INSTITUTO DA MOBILIDADE E DOS TRANSPORTES, I.P.

Annual Rail Safety Report

2017

Rail Safety Performance on the National Railway Network

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Glossary

Significant accident	Any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and rolling stock yards are excluded.
NRSA	National Railway Safety Authority
Train.km	Unit of measure representing the movement of a train over one kilometre (tk)
ERA	European Railway Agency
RU	Railway undertaking
Seriously Injured Person	Any person injured who was hospitalised for more than 24 hours as a result of an accident, excluding attempted suicides.
IM	Infrastructure manager
GPIAAF	Gabinete de Prevenção e Investigação de Acidentes com Aeronaves e de Acidentes Ferroviários [Office for the Prevention and Investigation of Air and Rail Accidents]
IMT, I.P.	Instituto da Mobilidade e dos Transportes, I.P.
CSI	Common Safety Indicators
INE	Instituto Nacional de Estatística, I.P. [National Statistics Institute]
CSM	Common Safety Method
Deaths (killed person)	Any person killed immediately or dying within 30 days as a result of an accident, with the exception of suicides
LC	Level crossing
ASR	Annual Rail Safety Report
NRN	National Rail Network
SMS	Safety Management System
SPAD	Signal Passed at Danger
SPWP	Safety Performance Working Party
Suicide	An act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority
Attempted suicide	An act to deliberately injure oneself resulting in serious injury
Tonne.km	Unit of measurement for recording transport output, corresponding to the carriage of 1 tonne over 1 kilometre calculated by multiplying the quantity carried in tonnes by the distance covered in kilometres (tk)

1. Introduction

1.1 Scope

Publication of the Annual Rail Safety Report (ASR) is the responsibility of IMT, I.P., the National Railway Safety Authority (NRSA), as provided for in Article 3(3)(m) of Decree-Law No 77/2014 of 14 May 2014, in compliance with Article 66 of Decree-Law No 151/2014 of 13 October 2014. The report must contain information on the following:

- the development of railway safety, including information on common safety indicators;
- important changes in legislation and regulation concerning railway safety;
- the development of safety certification and safety authorisation;
- results of and experience relating to the supervision of infrastructure managers and railway undertakings;
- the exemptions granted under Article 66-S(4-6) of Decree-Law No 151/2014 of 13 October 2014.

This report does not include all other guided transport systems which do not use the National Rail Network, such as metros, light rail, miniature trains, trams and passenger cableways.

1.2 Objectives

One of the objectives of this report is to publicise activities carried out by IMT, I.P., within its responsibilities as the NRSA, for monitoring, supervising, developing and managing railway safety in relation to passenger and goods transport on the NRN. Annex A gives a detailed overall description of the National Railway Network and identifies the undertakings responsible for rail transport and infrastructure management.

In addition to reporting on these activities, another objective of this report is to publish the Common Safety Indicators (CSIs), which make it possible to measure and evaluate safety performance. These indicators are listed in Annex C to this report.

The data supplied is based on reports on the application of the Safety Management System (SMS) of the infrastructure manager and railway undertakings, in compliance with Article 66(C) of Decree-Law No 151/2014 of 13 October 2014, complemented by statistical data provided by the National Statistics Institute (INE).

This report also seeks to raise awareness in the national railway sector of the importance of making every effort to improve safety performance in order to continually improve railway accident rate indicators.

1.3 National Railway Safety Authority – NRSA

1.3.1. National legal framework

Decree-Law No 151/2014 of 13 October 2014, Chapter VI - Safety, Section I - The National Railway Safety Authority, describes the activities of the IMT, I.P., as the NRSA.

1.3.2. The National Railway Safety Authority

Article 63 - The National Railway Safety Authority

1 — The IMT, I. P. is the national body responsible for railway safety, as set out in this Decree-Law.

2 — The railway safety authority is responsible for ensuring that railway safety is generally maintained and, where reasonably practicable, continuously improved, taking into consideration the development of European legislation and technical and scientific progress and giving priority to the prevention of accidents.

1.3.3. Responsibilities of the National Railway Safety Authority

Article 63(B) - Responsibilities of the National Railway Safety Authority

1 — The authority responsible for railway safety has the following duties:

a) authorising the commissioning of the structural subsystems of the railway system, according to rules on interoperability with the rail system, and ensuring that they are operated and maintained in accordance with the relevant essential requirements;
b) supervising that the interoperability constituents are in compliance with the essential requirements of the applicable legislation;
c) authorising the placing in service of new and substantially altered rolling stock that is not yet covered by a TSI;
d) issuing, renewing, altering and cancelling safety certificates and safety authorisations and checking that conditions and requirements laid down in them are met and that infrastructure managers and railway undertakings are operating under the requirements of Community or national law;
e) monitoring, promoting and, where appropriate, enforcing and developing the safety regulation framework, including the system of national safety rules;
f) ensuring that vehicles are duly registered in the national rolling stock register, and that safety related information contained therein is accurate and kept up to date;
g) analysing recommendations sent to it by the railway accidents investigation body and, if applicable, ensuring that such recommendations are applied;
h) issuing binding instructions and recommendations concerning railway safety.

2 — The functions listed above may not be transferred or contracted to the infrastructure manager, a railway undertaking or a contracting entity.

3 — In accordance with 1(h) and without prejudice to the following Article, binding instructions shall be communicated to the recipients and published on the NRSA's website.

1.4 Publication of the 2017 Annual Rail Safety Report

Accident data was checked for consistency and underwent final validation using a transparent participatory process involving rail transport undertakings and the infrastructure manager, who were given the opportunity to analyse and consolidate the common data, thereby ensuring the reliability and quality of the final data presented.

This report will be provided to the following entities and bodies:

- Ministry of Planning and Infrastructure (MPI);
- European Railway Agency (ERA);
- Office for the Prevention and Investigation of Accidents in Civil Aviation and Rail (GPIAAF);
- Mobility and Transport Authority (AMT);
- Infraestruturas de Portugal (IP);
- Railway undertakings;
- IMT, I.P. website for access by the public.

1.5 Organisational changes

In 2017, no organisational changes were made to the internal structure of the IMT, I.P., which deals with railway issues, particularly those related to railway safety, a responsibility which is attributed to the Departamento de Equipamentos e Infraestruturas de Transporte (DEIT) [Department of Transport Equipment and Infrastructure] of the Direção de Serviços de Regulamentação Técnica, de Qualidade e Segurança (DSRTQS) [Department for Technical Regulations, Quality and Safety Services].

Annex B contains information on the organisation of the IMT, I.P.

1.6 Principal findings for 2017

The railway accident rate fell in 2017 compared to 2016, particularly with respect to the number of deaths and significant accidents. The number of significant accidents was 23.7% lower, the number of deaths was 20.0% lower and the number of serious injuries fell by 16.7%, leading to a 20.3% reduction in the number of fatalities and weighted serious injuries (FWSI).

Contrary to this positive trend, however, the number of suicides recorded on the railways (52) regrettably increased by 62.5% compared to 2016.

Nevertheless, generally positive variations in accident precursors were recorded, slightly lessening the negative curve of recent years, with an 8.5% reduction in total precursors analysed. Data on relevant

accident precursors in relation to railway infrastructure, particularly track buckles and broken rails, indicate a slight reversal in the form of a 29.6% fall in broken rails, while track buckles increased by 7.8%, although this was less serious than the number recorded in 2016.

In this context, therefore, the safety performance of the national railway system was generally slightly lower than the negative peak recorded in 2016, so that in relation to indicators of deaths and serious injuries (more serious consequences), the latter were mostly related to accidents to persons caused by rolling stock in motion, not including suicides, rather than mostly by causes connected to railway operation or infrastructure management.

This consolidates the findings of previous years that the number of accidents is due primarily to incidents that occur outside core railway activity, specifically involving interfaces between the system and third parties, such as train collisions with trespassers on railway property and with people who do not obey the rules of use for level crossings. These two accident categories were responsible for all deaths recorded.

2. SUMÁRIO EM INGLÊS – ENGLISH SUMMARY

There was a reduction in the number of fatal accidents in 2017 compared to 2016, namely in terms of the number of fatalities and significant accidents. The number of significant accidents was lower by 23.7%, the number of fatalities less 20.0%, and the serious injuries decreased by 16.7%, which consequently led to a reduction of the MFGP (Fatalities and Weighted Serious Injuries - FWSI) Index in 20.3%. However, contrary to this positive trend, in relation to the number of suicides recorded in the railway environment (52), there was a 62.5% increase compared to 2016.

In the context of precursors to accident, there were positive trends, slightly lowering the negative curve of recent years, with a reduction of 8.5% in the total number of precursors analysed. Data on precursors incident relevant to rail infrastructure, namely track buckle and other track misalignment, and broken rails, show a significant inversion in the level of broken rails in 2017, 29.6% although in the case of track buckle and other track misalignment, there was still a slight increase of 7.8%, less worrying than in 2016 compared to 2015.

In this context, in 2017, it was shown that in general the safety performance of the national railway system slightly breaks the negative peak recorded of 2016, and consolidates the idea that regarding to indicators of fatalities and serious injuries, those are mostly related to persons caught by rolling stock in motion, with the exception of suicides, and not (mostly) from causes related with the railway operations or infrastructural exploitation. This reinforces the result of the analyses of previous years, indicating that the number of accidents derives essentially from events that are extraneous to the core activity of the railways, more specifically pointing to the interfaces of the system with third parties, which are *explained* by the train collisions with rail trespassers, and with people who transgress the road safety rules on level crossings, having been in these two categories of accident where the totality of fatalities was verified.

In a glance one can say that the Portuguese railway network safety performance upon more than a decade of the Safety Management Systems implementation, is accomplishing a very good maturity level. This considering and despite the challenging process of changing an entire business framework, of rethinking the way that sector actors are putting in place all the regulatory and regulation changes, as well the efforts needed to comply with a totally different safety management approach.

3. RAILWAY SAFETY PROGRAMME AND STRATEGY

3.1 National safety strategy, initiatives and other relevant facts

In observing the performance of railway safety, both the IM and the RU monitor events with a potential impact on the safe operation of the national railway system on a daily basis. In addition to such daily analyses, trends are also analysed and the results are then compiled in annual reports on the application of safety management systems. These daily incident reports are known to the NRSA, which, when deemed necessary, asks for detailed data on specific events and meets the bodies involved to analyse the respective causes and the safety improvements to be made.

Effective risk management and control requires compliance with legislation and regulations applicable to railways. Priority is given to reducing the railway accident rate by committing to the common safety objectives and common safety indicators adopted. This is achieved by regularly assessing and continually improving performance, specifically by using the best available safety practices and common safety methods (CSM).

The analysis and monitoring of safety performance indicators over the last 10 years has shown that the assessment, management and control of risks related to railway operation must be consolidated to guarantee the consistency achieved in managing the 'internal' safety of the railway system and better control railway accident rates in terms of incidents that occur outside core railway activity, particularly at railway interfaces with third parties (e.g. road-rail interface at level crossings).

In coming years it is therefore crucial to increase the monitoring and supervision of railway undertakings subject to regulation by the IMT, I.P. To this end, a wide-ranging supervision strategy set out in accordance with Commission Regulation (EU) No 1077/2012 will be applied. In order to perform the tasks it is responsible for, it is essential for the NRSA to be equipped with the internal and external organisational capacity required in terms of human and material resources.

In 2017 the IMT intensified its supervisory work with the IM, particularly in relation to accident precursors in the area of infrastructure, to identify possible causes for their deterioration and issue recommendations for improvements.

Another priority for the IMT, I.P. is to continue the process of revising the railway safety regulations in order to simplify and update them with respect to the legal framework of both Portugal and the European Union.

4. RAILWAY SAFETY PERFORMANCE 2017

This section of the report provides a detailed analysis of trends seen in the Common Safety Indicators over the ten-year period from 2008 to 2017. It will also provide an analysis of railway safety performance in 2017 compared to the previous year's data and the average over the last five years (2012 to 2017). Annex C contains tables of the numerical data used in calculating the Common Safety Indicators for 2017. The data presented in this report was calculated and analysed based on the common European definitions and methods developed by the ERA[1].

The number of significant accidents fell by 23.7% compared to 2016, a reduction virtually identical to the average over the last five years (22.9%), but 29.1% below the average for the last ten years. In addition, the number of deaths decreased by 20.0% compared to the previous year, a reduction of 8.3% compared to the average over the previous five years, although this was more significant compared to the average over the previous ten years (17.7%).

The most positive aspects are the lack of deaths among passengers or railway workers. Another positive aspect of rail safety performance in 2017 is the reduced number of seriously injured people. This number went down by over 50 % compared to the previous five years, and even more compared to the previous ten years (66.4 %).

Although the process of reducing the number of level crossings (LCs) and improving traffic conditions continues, only one LC was closed in 2017.

The number of LCs with active protection (manual or automatic) continues to be higher than the number with passive protection (460 vs 390), with an improvement compared to 2016. These slight improvements in LCs were reflected in a slight decrease in the number of accidents and deaths at LCs. For that reason, continuation of the LC closure programme, along with the preparation and implementation of a yearly plan, is considered a priority.

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.

[1] Set out in Directive 2009/149/EC of 27/11/2009, which amends Annex 1 of Directive 2004/49/EC (Safety Directive), transposed into national law by Decree-Law No 62/2010 of 9 June 2010.

