GOBIERNO DE ESPAÑA

MINISTERIO DE FOMENTO

SECRETARÍA DE ESTADO DE INFRAESTRUCTURAS, TRANSPORTE Y VIVIENDA

SECRETARÍA GENERAL DE INFRAESTRUCTURAS

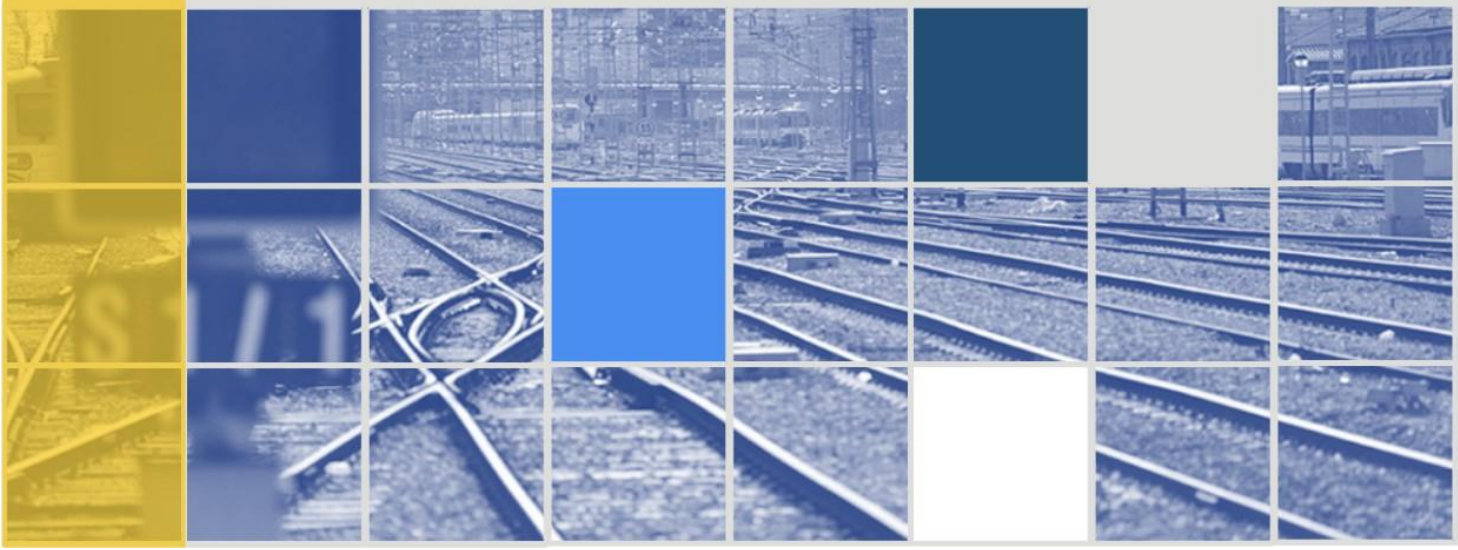
DIRECCIÓN GENERAL DE FERROCARRILES

Annual Report

(Article 18 of Directive 49/2004)

2013

(Measures taken up to 31 December 2012)



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DIRECCIÓN GENERAL DE FERROCARRILES	DEPARTMENT OF RAILWAYS

GOBIERNO DE ESPAÑA
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Department of Railways

Annual Report

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Contents

A.1 SCOPE OF THE REPORT

This report has been prepared by the Department of Railways (DGF - *Dirección General de Ferrocarriles*), which currently exercises the powers assigned under Directive 49/2004/EC on railway safety, to the authority responsible for safety in Spain, in accordance with current legislation.

It has been drafted pursuant to Article 18 of Directive 49/2004/EC on railway safety:

> *'Each year the safety authority shall publish an annual report concerning its activities in the preceding year and send it to the Agency by 30 September at the latest. The report shall contain information on:*
>
> *a) the development of railway safety, including an aggregation at Member State level of the CSIs laid down in Annex I;*
>
> *b) important changes in the legislation and regulations concerning railway safety;*
>
> *c) the development of safety certification and safety authorisation;*
>
> *d) the results of, and experience relating to the supervision of infrastructure managers and railway undertakings.'*

The information contained in this report reflects the situation at the end of the reporting year 2012, i.e. **up to 31 December 2012**.

The report **sets out information relating to the General Interest Rail Network (RFIG)[1] run by the Administrador de Infraestructuras Ferroviarias (ADIF - Railway Infrastructure Manager) and by TP**

[1] *Defined as per Article 4 of Act 39/2003 of 17 November on the Railway Sector.*

Ferro[2], and the services and activities provided on that network. As permitted by Directive 49/2004, the scope of this report excludes:

a) metros, trams and other light rail systems,

b) networks whose operation is functionally separate from the rest of the railway system and which are intended for local, urban or suburban passenger services only, and railway undertakings which operate only on this type of network;

c) privately owned railway infrastructure for use exclusively by the owner of the infrastructure for its own freight operations.

This report also excludes the State-owned metre-gauge rail network managed by FEVE (narrow-gauge network) which, although part of the RFIG, is not regarded as covered by Directive 12/2001/EC and successive railway directives and, according to Spanish law, up to now has kept a special status.

However, Article 2 of Royal Decree-Law No 22/2012 of 20 July, adopting measures regarding rail infrastructure and services, reported the 'abolition of the public enterprise entity Ferrocarriles Españoles de Vía Estrecha [Narrow-Track Spanish Railways] (FEVE)', ending it on 31 December 2012. As of then, the metre-gauge network will be integrated into the network managed by ADIF and the services on it, run by RENFE, so that from 1 January 2013, they will be within the scope of the Directives.

[2] *Section situated in the Spanish territory of the International Section between Figueres and Perpignan.*

A.2 SUMMARY (ENGLISH)

This report has been prepared by the '*Dirección General de Ferrocarriles*', within the Ministry of Transport, which is the current entity in charge of the Spanish National Safety Authority functions, in accordance with the provisions set out in the legislation in force.

In general, and in relation to the different activities that the '*Dirección General de Ferrocarriles*' (DGF) exercises at present in its role of National Safety Authority, it is necessary to outline the main conclusions of its activity during 2012:

In relation to **safety certificates and safety authorisations**:

- In 2012, DGF renewed the safety certificates of railway undertakings that, at the beginning of 2012, still had a safety certificate issued according to regulations prior to Royal Decree 810/2007, which is the transposition of Safety Directive 49/2004/EC. This act means that all safety management systems are assessed according to Regulation 1158/2010 which will enable their later supervision using homogeneous criteria.

- In our opinion, the collaboration of DGF during the development of these management systems, prior to their official application, is giving good results and is welcomed by the sector.

In relation to the **global accident rate** of the system during this year, there has been a consolidation of the values of recent years, maintaining similar orders of magnitude. The efforts made in some fields have produced good results, such as the action on level crossings, achieving minimum values.

