Regulations

The most significant aspects in the area of technical safety regulations (RGS) was the publication of the following mandatory technical regulations by the IMT, I.P.:

- 16th amendment to CSI 115/05, establishing requirements for the circulation of special vehicles on tracks that are open for operation.
- CSI 27/13 - train circulation in conditions of degraded adherence, which sets out the rules of operation of the infrastructure manager and rail transport undertakings under such conditions.

G – Application of the Common Safety Method for Risk Evaluation and Assessment

In 2013, the infrastructure manager completed four processes, and one rail transport undertaking completed a further two processes, involving changes that were considered significant. These processes were subject to the application of Regulation (EC) No 352/2009 of the Commission, of 24 April 2009, regarding the adoption of a common safety method on risk determination and assessment.

The undertakings were generally considered to have correctly applied Regulation No 352/2009 in relation to the level of significance of changes, as well as to the process of risk management, having made use of internal risk-assessment bodies for this purpose.

H – BIBLIOGRAPHY

- Guideline for the use of the template – Structure for the content of the NSA Annual Safety Report: ERA - Network of National Safety Authorities
- Guidance for use of CSI recommendations - WG on Common Safety Indicators/Safety Performance
- Annual Safety Report 2013 – REFER
- Annual Safety Report 2013 – CP – COMBOIOS DE PORTUGAL
- Annual Safety Report 2013 – CP CARGA
- Annual Safety Report 2013 – FERTAGUS
- Annual Safety Report 2013 – TAKARGO
- Template - Structure for the content of the NSA Annual Report: ERA - Network of National Safety Authorities
- Data supplied by Statistics Portugal (INE - *Instituto Nacional de Estatística*) on undertaking production indicators and GDP.

I - ANNEXES

ANNEX A – STRUCTURE OF THE RAILWAY SYSTEM

ANNEX B – ORGANISATION OF THE IMT, I.P.

ANNEX C – COMMON SAFETY INDICATORS

ANNEX D – AMENDMENTS TO LEGISLATION AND REGULATIONS

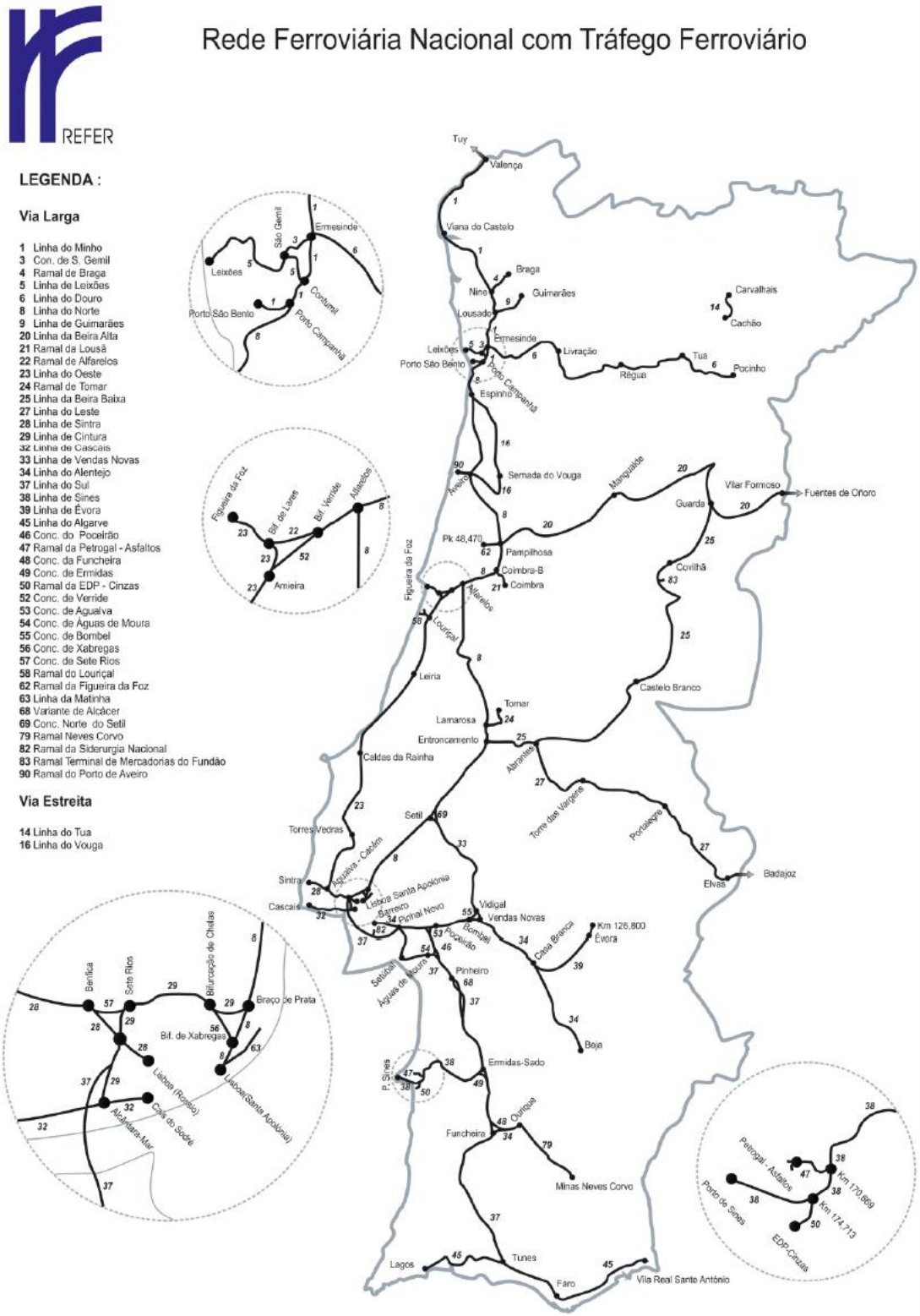
ANNEX E – SIGNIFICANT ACCIDENTS 2013

ANNEX A

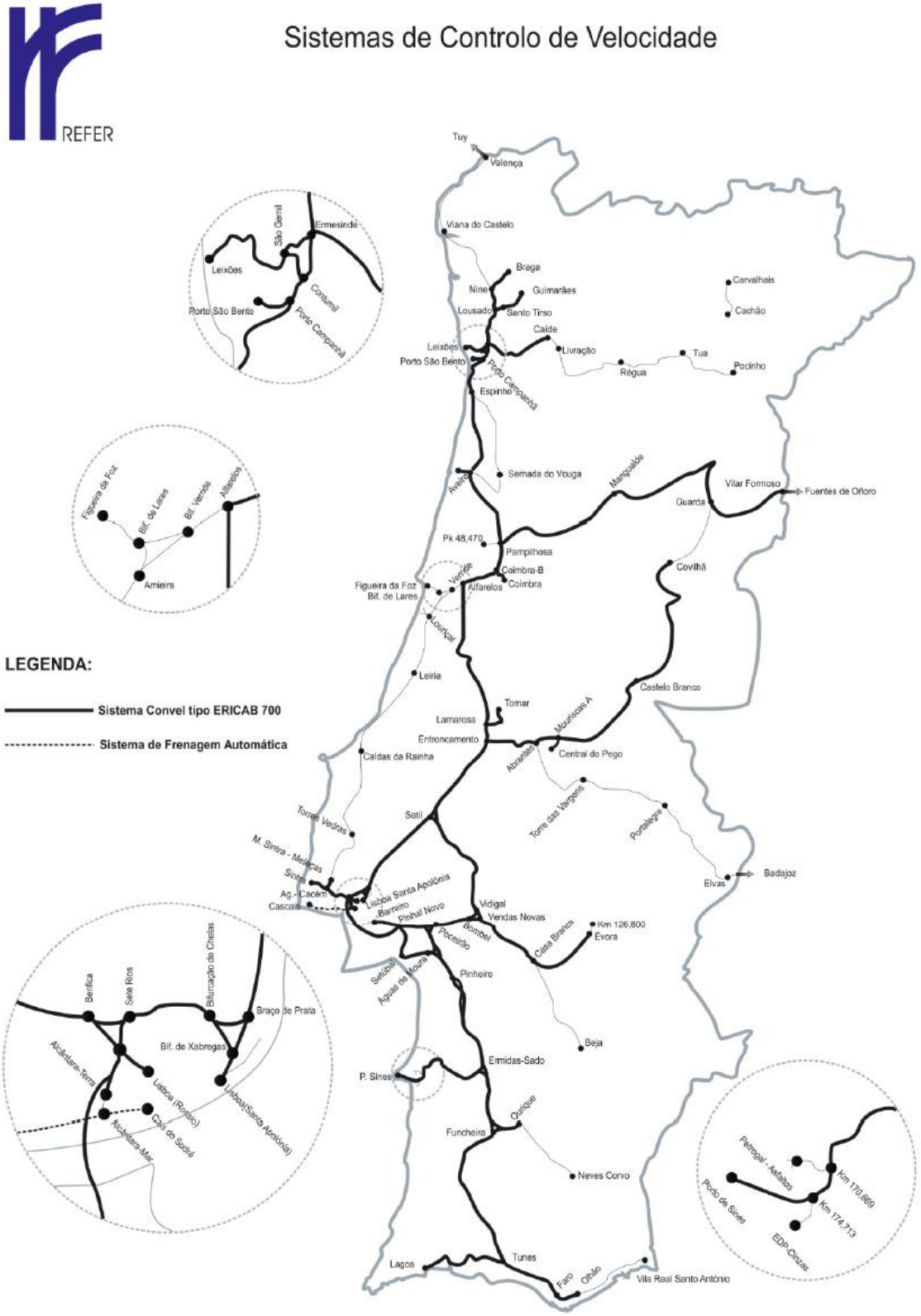
INFORMATION ON THE STRUCTURE OF THE RAILWAY SYSTEM