4.1.1. Deaths and Serious Injuries

4.1.1.1 Deaths per type of accident

Total deaths by type of accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the	Average, 5 years
Total for all accidents	42	32	22	14	24	26	19	19	25	20	24.3	21.8
Collisions of trains, including collisions with obstacles within the clearance gauge	0	0	0	0	0	0	0	0	0	0	0	0
Derailments	1	0	0	0	0	0	0	0	0	0	0.1	0
Accidents at LCs, including those involving pedestrians	15	17	11	4	8	10	4	6	8	6	8.9	6.8
Accidents to persons involving rolling stock in motion, with the exception of suicides	26	15	11	10	16	16	15	13	17	14	15.3	15
Fires on rolling stock	0	0	0	0	0	0	0	0	0	0	0	0
Other accidents	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 – Total number of deaths per type of accident, 2008-2017

As highlighted in the last Report, since 2009 there have only been deaths in two categories:

Accidents at LCs, including those involving pedestrians

- Accidents to persons involving rolling stock in motion, with the exception of suicides

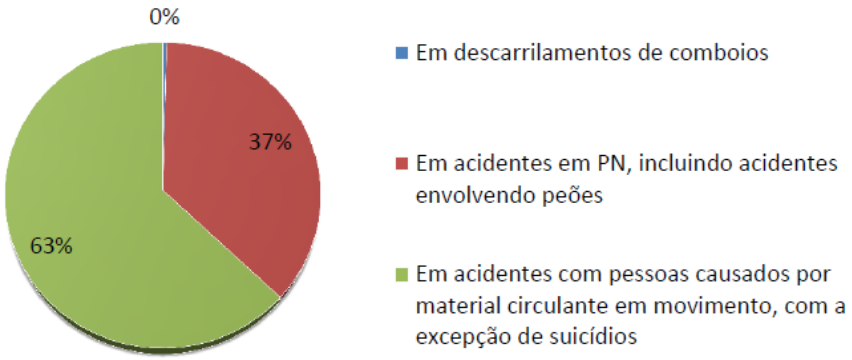
This once again reinforces and consolidates the perception of the high levels of analysis, management and control of railway operation risks in a context of a greater number of railway users and workers.

In 2016 the number of deaths caused by railway accidents was 20.0% lower than in 2016 and 8.3% lower than the average of the previous five years. In this context there was a 25.0% increase in deaths caused by accidents at LCs compared to 2016 and a 17.6% decrease in the number of accidents to persons involving rolling stock in motion.

In Portugal, as in other European countries, the overwhelming majority of deaths (100 % in Portugal since 2009) involve people making improper use of railway property, either by trespassing or by failing to observe the rules at level crossings.

Accidents caused by rolling stock in motion are responsible for most deaths (63%), followed by those occurring at level crossings (37%) (Chart 1). In 2017 there continued to be no deaths as a result of derailments or collisions. Although these types of accident attract intense media attention and have great

social impact, they have accounted for only 2% of deaths in the last ten years.



Em descarrilamentos de comboios	Derailments
Em acidentes em PN, incluindo acidentes envolvendo peões	Accidents at LCs, including those involving pedestrians
Em acidentes com pessoas causados por material circulante em movimento, com a excepção de suicídios	Accidents to persons caused by rolling stock in motion, with the exception of suicides

Chart 1 – Average percentage of deaths per accident category, 2008-2017

4.1.1.2 Deaths by category of person

Table 2 presents railway deaths by category of victim; 2017 was the seventh consecutive year without rail worker deaths. The 'Passengers' category followed the same trend: in the last seven years there was only one death, in 2013.

There was a reduction in the number of deaths among LC users (25.0%) and trespassers (13.3%) compared to 2016. The breakdown of averages over the past ten years for these two categories shows that the overwhelming majority of fatal accidents involve persons external to railway operations – 'Trespassers' (on railway property) and 'LC users' (230 out of 243 victims over 10 years, 94.7%).

Category of person	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the period	Average over the last 5
Passengers	3	0	1	0	0	1	0	0	0	0	0.5	0.2
Workers	1	1	1	0	0	0	0	0	0	0	0.3	0
LC Users	15	17	11	4	8	10	4	6	8	6	8.9	6.8
Trespassers	23	14	9	10	16	14	15	12	15	13	14.1	13.8
Others	0	0	0	0	0	1	0	1	2	1	0.5	1
Total	42	32	22	14	24	26	19	19	25	20	24.3	21.8

Table 2 – Number of deaths by category of person, 2008-2017

Records show that rail transportation is particularly safe for users, as only 2.1% of railway accident victims were passengers.

Despite the figures recorded in 2016 and 2017, the long-term trend is a clear and consistent decrease in the number of deaths due to railway accidents over recent years, which is very positive. This is most notable when compared to the average of the past ten and five years. In the latter period the figures are lower for all accident categories (Table 1) and categories of person (Table 2) with recorded deaths. This decrease is directly related to measures introduced to reduce and modernise LCs and improve the control of the risks associated with traffic safety, either through new regulatory provisions or the introduction or improvement of installed technical systems, which must be maintained.

4.1.1.3 Serious Injuries

Category of person	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the period	Average over the last 5 years
Passengers	6	4	3	2	3	3	9	1	2	1	3.4	3.2
Workers	2	2	2	0	0	0	0	0	1	0	0.7	0.2
LC Users	10	5	3	3	5	5	5	1	0	0	3.7	2.2
Trespassers	20	7	8	5	7	5	7	2	3	4	6.8	4.2
Others	1	0	0	0	1	1	0	0	0	0	0.3	0.2
Total	39	18	16	10	16	14	21	4	6	5	14.9	10

Table 3 – Number of serious injuries by category, 2008-2017

The number of serious injuries has fallen significantly and consistently over the past ten years, with less than 10 serious injuries being recorded for the third consecutive year in 2017.

As with the number of deaths and their distribution among the various categories, most serious injuries occur in the categories of trespassers and LC users (70.5%) over the ten-year period.

The average distribution over the last ten years (2008-2017) continues to record a not insubstantial percentage of passenger injuries (22.8%), in contrast to the low percentage of passenger deaths, representing only 2.5% of the total. This indicator, however, also highlights a consistent decrease in the number of serious injuries, as can be seen from a comparison of the averages over the last 10 years and the last five years, the latter period having lower results in all categories of person (Table 3) and accident types (Table 4).

Type of Accident	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the period	Average over the last 5
Train collisions, including collisions with obstacles within the clearance gauge	0	0	0	0	2	0	0	0	1	0	0.3	0.2
Derailments	4	0	0	0	0	0	0	0	0	0	0.4	0
Accidents at LCs, including those involving pedestrians	10	5	3	3	5	5	5	1	0	0	3.7	2.2
Accidents to persons caused by rolling stock in motion, with the exception of suicides	23	13	13	7	9	9	16	3	5	5	10.3	7.6
Fires on rolling stock	0	0	0	0	0	0	0	0	0	0	0	0
Other accidents	2	0	0	0	0	0	0	0	0	0	0.2	0
Total of all accidents	39	18	16	10	16	14	21	4	6	5	14.9	10

Table 4 – Serious injuries by type of accident, 2008-2017

In 2017, all serious injuries (100%) occurred in accidents caused by rolling stock in motion.

4.1.1.4 Risk to society

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.

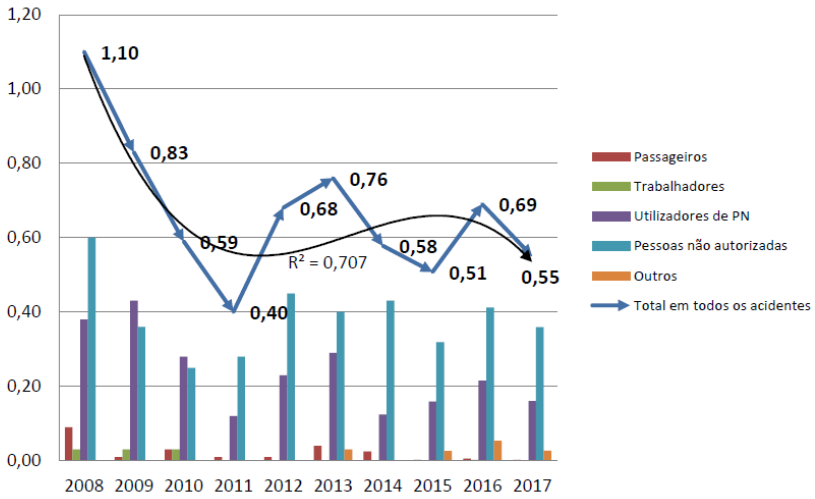
This indicator is calculated by dividing the total number of Fatalities and Weighted Serious Injuries (FWSI) by millions of train-kilometres travelled during the year in question. For the purposes of calculating the index, one weighted serious injury is regarded as statistically equivalent to 0.1 deaths.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average over the last 10	Average over the last 5
Passengers	0.09	0.01	0.03	0.01	0.01	0.03	0.03	0	0.01	0.00	0.02	0.02
Workers	0.03	0.03	0.03	0	0	0	0	0	0.00	0.00	0.01	0.00
LC Users	0.38	0.43	0.28	0.12	0.23	0.29	0.12	0.16	0.22	0.16	0.24	0.19
Trespassers	0.6	0.36	0.25	0.28	0.45	0.36	0.42	0.32	0.41	0.36	0.39	0.38
Others	0	0	0	0	0	0.03	0	0.03	0.05	0.03	0.01	0.03
Total	1.1	0.83	0.59	0.4	0.68	0.69	0.57	0.51	0.69	0.55	0.67	0.62

Table 5 – FWSI index per million train-km, by category of person, 2008-2017

The trend indicates a reduction over the past ten years in the overall risk to society posed by the railway

network, although with some variations, as shown in Chart 2, with the trend in 2017 being positive once again.



1,20	1.20
1,00	1.00
0,80	0.80
0,60	0.60
0,40	0.40
0,20	0.20
0,00	0.00
1,10	1.10
0,83	0.83
0,59	0.59
0,40	0.40
0,68	0.68
R^2 = 0,707	R^2 = 0.707
0,76	0.76
0,58	0.58
0,69	0.69
0,51	0.51
0,55	0.55
Passageiros	Passengers
Trabalhadores	Workers
Utilizadores de PN	LC Users
Pessoas não autorizadas	Trespassers
Outros	Others
Total em todos os acidentes	Total of all accidents

Chart 2 – FWSI index x 10^6 km by category, 2008-2017

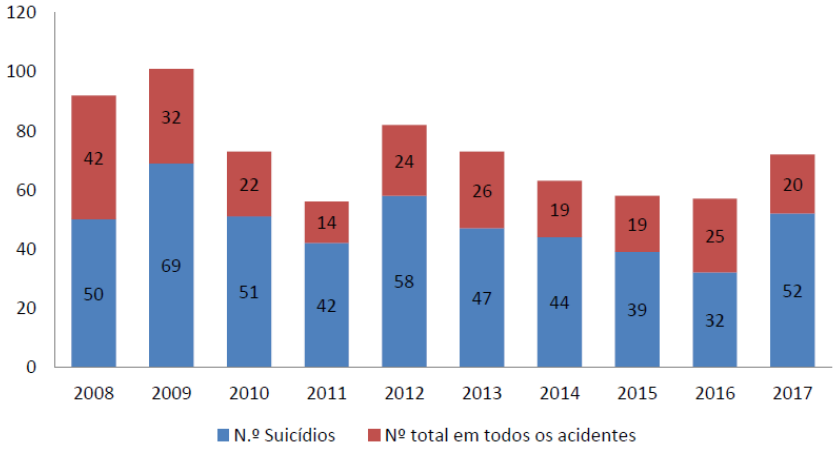
It can be seen from Chart 2 that there is yet again a clear predominance of risk in the most significant accident categories, namely 'Trespassers' and 'LC users'. It should also be noted that the categories of Passengers, Employees and Others contribute a relatively small amount to the railway system's overall risk to society.

4.1.1.5 Suicides

Since suicides on the railways are excluded from railway safety performance indicators, and although they are not regarded as railway accidents, they are nevertheless analysed in managing railway safety. Besides representing a personal and social tragedy, the cases arising out of these occurrences give rise to significant disruption and risks for railway users. Hence the efforts made by railway operators and other entities to reduce the number of such incidents and their negative impact on professionals and users.

Thus in relation to suicides recorded in 2017 and contrary to the positive trend recorded between 2012 and 2016, 2017 was a critical year with a total of 52 suicides, an increase of 62.5% compared to the previous year.

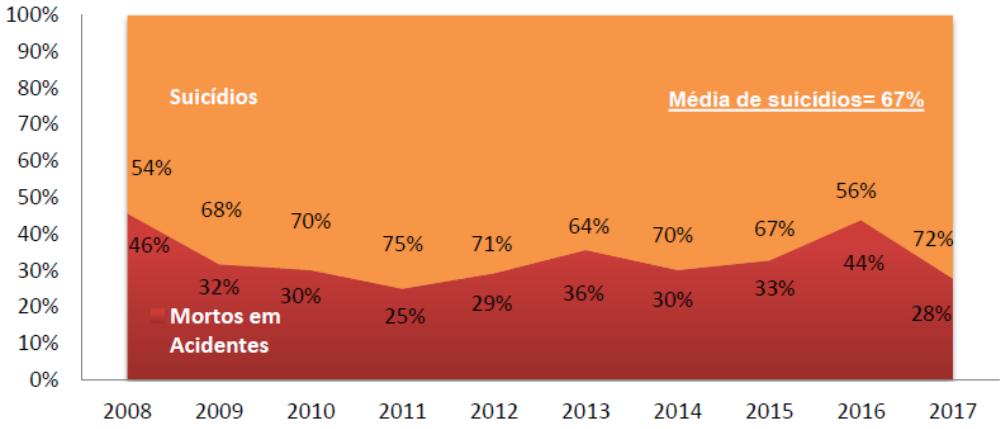
The highest number of suicides since 2013 was reached in 2017, the third worst record in the last 10 years. The negative impacts of such events on society make this a matter of great concern.