As for **actions aimed at improving safety**, various actors from the sector are becoming involved, carrying out the actions needed, as a consequence of events or on their own initiative.

In the field of **supervision**, DGF has attached importance to inspecting the maintenance of rolling stock workshops and inspecting railway staff training centres.

In the coming years, one of the main lines of work is related to the thorough restructuring of the national railway system stemming from the publication of Royal Decree-Law 22/2012. Year 2013 may be a transition period before an approaching liberalisation of the domestic passenger market, which will have a significant impact on the regulation and supervision structures of the railway sector.

Other lines of action are related to the implementation of European regulations throughout 2013, such as Regulations 1077/2012 and 1078/2012, whose entry into force is set for mid-2013.

The implementation of Regulation 445/2011 is also important to DGF. It is necessary to keep in mind that, in Spain, DGF has been designated as the certifying body for the maintenance systems of the entities in charge of wagon maintenance. In 2013, a major effort will be made to certify these entities before the deadline of 31 May, set in the Regulation.

B. GENERAL ASPECTS

1. OBJECTIVES OF THE REPORT

As set out in the Railway Safety Directive 49/2004/EC, the National Safety Authority must prepare an annual report which will be submitted to the European Railway Agency for the purpose of:

- Being used as basic information for the Agency in drawing up a biannual report on safety.
- Being published by the European Agency on its website.

The report is therefore addressed to the various actors in the rail sector and to the general public through its dissemination by the European Railway Agency.

For the preparation of this report, this Directive provides that:

> *'Each year all infrastructure managers and railway undertakings shall submit to the safety authority before 30 June an annual safety report concerning the preceding calendar year.'*

Accordingly, the various actors in the national rail system must provide the information required by Directive 49/2004/EC in these reports.

As at 31 December 2012, the applicable basic Spanish legislation was:

- Act 39/2003, the Rail Sector Act, of 17 November.
- Royal Decree 2387/2004 of 30 December, approving the Rail Sector Regulations, implementing the aforementioned Act.
- Royal Decree 810/2007 of 22 June approving the Regulations on Traffic Safety of the General Interest Rail Network.

- Royal Decree 1434/2010 of 5 November on the Interoperability of the General Interest Rail Network system.

Under those provisions, the functions of the National Safety Authority are currently exercised by the Department of Railways of the Ministry of Infrastructure and Transport.

As in previous years, for facilitating the collection of data for compiling this report, undertakings were provided with an annual report template and the annual safety reports received from railway undertakings and infrastructure managers were assessed, with the aim of establishing possible improvements in drafting subsequent reports.

2. INFORMATION ON THE STRUCTURE OF THE RAIL SYSTEM (ANNEX A)

2.1. THE NETWORK

The Spanish UIC standard and Iberian gauge General Interest Rail Network is run by the public undertaking ADIF, except for a small border section run by TP Ferro.

Under the Franco-Spanish concession contract, infrastructure manager powers were assigned to the concessionary undertaking TP Ferro. This undertaking has been responsible for the construction and is responsible for the maintenance and traffic management of a border section of line between Figueres and Perpignan (called the 'International Section'), 19.8 km of which is located in Spain, and accordingly falling within the RFIG.

Annex A.1 contains various maps of the network. For more details, please see the **Network Statements** drawn up by ADIF and TP Ferro, available at the following links:

http://www.adif.es/es_ES/conoceradif/declaracion_de_la_red.shtml

http://www.tpferro.com/sites/default/files/images/Declaracion-de-Red-TPFERRO-2013.pdf

The Network Statement is the document that the infrastructure managers provide to the railway undertakings and other candidates to inform them of the characteristics of the infrastructure and terms of access to the network, ensuring transparency and non-discriminatory access.

2.2. LIST OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

2.2.1. Infrastructure managers

- ADIF
- TP Ferro

2.2.2. Railway Undertakings

As of 31 December 2012 the following undertakings held safety certificates:

- Acciona Rail Services, S.A.
- Activa Rail, S.A.
- Alsa Ferrocarril, S.A.U.
- Comsa Rail Transport, S.A.
- Continental Rail, S.A.
- FESUR – Ferrocarriles del Suroeste, S.A.
- Ferrovial Railway S.A.

- FGC Mobilitat, S.A.
- Logitren Ferroviaria, S.A.U.
- RENFE Operadora
- Société Nationale des Chemins de Fer Français
- Tracción Rail S.A.

Annex A.2 contains the main particulars of these undertakings.

In addition to these, at the end of 2012, the following undertakings holding railway undertaking licences did not yet have safety certificates (since they had not expressed interest in obtaining them to begin operation or because their applications were being processed):

- Arcelormittal Siderail, S.A.
- Eusko Trenbideak – FF.CC. Vascos S.A.
- Guinovart Rail, S.A.
- Logibérica Rail, S.A.U.

3. PRIORITIES OF DGF ACTIVITIES

In general, and in relation to the various activities currently exercised by the Department of Railways, it is worth noting the main conclusions from the activity of 2012:

In relation to **safety certificates and authorisations**:

- Some undertakings appear to have taken a certain stand in the sector regarding the future liberalisation of passenger rail transport, initiating measures for obtaining safety certificates.
- The DGF is continuing with its task of facilitating the implementation of Regulations 1158/2010 and 1169/2010, for which it is collaborating with railway undertakings from the initial stages of development of management systems.

The **accident rate** this year has seen the declining trend of recent years continue, both in the number of accidents and the number of victims.

As for **actions aimed at improving safety**, various actors from the sector are becoming involved, carrying out the actions needed, either on their own initiative or as a consequence of events.

The DGF attaches great importance to monitoring the level of compliance with the **recommendations** issued by the Rail Accident Investigation Commission (*Comisión de Investigación de accidentes ferroviarios*), by means of periodic requests for information from the recipients regarding compliance level.

One of the priorities of the DGF is to monitor **maintenance activities on rolling stock**. Accordingly, it is making a major effort by launching the application of Regulation 445/2011, for certification of entities responsible for wagon maintenance.

C. ORGANISATIONAL ASPECTS

1. INTRODUCTION TO THE ORGANISATION

Within the Government of Spain, the Ministry of Infrastructure and Transport is the department responsible for the rail sector as a whole. Under Rail Sector Act 39/2003 of 17 December, its main areas of competence are:

- strategic planning of the rail sector, for both infrastructures and the provision of services;
- general organisation and regulation of the rail system, in particular in all matters relating to safety and interoperability and to relations between operators in the sector;
- setting targets and supervising the activity of the public railway undertakings, ADIF and RENFE, and their financing arrangements.

Further information about its competences and structure can be found at the following web address: www.fomento.es

The **Department of Railways,** reporting to the General Secretariat for Infrastructures of the State Secretariat for Infrastructure, Transport and Housing, is responsible for exercising major powers in the rail sector within the Ministry of Infrastructure and Transport.