2013

A.1 – Map of the National Rail Network



A.1.1 – Map of Automatic Speed Control Systems



A.2 – List of infrastructure management and rail transport undertakings

A.2.1 – Infrastructure Manager

Description	Information
Name	REFER, Rede Ferroviária Nacional, E.P.
Address	Estação de Santa Apolónia, 1100-105 Lisbon, Portugal
Website	www.refer.pt
Safety Authorisation (DL no 270/2003, as amended by DL no 231/2007 of 14 June)	PT 21 2012 0001 and PT 22 2012 0001
Date of commencement of activity	29 April 1997
Length of network open to traffic	Total: 2541.349 km Broad gauge track (1668 mm): 2432.039km Narrow gauge track (1000 mm): 112.310 km
Length of lines by number of tracks	Multiple-track: 610.333 km Single-track: 1934.016km
Length of electrified network	Total: 1634.648 km 25 000 V_{CA}: 1604.648 km 1 500 V_{cc}: 25.450 km % of network open to traffic: 64.06%
Length of lines equipped with CONVEL/ATP:	148.697 km % of network open to traffic: 64.79%
Length of lines equipped with Ground-to-Train radio:	1508.671km % of network open to traffic: 59.29%
Number of Level Crossings (including private and pedestrian)	870 LCs Density: 0.354 LCs/km of line 0.27 LCs/km of track
Level crossings with automatic or manual protection	436 LCs % of total LCs: 49.6 %
Number of trains on network	Total: 601 888 Passenger: 480 954 Goods: 45 347 Empty stock movements: 75 587
Trains x km travelled on the network (train-km)	Total: 36.28×10^6 Passenger: 29.69×10^6 Goods: 5.45×10^6 Empty stock movements: 1.12×10^6
% of train-km with CONVEL/ATP in operation	87.75%

A.2.2 – Rail Transport Undertakings

A.2.2.1 – CP – Comboios de Portugal, E.P.E.

Description	Information
Name	CP – Comboios de Portugal, E.P.E.
Address	Calçada do Duque, n.º 20 1249-109 Lisbon Portugal
Website	www.cp.pt
Licence to begin activity (DL no 270/2003, as amended by DL no231/2007 of 14 June)	PT 01 2010 0001 – International passengers PT 01 2010 0002 – Domestic passengers PT 01 2010 0003 – Regional passengers PT 01 2010 0004 – Suburban passengers
Safety Certificate (DL no 270/2003, as amended by DL no231/2007 of 14 June)	PT 11 2011 0002 and PT 12 2011 0004
Date of commencement of activity	09 May 1951
Traffic type	Passengers
Number of Locomotives	Total: 90 (Diesel: 38; Electric: 52)
Number of railcars	Total: 235 (Diesel:49; Electric: 186)
Number of Carriages	102
Number of drivers	767
Number of assistant drivers	2
Number of commercial operators with safety-related responsibilities	616
Number of trains used	Passenger: 449,468 (including empty movements)
Trains x km travelled (train-km)	Passenger: 28.60 x 10^6 (including empty movements)
% of train-km travelled with CONVEL/ATP in operation	99.9%
Number of passengers x km (pkm)	3 311 x 10^6
Number of hours worked on undertaking business	5 004,827

A.2.2.2 – FERTAGUS, S.A.

Description	Information
Name	FERTAGUS, Travessia do Tejo, Transportes, S.A.
Address	Estação do Pragal Porta 23 2805-333 Almada Portugal
Website	www.fertagus.pt
Licence to begin activity (DL no 270/2003, as amended by DL no231/2007 of 14 June)	PT 01 2011 0001
Safety Certificate (DL no 270/2003 of 28 October)	PT 11 2011 0003 and PT 2011 0005
Date of commencement of activity	29 July 1999
Traffic type	Passengers
Number of railcars	Electric: 18
Number of drivers	46
Number of assistant drivers	N/a
Number of commercial operators with safety-related responsibilities	83
Number of trains used	Passenger: 56 098 (including empty movements)
Trains x km travelled (train-km)	Passenger: 1,791 x 10^6
Number of passengers x km (pkm)	359 207 x 10^6
% of train-km with CONVEL/ATP in operation	100%
Number of hours worked on undertaking business	324 407

A.2.2.3 – TAKARGO, Transporte de Mercadorias, S.A.

Description	Information
Name	TAKARGO, Transporte de Mercadorias, S.A.
Address	Rua Mário Dionísio, nº 2 2799 – 557 Linda-a-Velha Portugal
Website	Not available
Licence to begin activity (DL no 270/2003, as amended by DL no231/2007 of 14 June)	Licence no 02 of 01 March 2007
Safety Certificate (DL no 270/2003, as amended by DL no231/2007 of 14 June)	Part A - PT 11 2008 0002 (1st issue) Part B - PT 12 2008 0001 (1st issue)
Date of commencement of activity	25 September 2008
Traffic type	Goods
Number of Locomotives	Diesel: 13
Number of wagons	125
Number of drivers	32
Number of assistant drivers	7
Number of trains used	Goods: 2 905 (including empty movements)
Trains x km travelled (train-km)	Goods: 0.760 X 10^6 (including empty movements)
Number of tonne-km	319 880 x 10^6
% of train-km with CONVEL/ATP in operation	84%
Number of hours worked on undertaking business	115 510

A.2.2.4 – CP Carga – Logística e Transporte Ferroviário de Mercadorias S.A.

Description	Information
Name	CP Carga – Logística e Transporte Ferroviário de Mercadorias S.A.
Address	Calçada do Duque, n.º 20 1249-110 Lisbon Portugal
Website	www.cpcarga.pt
Licence to begin activity (DL no 270/2003, as amended by DL no231/2007 of 14 June)	PT 01 2009 01 – Domestic freight PT 01 2009 02 – International freight
Safety Certificate (DL no 270/2003, as amended by DL no231/2007 of 14 June)	Part A – PT 11 2010 0001 Part B – PT 12 2010 0004
Date of commencement of activity	01 August 2009
Traffic type	Goods
Number of Locomotives	Total: 50 (Diesel: 31; Electric: 34)
Number of Wagons	2715
Number of drivers	230 (average)
Number of assistant drivers	284.7
Number of trains used	Goods: 45 992 (including empty movements)
Trains x km travelled (train-km)	Goods: 4.870×10^6
% of train-km travelled with CONVEL/ATP in operation	-- %
Number of tonne-km	$1\,893.648 \times 10^6$
Number of hours worked on undertaking business	1 080 170