N.º Suicídios	No of suicides
Nº total em todos os acidentes	Total for all accidents

Chart 3 - Number of deaths on the railway (Suicides - Accidents) 2008-2017

Thanks to the further development of safety management systems in recent years, on average the number of suicides exceeds the number of deaths caused by accidents, as shown in Chart 4, with 67% suicides compared to 33% accident deaths.



Suicídios	Suicides
Mortos em Acidentes	Accident deaths
Média de suicídios= 67%	Average number of suicides = 67%

Chart 4 - Development of deaths on the railway (accidents and suicides) 2008 - 2017

4.1.2. Number of accidents

The number of accidents in 2017 fell by 23.7% compared to 2016, a significant reduction which almost identical to the average over the last five years (22.9%). This reduction is more significant in comparison to the average for the period (2018/17).

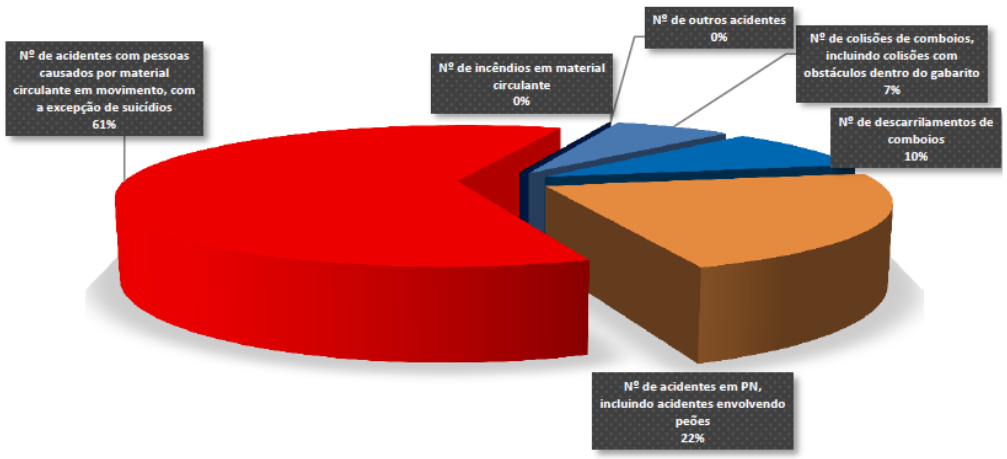
In a consistent trend over the last ten years and similar to observations of other European rail networks, the two categories with the largest number of accidents are accidents to persons caused by rolling stock in motion and accidents at level crossings (Chart 5).

As can be seen from Chart 5, accidents due to intrinsic railway activity represent only a small proportion of the total (17%), and there has also been a reduction in magnitude and a slight decrease in frequency over time.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the	Average over the last 5
Train collisions, including collisions with obstacles within the clearance gauge	0	0	2	1	1	1	7	1	4	0	1.7	2.6
Derailments	3	1	3	2	0	4	3	3	5	3	2.9	3.6
Accidents at LCs, including those involving pedestrians	20	15	14	7	11	12	9	6	8	7	10.9	8.4
Accidents to persons caused by rolling stock in motion, with the exception of suicides	49	27	22	17	23	31	31	13	21	19	25.3	23.0

Fires on rolling stock	0	0	0	0	0	0	0	0	0	0	0	0
Other accidents	1	0	1	0	1	0	0	0	0	0	0.3	0
Total number of accidents	73	43	42	27	36	48	50	23	38	29	40.9	37.6

Table 6 – Accidents by category, 2008-2017



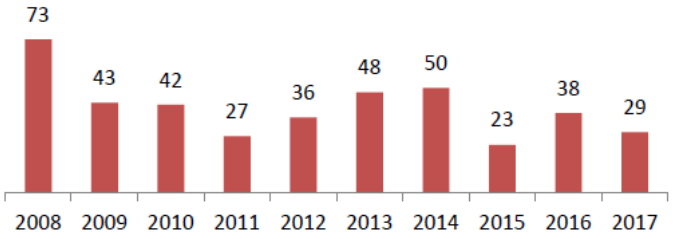
Nº de acidentes com pessoas causados por material circulante em movimento, com a excepção de suicídios 61%	No of accidents to persons caused by rolling stock in motion, with the exception of suicides 61 %
Nº de incêndios em material circulante 0%	No of fires on rolling stock 0 %
Nº de outros acidentes 0%	No of other accidents 0 %
Nº de colisões de comboios, incluindo colisões com obstáculos dentro do gabarito 7%	No of train collisions, including collisions with obstacles within the clearance gauge 7 %
Nº de descarrilamentos de comboios 10%	No of derailments 10 %
Nº de acidentes em PN, incluindo acidentes envolvendo peões 22%	No of accidents at LCs, including those involving pedestrians 22 %

Chart 5 – Distribution of accidents by category, 2013-2017

Since serious railway accidents have been recorded, i.e., since 2004, no accidents have been recorded that were due to fires in rolling stock.

The distribution of accidents and their relative weight compared to the previous year consolidated the weight of accident categories with persons caused by rolling stock in motion, i.e. 65.5% compared to 55.3% in 2016, and at level crossings, 24.1% compared to 21.1%, also in 2016.

Chart 6 – Total No of accidents



Contrary to 2016, in 2017 there was a decrease in the total number of accidents, with a reduction in all accident categories. The number of accidents at LCs fell slightly compared to 2016, recording one of the lowest figures for the period and exceeded only by the figure for 2015. This indicator has nevertheless stabilised to some extent since 2007. The positive impact observed in previous years due to the programme to remove and reclassify LCs, undertaken by the infrastructure manager, has not been as significant more recently because the number of LCs removed or reclassified has been decreasing. In 2017 one LC was removed, 25 % less than in 2016, while two were reclassified, 7.1 % fewer. Since accidents at LCs continue to be the second main category of accidents, it is important to continue and to intensify the respective prevention policy, either by reducing the number of LCs or through awareness campaigns aimed at users.

Chart 7 - No of accidents at LCs

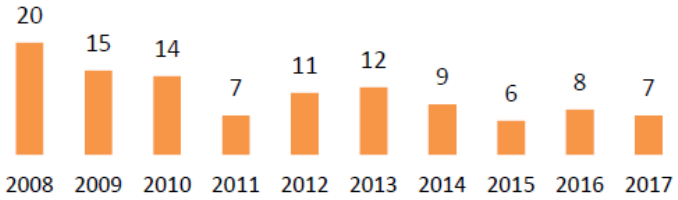
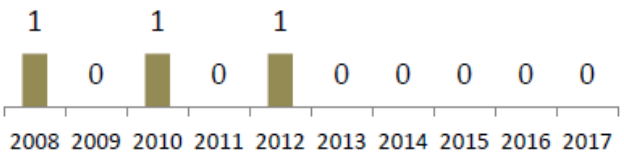


Chart 8 - No of other accidents



The following charts show the development of the remaining accident categories over the last ten years. The number of other significant accidents that do not fall within the main categories was zero for the second consecutive year.

In relation to collisions, since 2009 there has not been a year without collisions with obstacles within the clearance gauge, representing 100% reduction in this indicator.

In relation to derailments, the trend during the period was maintained, despite recording two fewer events than in the previous year, the average being constant in five of the 10 years analysed.

In addition, regarding accidents to persons caused by rolling stock in motion, the most significant category in the total number of accidents (65.5% of the total), in 2017 the number of incidents was 9.5% lower than in 2016. Compared to the averages for the last 5 to 10 years, however, the figure recorded in 2017 represented a more significant decrease (17.4% and 24.9% respectively).

Chart 9 - No of collisions

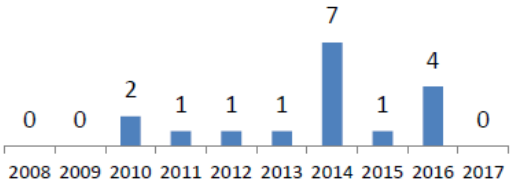


Chart 10 - No of derailments

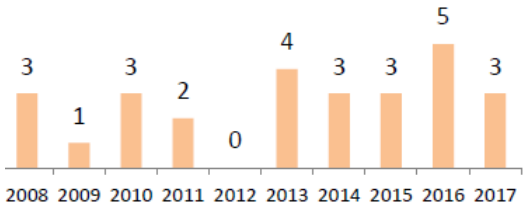
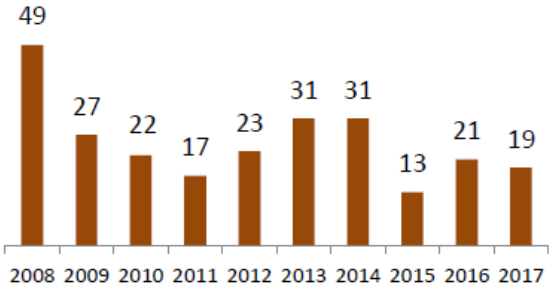


Chart 11 - Accidents to persons caused by rolling stock



4.1.3. Accident precursors

The total number of accident precursors (Table 7) has fluctuated since 2011 with a marked negative trend, particularly for indicators relating to infrastructure, track buckles and broken rails.

There was a slight easing of the trend in 2017, with an 8.5 % fall in the total number of accident precursors compared to 2016. However, since a new historical maximum of this indicator was observed in 2016, the concern expressed in the previous report regarding the need for all rail sector actors to reflect carefully on this data remains valid.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average for the period	Average over the last 5 years
Broken rails	33	35	50	21	45	29	52	43	71	50	42.90	49.0
Track buckles	37	44	56	24	76	121	146	128	167	180	97.90	148.4
Wrong-side signalling failures	0	0	1	0	0	0	0	0	1	0	0.20	0.20
Signals passed at danger (SPAD) SPAD	24	12	6	22	25	26	30	17	32	18	21.20	24.60
Broken wheels on rolling stock in operation	0	0	0	0	0	1	1	0	0	0	0.20	0.40
Broken axles	0	0	1	1	0	2	2	0	0	0	0.60	0.80
Total incidents and near misses	**94**	**91**	**114**	**68**	**146**	**179**	**231**	**188**	**271**	**248**	**163.0**	**223.4**
Change relative to the previous year (%)	-6.0	-3.2	25.3	-40.4	+114.7	+22.6	+29.1	-18.6	+44.1	-8.5	-	-

Table 7 – Accident precursors, 2008-2017

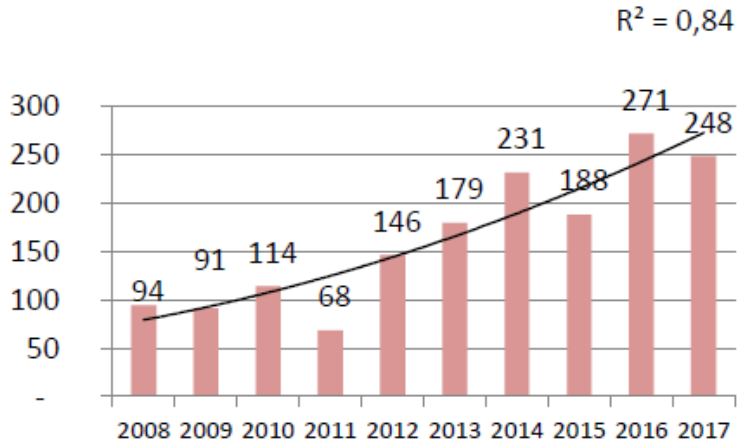
While the number of occurrences of this indicator fell slightly in 2017, it would be premature to assume that the upward trend is reversing. In 2017 the number of occurrences of broken rails and SPADs fell but there was a slight increase in track buckles.

The number of events concerning infrastructure-related precursors (broken rails and track buckles) remains above the average for the last five and 10 years, a very significant situation. The trend of total accident precursors has been increasing and must be reversed as a matter of urgency. The average distribution of accident precursors for the 2008-2017 period reflects three main categories in absolute terms: track buckles, broken rails and SPADs. These three categories have been the most common since this indicator has been in place. However, track buckles have gradually become the most common accident precursors.

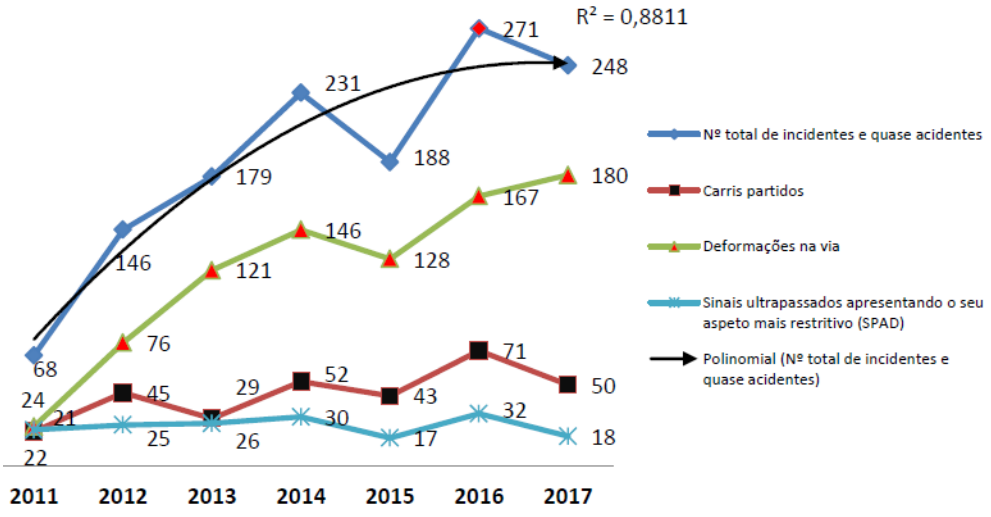
In 2017, variations in the number of events were observed in the three above-mentioned categories compared to 2016: 13 more track buckles (a 7.8 % increase), 21 fewer broken rails (a 29.6 % decrease) and 14 fewer SPADs (a 43.8 % decrease).