Among its other functions, the Department of Railways is responsible for carrying out the functions covered by this report. Specifically, under Royal Decree 452/2012 of 5 March, developing the basic organic structure of the Ministry of Infrastructure and Transport, it has been allocated the following functions:

e) Drawing up draft general provisions relating to railway infrastructures, traffic conditions, rail system safety and interoperability, rolling stock conditions and requirements, and to railway staff with regard to safety.

f) Exercising the powers falling to the Ministry of Infrastructure and Transport with regard to interoperability and safety of rail traffic in all matters concerning infrastructures, safety systems, rolling stock, their maintenance centres, railway staff relating to safety in rail traffic and training centres and medical examinations of such staff.

g) Exercising the powers falling to the Ministry of Infrastructure and Transport in connection with the defence of the public railway domain and the modification of the building boundary line, without prejudice to the powers that correspond to the Railway Infrastructure Manager.

h) Representing the Ministry of Infrastructure and Transport at international and EU organisations with regard to railway infrastructures, interoperability and safety of rail traffic and participation in the coordination and management bodies of the European rail corridors.

Annex B.1 includes two organisation charts showing the structure of the Department of Railways.

2. RELATIONSHIP OF THE DEPARTMENT OF RAILWAYS WITH OTHER NATIONAL BODIES

In 2012, in addition to the Department of Railways, the main actors in the rail system were:

- **Department of Land Transport**

This department reports on railway matters to the Ministry of Infrastructure and Transport, via the State Secretariat for Transport, and is responsible for issuing licences to railway undertakings and matters related to rail services.

- **Rail Regulation Committee**

This is the rail sector regulator. It is a collegiate body reporting to the Under-Secretariat of the Ministry of Infrastructure and Transport. It is composed of officials from the Ministry of Infrastructure and Transport and its principal missions are:

- To safeguard plurality in the provision of rail services.
- To ensure equal conditions of access to the market for all operators.
- To resolve disputes between the infrastructure managers and the railway undertakings.

- **Rail Accident Investigation Commission**

Body attached to the Ministry of Infrastructure and Transport through the Under-Secretariat, but independent of the Department of Railways, of the infrastructure managers and of the operators, as set out in Royal Decree 810/2007, and in full compliance with the provisions of Directive 49/2004/EC.

For more information about this organisation, please consult the following link:

http://www.fomento.gob.es/MFOM/LANG_CASTELLANO/ORGANOS_COLEGIADOS/CIAF/

- **ADIF**

The railway infrastructure manager, ADIF, was established by the Rail Sector Act, Law 39/2003 of 17 December. The articles of association of ADIF were laid down in Royal Decree 2395/2004 of 30 December 2004. It began operation on 1 January 2005. ADIF is a public enterprise, with managerial autonomy within the limits laid down by its governing regulations and is part of the Ministry of Infrastructure and Transport. It has its own legal personality, full capacity to work for the achievement of its ends, and its own assets. Its principal purpose is to manage and construct railway infrastructures.

ADIF runs the General Interest Rail Network (RFIG)[3], with the exception of the stretch belonging to the 'International Section' run by the infrastructure manager, TP Ferro. As well as managing the aforementioned railway infrastructures (operation and maintenance), it is responsible for the construction of any lines commissioned by the State, funded either from its own resources, for lines it owns, or out of the State budget, where State-owned.

Further information about its competences and structure can be found at the following web address: www.adif.es

- **TP Ferro**

The Kingdom of Spain and the French Republic concluded an international agreement in Madrid on 10 October 1995 for the construction and operation of the international section of a high-speed railway line between Spain and France (Mediterranean side) (hereinafter referred to as the 'Madrid Agreement'), by which both States committed themselves in particular to authorise the construction and operation of the international section under a concession scheme.

The undertaking TP Ferro is the concessionaire of the new high-speed line between Spain and France for a period of 53 years. This concession, approved by the Kingdom of Spain and the French Republic in 2003 and endorsed via the concession contract of 17 February 2004 (BOE [Official State Gazette] 175 of 21/7/2004), authorises TP Ferro to act as Railway Infrastructure Manager of the 'International Section' covered by the concession, in accordance with Directive 14/2001/EC and with the provisions of the applicable legal rules and specifications in the territory of both concession-granting states. It began operation on 19 December 2010.

Further information about its competences and structure can be found at the following web address: www.tpferro.com

- **RENFE-Operadora**

The present undertaking RENFE-Operadora was established by the Rail Sector Act, Law 39/2003 of 17 November, as a public enterprise. The articles of association of RENFE were laid down in Royal Decree 2396/2004 of 30 December 2004. It began operation on 1 January 2005.

RENFE-Operadora was created by splitting off business units providing rail services and other commercial activities from the former railway undertaking.

RENFE-Operadora is a public enterprise, with managerial autonomy within the limits laid down by its governing regulations and is attached to the Ministry of Infrastructure and Transport. It has its own legal personality, full capacity to work for the achievement of its ends, and its own assets. Its purpose is to provide passenger and freight rail services and other services or activities that are complementary or linked to rail transport.[4]

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[3] *In application of Royal Decree Law 22/2012 of 20 July, the metre-gauge lines of the now-defunct public enterprise Ferrocarriles de Vía Estrecha FEVE have been managed by ADIF since 01/01/2013.*

[4] *In application of Royal Decree Law 22/2012 of 20 July, services on the metre-gauge lines of the now-defunct public enterprise Ferrocarriles de Vía Estrecha FEVE have been managed by RENFE since 01/01/2013.*

Further information about its competences and structure can be found at the following web address: www.renfe.es

- **Other operators**

As a result of liberalisation of the goods transport sector, new operators are gradually joining the rail sector. Between 2006 and 2012, in addition to RENFE-Operadora, ten undertakings obtained the requisite safety certificate.

Annex B.2 includes an organisational chart setting out the relationships between the main actors in the system.

D. EVOLUTION OF RAILWAY SAFETY

1. INITIATIVES FOR MAINTAINING/IMPROVING SAFETY

1.1. GENERAL SAFETY IMPROVEMENT POLICIES

The current policies of the Ministry of Infrastructure and Transport regarding transport are reflected in the **Plan for Infrastructure, Transport and Housing (PITVI).** This Plan arises from the advisability of instituting a new framework for the strategic planning of the infrastructure, with a time horizon spanning the years 2012 to 2024.

The main **points of action** to be accomplished in rail transport under this Plan are:

- To restructure the current organisational model of rail management, in order to overcome dysfunctions and ensure effective coordination of the roles of the various players.
- To provide a new impetus to the complete liberalisation of the sector in line with the European guidelines, in order to ensure the development and improvement of rail transport efficiency.
- To promote opening up to new passenger rail operators in a competitive situation in the Spanish network.
- To improve efficiency and competitiveness in the transport of goods by rail, as well as its effective integration into logistic chains.
- To integrate the High-Speed networks and Conventional networks together, as well as links with the networks of other countries.