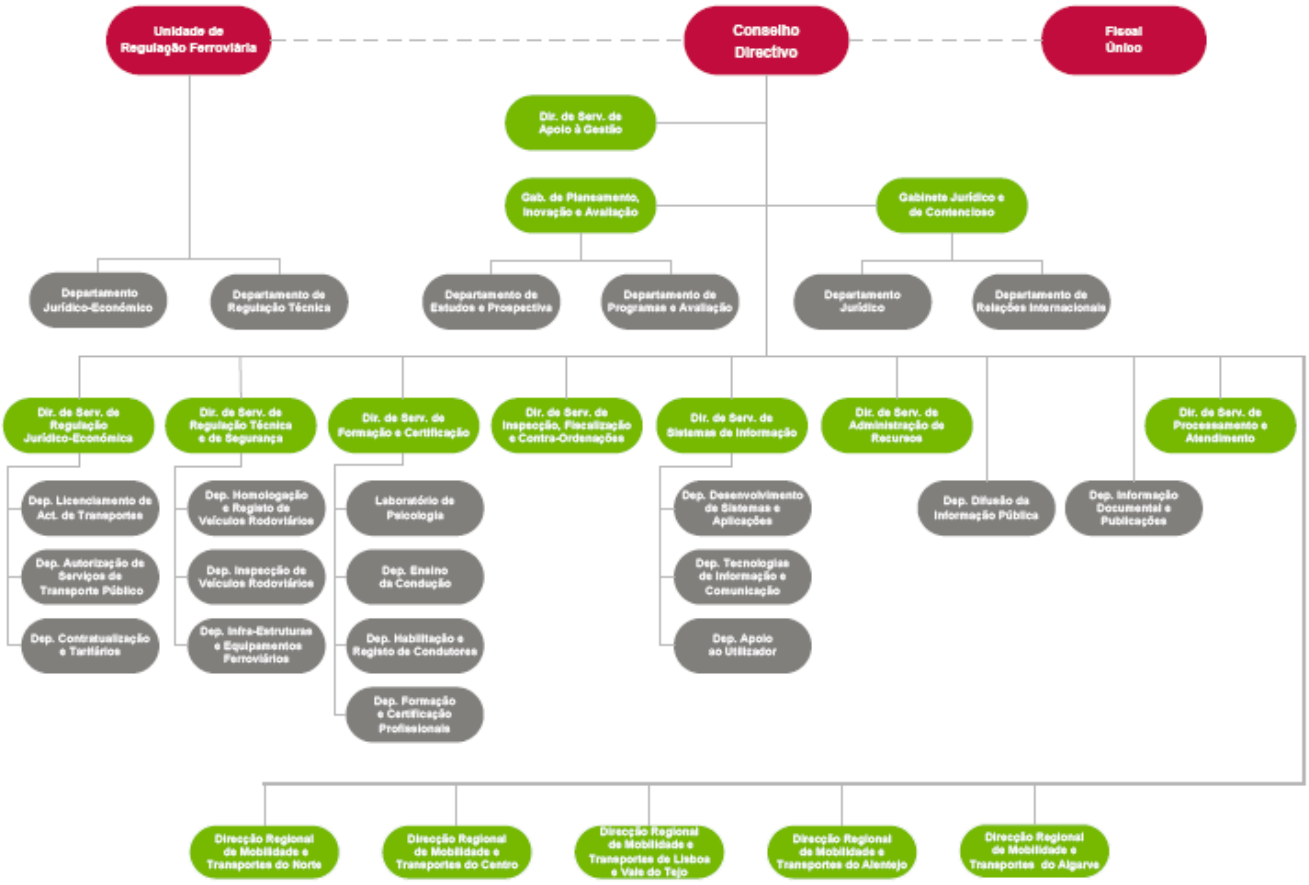
INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P.

ANNEX B

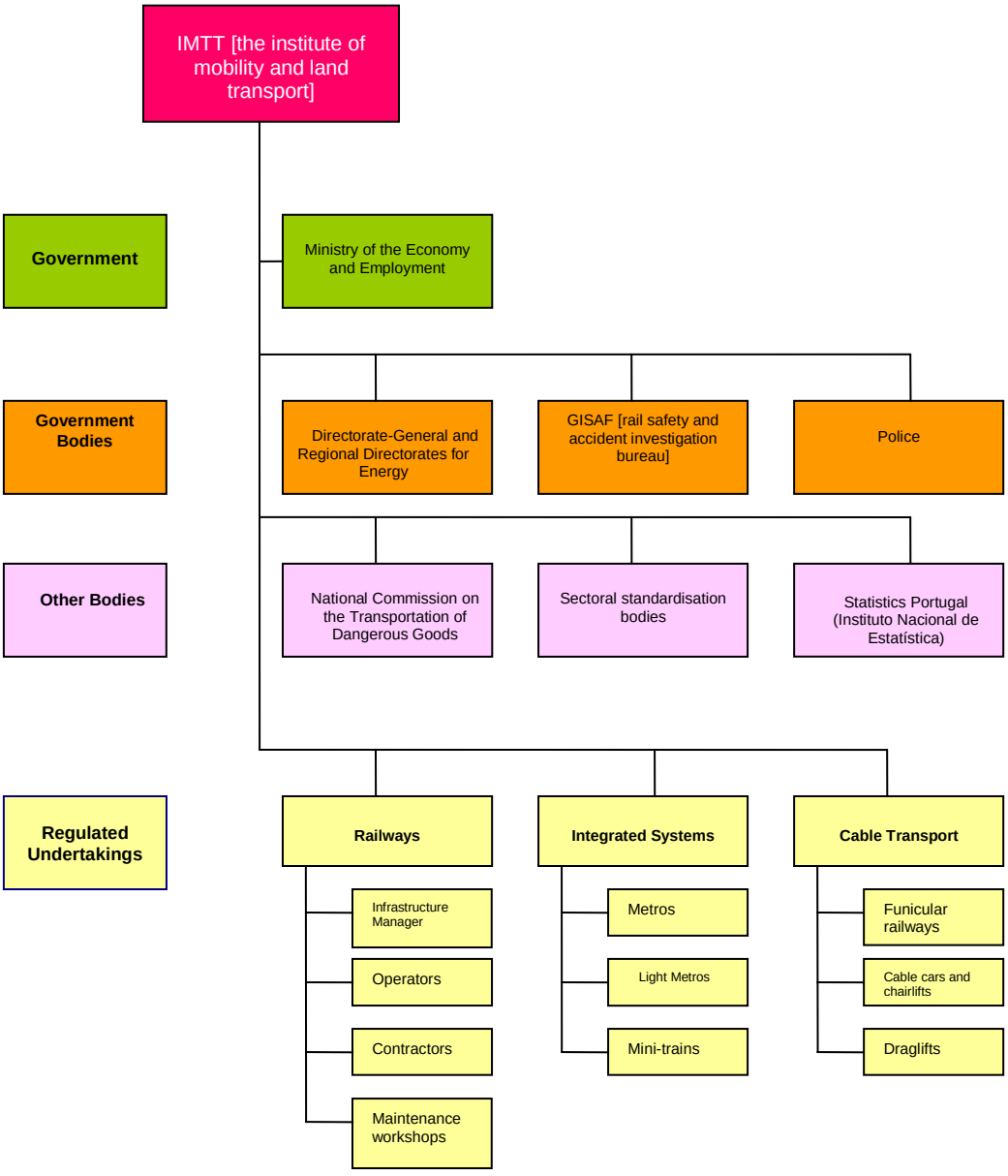
ORGANISATION OF THE IMT, I.P.

2013

B.1 – Organisation Chart of the IMT, I.P.



B.2 – Relationship of the IMT, I.P. with other rail safety bodies



ANNEX C

COMMON SAFETY INDICATORS

2013

C.1 – Common Safety Indicators 2012

Number of accidents and breakdown by type		Per million train-km
Total number of accidents	48	1.32
Train collisions, including collisions with obstacles within the clearance gauge	1	0.03
Train derailments	4	0.11
Accidents at level crossings, including those involving pedestrians	12	0.33
Accidents to persons caused by rolling stock in motion, excluding suicides	31	0.85
Fires on rolling stock	0	0
Other accidents	0	0

Total number of presumed suicides		Per million train-km
No of suicides	47	1.25

Number of fatalities and breakdown by category of person		Per million train-km	Per million pkm
Total number of fatalities	26	0.72	
Passengers	1	0.03	0.0003
Employees (including contractor staff)	0	0	
LC users	10	0.28	
Unauthorised persons on railway property	14	0.39	
Others	1	0.03	

Number of fatalities and breakdown by type of accident		Per million train-km
Total number of fatalities	26	0.72
Train collisions	0	0
Train derailments	0	0
Accidents at level crossings, including those involving pedestrians	10	0.28
Accidents to persons caused by rolling stock in motion, excluding suicides	16	0.44
Fires on rolling stock	0	0
Other accidents	0	0

Number of serious injuries and breakdown by type of casualty		Per million train-km	Per million pkm
Total number of serious injuries	**14**	**0.39**	
Passengers	**3**	**0.08**	**0.0008**
Employees (including contractor staff)	**0**	**0**	
LC users	**5**	**0.14**	
Unauthorised persons on railway property	**5**	**0.14**	
Others	**1**	**0.03**	