The following chart shows development over the last seven years (from the lowest point of recording occurrences), particularly of these three accident precursor categories, the data on broken wheels and axles being marginal, with a combined total of eight occurrences in the same period. The negative development of the three main categories of accident precursor is therefore clearly evident, with 2017 showing the highest ever number of track buckles.

Chart 12 – Trend in precursors



R² = 0,84	R² = 0.84



R² = 0,8811	R² = 0.8811
Nº total de incidentes e quase acidentes	Total incidents or near misses
Carris partidos	Broken rails
Deformações na via	Track buckles
Sinais ultrapassados apresentando o seu aspeto mais restritivo (SPAD)	Signals passed at danger (SPADs)

Polinomial (Nº total de incidentes e quase acidentes)	Total incidents or near misses

Chart 13 - Development of each category of accident precursor, 2008 - 2017

The significant increase recorded over recent years in infrastructure-related precursors (track buckles and broken rails) must be analysed in depth and requires urgent corrective action, as it indicates a deterioration in national railway network operating conditions, possibly due to maintenance shortcomings. These two indicators (track buckles and broken rails) are directly associated with the activity of the infrastructure manager, who is responsible for ensuring good operating conditions on the national railway network. In 2017, the IMT, with the aid of Portugal's National Civil Engineering Laboratory (LNEC), initiated an evaluation of the situation in order to propose or recommend actions to mitigate the risks associated to this type of occurrence. The results of this evaluation will be presented in the next report.

However, and also as stated above, SPADs, the precursor that increased most from 2015 to 2016 (88.2 %), improved substantially in 2017, with a reduction of 43.8 % compared to 2016.

4.2 Results of safety recommendations

No safety recommendations were issued by the GPIAAF in 2017.

Table 8 shows the latest situation on the implementation of the 20 recommendations issued by the GPIAAF in 2016, referred to in the previous report. The implementation of recommendations is monitored by the IMT, which notifies the GPIAAF when they have been complied with and the degree of effectiveness.

GPIAAF Report	Issued recommendations	Implemented recommendations	Partially implemented recommendations	Recommendations with implementation ongoing
2016 / 01	7	6	1	-
2016 / 02	13	8	2	3
Total	20	14	3	3

Table 8 – Latest situation regarding the implementation of GPIAAF recommendations.

5. SUPERVISION OF RAILWAY UNDERTAKINGS AND THE INFRASTRUCTURE MANAGER

5.1 Supervision and plan

Supervision is covered by Commission Regulation (EU) No 1077/2012 on a common safety method for the supervision of safety performance after the issuing of a safety certificate for railway undertakings or a safety authorisation for infrastructure managers, as stipulated in Annex IV of Regulation (EU) No 1158/2010 and Annex III of Regulation (EU) No 1169/2010 respectively, both of the European Commission. Article 2 - Definitions in the latter two Regulations state:

> **Supervision**: the arrangements put in place by the national safety authority to oversee safety performance after it has granted a safety certificate/safety authorisation.

Systematic safety monitoring to reinforce accident and incident prevention is thus carried out while supervising compliance with and enforcement of safety management systems (SMS) by the IM and the operation of RU services. Particular attention is given to the behaviour and development of accident precursors which, together with the set of common safety indicators (CSI), are analysed and studied in connection with the behaviour and performance of IM and RU safety systems.

Therefore, in order to carry out this activity the NRSA must have the required internal and external organisational capacity in terms of human resources and materials.

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 the infrastructure manager;
- performance of planned monitoring activities;
- monitoring of activities initiated after analysing events relating to accidents or incidents, claims/complaints or recommendations made by a board of enquiry;
- carrying out of Safety Management System Audits.

Monitoring activities are always carried out by IMT staff, who may ask personnel from the companies under inspection for assistance in carrying out the work necessary for such monitoring.

5.2 Human resources

Under the current structural and functional model of the NRSA, this is ensured within the organizational structure of the IMT by the Transport Equipment and Infrastructure Department (DEIT), part of the Technical Regulation, Quality and Safety Directorate (DSRTQS). Most NRSA functions are provided by the DEIT, except for Driver Certification, which is ensured by the Training and Certification Services Directorate (DSFC). It should be noted in addition that the DEIT is also responsible for regulating, ensuring the administration of and supervising the safety of the various kinds of guided transport systems (metro systems, mini trains, trams, cable transport - funiculars, cable cars, ski lifts).

Structure in 2017

- 1 Department Head;
- 4 Senior Technical Officers.

5.3 Skills

No human resources skills management system was developed or implemented by the DIET in 2017.

5.4 Decision-making process

Supervision of activities carried out by undertakings in 2017 entailed daily monitoring of occurrences relating to railway operations, the holding of meetings and inspections to assess compliance with operating rules by the rail transport undertakings.

5.5 Coordination and cooperation

In 2017 the protocol established with the NRSA of Spain was continued. This was relevant to the supervision and cross-acceptance of wagons.

The protocol for the cross-acceptance of wagons deals with the application of common procedures to authorise the commissioning of new or existing wagons. Its main objective is to facilitate the authorisation procedure in both countries by means of the mutual acceptance of the checks and tests that have already been approved by the authorities of Spain or Portugal.

A guide to the application of the above protocol was initiated in 2017 to clarify and simplify procedures to be adopted in very specific situations, and is expected to be concluded in 2018.

Work also began on establishing a cooperation agreement with the Spanish NRSA to supervise the activity of railway undertakings that operate on both national railway networks and for operating in border sections. This cooperation agreement should also be concluded in 2018.

5.6 Outcome of measures

The rail transport undertakings and infrastructure manager have carried out 13 regular internal audits in compliance with management and rail safety objectives. As a result of the internal audits carried out, the undertakings worked on resolving non-conformities and on ensuring rapid and integrated opportunities for improving their organisations.

6. DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

6.1 Legal framework and support

Decree-Law No 231/2007, which came into force on 14 June 2007, introduced the amendments to Decree-Law No 270/2003 that were required to transpose Directive 2004/49/EC of 29 April 2006 (Safety Directive). From that date on, therefore, a new system for the safety certification of railway undertakings came into force, and the infrastructure manager now needs to be in possession of a safety authorisation in order to carry out its activities. Meanwhile, Decree-Law No 151/2014 of 13 October was published in 2014, and Decree-Laws No 214-D/2015 of 30 September and 217/2015 of 7 October were published in 2015; these amended Decree-Law No 270/2003, though there were no changes to key elements of the safety certification procedure for undertakings.

The way the Safety Certification and Authorisation procedures can be prepared is set out in IMT Regulations No 442/2010 and No 443/2010 respectively.

The relevant legal documentation for preparing safety authorisation and certification procedures, as well as a list of railway legislation and regulations, is available on the IMT, I.P. website. Prospective candidates can also request documentation on safety regulations from the IMT.

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

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

Commission Regulation (EC) No 653/2007 of 13 June 2007 (on the use of a common European format for safety certificates) and the above-mentioned Regulation No 1158/2010 were used as a reference for the assessment criteria during the analysis of 'Part B' of the Safety Certificate application.

Applications for safety authorisations are examined in accordance with EU Regulation 1169/2010 on a common safety method for assessing conformity with the requirements for obtaining safety authorisations.

6.2 Contacts with other safety authorities

The IMT, I.P. continues to participate actively in the Safety Performance Working Party (SPWP) promoted by the ERA. Throughout 2017 the IMT, I.P. worked with the ERA and other national safety authorities in meetings of the NRSA network and working groups supported by the ERA to ensure mutual clarification and interpretation of indicator definitions.

In addition to informal interactions with European counterparts, at a formal level the IMT participates actively in meetings of the European Commission as part of the rail safety and interoperability committee, where, among other technical matters, European rules and regulations on the administration of railway safety are defined and approved.

6.3 Procedures

No applications for safety certification were received in 2017 from rail transport undertakings from other Member States.

The renewal of the safety authorisation of the IM, Infraestruturas de Portugal, began as planned in 2017, leading to its renewal following the merger of REFER with Estradas de Portugal, a complex process of analysis that will conclude in 2018.

6.4 Feedback

Railway undertakings and the infrastructure manager are permitted and encouraged to contact the IMT, I.P. for clarification, suggestions and comments regarding the procedure for awarding certificates and safety authorisations.

To that effect, and following a methodology of non-discrimination and equal treatment, in 2017 there were contacts from railway undertakings with a view to improving and monitoring all issues related to risk management and control procedures, rail regulations and the analysis and observation of measures to mitigate risks inherent to the operation of the railway system.

7. AMENDMENTS TO LEGISLATION AND REGULATIONS

7.1 Railway Safety Directive

Directive 2004/49/EC of the European Parliament and Council was substantially amended. New changes were made in 2016, including reformulation for reasons of clarity.

To that end, on 25 May 2016, Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety was published in the Official Journal of the European Union. This recasting followed the publication of Directives 2008/110/EC and 2014/88/EU, establishing a developing picture of the framework put in place by Directive 2004/49/CE. With the implementation of this new Directive, the safety certificates were to become unique and the ERA was to take responsibility for issuing them for railway undertakings seeking to operate in more than one Member State or, even when operating on a single network, applying for the certificate to be issued by the ERA rather than the NRSA.

Thus as set out in Article 33 – Transposition, point 1, the Member States have until 16 June 2019 to bring into force the laws, regulations and administrative provisions necessary to comply with the articles listed therein. The transposition deadline, however, can be extended by one year. By 16 June 2018, Member States that have not brought into force the laws, regulations and administrative provisions within the aforementioned transposition period shall notify the Agency and the Commission and shall present the reasons for such an extension.

7.2 Amendments to Portuguese Law and Technical Safety Regulations

Decree-Law No 270/2003, relating to the transposition of the Safety Directive, was amended by Decree-Laws No 214-D/2015 of 30 September 2015 and No 217/2015 of 7 October 2015. Decree-Law No 214-D/2015 transposed into domestic legislation Commission Directive 2014/88/EU of 9 July 2014 amending Annex I of Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 as regards common safety indicators and common methods of calculating accident costs. Decree-Law No 217/2015 transposed into domestic legislation Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2014 establishing a single European railway area, revoking Decree-Law No 270/2003 on infrastructure management, access to the activity of railway undertakings, rules for setting railway infrastructure charges and the allocation of capacity. Decree-Law No 270/2003, which currently only contains requirements relating to railway safety, is difficult to read since it was not republished after the above-mentioned amendments.

In 2017, the IMT, I.P. continued to review the system of technical safety standards. Together with the railway undertakings and infrastructure manager, a methodology was established for reviewing the above-mentioned system, taking the respective ERA guidelines into account, as detailed in IMT Instruction No 1/2015 on railway safety technical standards. In addition to describing the methodology agreed upon with

the sector, this instruction also defines the control procedure for revising national standards, to be achieved within two years from the date of its publication (20/03/2015). The deadline set in the above-mentioned Instruction could not be met due to the complexity and care with which this revision procedure must be carried out. Instead it was decided to conclude the procedure within the legal deadline defined in Directive (EU) 2016/798, i.e., by 16 June 2018.[2]

With respect to IMT Instruction No 1/2015, the new General Safety Regulation No II (GSR II) on signals was published in 2015 after evaluation by the ERA and approval by the European Commission. It came into force on 1 December 2015. The same process was repeated for Additional Safety Instruction No 102 on additional standards and procedures to GSR II. The number of national rules will be greatly reduced once the revision process is complete. In 2016 the new General Safety Regulation No I (GSR I), on fundamental principles, was evaluated by the ERA and approved by the European Commission. It will come into force on 2 December 2017. It was nevertheless considered relevant to re-assess some specific aspects of this document in light of the suggestions of workers' representative organisations, and its entry into force was postponed until 2018.

The ongoing review of national safety rules is based on existing fundamental operational safety rules. The NRSA is responsible for ensuring that safety procedures which are not included in the new national safety rules are transposed into the internal procedures of undertakings, as set out in IMT Instruction No 1/2015.

These changes are listed in Annex D.

[2]Established in Article 8(2) of EU Directive 2016/798 of 11 May 2016 on railway safety.

8. APPLICATION OF THE COMMON SAFETY METHOD FOR RISK EVALUATION AND ASSESSMENT

In general, railway undertakings and the infrastructure manager have applied the CSM that determines the evaluation of risks within the scope of Regulation (EC) No 402/2013 of 30 April 2013, both in terms of analysing the significance of changes as well as the risk management process.

8.1 Experience of the Regulator

The experience of railway undertakings improved compared to previous years with the implementation of this CSM. All undertakings reported that they had implemented the European Regulation, having carried out internal procedures in support of their applications.

The rail transport undertakings all found that they were only facing changes that would not have a significant impact on safety, so there was no need to apply risk management procedures, instead making use of an independent safety assessment body.

8.2 Stakeholder Feedback

Railway undertakings have specific procedures for implementing the CSM and have applied different changes to them, resulting in greater and more skilled use of such CSM. The assessment of these amendment procedures is recorded and documented under the SGS of all undertakings.