All these action points revolve around the basic premise of maintaining and improving rail transport safety. Thus, the action programmes include safety-related lines of action. For example, the Programme for Regulation, Control and Supervision includes a line of action of 'Improvement in railway safety and protection of passengers'.

The Investment Action Programme also sets out investments for reducing the accident rate of the network, through maintenance of the conventional network, continuing with the removal of level crossings or investment in upgrading safety facilities.

1.2. OTHER MEASURES TO IMPROVE SAFETY

In addition to implementing the broad strategies referred to in the previous section, other specific measures were taken during 2012, focused on solving specific problems arising from accident rates and the investigation of events which have occurred.

1.2.1. Measures Taken by the Railway Infrastructure Manager ADIF

ANNUAL SAFETY PLAN 2012

The plan aims to achieve a continuous improvement in safety levels on the General Interest Rail Network and is the most important tool of the system.

The main measures that were used in the 2012 Annual Safety Plan to achieve its objectives were:

- Scheduled Safety Inspections and Visits to prevent or mitigate traffic accidents and incidents, as the case may be.
- Unscheduled inspections, whose purpose is to correct, or eliminate deviations in the Accident and Incident Rate Indicators throughout the year.
- To organise and design the Participating Bodies in operational areas, both central and local, in traffic safety management, in keeping with ADIF's internal organisation.
- To carry out the measures of the ADIF Strategic Plan each year in chronological order.
- To have all departments of the undertaking commit to a continuous reduction in the rate of accidents and incidents.
- To detect and correct infringements of the regulations, incorrect operations, unsafe practices and possible anomalies and shortcomings in the state of the facilities.
- To establish the Annual Accident Rate Indicators for quantifying the Target Indicators laid down in the Strategic Plan, assisting the continuous improvement in safety levels in the General Interest Rail Network.
- To establish a Plan for Monitoring the Precursors of Accidents related to the main activity of ADIF, such as track deformations and broken rails, linking them to inspection procedures and conducting a follow-up with the relevant Area.

The level of compliance with all the measures provided for in the 2012 Annual Safety Plan was practically 100%, reducing the accident rate below the target indicators set, with the exception, already mentioned, of the accidents to persons attributed to ADIF.

ADIF'S LINES OF ACTION FOR IMPROVING SAFETY

1. Aimed at reducing the **risk of people being run over:**

   In Stations:

   - Continuing and increasing measures for the elimination of crossings between platforms over the line and where this is not possible, replacing their paving with non-slip rubber.
   - Improving the resource aspect of stations with regard to information reminding people of the need to use the proper paths for crossing lines.
   - Launching information campaigns on the precautions to be observed by pedestrians in the vicinity of railway lines, especially in stations.
   - Increasing perimeter fences in the vicinity of stations to prevent access to these across the lines, especially near car parks and housing developments.

   At Level Crossings:

   - Continuing with the plan to eliminate level crossings.

   On Open Line:

   - Increasing railway line perimeter fences on the conventional network.
   - Stressing the inspection of existing perimeter fences and prompt repair of those damaged.

2. Aimed at reducing the **risk of derailments:**

   On branch lines of stations and freight terminals: implementing formulae for meeting the economic requirements for maintaining and, where necessary, renewing branch lines used for moving trains out of the way and shunting in cases where there are no alternative routes or the use of these significantly complicates the operation.

   Due to the state of the rolling stock: continuing with the measures for adding to the checks and inspections, especially in incidents occurring in gauge changing systems.

3. Aimed at reducing the **risk of accidents at level crossings:** continuing to boost the plan for eliminating level crossings.

4. Aimed at reducing **running into obstacles:**

   Due to natural causes:

- Studying the suitability of installing detectors of objects on the line in high-risk areas (such as cuttings, overpasses and tunnel mouths) on conventional network lines.
- Carrying out planned works on reinforcing tunnels and cuttings to prevent landslides.

Due to acts of vandalism: as in the case of people being run over, the perimeter fencing of lines is useful in reducing such incidents.

5. Aimed at reducing the **risk of incidents by shifting of loads:** the proposed corrective measures, in particular monitoring the proper closure of container's side tarpaulins during the loading process and their correct condition, are producing satisfactory results, which is reflected in the reduction of this type of event. However, detailed monitoring of these incidents will continue.

6. Aimed at reducing the **risk of shunting accidents due to human error:** continuing with training and awareness-raising about safe practices in shunting-related work.

7. Aimed at reducing **signal failure incidents:** although occurring infrequently, and their number has gone down after the measures adopted, given the severity of accidents that may result, it is appropriate to remain vigilant in the face of situations that may cause such events and, in particular, to ensure strict compliance with the action protocols in carrying out modification work on safety facilities and correct fulfilment of the applicable regulations.

8. Aimed at reducing **incidents related to vehicle components:** intensification of wagon inspections to ensure proper compliance with preventive maintenance tasks.

9. Other measures aimed at **improving other safety aspects** of railway operation:
   - Increasing the funding necessary for the urgent correction of anomalies detected in inspections and for implementing proposals for urgent improvement of the infrastructure.
   - Introduction of the Plan to Install Warning Beacons for Exit Signals from stations, to minimise overrunning this type of signal.
   - Increasing the number of heat detectors for reducing events related to wheel or axle breakages.
   - Stepping up projects and work on refurbishing and improving lines, even those with less traffic.
   - Carrying out work on modernising interlocks and, in general, for improving safety facilities.

10. Plans for **continuous staff training related to traffic safety,** such as those related to special training in inspecting track, cargoes and rolling stock and rail accident investigation, all incorporating the latest developments in each field.

1.2.2. Measures taken by the railway infrastructure manager TP Ferro

The Internal Safety Committee of TP Ferro, responsible for dealing with TP Ferro's internal safety problems as well as those that may involve adjacent infrastructure managers and/or railway undertakings, validated the 2012 Safety Action Programme for achieving the objectives outlined below:

- Updating the operational documentation for final commissioning (100%).
- Updating the line protection and interception reference (85%).
- Drafting a new Manual Control Reference (85%).
- Updating the Blue Reference (95%).
- Revising the Initial Training Plan and Skills Maintenance Procedure (100%).
- Drafting of Instructions for physical and mental fitness of staff (100%).
- Drafting of the Work Instruction for safety installations (100%).
- Drafting of the KABA Reference for access control to the international section (80% in August 2012).

There have also been two technological improvements in 2012 for improving system safety and/or operation in general:

- Implementation of an analogue radio network, for enhancing the communication capabilities offered by the GSM-R system which, in the event of an incident, are insufficient.
- Modification of the CTC and PLO remote traffic control functionalities. The new functionality consists in adding a new command for moving linked switches together. The functionality of individual movement remains, but it will require a double confirmation.