Number of serious injuries and breakdown by type of accident		Per million train-km
Total number of serious injuries	14	0.39
Train collisions, including collisions with obstacles within the clearance gauge	0	0
Train derailments	0	0
Accidents at level crossings, including those involving pedestrians	5	0.14
Accidents to persons caused by rolling stock in motion, excluding suicides	9	0.25
Fires on rolling stock	0	0
Other accidents	0	0

Number of incidents and near-misses and breakdown by type		Per million train-km
Total number of incidents and near misses	179	4.93
Broken rails	29	0.8
Track buckles	121	3.34
Wrong-side signalling failures	0	0
Signals passed at danger	26	0.72
Broken wheels on rolling stock in operation	1	0.03
Faulty axles on rolling stock in operation	2	0.06

Cost of accidents (millions of Euros)		Per million train-km
Total cost	33.49	0.92
Cost of fatalities	24.26	0.67
Cost of injuries	1.748	0.05
Cost of replacing or repairing damaged rolling stock and infrastructure	6.286	0.17
Cost of delays, disruptions and re-routing of traffic, including expenditure on additional staff and loss of profits	1.196	0.03

Indicators relating to technical safety of infrastructure	
% lines with Automatic Train Protection (ATP) in operation	64.8%
% of train-kilometres travelled using operational ATP systems	87.55%
No of level crossings (LCs)	
Total active level crossings	**436**
Automatic user warning	39
Automated user protection	0
Automatic user warning + protection (simultaneous)	350
Automatic user warning + protection + ATP	2
Manual user warning	4
Manual user protection	31
Manual user warning + protection (simultaneous)	113
Total passive level crossings	**434**
Total LCs (Active + Passive)	**870**
Number of LCs per kilometre of track	0.268
Number of LCs per kilometre of line	0.342
% of level crossings with automatic or manual protection	50.1%

Reference data	
No of trains x km (in millions of train-km)	36.279
No of passengers x km (in millions of pkm)	3649.385
No of km of track (km of multiple-line track x no of tracks)	3242.237
No of km of line in operation	2544.349

N.B.: figures from Statistics Portugal (INE)

Table C.1.1 – Summary of Common Safety Indicators

N.B: The definitions used in the Common Safety Indicators and the common method for calculating the economic impact of the cost of accidents can be found in Decree Law 62/2010 of 9 June, which transposes Directive 2009/149/EC of 27 November into national law.

INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P.

ANNEX D

AMENDMENTS TO LEGISLATION AND REGULATIONS

2013

Table D.1

Safety Directive and Amendments			
Community standard	**Transposed (Y/N)**	**National legal reference**	**Date**
Directive 2004/49/EC	Yes	Decree Law No 270/2003 with amendments introduced under Decree Law No 231/2017 Decree Law No 394/2007	14 June 2007 31 December 2007
Directive 2008/57/EC	Yes	Decree Law No 27/2011	17 February 2011
Directive 2008/110/EC	Yes	Decree Law No 27/2011	17 February 2011
Directive 2009/149/EC	Yes	Decree Law No 62/2010	9 June 2010

Amendments to legislation and regulations				
National legislation and regulations	**Legal reference**	**Date of entry into force**	**Description of the amendment**	**Reasons for the change**
Relative to the National Safety Authority	-	-	-	-
Relative to bodies notified, assessors, third parties for registration, investigations, etc.	-	-	-	-
Relative to rail transport undertakings/infrastructure manager/entity in charge of maintenance and others	16th amendment to CSI 115/05 CSI 27/13	22.09.2013 29.09.2013	Conditions for the movement of special vehicles on tracks open to operation. Train circulation under conditions of poor adherence	Special vehicle access to and circulation on the national railway system was in need of regulation. Rules of operation for the infrastructure manager and the rail transport undertakings under conditions of poor adherence need to be defined.
Implementation of other European requirements	-	-	-	-

Table D.2

ANNEX E

Significant Accidents

2013

Significant Accidents in 2013

Accident involving rolling stock in motion	Date/Time: 06-Jan/16:45	Train no. n/a	Minho Line	Km 003.950

As train 15537 was passing, a body was spotted by the side of the track on the down line. The ticket inspector arrived at the site and determined that the body was that of a man who was already deceased. The Porto civil protection authority (CDOS) was notified, and they in turn notified the police and the Rio Tinto volunteer fire brigade. A category C emergency plan was put into action, and the person in charge of operating zone 102 was appointed local emergency manager. Temporary single-tracking was established on the up line between 17:00 and 18:22, with proceed on sight orders instituted between km 3.900 and 4.050. The sets of coaches belonging to trains nos 15165, 15227, 15531, 15229, 855 and 873 were checked, but no evidence of an accident was found. The line was declared clear at 18:20 after the body was removed and the track was cleaned.
The body showed signs of having been hit by a train, though this was not established.

Accident involving rolling stock in motion	Date/Time: 10-Jan/20:06	Train no. 5411	Beira Alta line	Km 140.500

The train derailed at the indicated km marker due to a fallen barrier. The 2 front bogies were derailed. Assistance was requested via model 117, no. 62800 at 21:00.
The local emergency manager went to the site as part of a category B emergency plan. Passengers were removed from the site in movements 98210, 98212 and 98215.
The EMU (triple) remained stationary at about 25 metres from the point of collision.
At 23:42 on 10 Jan, urgent line closure requisition (Pedido Antecipado de Trabalho Extraordinário - PATE) no. 03/2012 was put into effect, involving a power shutoff between the neutral section for the Gouveia traction substation and the Gouveia station.
An assistance train arrived at the site at 01:04, bringing 1 engineer, 1 manager, 1 line manager and 3 workers, who started re-railing work at 01:20.
The first bogie was re-railed at 05:30 and the second at 07:35 on 11 Jan.
The assistance train left the site at 08:40, towing the malfunctioning rolling stock at idling speed (10 km/h).
From information supplied by the staff on site, it is assumed that the rocks slid due to the rain that had occurred during the day, with the larger sized rocks agreed to have caused the derailment.

Accident involving rolling stock in motion	Date/Time: 12-Jan/11:47	Train no. 15724	Northern Line	Km 300.581

As it entered Ovar station, the train hit a woman who was crossing the line at the pedestrian crossing (km 300.581). The woman appeared to have been crossing from the right side in the train's direction of travel. The body then lay across line II. Emergency services were called, and the emergency ambulance service (INEM) and the Ovar police came to the scene. The crossing is protected by audible and warnings and illuminated signs, as well as being overseen by a REFER official. Public information announcements had been made as the train was arriving. The inspector of operations for zone 105 was appointed as the local emergency manager. A category C emergency plan was set in motion. A test of the audible warnings was ordered to check that they were working correctly. The maintenance department did not come to conduct this test, as they said that it had been done the day before. The line was cleared at 12:20 when the body was moved to the platform. The body was removed by the Ovar volunteer fire brigade at 13:25.

Accident involving rolling stock in motion	Date/Time: 19-Jan/01:40	Train no. 123	Northern Line	Km 142.800

There was a power outage in the Caxarias-Albergaria neutral section sub-sector between isolating switches 140-07 and IL1 on the down line and IL2 and 139-10 on the up line, due to trips on the overhead line that were not reset. Circulation was suspended on the down and up lines between the two stations. An inspection was carried out by the overhead line unit, who reported that there was a large tree at km 145.780 that had fallen on top of the overhead line, and that the overhead line was damaged on both the down and up lines. PATE requisition no. 11/2013 was issued to deal with the repair of the overhead line, which involved the power being cut and track possession of the down and up lines between Caxarias and Albergaria dos Doze. A category B emergency plan was set in motion. A local emergency manager was appointed. At 08:45 the up line was declared clear. At 09:55 train 50301 reported that it was stuck at km 145.400. Assistance was requested (no. 24347), and the cargo was divided up and all of it stored at Albergaria station at 11:55. Train 123 was stopped from 12:01 to 13:20 at km 142.800, as it had hit a tree, damaging the pantograph belonging to the BAN. Power was immediately cut on the up line between the indicated stations. Circulation was re-established on the down line at 17:03 and on the up line at 17:34.