Two undertakings reported that they were preparing the respective procedures for requesting accreditation as independent safety assessment bodies.

8.3 Revision of National Safety Rules to take account of EU rules on the common safety method for risk evaluation and assessment

There was no need to carry out any revisions to national safety rules to take account of the Common Safety Method for Risk Evaluation and Assessment in 2017. The implementation of this EU Regulation is obligatory for undertakings in the sector, which will develop internal procedures and standards in their safety management systems for their adequate implementation.

9. CERTIFICATION EXEMPTIONS FOR ENTITIES RESPONSIBLE FOR MAINTENANCE

During 2017 the IMT, I.P. received no requests for exemptions in this area.

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Template – Structure for the content of the NSA Annual Report: ERA – Network of National Safety Authorities

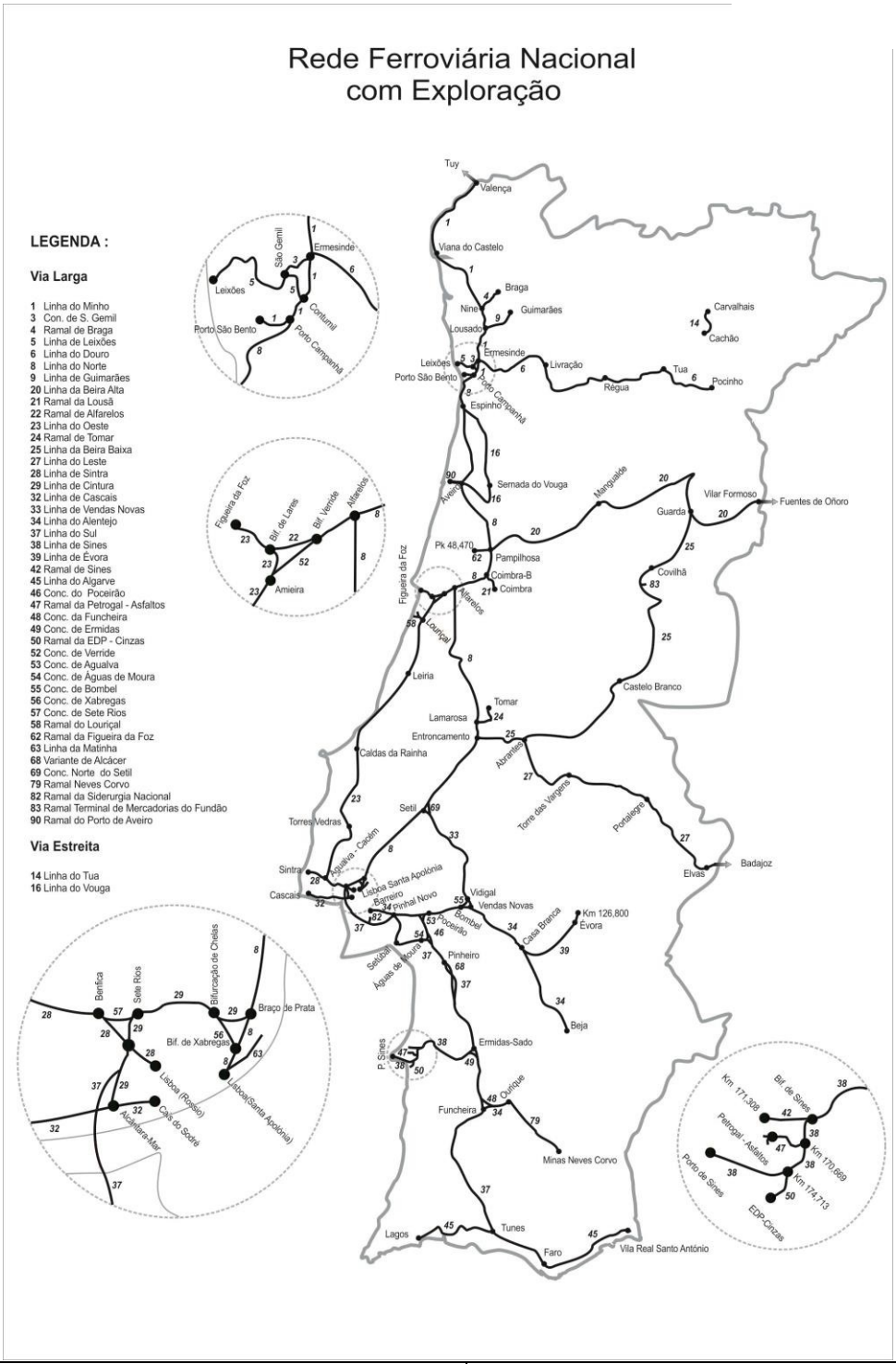
Guideline for the use of the template – Structure for the content of the NSA Annual Safety Report: ERA – Network of National Safety Authorities

2017 data on company production indicators provided by the INE

ANNEX A STRUCTURE OF THE RAIL SYSTEM

A.1 Map of the National Railway Network

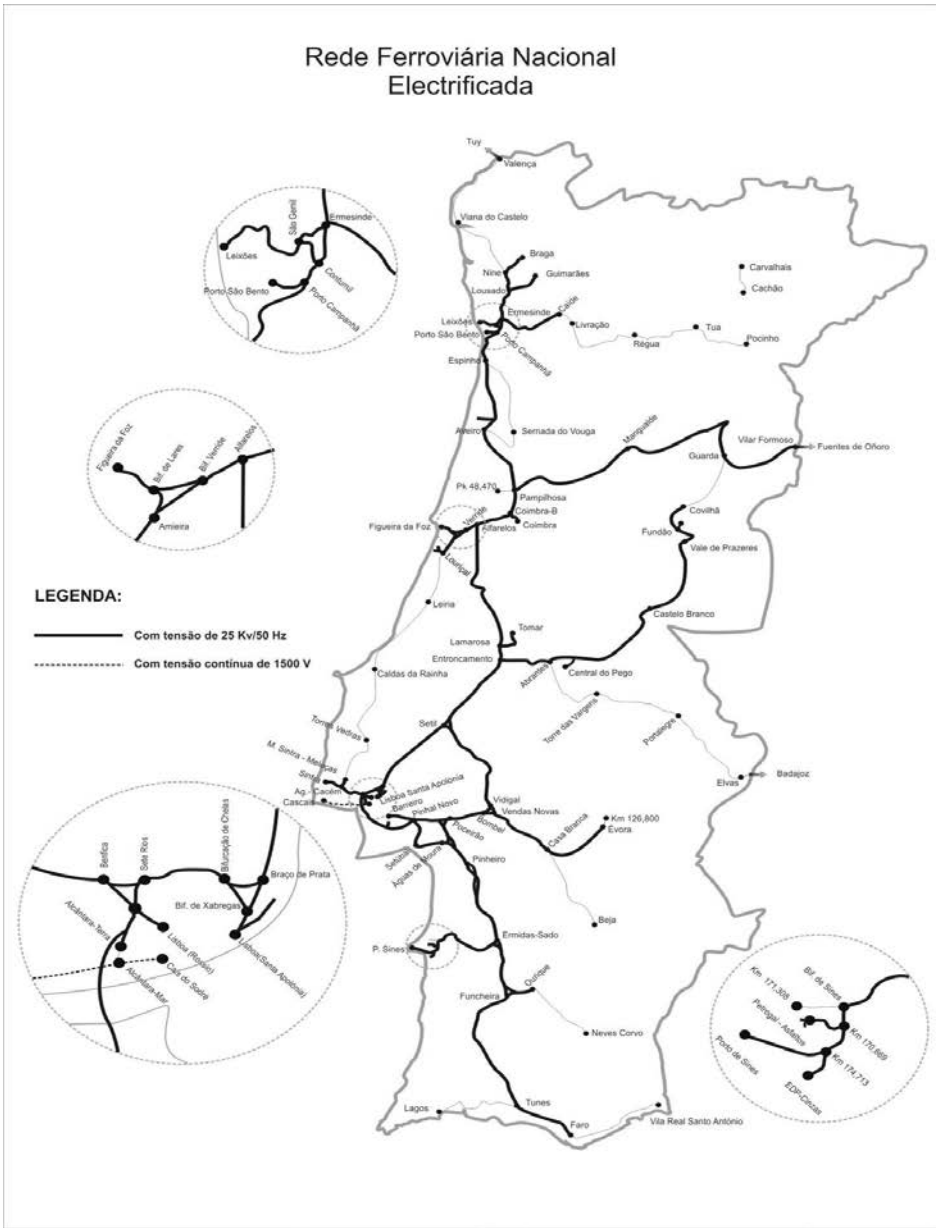
Source: 2018 Infraestruturas de Portugal network directory, published on 9 December 2016.



Rede Ferroviária Nacional com Exploração	National Railway Network in Operation
LEGENDA	KEY

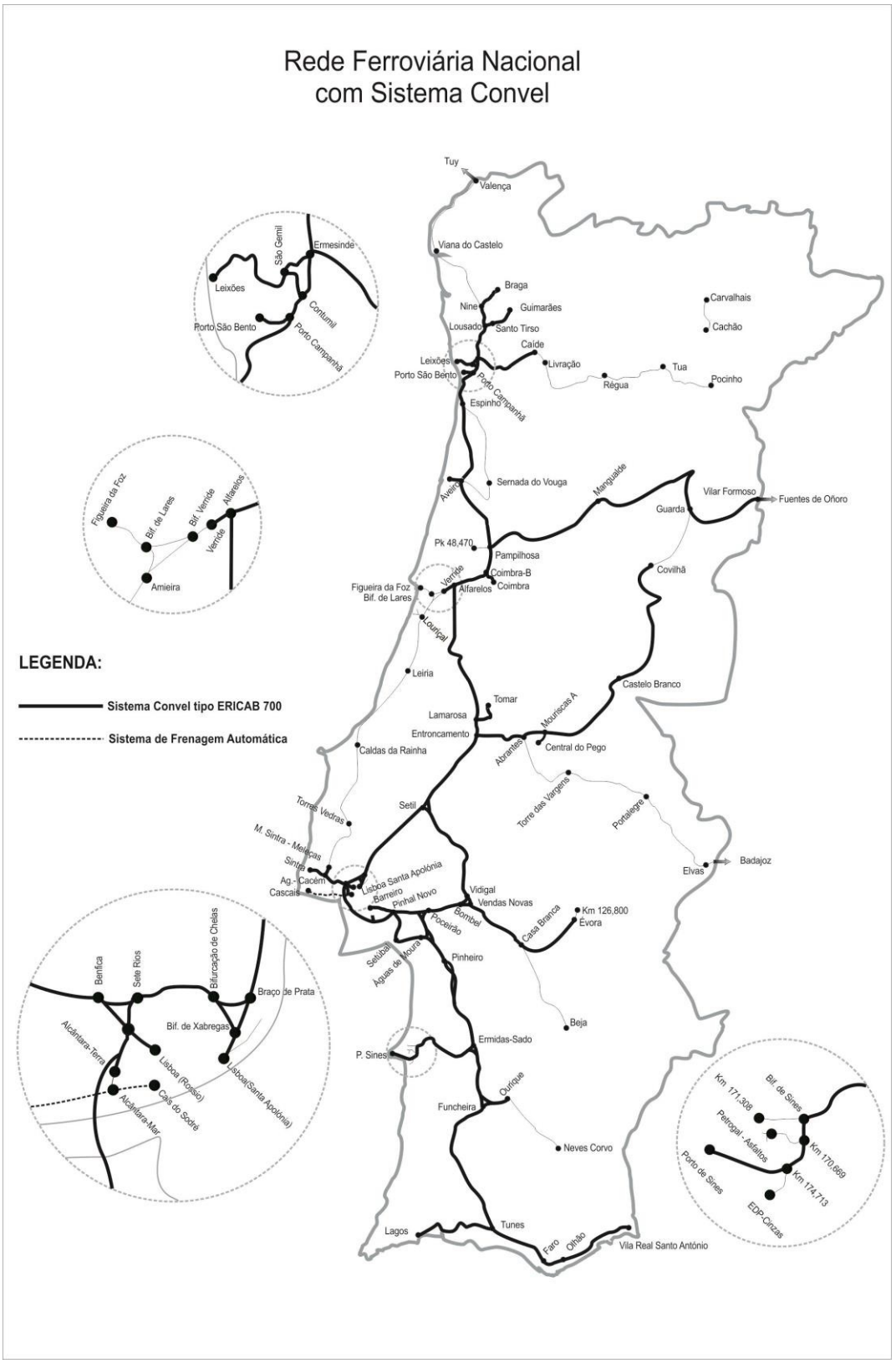
Via Larga	Broad Gauge
Via Estreita	Narrow Gauge