1.2.3. Measures taken by the railway undertakings

Generally speaking, the railway undertakings in Spain approach safety through:

- Preparing annual safety plans containing safety indicators and objectives, among others, relating to:
  - Accident rates.
  - Staff training management.
  - Railway safety management (inspections).
- Safety policy approved and endorsed by the management bodies of the undertaking.
- A strategic traffic safety plan, aimed at continuously reducing risk levels.

- An annual traffic safety plan, which basically determines the annual goals relating to supervision, i.e. inspections and audits.
- The following are safety measures adopted by some railway undertakings in 2012:
- Preferential use of dynamic braking in locomotives for improving the service life of wagon brake shoes and minimising the risk of fire during the summer period.
- Comprehensive overhaul of wagon brake shoes and brake blocks in safety inspections for improving traffic safety.
- Systematic overhaul of tarpaulins for swap bodies with the aim of reducing incidents due to shifting of loads.

More specifically, the main operator in Spain, **RENFE-OPERADORA**, took the following measures over the reporting year:

RENFE's safety objectives

The Safety Management System implemented by Renfe Operadora has a set of indicators for monitoring overall progress in safety, and assessing the degree of achievement of the annual Safety Objectives. Renfe Operadora has managed to accomplish these objectives in all the reporting years since 2005, within the reference level of all the more advanced European railways.

Strategic safety guidelines

These strategic guidelines are planned annually, being of a sliding nature over time, and contain a set of actions aimed at the continuous reduction of risk levels, based on issues such as modernising safety facilities, improving rolling stock equipment, updating training plans and reviewing and improving the management systems themselves. These strategic safety guidelines are reviewed again every year.

For achieving the objectives set for 2012, the planned Strategic Guidelines (*LE*) were as follows:

- *LE No 1:* Reduction of risk due to human error.
- *LE No 2:* Reduction of risk due to technical failure.
- *LE No 3:* Development of the safety management system.
- *LE No 4:* Extending the culture of safety via experience feedback (REX).

Each strategic guideline, through the annual safety plan and the annual safety objectives, established a set of operational objectives for reducing accidents and incidents caused by human and technical failure, by implementing management measures and developing new technologies, especially in the field of rail vehicle driving.

The following are the operational objectives set with the main actions noted for each of them:

1. Reduction of risks due to human error.
    - Publication and dissemination of the 'Guide to Good Practice' that will act as a reference for the proper working practices of driving staff.

- Automation of the process of dealing with risks due to the human factor.
- Modification of Operational Circular No 1, making use of the experience gained from implementing the current circular.
- Monitoring compliance with Operational Circular No 1.
- Promoting and increasing inspection checks on alcohol and drug consumption, in order to verify that employees associated with traffic perform their duties in a proper state.
- Updating of train accompaniments in the driving cab, in order to detect incorrect practices, according to the Guide to Good Practice and the reading of safety logs.
- Updating the contents of the day-to-day Safety Tab section, in the Corporate Portal.

2. Reduction of risks due to technical failure.
   - Mechanisation of the process of dealing with risks due to the technical failure of equipment.
   - Improving the technical inspection of equipment in service, affecting a representative number of vehicles for detecting the commonest equipment faults, in order to prevent accidents and incidents caused by them.
   - Checking the train before placing it in service, in order to ensure that the equipment that is going to perform a service, starts under optimum conditions.
3. Development of the safety management system.
   - Assessment of the safety management system using the system's internal audit, in accordance with the regulations in force.
   - Development of upgrades to applications in the Asegur@ platform.
   - Preparation of the procedure for disseminating the most relevant warnings.
   - Preparation of the procedure for managing traffic safety alerts and notifications due to technical failure.
   - Preparation of the 'Safety Surveys' special procedure, with the aim of establishing a common methodology for conducting inspections of safety surveys.
   - Review of the procedure for controlling alcohol and drug use, in order to adapt this procedure to the new breathalysers.
   - Establishment of joint procedures and coordination protocols for safety management with other actors in the sector.
   - Review of the training routes set up with approved training centres.
4. Extending the safety culture via experience feedback (REX).
   - Safety days, communication workshops and discussion forums.
   - Instituting a training community.
   - Instituting a safety community.
   - Publishing a guide to good practice, whose objective is to raise awareness of the main risks identified and recorded, relating to train driving, and to offer specific

recommendations on personal and professional conduct, instilling better habits for safer driving.

- Use of this guide to good practice in training, in the management of human error, and as a guide for middle management (counselling, accompaniment, etc.).
- Preparation of information sheets aimed specifically at the driving crews, with the most relevant information about events that have occurred, as well as the recommendations emanating from their analysis for correcting them.

1.3. MEASURES RELATING TO ACCIDENTS, INCIDENTS AND SAFETY RECOMMENDATIONS

This section will conduct a review of the main actions considered by the various actors in the rail sector, as a direct consequence of accidents, incidents or specific events.

For the most part, the actions in the following table are derived from **safety recommendations** (see section D(3) of this report)[5].

EVENT: DERAILMENT ON GAUGE CHANGING SYSTEM.	
Actions:	▪ Modification of the screw fastening system of the gauge change locking mechanism.
EVENT: DERAILMENT ON GAUGE CHANGE, DUE TO INCORRECT GAUGE POSITION.	
Actions:	▪ Special training courses are conducted on third rail equipment, supplemented by simulators and visits to facilities. ▪ A circular decision is being prepared for improving the contents of training programmes and laying down guidelines for action, aimed at the affected staff.
EVENT: PERSONS BEING RUN OVER WHEN WORK IS BEING CARRIED OUT ON THE TRACK.	

[5] *This includes the measures of those recommendations considered closed during 2012, due to the DGF considering that the degree of compliance was satisfactory.*

Actions:	▪ Drafting of a Record with special instructions for the work, discussed at a meeting prior to this and signed by all the participants in the work. ▪ Training activities aimed at those in charge of work having an impact on the regulatory aspects of track work. ▪ Training activities aimed at employees of undertakings involved in carrying out track work. ▪ Inspection visits for analysing specific regulatory processes according to the complexity of the work.
EVENT: DERAILMENT DUE TO IMPROPER PASSING OF A SIGNAL.	
Actions:	▪ Possibilities for improving the visibility of the signal are currently being studied. ▪ An action plan has been developed to include a track in the station interlock.
EVENT: NEAR COLLISION DUE TO IMPROPER PASSING OF A SIGNAL.	
Actions:	▪ The behaviour of the ASFA beacon at the base of the signal was monitored. ▪ Inspection plans and safety surveys are conducted to check and monitor that communications comply with the Regulatory Standards. ▪ Guidelines have been established for preventing Management Centres from communicating with driving staff when they are driving.
EVENT: DERAILMENT DUE TO POOR STATE OF THE INFRASTRUCTURE.	
Actions:	▪ Project developed for replacing wooden sleepers with concrete ones in the area. ▪ Drafting was begun on a technical standard for the delivery of track under both normal and degraded conditions.
EVENT: AXLE BREAKAGE RESULTING FROM A CRACK LIKELY TO BE CAUSED BY ARCING DUE TO MALFUNCTIONING OF THE EARTHING SYSTEM.	
Actions:	▪ The Maintenance Technical Standard, the Maintenance Plan for the equipment affected and the Inspection Sheet were modified. ▪ A study was made of the whole vehicle fleet and the Maintenance Technical Standard of the series affected was modified accordingly. ▪ Inspection by ultrasound was included in the maintenance plan on each second Special Intervention.
EVENT: INCORRECT CONNECTIONS IN SWITCH MODULES AFTER MAINTENANCE WORK.	