Train collision	Date/Time: 21-Jan/21:18	Train no. 529	Northern Line	Km 198339

The duty officer at the Alfarelos signal tower reported that train 4523 passed signal S1 at danger. He later reported that train 529 also passed that same signal at danger and then hit the rear end of train 4523, which was stationary. A category A emergency plan was declared, and a local emergency manager was appointed.
The down line was closed between Soure and Alfarelos (including line I up to points 23I/II [exclusive]) and the up line between Alfarelos (including line II from points 23-I/II [exclusive]) and Soure. The assistance train was called in, in operation 95315, arriving at the site of the accident at 02:10.
This emergency was reclassified as category B on 22 Jan.
This incident continues as an incident with number: 145654 of 22-Jan.
The overhead line remained in operation with the following restrictions for an indefinite time. Isolating switch 197-29, out of service, there is no air-gap. Diagonal part of the insulator in section no. 5 is out of service, there is no overhead line. Diagonal part on the insulator in section no. 6. Out of service, there is no overhead line.
Power was switched on for the down line at 17:03, and the line was declared clear at 17:30. Normal train circulation was re-established on the double track between Soure and Alfarelos, and the emergency plan was lifted at 17:30. The following speed limits were put in place: Down line, normal direction of travel, 30 km/h between km 197.800 and 198.050, and 60 km/h between km 198.050 and 199.100. Moving against the normal direction of travel, 30 km/h between km 198.050 and 199.100. Up line, normal direction of travel, 30 km/h between km 198.900 and 197.800; moving against the normal direction of travel between km 195.950 and 198.900. Signal S1960 A remains locked on steady red.
The up line was released at 10:20, and power was restored at 10:14. Single-track circulation was established between Alfarelos and Soure, with a speed limit for normal direction of travel of 10 km/h between km 198.050 and 197.800, and against the normal direction of travel of 30 km/h between km 195.950 and 197.800, and 10 km/h between km 197.800 and 198.050.
At 08:26 on 22 Jan, the 5 Corail carriages were removed from the damaged intercity train and taken to the Soure station in operation 95266.
The last triple electric drive train (UTE) was removed at 20:50, at which point the track was clear of material from the accident.
Suspension of circulation was in effect up to the moment when the up line was opened for train circulation.
At around 0:00 on 23 Jan, the carriage involved in the accident, which was on the intercity locomotive, was removed in its entirety, allowing locomotive 5613 to be taken away and stored at Soure station.
During the continuing work to remove the wreckage of the damaged train, and after the removal of the triple electric drive train carriage from the Soure side to the down line side, at around 05:00 in the morning crane G21 fell onto the 2nd carriage of the damaged triple electric drive train, without causing any casualties.
A private road crane was expected at around 11:00 to put crane G21 back into its correct position. It was presumed that G21 did not suffer any damage and was able to continue with the work.
Crane G21 was re-railed and set into its normal position at 20:20. A crane arrived at 13:30 to help with the infrastructure work, and another one at 15:25.

Accident/rolling stock in motion	Date/Time: 22-Jan/18:35	Train no. 16138	Northern Line	Km 016.650

The driver of train 16138 (quadruple electric drive train UQE 3522) reported that he hit a person who was walking on the slow up line at the km indicated. The ticket inspector went to the scene and reported that the person in question was male and was alive and conscious. A category B emergency plan was set in motion, and a local emergency manager was appointed.
Officers at Gil police station were notified.
Trains travelling on the slow down line were advised to proceed on sight at the location in question.
The injured man was removed from the track by the emergency ambulance service (INEM) at 19:33 and taken to Vila Franca de Xira hospital by the Póvoa fire brigade.
The train restarted its journey at 19:48, after the police had identified the train driver
Circulation returned to normal at that time.

Accident at an LC	Date/Time: 01-Feb/12:05	Train no. 525	Northern Line	Km 006.090

An alarm was triggered on the Ground-to-Train radio system by the driver of train 525, which was being towed by locomotive 5616, due to a collision with a motor vehicle which appeared on the left side in the train's direction of travel at a type B level crossing. Circulation was suspended on both tracks. A category B emergency plan was set in motion, and a local emergency manager was appointed. According to the driver of the train, there did not appear to be any problem with the level crossing.
The collision resulted in material damage to the locomotive, half a barrier was forced to the side of the down line, and two persons in the motor vehicle were injured. Train 122 was travelling without a Ground-to-Train radio as this was out of order, and it had not been aware of the alarm triggered by train 525, the latter train having come to a halt on the up line alongside the vehicle. Train 525 restarted its journey at 13:09 and train 122 at 13:12. The down and up lines were declared clear for train circulation at 13:25. Train 525 was kept at Entroncamento station from 13:52 to 14:13 for a change of locomotive.

Accident at an LC	Date/Time: 02-Feb/14:30	Train no. 853	Minho line	Km 103.167

Train 853 (a triple diesel unit UTD 592 019) hit a man at the pedestrian level crossing at the indicated km and killed him instantly. The civil protection authority (CDOS) at Viana do Castelo was informed, and they in turn alerted the other entities. According to the train driver, the victim approached the level crossing at a run from the right side in the direction of travel, hesitating when he saw the train. It is presumed that this was an accident.
The train restarted its journey at 15:26.
The body was removed at 16:10. The line was declared clear without restriction at 16:30, after the track was washed. The victim was identified.

Accident involving rolling stock in motion	**Date/Time: 07-Feb/17:36**	**Train no. 126**	**Northern Line**	**Km 231.300**

Information was received via Ground-to-Train radio only indicating that a man had been hit and rather seriously injured at the station very close to the track.
The emergency ambulance service (INEM) took charge of the incident and transported the victim to the University of Coimbra hospitals.

Train derailment	**Date/Time: 08-Feb/08:25**	**Train no. 19212**	**Cascais Line**	**Km 011.763**

It was reported that train 19212 was derailed at the points and could not pull free of the clearance gauge on the up line. The decision was made to immediately stop the circulation of all rolling stock on that stretch of line. A category B emergency was set in motion, and a local emergency manager was appointed. 2 bogies and 1 group of axles were derailed on the My 3269. (Connection to the eGOC incident management system, No 146363).
The down line was declared clear at 15:05, and train circulation was re-established under a regime of telephone blocking with tokens (1st train to circulate no 19265) between the Algés and Oeiras stations. Urgent line closure requisitions (PATEs) 26 and 27 were set in motion; with a power shutoff and track possession on the up line between Oeiras and Algés stations.
The derailed rolling stock, train 19212, traction units 3262/3269, was taken to the Oeiras depot at 15:58. Power was restored on the up line between Oeiras and Caxias stations at 19:34, and the track was declared clear at 19:40. Track possession was lifted between Oeiras and Caxias stations at 20:27 by telegram no. 29/1 (after the arrival of train 19296 at Algés station).

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Accident involving rolling stock in motion	**Date/Time: 21-Feb/16:00**	**Train no. 47810**	**Minho line**	**Km 050.945**

A man was hit at the pedestrian level crossing at the indicated km. The Braga civil protection authority (CDOS) was notified, who alerted the other entities. According to the train crew the collision had been accidental, as the victim entered the level crossing from the right side in the direction of travel with headphones in his ears and had not noticed the arrival of the train. According to the civil protection authority (CDOS), the man was 24 years old and received care at the site from an emergency medical response vehicle and taken to Barcelos hospital, with the track being declared clear at 16:40.

Accident at an LC	**Date/Time: 14-Mar/09:02**	**Train no. 5105**	**Vouga line**	**Km 023.479**

The train stopped at the indicated km, as it had collided with a motor vehicle which appeared on the right side to the direction of travel. The accident resulted in two persons injured. A category C emergency plan was set in motion, and a local emergency manager was appointed.
Normal train circulation was re-established at 10:20, with train 5105 continuing its journey at 10:42.
The Aveiro Bombeiros Novos fire brigade and the Cacia National Republican Guard (GNR) assisted the operations.

Accident involving rolling stock in motion	**Date/Time: 17-Mar/15:30**	**Train no. 542**	**Beira Baixa line**	**Km 095.300**

The driver of train 542 reported having hit a woman who was crossing the track at km 95.300 on the Beira Baixa line. The woman was injured and received care at the site from the emergency ambulance service (INEM) and taken to the Castelo Branco district hospital.
The Castelo Branco police took charge of the incident.
The circulation manager from the Castelo Branco station went to the site.
The train restarted its journey at 15:56.