A.1.1 Map of the electrified network

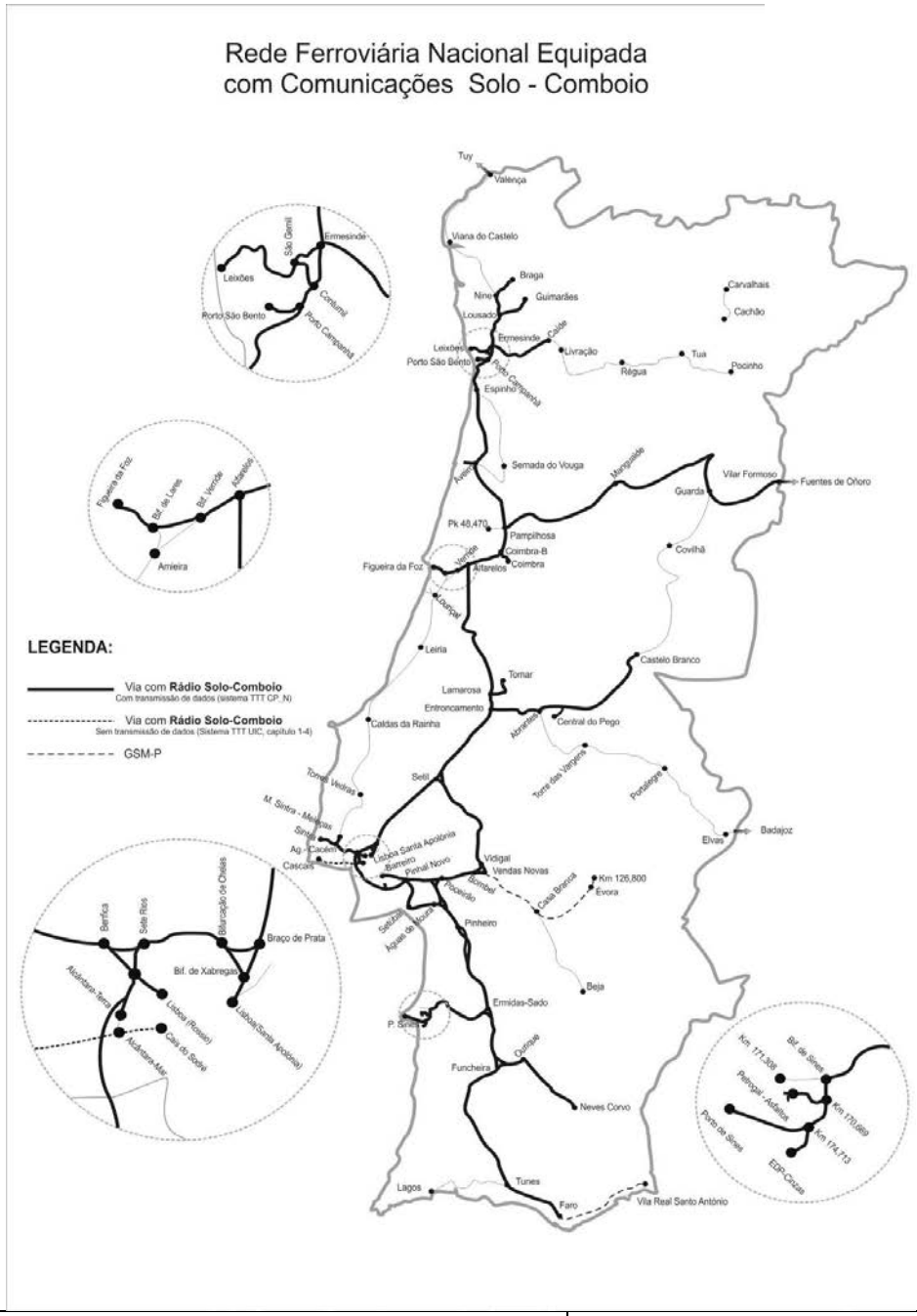


LEGENDA	KEY
Rede Ferroviária Nacional Electrificada	Electrified National Rail Network
Com tensão de 25 KV/50 Hz	With 25 KV/50 Hz voltage
Com tensão contínua de 1500 V	With 1500 V continuous voltage

A.1.2 Map of Automatic Speed Control Systems



Rete Ferroviária Nacional con Sistema Convel	National Railway Network with Convel System
LEGENDA	KEY



Sistema Convel tipo ERICAB 700	ERICAB 700 Convel System
Sistema de Frenagem Automática	Automatic braking system
LEGENDA	KEY
Via com Rádio Solo-Comboio Com transmissão de datos (sistemaTT CP_N)	Track with Ground-Train radio TTT Radio System CP_N
Via com Rádio Solo-Comboio Sem transmissão de datos (sistema TTT UIC, capítulo 1-4)	Track with Ground-Train radio Without data transmission (TTT UIC radio, Chapter 1-4)
GSM-P	GSM-P
Rede Ferroviária Nacional Equipada com Comunicações Solo-Comboio	National Railway Network equipped with Ground-Train Communications

A.1.3 Map of ground-train communication systems

A.2 List of infrastructure management and railway undertakings

A.2.1 Infrastructure manager

Description	Information
Name	Infraestruturas de Portugal, S.A.
Address	Praça da Portagem 2809-013 Almada Portugal
Website	http://www.infraestruturasdeportugal.pt/
Safety authorisations valid in the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	**Parte A –** PT 21 2016 0001 **Part B –** PT 22 2016 001
Date of commencement of activity	01 June 2015
Length of network open to traffic	Total: 2 545.960 km. Wide gauge (1 668 mm): 2 433.424 km Narrow gauge (1 000 mm): 112.536 km.
Length of lines by number of tracks	Multiple track: 610.557 km Single track: 1 822.867 km.
Length of electrified network	Total: 1 639.072 km. 25 000 V_{CA}: 1 613.322 km. 1 500 V_{CC}: 25 450 km. % of network open to traffic: 64.38 %
Length of lines equipped with CONVEL/ATP:	1 695.438 km. % of network open to traffic: 66.59 %
Length of lines equipped with Ground-Train radio	1 510.056 km. % of network open to traffic: 59.31 %
Number of Level Crossings (including private and pedestrian)	850 LC Density: 0.33 LC/km of line 0.26 LC/km of track
Level crossings with automatic or manual protection	417 LC % of total LC: 59.18 %
Number of trains on network	Total: 608 372 Passenger: 493 564 Goods: 36 078 Empty Stock Movements: 78 730
Trains x km travelled on the network (train-km)	Total: 37.28 x 10^6 Passengers: 30.14 x 10^6 Goods: 5.98 x 10^6 Empty Stock Movements: 1.15 x 10^6
% of train-km with automatic protection (CONVEL/ATP)	81.9%

A.2.2 Railway 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 Lisbon Portugal
Website	www.cp.pt
Activity permits valid during the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	PT 01 2015 0001 – International passengers PT 01 2015 0002 – National passengers PT 01 2015 0003 – Regional passengers PT 01 2015 0004 – Suburban passengers
Safety Certificates valid during the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	Part A - PT 11 2016 0002 Part B - PT 12 2016 0002
Date of commencement of activity	09 May 1951
Traffic type	Passengers
Number of locomotives	Total: 31 (Diesel: 7; Electric: 24)
Number of railcars	Total: 239 (Diesel:50; Electric: 189)
Number of carriages	104
Number of drivers	729
Number of assistant drivers	0
Number of commercial operators with safety-related functions	604
Number of trains used	Passenger: 444 980 (includes empty stock movements)
Trains x km travelled (train-km)	Passenger: 29 x 10^6 (includes empty stock movements)
% of train-km with automatic protection (CONVEL/ATP)	99.9 %
Number of passengers x km (pkm)	4,032,712 x 10^6
Number of hours worked on company business	5,028,410

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
Activity licence valid during the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	PT 01 2011 0001
Safety certificates valid during the period (DL No 270/2003 of 28 October 2003)	Part A - PT 11 2016 0004 Part B - PT 12 2016 0004
Date of commencement of activity	29 July 1999
Traffic type	Passengers
Number of railcars	Electric: 18
Number of drivers	42
Number of assistant drivers	0
Number of commercial operators with safety-related responsibilities	69
Number of trains used	Passenger: 55 792 (includes empty stock movements)
Trains x km travelled (train-km)	Passenger: 1 779 x 10^3
Number of passengers x km (pkm)	358 707 x 10^3
% of train-km with automatic protection (CONVEL/ ATP)	99.93 %
Number of hours worked on company business	285 395

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

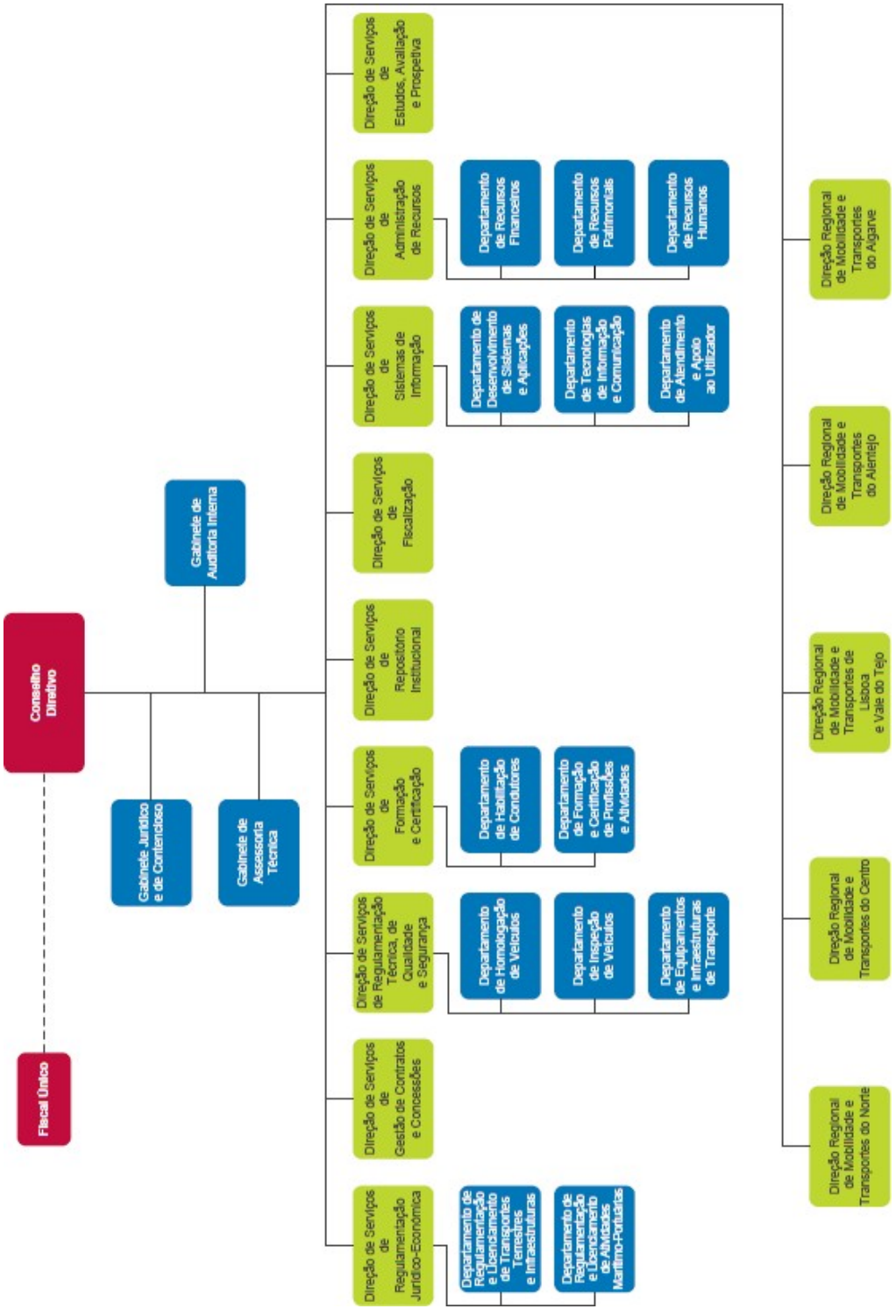
Description	Information
Name	TAKARGO, Transporte de Mercadorias, S.A.
Address	Rua Mário Dionísio, nº 2 2799 – 557 Linda-a-Velha Portugal
Website	www.takargo.pt
Activity licence valid during the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	PT 01 2014 03 – Domestic freight
Safety certificates valid during the period (DL No 270/2003 of 28 October, as amended by DL No 231/2007 of 14 June 2007)	Part A - PT 11 112014 0003 Part B - PT 12 2014 0001
Date of commencement of activity	25 September 2008
Traffic type	Goods
Number of Locomotives	Diesel: 18
Number of wagons	125
Number of drivers	38
Number of assistant drivers	20
Number of trains used	Goods: 4,851 (includes empty stock movements)
Trains x km travelled (train-km)	Goods: 966,494 x 10^6 (includes empty stock movements)
Number of tonne-km	349,785 x 10^6
% of train-km with automatic protection (CONVEL/ATP)	78 %
Number of hours worked on company business	179,043h

A.2.2.4 MEDWAY – Operador Ferroviário e Logístico de Mercadorias.

Description	Information
Name	MEDWAY – Operador Ferroviário e Logístico de Mercadorias
Address	Avenida da Republica, 66 1050-197 Lisbon, Portugal
Website	www.medway.com
Valid activity permits during the period (DL No 270 / 2003, as amended by DL No 231/2007 of 14 June 2007	PT 01 2014 01 – International freight PT 01 2014 02 – Domestic freight
Safety Certificates valid during the period (DL No 270/2003, as amended by DL No 231/2007 of 14 June 2007)	Part A - PT 11 2016 0003 Part B - PT 12 2016 0003
Date of commencement of activity	01 August 2009
Traffic type	Goods
Number of Locomotives	Total: 59 (Diesel: 25; Electric: 34)
Number of Wagons	2 917
Number of drivers	165
Number of assistant drivers	104
Number of trains used	Goods: 35 722 (includes empty stock movements)
Trains x km travelled (train-km)	Goods: 5 197 x 10^6
% of train-km with automatic protection (CONVEL/ATP)	99.97 %
Number of tonne-km	2 341 975 x 10^6
Number of hours worked on company business	986 773

ANNEX B INFORMATION ON THE ORGANISATION OF IMT, I.P.