Actions:	▪ Training activities to raise awareness among personnel regarding accidents and incidents. ▪ Retraining activities on the General Traffic Regulations. ▪ Introduction of colour codes on the connections in existing interlocks.
EVENT: LATERAL COLLISION DUE TO TRACK CANT AND INTER-AXLE DEFICIENCY	
Actions:	▪ Increase in preventive maintenance activity. ▪ The Department of Railways has issued CIRCULAR DECISION 02/2012 on recommendations for designing track superstructure in tunnels.

The Railway Infrastructure Manager ADIF has implemented actions that meant checking **incidents involving broken rails**, an indicator that has resulted in a number of events and a slight deviation from the previous year, although it is true that most events were concentrated in the coldest months of the year and during episodes of high temperature gradients.

For extending and improving the preventive treatment of these incidents, the precursors of accidents due to broken rails, ADIF's maintenance sections are in the process of developing equipment for the non-destructive preventive detection of surface rail defects by means of induced currents, with track prototype tests in progress, in addition to the annual plans for checking track using inspection [auscultation] cars and track geometry test equipment.

In general, all types of incidents termed accident precursors have been reduced in magnitude, except those pertaining to broken rails as has been pointed out previously, which had a seasonal nature.

With regard to the above, it should be pointed out that the cataloguing of this type of event is very strict in the Spanish railway system, since virtually all the events were detected by the testing resources of the facilities and their maintainers, and did not involve trains when actually running. With regard to the risk of such events so detected, cases have been made in various areas as to whether or not they should be re-catalogued if trains are not affected or if they take place in a controlled manner by setting suitable speed limits or traffic restrictions at the site of the event until it has been made good.

2. TREND ANALYSIS WITH DETAILED DATA

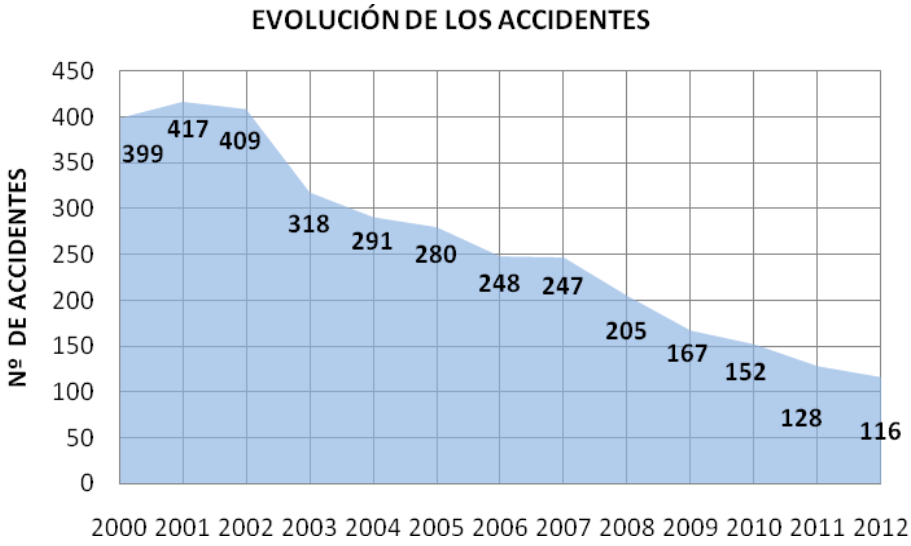
This report sets out the statistics for significant accidents occurring on the General Interest Rail Network run by the Railway Infrastructure Manager ADIF during 2012. In addition, in the network managed by TP Ferro a significant accident[6] occurred classified as 'Other' due to the low-speed collision between two maintenance vehicles. This accident has been included in the graphs shown below.

A series of graphs have been prepared showing the trend for each of the Common Safety Indicators, according to the criteria and templates supplied by the European Railway Agency.

Annex C gives a breakdown of these statistics.

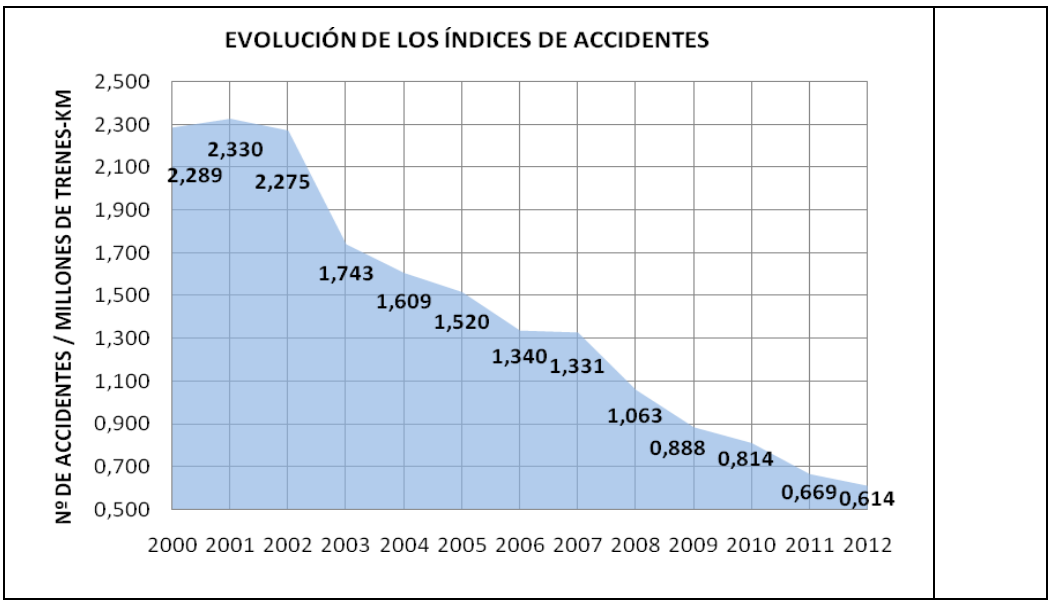
A highly significant feature of the accident rate in Spain is that a high proportion of accidents are not caused solely by railway operation; they are due to the involvement of third parties (level-crossing users or third parties improperly accessing railway facilities).

In 2012, 116 accidents occurred in the RFIG compared with 128 in the previous year, which means a reduction of 9.4%. The accident rate (number of accidents per million train-kilometres travelled) was 0.614, less than the figure for the previous year of 0.669, representing a fall of 8.2%.