Accident involving rolling stock in motion	**Date/Time: 22-Mar/18:17**	**Train no. 18020**	**"Ring" line**	**Km 009.700**

Collision with a man who was walking along the down line with his back to the oncoming train, at the location indicated. The body was thrown away from the track into the drainage system area. The operational command centre (CCO) called the emergency ambulance service (INEM) to the site. The Gil police were notified. Train 18020/21 remained at the site by order of the authorities between 18:17 and 19:04, at which point the train set off again without having been authorised to do so by the operational command centre (CCO).
The appointed local emergency manager went to the site and instigated a category C emergency plan. At 19:08 the local emergency manager declared the down line clear for train circulation between the Chelas junction and Braço de Prata, with proceed on sight indicated at km 9.800.
Due to a malfunction on the Ground-to-Train radio (incident record no. 148812), signal 95AS was locked at danger so that the regime of proceed on sight on the down line at km 9.800 could be complied with.
The body was removed from the site at 20:21.

Accident involving rolling stock in motion	**Date/Time: 24-Mar/08:07**	**Train no. 3103**	**Minho line**	**Km 064.900**

The train stopped, as it had hit some rocks that had fallen from a barrier, leading to the derailment of the first bogie on cab 112. There were no injuries. Assistance was requested using a model 11-107 requisition (No 50993) at 08:10, provided under operation 92213/92215 which left Contumil at 09:35 arriving at the site at 11:35.
A category B emergency plan was set in motion, and a local emergency manager was appointed. Re-railing began at 11:40 and was completed at 14:15. Road transfer was carried out between the stations of Viana do Castelo and Barcelos. The Barroselas and Tamel stations were manned at 11:00 and 11:20, respectively, with the transfer then taking place between these two stations. The triple diesel unit (UTD) involved in the accident was towed by train 92218 (assistance) to Contumil. The track was declared clear at 16:10, with speed restricted to 30 km/h between km 64.840 and 64.880.

Accident involving rolling stock in motion	**Date/Time: 29-Mar/09:00**	**Train no. 861**	**Douro line**	**Km 087.200**

The driver of train 861 reported hitting a medium-sized rock that was on the line at km 8.200. Circulation was restricted to proceed on sight between km 87.100 and 87.300. The driver of train 864 later reported that there was a risk of barriers falling due to the weather conditions that were just starting. At 13:35 a large barrier at Ermida station fell down and occupied lines I and II next to points No 2. It was partially removed, with line II being cleared. At 13:30 a large barrier collapsed at km 65.100 next to point No 2 at Juncal station, covering the entrance to the tunnel. The earth was removed at 23:50. At 13:55, a barrier fell at Rede station, km 94.600, next to the pedestrian crossing; at 16:00 another fallen barrier was found at km 94.050, which was removed at 17:20. At 18:45, a private individual reported that the track was blocked by a large amount of earth and rocks next to signal SA1 at Mosteirô (km 71.050). Circulation was suspended between Marco and Régua, with transfers being carried out by road. The manning period at Ermida station was brought forward to 14:00.

Accident involving rolling stock in motion	**Date/Time: 29-Mar/16:25**	**Train no. 871**	**Douro line**	**Km 135.600**

The train stopped at the indicated km, as the track was blocked by rocks and earth between km 135.600 and 135.700. Since it could not restart its journey, at 16:50 requisition No 1 was made to return to Régua station.
The train began its retreat at 17:00, under requisition No 18, and returned to Régua at 18:00, where it remained.

Accident at an LC	**Date/Time: 30-Mar/16:35**	**Train no. 5210**	**Vouga line**	**Km 022.875**

As the train approached, a man on a motorcycle appeared on the left side, went around the half-barriers and crashed into the side of the dual diesel unit (UDD). On impact he was thrown outside of the clearance gauge, resulting in somewhat serious injuries. The Arrifana fire brigade and the emergency ambulance service (INEM) arrived at the scene and took the man to hospital. The motorcycle was meanwhile removed from the site.
There was no damage to the rolling stock, and the train restarted its journey at 17:25, after waiting in vain for the authorities, even though they had been notified immediately after the accident. A local emergency manager was appointed.

Accident at an LC	**Date/Time: 06-Apr/07:08**	**Train no. 520**	**Northern Line**	**Km 319.902**

The train stopped at km 319.750, as it had hit a man on a bicycle who had appeared on the right side to the direction of travel; he was killed instantly. The Porto civil protection authority (CDOS) was notified. Circulation then continued via the down line between Esmoriz and Granja stations, with proceed on sight between km 319.850 and 319.950 from 07:25. The line was declared clear without restriction at 08:30, after authorisation was received and the body removed. Circulation was once again suspended between the two previously mentioned stations from 09:17 to 09:30 for track cleaning. The identity of the victim is unknown. A category C emergency plan was set in motion, and a local emergency manager was appointed, who monitored the operations at the site.

Accident at an LC e	**Date/Time: 19-Apr/14:55**	**Train no. 15633**	**Northern Line**	**Km 315.616**

The train stopped, remaining stationary from 14:55 to 15:36, as it had hit a man who appeared running from the down side (left to the direction of travel) when the train was arriving, in order to cross the LC in question. The man was seriously injured and was taken away at 15:20 by the emergency ambulance service (INEM). Although the victim received care in the ambulance, he later died. A category C emergency plan was put into action, and the person in charge of the operating zone was appointed local emergency manager. As the track was blocked by local residents, circulation was stopped until 15:52, when it was re-established under proceed on sight on both tracks between km 315.550 and 315.650.
Normal circulation was re-established at 16:40.

Derailment of train	**Date/Time: 20-Apr/07:32**	**Train no. 312**	**Northern Line**	**Km 000.000**

The circulation manager for Lisbon Santa Apolónia (LxSA) reported that train 312 had derailed on the up line between points 38I and 28II upon arriving at Santa Apolónia station in Lisbon, with its journey carried out to line no. III, causing signal S13 to be unexpectedly at danger for train 521. The 9th, 10th and 11th carriages were derailed. No injuries were reported amongst passengers or crew. A category C emergency plan was put into action, and an emergency manager was appointed. The assistance train was activated by the central command post (PCC). The first piece of rolling stock to travel on the down line was train 521, after checks to ensure that the derailed coaches were free of the clearance gauge on the down line. Train circulation was suspended on the down line between Oriente and Santa Apolónia stations in Lisbon (inclusive up to signal S16/M16) and single-track circulation was established on the down line between these stations. The set of carriages in front was removed from the site at 09:40 by the train's own locomotive. Track repair began at 10:40. Set of points 38-I/II was repaired at 11:02, permitting signals S13 and S6 to be opened from this time. Proceed on sight for circulation in both directions was instigated at the site. Re-railing was completed for all vehicles at 06:05 on 20 April, and all existing restrictions on the track were lifted at 22:40.

Accident involving rolling stock in motion	**Date/Time: 19-May/20:47**	**Train no. 15633**	**Northern Line**	**Km 300.776**

As the train was departing, a passenger who was trying to get on the train fell onto the track. The crew did not notice and the passenger died instantly. The body remained on line No 1 and was removed at 21:45, when the line was declared clear for normal train circulation. During this time circulation in the direction of the down line used line 3, and up line circulation used line 2, under proceed on sight authority. A category C emergency plan was put into action, and the person in charge of the operating zone was appointed local emergency manager. Power was cut to the down line between Válega and Esmoriz from 23:17 to 23:27 so that the track could be cleaned.

Accident at an LC	**Date/Time: 21-May/00:06**	**Train no. 50039**	**Cascais Line**	**Km 022.556**

The train driver reported that a fatal collision involving a man of about 30 occurred at the LC at the km indicated. When approaching the LC, which was shut and under a regime of advance warning by telephone, the man, who was riding a bicycle, crossed the LC from the side facing the sea, and although the train driver sounded his horn the man continued onwards. He was hit by the coupling of the quadruple electric drive train (UQE) and thrown about two metres onto the road, leaving the clearance gauge free. The emergency ambulance service (INEM) was called by the ticket inspector. A category C emergency was declared, and a local emergency manager was appointed. Train circulation on both tracks was authorised by the Oeiras PSP/CP police, with approach to the site carried out under a proceed-on-sight authority. The body was removed at 01:35, with circulation then returning to normal speed.

Accident involving rolling stock in motion	**Date/Time: 21-May/01:55**	**Train no. 50039**	**Northern Line**	**Km 288.500**

The rolling stock stopped at km 289.200, where it remained until 03:05, as at km 288.500 it had hit a man who was crossing the track. He had appeared travelling from right to left (in the direction of travel of the train) and was killed instantly. Temporary single-track circulation was established on the up line between 01:55 and 03:10, using the Amoníaco branch line, with proceed-on-sight authority established at that location. The body was removed at 03:10, at which time the line declared clear for normal train circulation. A category C emergency plan was put into action, and the person in charge of the operating zone was appointed local emergency manager.