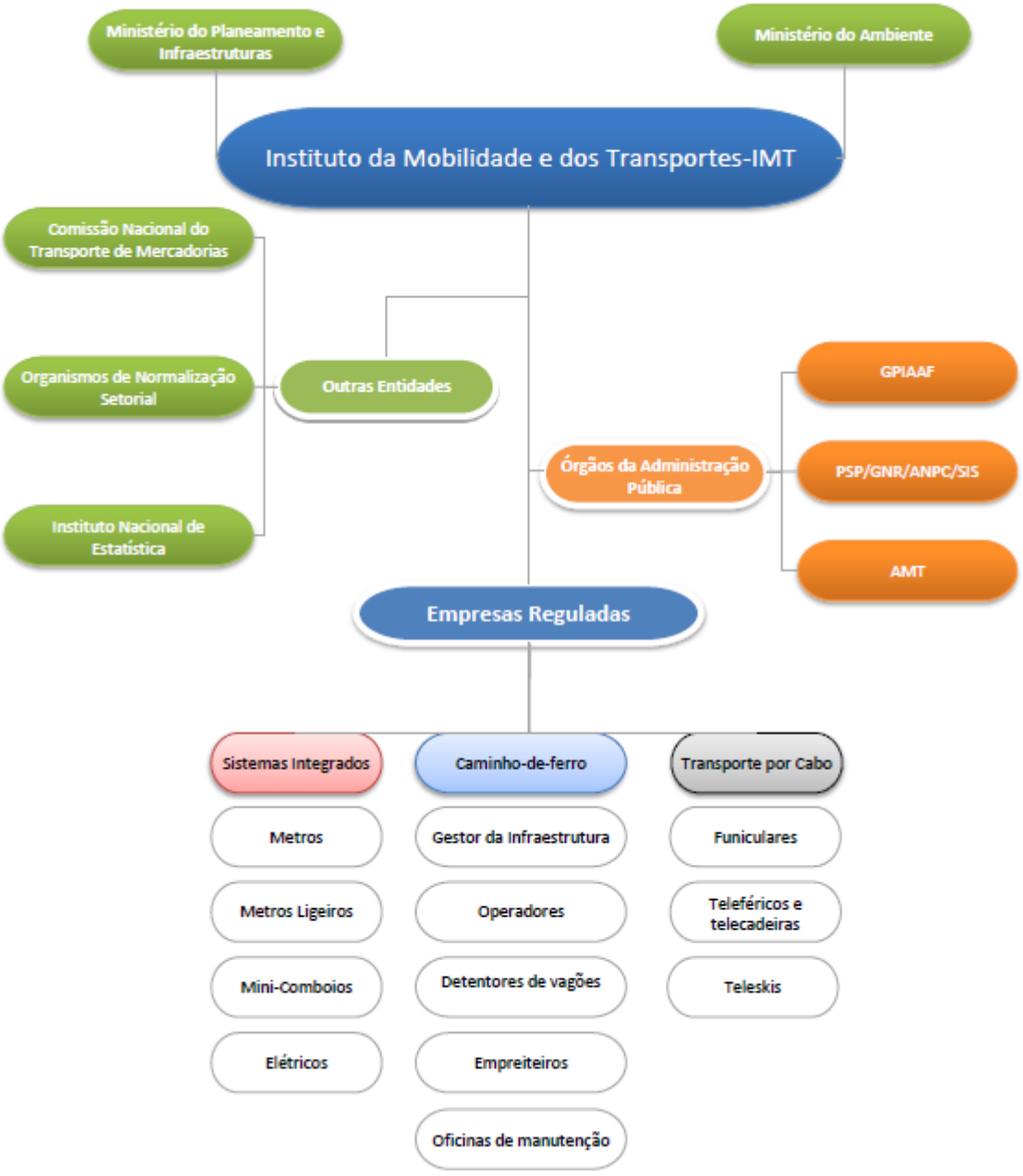
B.1 Organisation Chart - 2017



Fiscal Único	Statutory Auditor

Conselho Diretivo	Executive Council
Gabinete Jurídico e de Contencioso	Legal and Claims Office
Gabinete de Assessoria Técnica	Technical Assistance Department
Gabinete de Auditoria Interna	Internal Auditing Department
Direção de Serviços de Regulamentação Jurídico-Económica	Directorate for Legal and Economic Regulation Services
Direção de Serviços de Gestão de Contratos e Concessões	Directorate for Contract Management Services and Concessions
Direção de Serviços de Regulamentação Técnica, de Qualidade e Segurança	Directorate for Technical Regulation, Quality and Safety Services
Direção de Serviços de Formação e Certificação	Directorate for Training and Certification Services
Direção de Serviços de Repositório Institucional	Institutional Repository Services Directorate
Direção de Serviços de Fiscalização	Directorate for Inspection Services
Direção de Serviços de Sistemas de Informação	Information Systems Services Division
Direção de Serviços de Administração de Recursos	Resource Administration Services Division
Departamento de Regulamentação e Licenciamento de Transportes Terrestres e Infraestruturas	Department for the Regulation and Licensing of Land Transport and Infrastructure.
Departamento de Regulamentação e Licenciamento de Atividades Marítimo-Portuárias	Department for the Regulation and Licensing of Port and Maritime Activity
Departamento de Homologação de Veículos	Vehicle Approval Department
Departamento de Inspeção de Veículos	Vehicle Inspection Department
Departamento de Equipamentos e Infraestruturas de Transporte	Department of Transport Equipment and Infrastructure
Departamento de Habilitação de Condutores	Driver Licensing Department
Departamento de Formação e Certificação de Profissões e Atividades	Department of Professional and Operational Training and Certification
Departamento de Desenvolvimento de Sistemas e Aplicações	Department for the Development of Systems and Applications
Departamento de Tecnologias de Informação e Comunicação	Information and Communication Technology Department
Departamento de Atendimento e Apoio ao Utilizador	Department of User Assistance and Support
Departamento de Recursos Financeiros	Department of Financial Resources
Departamento de Recursos Patrimoniais	Department of Asset Resources
Departamento de Recursos Humanos	Department of Human Resources
Direção de Mobilidade e Transportes do Norte	Directorate for Mobility and Transport (North)
Direção Regional de Mobilidade e Transportes do Norte	Regional Directorate for Mobility and Transport (North)
Direção Regional de Mobilidade e Transportes do Centro	Regional Directorate for Mobility and Transport (Centre)
Direção Regional de Mobilidade e Transportes de Lisboa e Vale do Tejo	Regional Directorate for Mobility and Transport (Lisbon and Tejo Valley)
Direção Regional de Mobilidade e Transportes do Alentejo	Regional Directorate for Mobility and Transport (Alentejo)
Direção Regional de Mobilidade e Transportes do Algarve	Regional Directorate for Mobility and Transport (Algarve)

B.2 Relationship of IMT, I.P. with other rail safety entities



Ministério do Planeamento e Infraestruturas	Ministry of Planning and Infrastructure
Ministério do Ambiente	Ministry of the Environment
Instituto da Mobilidade e dos Transportes-IMT	Mobility and Transport Institute - IMT
Comissão Nacional do Transporte de Mercadorias	National Freight Transport Commission

Organismos de Normalização Setorial	Sectoral Standardisation Bodies
Outras Entidades	Other Entities
Instituto Nacional de Estatística	National Statistics Institute
Órgãos da Administração Pública	Government Bodies
GPIAAF	GPIAAF
PSP/GNR/ANPC/SIS	PSP/GNR/ANPC/SIS
AMT	Mobility and Transport Authority (AMT)
Empresas Reguladas	Regulated companies
Sistemas Integrados	Integrated Systems
Caminho-de-ferro	Railways
Transporte por Cabo	Cable Transport
Metros	Metros
Gestor da Infraestrutura	Infrastructure manager
Funiculares	Funicular Railways
Metros Ligeiros	Light Metros
Operadores	Operators
Teleféricos e telhadeiras	Cable cars and chairlifts
Mini-Comboios	Miniature trains
Detentores de vagões	Wagon holders
Teleskis	Draglifts
Elétricos	Trams
Empreiteiros	Contractors
Oficinas de manutenção	Maintenance workshops

ANNEX C COMMON SAFETY INDICATORS 2017

1.1 a. Number of significant accidents and breakdown by type

Total for all accidents

Train collisions, including collisions with obstacles within the clearance gauge	0
No of collisions with obstacles No	0
of train derailments	0
No of accidents at LCs, including those involving pedestrians	3
No of accidents to persons caused by rolling stock in motion, with the exception of suicides	7
No of fires on rolling stock No of other	19
accidents	0
	0

1.2 a. Number of suicides

Total suicides	52

1.3 a. Number of accidents involving the transportation of dangerous goods

Total accidents involving at least one vehicle carrying dangerous goods	0
No of accidents involving at least one vehicle carrying dangerous goods in which the goods were not released	0
No of accidents which caused the release of dangerous goods	0

2.1 a. Total number of serious injuries by type of accident, divided into the following categories

Total for all accidents	5
Train collisions, including collisions with obstacles within the clearance gauge	0
Train derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	5
Fires on rolling stock	0
Other accidents	0

2.2 a. Total number of passengers with serious injuries by type of accident, divided into the following categories

Total for all accidents	1
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	1
Fires on rolling stock	0
Other accidents	0

2.3 a. Total number of rail workers, including service providers, with serious injuries by type of accident, divided into the following categories

Total for all accidents	0
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0
	0

2.4 a. Total number of LC users with serious injuries by type of accident, divided into the following categories

Total for all accidents	0
Train collisions, including collisions with obstacles within the clearance gauge	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0
	0

2.5 a. Total number of trespassers with serious injuries by type of accident, divided into the following categories

Total for all accidents	4
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons caused by rolling stock in motion, with the exception of suicides	4
Fires on rolling stock	0
Other accidents	0

2.6 a. Total number of other persons with serious injuries by type of accident, divided into the following categories

Total for all accidents	0
Train collisions, including collisions with obstacles within the clearance gauge	0
Train derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0

3.1 a. Total number of deaths by type of accident, divided into the following categories

Total for all accidents	20
Train collisions, including collisions with obstacles within the clearance gauge	0
Train derailments	0
Accidents at LCs, including those involving pedestrians	6
Accidents to persons involving rolling stock in motion, with the exception of	14

suicides	0
Fires on rolling stock	0
Other accidents	

3.2 a. Total number of passenger deaths by type of accident, divided into the following categories

Total for all accidents	0
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0

3.3 a. Total number of deaths among rail workers, including service providers, by type of accident, divided into the following categories

Total for all accidents	0
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0

3.4 a. Total number of deaths among LC users by type of accident, divided into the following categories

Total for all accidents	6
Train collisions, including collisions with obstacles within the clearance gauge	0
Train derailments	0
Accidents at LCs, including those involving pedestrians	6
Accidents to persons involving rolling stock in motion, with the exception of suicides	0
Fires on rolling stock	0
Other accidents	0

3.5 a. Total number of deaths among trespassers by type of accident, divided into the following categories

Total for all accidents	13
Train collisions, including collisions with obstacles within the clearance gauge	0
Derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	13
Fires on rolling stock	0
Other accidents	0

3.6 a. Total number of deaths among other persons by type of accident, divided into the following categories

Total for all accidents	1
Train collisions, including collisions with obstacles within the clearance gauge	0
Train derailments	0
Accidents at LCs, including those involving pedestrians	0
Accidents to persons involving rolling stock in motion, with the exception of suicides	1
Fires on rolling stock	0
Other accidents	0

4.1 a. Total number of accident precursors and breakdown by type

Total number of accident precursors	248
Number of broken rails	50
Track buckles	180
Wrong-side signalling failures	0
Number of signals passed at danger (SPADs) No of	18
broken wheels	0
No of broken axles	0

5.1 a. Cost of significant accidents in Euros (millions of Euros)

Total cost	19.93
Number of deaths x VPC (death)	18.65
Number of serious injuries x VPC (serious injury)	0.62
Cost of replacing or repairing damaged rolling stock or infrastructure Cost of	0.64
environmental damage	-
Cost of delays due to accidents	-

6.1 a. Indicators relating to technical safety of infrastructure and its implementation

% of lines that have working Automatic Train Protection (ATP) systems	66.59 %
% of train-km with operational ATP systems Total no of	81.90 %
LC (active and passive)	850
Total number of LC (active + passive) per km of line	0.33

6.2 Level crossings	No	no/km of track
Total of all active LCs	460	0.14
Automatic warning of users	39	0.01
Automatic user protection, including automatic warning	374	0.12
Automated user warning and protection and automatic train protection	4	0.00
Manual		
Total of all passive LCs	43	0.01
	390	0.12

7. Safety management indicators

Total number of internal audits carried out % audits carried out in relation to those	4
required or planned	80.0%

8. Reference data for traffic and infrastructure

Total number of train-km Train-km	37 072
passengers Train-km goods Train-km	30 908
(others)	6 163
No of passengers-km No of	1 153
tonnes-km No of km of line	4 391
Number of km of track (sum of km of line x number of corresponding tracks)	2 750 696
	2 545.96
	3 244.07

9. Reference data for economic indicators

Average % of passengers on business trips	5 %
Average % passengers on non-business trips Value	95 %
of preventing 1 death (2014)	€932 897.06
Value of preventing 1 serious injury (2014)	€124 773.53
Value of time spent on business travel per hour (2014)	22 469
Value of time spent on non-business travel per hour (2014)	7 490
Value of time for freight trains per hour (2014)	1 231

Note: The definitions used in the Common Safety Indicators and the common method for calculating the economic impact of accident costs can be found in Decree Law No 62/2010 of 9 June 2010, which transposes Directive 2009/149/EC of 27 November 2009 into national law.