EVOLUCIÓN DE LOS ACCIDENTES	TREND OF ACCIDENTS
N° DE ACCIDENTES	No OF ACCIDENTS

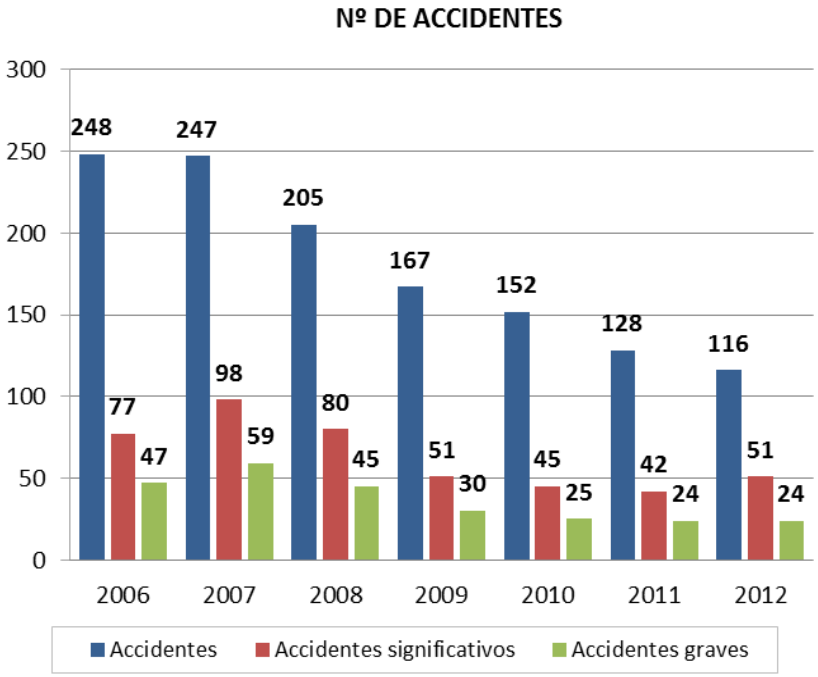
6 *Significant accident included in the quantification of Common Safety Indicators.*



EVOLUCIÓN DE LOS ÍNDICES DE ACCIDENTES	TREND OF ACCIDENT INDICES
N° DE ACCIDENTES / MILLIONES DE TRENES-KM	No OF ACCIDENTS / MILLIONS OF TRAIN-KM

Below are a series of graphs showing the trend in the accident rate over the last few years in the General Interest Rail Network (RFIG) managed by the railway infrastructure manager ADIF and in the international section managed by TP Ferro (residual in character, as since it began activity in 2010 there has only been one significant accident in 2012).

The following graph continues to show a **downward trend in the <u>total number of accidents</u> in recent years**, having fallen by 133 between 2006 and 2012.

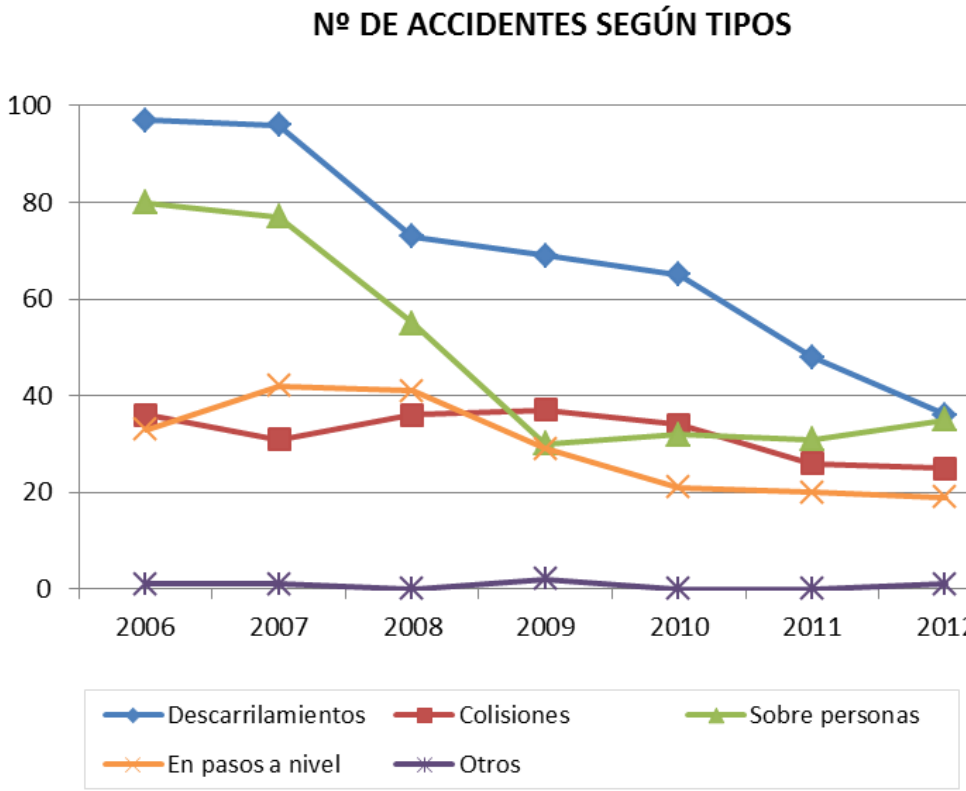


N° DE ACCIDENTES	No OF ACCIDENTS
Accidentes	Accidents

Accidentes significativos	Significant accidents
Accidentes graves	Serious Accidents

By type of accident, a reduction was noted compared with the previous year in all categories of accidents, with the exception of accidents to persons, which underwent a slight upturn.

Accidents	2006	2007	2008	2009	2010	2011	2012
Derailments	97	96	73	69	65	48	36
Collisions	36	31	36	37	34	26	25
To persons	80	77	55	30	32	31	35
At level crossings	33	42	41	29	21	20	19
Fire	1	0	0	0	0	3	0
Other	1	1	0	2	0	0	1
TOTAL	**248**	**247**	**205**	**167**	**152**	**128**	**116**