Accident at an LC	**Date/Time: 19-Jun/15:26**	**Train no. 98226**	**Beira Alta line**	**Km 207.273**

The duty traffic controller at Guarda station reported that the train in question had collided with a motor vehicle at the LC at the indicated km, which it then dragged for about 500 metres. The vehicle entered the LC from the left side to the train's direction of travel. The accident resulted in two fatalities (the occupants of the motor vehicle). Power was shut down and the track was closed between Pinhel and Vilar Formoso (inclusive) at 15:38. A category A emergency plan was set in motion, and a local emergency manager was appointed, who went to the site. The emergency ambulance service (INEM) and the local fire brigade were notified. Signal M2 and set of points 2/I were damaged. Power was restored to the stretch of line a 17:17. As set of points 2/I had sustained heavy damage, with no time estimate for its repair, it was unable to receive/send trains in the direction of Vilar Formoso. Train circulation was suspended between Guarda and Cerdeira until 19:00. An overhead line maintenance vehicle (Veiculo de conservação de Catenária - VCC) belonging to REFER was used to remove the vehicle from the track, and the power was shut off between 19:36 and 20:17 between Pinhel and V. Formoso. The vehicle was removed at 20:10. The line was cleared for normal train circulation at Guarda station at 21:00 (with the exception of line I), after repair to set of points 2/I. The accident resulted in damage of different types to locomotive 4714. Service order 2237, which closed the track between Guarda and V. Formoso Fronteira between 19:00 and 24:00 on 19 June, has been cancelled. Line no. I at Guarda was declared clear for train circulation at 21:54.

Accident at an LC	**Date/Time: 28-Jun/07:16**	**Train no. 923**	**Tomar branch line**	**Km 001.289**

Collision with a light vehicle that appeared from the right side to the direction of travel of the train; the rolling stock was derailed. An IPE (telecommunications) box and a cable box were damaged.
A category A emergency was declared, and a local emergency manager was appointed.
Assistance was provided by train 95255, which arrived at the site at 09:35; re-railing manoeuvres started at 09:40.

Accident at an LC	Date/Time: 17-Jul/15:00	Train no. 47815	Minho line	Km 102.923

The indicated train came to a stop, as it had hit a stationary car on the LC at the km indicated. The driver of the vehicle was killed. The emergency ambulance service (INEM), the National Republican Guard (GNR) and the Caminha volunteer fire brigade came to the scene and took charge of the incident. The locomotive suffered damage to its compressed air tubing. Assistance was requested under requisition No 278 at 16:00. Later on, and after working with the fire brigade, the train driver managed to make a temporary repair to the locomotive, cancelling the request for assistance under requisition No 279 at 16:34. Limited damage was caused to the track, which did not lead to restrictions, and the half-barrier on the eastern side of the LC was broken. The train restarted its journey at 17:04. A category C emergency plan was put into action, and a local emergency manager was appointed. The barrier at the LC at km 102.923 was repaired at 20:53.

Accident involving rolling stock in motion	Date/Time: 27-Jul/01:43	Train no. 3400	Northern Line	Km 325.200

The train stopped at the indicated km, where it remained from 01:43 to 02:30, as it had hit a man who was walking next to the rail on the right side to the direction of travel. The man was killed instantly.
According to the train driver, the horn on the multiple electric drive train (UME) was sounded.
The train was running on the down line, due to service order 2692 being in force.
A category C emergency plan was put into action.
The body was removed at 02:55.

Accident at an LC	Date/Time: 12-Aug/18:57	Train no. 134	Northern Line	Km 327.550

The train stopped at km 327.272 after hitting a man who was crossing the track at the pedestrian crossing at km 327.582; the LC audible warnings and illuminated signs were in good order. The man appeared travelling from left to right and was killed instantly. The Porto civil protection authority (CDOS) were notified, sending assistance to the site of the accident. A category C emergency plan was put into action. A local emergency manager was appointed at 19:05 and arrived at the site at 19:30. Train 134 restarted its journey at 19:36. Train 15839 restarted its journey at 19:49, under proceed on sight authority at that location. The line was declared clear at 19:51, with trains circulating on both tracks under proceed on sight authority between km 327.500 and 32.600. Restrictions to circulation were lifted at 20:13.
The entrance to the pedestrian LC at km 327.582 on the Northern Line is furnished with a staggered pedestrian guardrail, audible warnings and illuminated signals, and the crossing surface is in good condition.

Accident involving rolling stock in motion	Date/Time: 13-Aug/10:43	Train no. 863	Douro line	Km 073.362

After concluding passenger service on line no. 2, the train started its journey, but it stopped again when it hit a woman who was crossing between platforms. The woman, who was killed instantly, had crossed the track in front of the train, coming from the left side to the direction of travel. The victim's companion was crossing with the victim and suffered slight injury to his lower limbs.
The Porto civil protection authority (CDOS) was notified, sending assistance to the site of the accident.
A category C emergency plan was put into action, and a local emergency manager was appointed at 10:50, arriving at the site of the accident at 11:27.
The body was removed at 13:55, and the line was declared clear without restrictions at 14:35.

Accident involving rolling stock in motion	Date/Time: 15-Aug/09:27	Train no. 18424	"Ring" line	Km 008.689

The driver of train 18424 reported having hit a person who was walking on the track and who was unable to get away in time as the train approached.
A category C emergency was declared, and a local emergency manager was appointed at 09:35.
The emergency ambulance service (INEM) and the Gil police arrived at the site. Train circulation was single tracked on the up line.
Circulation was suspended on both tracks at 10:10 to remove the body.
The train was released and the tracks declared clear for circulation at 10:38.

Accident involving rolling stock in motion	Date/Time: 25-Aug/05:39	Train no. 19008	Cascais Line	Km 022.500

The driver of train 19008 reported a woman's body on the track at the indicated km; she had presumably been hit by the previous train (train 19006, which had passed the site at 01:35). Circulation was suspended on the up line at 05:39 and on the down line at 06:30.
A category C emergency plan was put into action, and a local emergency manager was appointed, arriving at the site at 06:35.
The body was removed from the track at 07:20. Circulation was re-established on the down and up lines at 07:22, under proceed on sight authority at the location in question.
The local emergency manager later reported that the body was removed from the site at 08:53.

Accident involving rolling stock in motion	**Date/Time: 11-Sep/16:36**	**Train no. 91250**	**Cascais Line**	**Km 009.793**

Collision with a visually impaired person who had fallen from the platform onto line II.
A category C emergency was declared. Circulation was suspended on both tracks between Caxias and Algés.
The local emergency manager arrived at the site at 17:00.
The accident victim was removed from the site, still alive, by the emergency ambulance service (INEM).
Normal circulation was re-established on both tracks at 17:16

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Accident involving rolling stock in motion	**Date/Time: 14-Sep/01:22**	**Train no. 16401**	**Northern Line**	**Km 023.380**

Fatal collision with a person who was walking on the line in the direction of travel.
A category C emergency plan was put into action. The local emergency manager arrived at the site at 02:00.
The train restarted its journey at 03:24, after being authorised to do so by the authorities. Power was shut off to the line between Alverca (ACA) and the neutral section at Vila Franca de Xira (VFX) between 03:39 and 04:23 to allow track clean.
Due to this incident, it was not possible to carry out the track possession determined in service order 3146 between 01:40 and 05:30, for weekly work order (OST) 37/2013.

Accident involving rolling stock in motion	**Date/Time: 25-Sep/00:06**	**Train no. 64311**	**Northern Line**	**Km 309.376**

When train 15601 stopped at the Cortegaça halt/alighting point in order to provide passenger service, the train driver found a man lying down on the up line, probably having been hit by one of the trains that circulate on that track during the night. The man was taken to hospital at Vila da Feira.
A category C emergency plan was put into action, and the inspector of the operations zone was appointed local emergency manager, arriving at the site at around 06:00. The drivers of the rolling stock that had passed that site were questioned, and they reported that they had not noticed anything.
Circulation was suspended on the up line between Esmoriz/Ovar from 05:17 to 05:55.
Train 15601 waited at the site for the arrival of the emergency ambulance service (INEM).

Accident involving rolling stock in motion	**Date/Time: 26-Sep/17:05**	**Train no. 15639**	**Northern Line**	**Km 299.600**

The train was stopped by activation of the emergency brake, as there was a man walking on the track.
As the person in question fell onto and then remained on the trackside, the civil protection authority (CDOS) was called, who alerted the other entities.
When the ticket inspector arrived at the site he found that the person was alive and appeared to be under the influence of alcohol. The manager of the Aveiro circulation zone was appointed local emergency manager at 17:20.
The Ovar voluntary fire brigade removed the victim and took him to hospital.
The category C emergency plan was de-activated and the track was declared clear at 17:40.