ANNEX D AMENDMENTS TO LAWS AND REGULATIONS 2017

Legislation/REG	Transposed	Legal reference	Date of entry into force
Directive (EU) 2016/797	N (transposition envisaged by 19/06/2019)		
Directive (EU) 2016/798	**N** (transposition envisaged by 19/06/2019)		

Note: In the framework of the process of revising the railway safety regulations, various regulatory documents were updated or annulled. However, no new national safety regulation was published in 2017.

ANNEX E LIST OF SIGNIFICANT ACCIDENTS 2017

Accident at level crossing	eGOC No 242494	Date/Time: 02-Jan 14:50	Train 6453	Western Line	Km 112.098

CP notified Lisbon OCC [Operational Control Centre] that Train 6453 hit a vehicle that had approached from the right in the direction of travel of the train at the LC at the km indicated. The OCC ordered traffic to be suspended between Martingança and Caldas da Rainha. An Emergency Coordinator and Local Emergency Manager were appointed and the yellow emergency plan was activated.
The collision caused one slight injury (vehicle occupant) and a variety of damage to the DMU. Assistance was requested and was ensured via the rear by locomotive 1963 The rescue services were mobilised and went to the scene by road. The line was declared clear without restrictions at 21:23.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Extensive disruptions to traffic for more than 360 minutes".

Train Derailment	eGOC No 242745	Date/Time: 06-Jan 14:50	Train 47840	Beira Alta Line	Km 181.834

The train driver notified Lisbon OCC that the train was being held outside the station indicated at km 181.370 due to the derailment of tail wagon 47750728. The Support Officer reported that the wagon derailed at km 181.970. The OCC suspended traffic between Guarda and Celorico da Beira stations, with road transfers between them. The Emergency Coordinator and Local Emergency Manager were appointed and the yellow emergency plan was activated. The plan was changed to orange from 20.38. The train continued its journey after uncoupling from the derailed wagon.
The relief train arrived at the scene at 23:04, re-railing being completed at 05:31. The wagon was held on Vila Franca das Naves line 111. The all-clear was given between Guarda and Celorico da Beira at 9.45, with a speed limit of 30 km/h between kms 181.400 and 181.680, a signalled location with CONVEL.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Extensive disruptions to traffic for more than 360 minutes"

Train Derailment	eGOC No 243270	Date/Time: 15-Jan 11:38	Train 868	Douro Line	Km 055.323

Porto OCC was notified of a partial train derailment at the entry to the station. The second wagon was completely derailed, as was the second bogie on the third wagon. There were no personal injuries, only damage to the traction unit and track. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. The relief train was called to the scene and re-railing was concluded at 21.15. The RF COM Norte track team gave the all-clear at 02:10, with a speed restriction of 30 km/h on line I between km 55.500 and 55.600, and line II was closed between km 55.450 and 55.952. Points no 2 were set in the direction of line 1.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Extensive disruptions to traffic for more than 360 minutes".

Accident to persons involving rolling stock in motion	eGOC No 243330	Date/Time: 16-Jan 07:45	Train 15710	Northern Line	Km 307.497

The Inspector on train 15710 notified Porto OCC that the train had hit and killed a male individual at the pedestrian level crossing at the km indicated.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
Esmoriz B.V. [Fire Brigade) and GNR (National Republican Guard] went to the scene.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC No 243819	Date/Time: 22-Jan 13:00	Train 4417	Northern Line	Km 015.000

The train driver notified Lisbon OCC that the train had hit and killed a male individual on leaving Santa Iria Halt. The individual was sitting with his legs towards the track at the end of the platform, but despite repeated sounding of the DMU's horn he did not move. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC No 244641	Date/Time: 03-Feb 09:17	Train 15613	Northern Line	Km 322.800

The train driver notified Porto OCC that a female individual who was walking along the track had been struck a glancing blow which knocked her into the four-foot way, causing serious injuries. The Emergency Coordinator and Local Emergency Manager were appointed, in this case the train inspector, and the yellow emergency plan was activated. The individual was taken away by INEM.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC No 245498	Date/Time: 15-Feb 09:44	Train 130	Northern Line	Km 003.992

The train driver notified Lisbon OCC that the train had hit and killed a male individual who was crossing the track at the station indicated. The body remained between the tracks, clearing the gauge of track A. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Train Derailment	eGOC No 248792	Date/Time: 01-Apr 18:07	Train 95204	Northern Line	Km 221.200

The train driver notified Lisbon OCC that 13 wagons had derailed at the km indicated, damaging tracks A and D and the catenary. The OCC prohibited traffic on tracks A and D between Coimbra-B and Pampilhosa. The Emergency Coordinator and Local Emergency Manager were appointed and the yellow emergency plan was activated. Assistance was requested, and units 92216 and 95225 were deployed to accompany the emergency rolling stock. At 07:00 on 17-04-03 the final wagon that was obstructing track A was removed and Promorail began work on track D to allow the crane to approach in order to re-rail the wagons.
(Mitigation ensured under SIGMA No 21154242 and 21154243)

Accident to persons involving rolling stock in motion	eGOC No 251826	Date/Time: 09-May 04:13	Train 64311	Northern Line	Km 272.676

The Support Operator notified Porto OCC that the train stopped at the entrance to the station indicated because it had hit and killed a male individual. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. This event falls within Significant Accidents under Commission Directive 2014/88/EU as “Accidents to persons involving rolling stock in motion”.

Accident to persons involving rolling stock in motion	eGOC No 252319	Date/Time: 15-May 13:59	Train 18462	Circle Line	Km 010.400

The train driver notified Lisbon OCC that the train had hit and killed a female individual at the km indicated. The individual was walking in the middle of the track with her back to the train. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as “Accidents to persons involving rolling stock in motion”.

Accident at level crossing	eGOC No 252370	Date/Time: 16-May 07:15	Train 81380	Sines Line	Km 147.265

The Support Operator of train 81380 notified Setúbal OCC that the train had collided with a car at the unmanned level crossing at km 147.265. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. The RF COM Sul track team reported that catenary post 147-06 was damaged. The damaged locomotives were retained at S. Bartolomeu station and the remaining wagons continued to Ermidas on train 96214. The all-clear was given at 13.40, with a 10 km/hour speed limit at km 147.265. The restrictions were lifted at 15.02. (Mitigation ensured under SIGMA No 21155684). The goods train (2080 Ton; 650 m) is scheduled to transport containers between Entroncamento and Terminal XXI (Sines).
This event falls within Significant Accidents under Commission Directive 2014/88/EU as “Accidents to persons involving rolling stock in motion”.

Accident to persons involving rolling stock in motion	eGOC nr. 252571	Date/Time: 18-May 05:38	Train 19008	Cascais Line	Km 021.062

The train driver notified Lisbon OCC that the train had hit and killed a male individual at the entrance to the station. The individual was walking along the track and did not react to the train's whistles. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. The Oeiras PSP (police) and Civil Protection forces were notified.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 253084	Date/Time: 23-May 19:21	Train 545	Northern Line	Km 003.992

The driver of train 545 notified Lisbon OCC that an individual who was crossing the track between lines II and IV was struck a glancing blow. The collision threw the individual onto the platform of line III. The Emergency Coordinator and Local Emergency Manager were appointed and the yellow emergency plan was activated. INEM was called to provide assistance to the individual.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident at level crossing	eGOC nr. 253217	Date/Time: 24 May 19:52	Train 806	Western Line	Km 174.019

The CP CAT notified Lisbon OCC that train 806 collided with a car at a type A LC at km 174.019, which was operating perfectly correctly. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. The OCC suspended traffic between Leiria and Louriçal stations. The ORV reported that the DMU derailed at km 173.670. The DMU issued the call for assistance. The collision resulted in the death of the driver of the car and damage to the half barrier of the LC and to the track. The DMU was re-railed at 03:00 and returned to Louriçal station. The track repair work was completed at 05:36 and an unrestricted all-clear was given.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Level crossing accident". The circumstances surrounding this incident will be investigated.

Accident to persons involving rolling stock in motion	eGOC nr. 253627	Date/Time: 30-May 01:05	Train 3400	Northern Line	Km 329.700

The train driver notified Porto OCC that the train had hit and killed a male individual who was walking along track D in the opposite way to the direction of travel of the train, beside the outer rail at the km indicated. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. This event falls within Significant Accidents under Commission Directive 2014/88/EU as “Accidents to persons involving rolling stock in motion”.

Accident to persons involving rolling stock in motion	eGOC nr. 253652	Date/Time: 30-May 09:24	Train 510	Northern Line	Km 217.294

The IP agent at Coimbra- B station notified Lisbon OCC that an elderly passenger had fallen on the platform of line II when alighting from the train, requiring assistance from INEM. Traffic on line II was suspended until 10.00 so that assistance could be provided.

Accident to persons involving rolling stock in motion	eGOC nr. 258343	Date/Time: 20-Jul/01:05	Train 19001	Cascais Line	Km 007.805

CP Lisboa Central Services notified Lisbon OCC that train 19002 was held back in Algés because an individual who had been electrocuted was found on the train beside the pantograph of EMU 3270. The OCC suspended traffic on track D between Caxias and Alcântara-Mar, cutting the power in order to remove the body from the site. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. Oeiras. PSP was notified.

Accident at level crossing	eGOC nr. 260064	Date/Time: 07-Aug/08:10	Train 851	Minho Line	Km 117.897

The driver of train 851 notified Porto OCC that the train was stationary at PK 119.000 because it had hit and killed a female individual at the pedestrian LC at PK 117.897. The orange emergency plan was activated, and the GLE was appointed and reached the scene at 09.33. Viana do Castelo CDOS [emergency services] was notified and mobilised the authorities and the assistance measures.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as “Level crossing accident”.

Accident to persons involving rolling stock in motion	eGOC nr. 261821	Date/Time: 23-Aug/20:58	Train 19097	Cascais Line	Km 004.861

The driver of train 19097 notified Lisbon OCC that on entering Belém station the train had hit and killed an individual who was trying to get up onto the passenger platform.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 262185	Date/Time: 27-Aug/18:51	Train 186	Northern Line	Km 004.200

The driver of train 186 notified Lisbon OCC that the train had collided with a male individual at km 4.200. The individual was on line II and was thrown onto the trackbed of lines II/III.
The Local Emergency Manager was appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 262418	Date/Time: 29-Aug/17:17	Train 127	Northern Line	Km 014.450

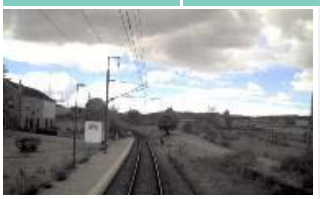
The driver of train 127 notified Lisbon OCC of a collision with a vehicle at the LC at km 14.550. The individual was on the left-hand side of the track and was found between tracks AL and DR on the embankment of track AL. The OCC suspended traffic on tracks AL and DL. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 263045	Date/Time: 05-Sep 09:40	Train 5708	Algarve Line	Km 373.500

The inspector of train 5708 notified Setúbal/Faro OCC that at the km indicated the train had hit and killed a female individual who was walking on the left-hand side of the track in the direction of travel of the train. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 264521	Date/Time: 21-Sep 13:13	Train 512	Beira Alta Line	Km 199.500

The train driver notified Lisbon OCC that the train had hit and killed a child who was on the track at the km indicated. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".



Accident at level crossing	eGOC nr. 265652	Date/Time: 04-Oct 14:04	Train 522	Northern Line	Km 213.790

The driver of train 522 notified Lisbon OCC that the train had hit and killed a male individual at km 4,200.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 266082	Date/Time: 09-Oct 16:13	Train 48865	Minho Line	Km 034.920

The driver of train 48865 notified Porto OCC that he had stopped the train on leaving Mouquim Halt because it had hit and killed an individual.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident at level crossing	eGOC nr. 268492	Date/Time: 05-Nov 11:23	Train 21610	Northern Line	Km 029.887

The driver of train 21610 notified Lisbon OCC that the train had hit and killed a male individual who was crossing the level crossing at km 29.887. The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Level crossing accident".

Accident to persons involving rolling stock in motion	eGOC nr. 269279	Date/Time: 14-Nov 20:18	Train 4431	Northern Line	Km 034.234

The driver of train 4431 notified Lisbon OCC that the train had hit and killed a female individual who was crossing the track at the km indicated, close to signal S3.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident to persons involving rolling stock in motion	eGOC nr. 269667	Date/Time: 19-Nov 16:04	Train 19064	Cascais Line	Km 001.000

CP notified Lisbon OCC that train 19064 had hit a male individual at Santos Halt. The individual was injured on track A.
The OCC suspended traffic on both tracks and notified Lisbon CDOS/INEM.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated.
The GLE reported that the accident occurred when an individual was crossing from the side of track A to track D in the platform area.
The individual was removed from the site and taken to São José. hospital.
This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

Accident at level crossing	eGOC nr. 270008	Date/Time: 23-Nov 12:22	Train 15726	Northern Line	Km 325.417

The train driver notified Porto OCC that the train had hit and killed a male individual at the pedestrian level crossing at the km indicated. The individual approached from track A towards the track.
The Emergency Coordinator and Local Emergency Manager were appointed and the orange emergency plan was activated. This event falls within Significant Accidents under Commission Directive 2014/88/EU as "Accidents to persons involving rolling stock in motion".

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Direção de Serviços de Regulamentação Técnica, Qualidade e Segurança

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