Accident involving rolling stock in motion	**Date/Time: 27-Sep/19:27**	**Train no. 126**	**Northern Line**	**Km 030.164**

The driver of train 126 reported colliding with a man who was passing behind train 16453, moving from the down line to the up line.
A category C emergency was declared, and a local emergency manager was appointed, who arrived at the scene at 20:25.
Circulation on the up line was suspended between Castanheira do Ribatejo and Alhandra, with single-track circulation being established on the down line.
The body was removed from the scene, and the line was declared clear for train circulation with no restrictions at 20:50.

Accident involving rolling stock in motion	**Date/Time: 07-Oct/21:03**	**Train no. 18518**	**Sintra Line**	**Km 012.975**

The driver of train 18518 reported that the train had collided with an elderly man at the entrance to the platform of line III at M. Abraão.
A local emergency manager was appointed at 21:17, arriving at the scene at 21:45.
The man was injured and was taken to Francisco Xavier hospital by the emergency ambulance service (INEM).
The train driver later reported to CP Lisbon that the man in question was attempting to pass from line II to line III via the platforms when he was hit by the train.

Derailment of train	Date/Time: 21-Oct/07:09	Train no. 5201	Vouga line	Km 035.300

The train was held at the above-mentioned km due to the derailment of the first bogie of dual diesel unit (UDD) 9634, which was following behind. As it consisted of two dual diesel units (UDD) and given that train 9632 was undamaged, the journey was continued at 07:35 using this railcar. Damage was found on the dual diesel unit (UDD) and on the track, which was damaged between km 36.800 and 35.300.
A local emergency manager was appointed at 07:16, arriving at the scene at 08:05. Circulation was suspended between Oliveira de Azeméis and Pinheiro da Bemposta at 07:45. Re-railing began at 10:50 and was completed at 18:30. Suspension between Oliveira de Azeméis and Pinheiro de Bemposta was lifted at 19:25 so that assistance could be provided to the derailed dual diesel unit (UDD).
The track was declared clear at 20:33, with speed restricted to 10 km/h between km 35.300 and 36.800, a location that is not signalled.

Derailment of train	Date/Time: 22-Oct/01:50	Train no. 92227 (REFER)	Minho line	Km 054.800

Train 92227 (maintenance support car - Dresina DP 123) was carrying out track inspection at km 54.980 when it derailed at around 01:50 due to a 25 metre stretch of track without ballast.
The same situation was later found on a 12 metre stretch at km 55.524.
The Barcelos and Tamel stations were manned from 04:15 and 04:35, respectively.
The maintenance support car (*dresina*) was re-railed at 04:25. Passenger service was provided by road between the stations of Barcelos and Tamel.
The manager of circulation zone 101 was appointed local emergency manager at 01:55, arriving at the site at 3:20.

Accident involving rolling stock in motion	Date/Time: 24-Oct/16:21	Train no. 871	Douro line	Km 109.000

Adverse weather conditions caused a large rock to fall onto the track, causing the first bogie of the traction unit to derail.
Assistance requisition No 97779 was made. A category B emergency plan was put into action, and a local emergency manager was appointed at 16:45, arriving at the site at 17:10. Locomotive 92237 was sent to the site at 17:24 to transfer the passengers, arriving at 17:45. After the passengers got on the train, requisition type 11107 No 216 was made to return to Régua, returning in train 871 which arrived at 18:14. There were no injuries. The emergency train was sent to deal with re-railing, leaving Régua at 20:47 and arriving at the site at 21:15. Re-railing operations started at 21:30.

Accident involving rolling stock in motion	Date/Time: 27-Oct/18:55	Train no. 854	Minho line	Km 074.962

At km 74.962 the train collided fatally with a man who appeared to have fallen down while crossing open track on the right side to the direction of travel. At around 19:37 the train was permitted to continue its journey by the authorities at the site, given that it had already passed the location where the victim lay. A category C emergency plan was put into action, and the inspector of the operations zone was appointed local emergency manager at 19:15, arriving at the site at 19:50.
The body was removed by the Viana volunteer fire brigade at 20:52, and the track was declared clear and without restrictions at the same time. The victim was an elderly man whose identity is unknown.

Accident at an LC	Date/Time: 29-Oct/20:53	Train no. 806	Western Line	Km 112.098

The CP Regional overhead line inspector informed the Lisbon operational command centre (CCO) that train 806 had collided with a truck on the left side, which appeared from the right side in the direction of travel, at a type D LC at km 112.098. A local emergency manager was appointed, arriving at the site at 22:45. A category C emergency was declared. The ticket inspector asked for assistance from the front, under requisition no. 13786, at 21:46. Assistance was provided by the My 463, which left Caldas da Rainha at 22:00, arriving on site at 22:25. The train restarted its journey at 22:32, arriving at Caldas da Rainha station at 22:55.
The track was declared clear without restrictions at 02:20.

Accident involving rolling stock in motion	Date/Time: 19-Nov/13:05	Train no. 543	Northern Line	Km 000.000

The security office was informed by the Santa Apolónia security guard that at 12:55 a passenger inside the train fell when getting off the train that was halted at platform 5 (visible on camera 1-19) and was leaving at 13:16. The security guard called the emergency ambulance service (INEM) at 13:00 and then provided care until INEM arrived at 13:24; the passenger was taken to São José hospital.

Accident involving rolling stock in motion	**Date/Time: 27-Nov/09:48**	**Train no. 181**	**Alentejo Line**	**Km 138.443**

At the Alvalade halt/alighting point Train 181 collided fatally with a man crossing the track from right to left in the train's direction of travel, with the body remaining on the left side. A category C emergency plan was put into action, and a local emergency manager was appointed at 10:00, arriving at the site at 10:25.
The train was cleaned and then restarted its journey at 11:10. Urgent line closure requisition (PATE) 37/2013 was issued so that the track could be cleaned, beginning at 12:13 and ending at 12:39.

Accident involving rolling stock in motion	**Date/Time: 01-Dec/00:06**	**Train no. 543**	**Northern Line**	**Km 066.390**

The train was involved in a fatal collision with a man when passing km 066.390 at the indicated time. Train circulation was suspended on the down line between Santana Cartaxo-Resguardo and Entroncamento between 13:59 and 15:44. A local emergency manager was appointed at 14:12, arriving at the scene at 15:55. Trains were ordered to proceed on sight when passing the location in question.
According to the Santarém civil protection authority (CDOS) the victim was removed from the site at 15:47 and taken to the morgue at Santarém hospital.
Power was shut off to the down line from 17:10 to 17:20 between the Vale de Santarém neutral section and Santarém station to allow the line to be cleaned.
Normal train circulation was re-established without restrictions at 17:21.
The Santarém National Republican Guard (GNR) took charge of the incident.

Accident involving rolling stock in Motion	**Date/Time: 04-Dec/13:02**	**Train no. 670**	**"Ring" line**	**Km 004.050**

The train driver reported that a woman had fallen onto line III when train 670 was passing. A local emergency manager was appointed, arriving at the site at 13:30. The driver of train 14061 later reported that a woman was lying on line III next to the up line platform. When the driver of train 670 was interviewed, he stated that he had not been aware of the situation and that the alarm was raised by passengers on the train itself.
Circulation was suspended on line III at 13:10, and on line IV at 13:42, to provide care to the woman, who suffered severe leg injuries. The woman was removed from the line at 13:47 and taken to hospital by the emergency ambulance service (INEM).
Power was shut off on both lines between ETC/CAE from 14:20 to 14:29 at the request of the fire brigade and in order to wash the line.
Circulation was re-established on the aforementioned tracks at 14:30 with no restrictions.

Accident involving rolling stock in motion	**Date/Time: 13-Dec/11:26**	**Train no. 867**	**Minho line**	**Km 005.050**

The ticket inspector reported that the train was involved in a fatal collision with a man at the indicated km; he was moving from the side of the up line to the front of the train as it was approaching.
The identity of the man is not known, and he appears to be about 50 years old. A category C emergency plan was put into action, and a local emergency manager was appointed at 11:30, arriving at the site at 11:50. Circulation continued on a single track - the up line - between Contumil and Ermesinde starting at 11:30, with trains circulating at proceed on sight authority at the location of the accident. Train 867 restarted its journey at 12:18 after the police had completed formalities. Removal of the body was completed at 12:24 and both tracks were declared clear without restrictions from that time onwards.

Source: Annual Safety Report 2013, REFER