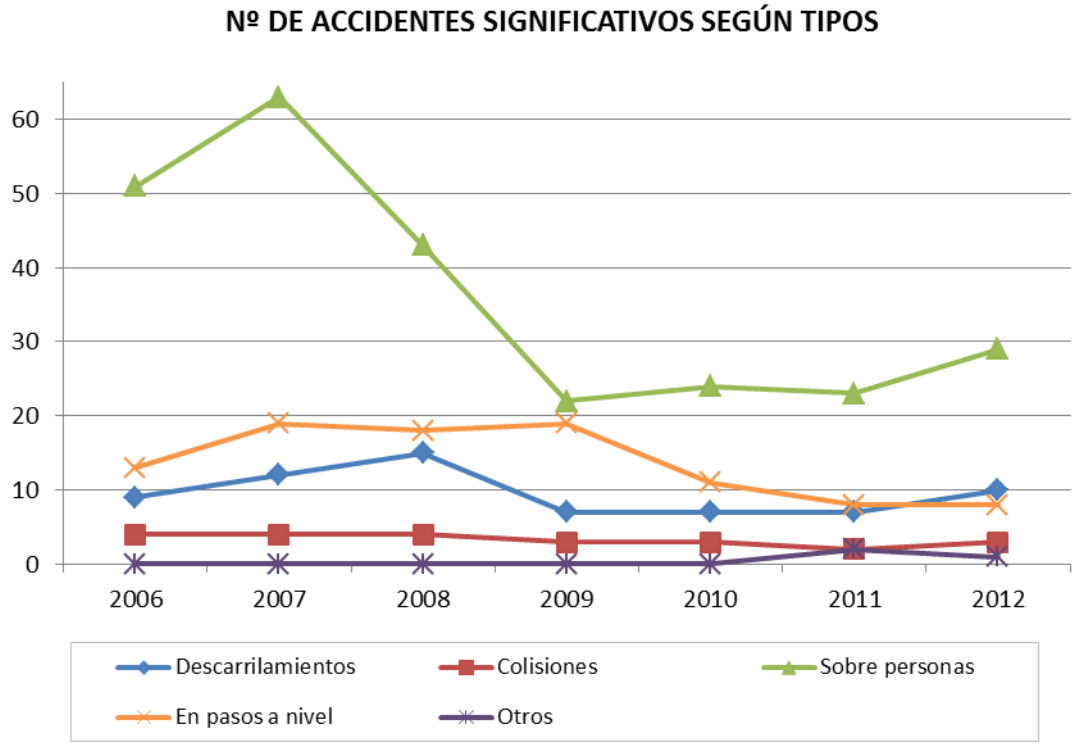


N° DE ACCIDENTES SEGÚN TIPOS	No OF ACCIDENTS BY TYPE
Descarrilamentos	Derailments
Colisiones	Collisions
Sobre personas	To persons
En pasos a nivel	At level crossings
Otros	Other

Focusing exclusively on **significant accidents**, after reaching a peak in 2007, their number fell significantly and in the last four years has shown a stable trend.

The next graph shows the analysis of trends in **significant accidents broken down by type**. By way of a general conclusion, no completely stable trend can be observed for any type of accident.

Significant accidents	2006	2007	2008	2009	2010	2011	2012
Derailments	9	12	15	7	7	7	10
Collisions	4	4	4	3	3	2	3
To persons	51	63	43	22	24	23	29
At level crossings	13	19	18	19	11	8	8
Other	0	0	0	0	0	2	1
TOTAL	**77**	**98**	**80**	**51**	**45**	**42**	**51**



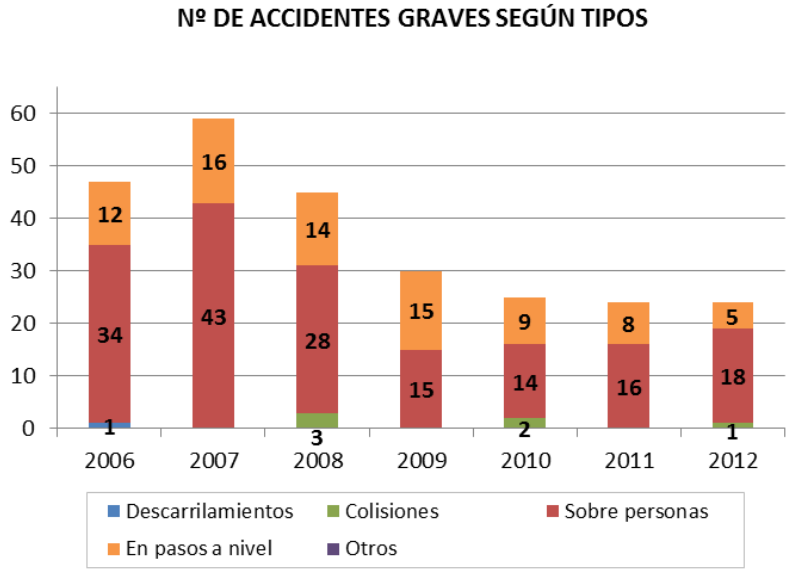
N° DE ACCIDENTES SIGNIFICATIVOS SEGÚN TIPOS	No OF SIGNIFICANT ACCIDENTS BY TYPE
Descarrilamentos	Derailments
Colisiones	Collisions
Sobre personas	To persons
En pasos a nivel	At level crossings
Otros	Other

It should be noted that the number of accidents at level crossings fell considerably in 2010, reaching its lowest value in 2011 and remaining there in 2012, demonstrating the great

effort made in this field in recent years. However, the value for accidents to persons increased slightly.

Derailments also increased slightly over the last year, from 7 to 10. It should be noted that several of these accidents (3) took place at gauge changers, in conditions significantly affecting line operation, but with little effect on safety.

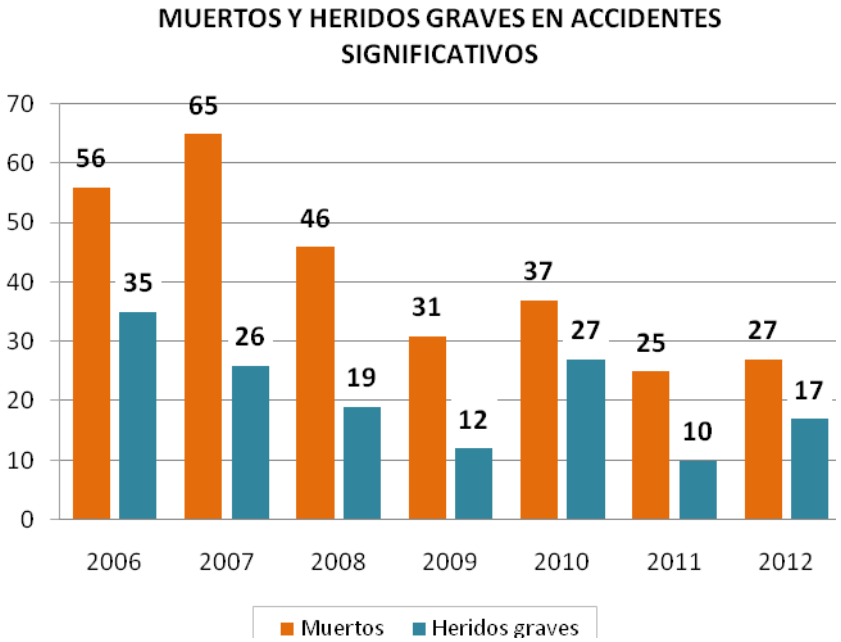
In terms of **serious accidents**, the lowest value of the entire series achieved in 2011 (24 accidents) was maintained. In the next graph, showing the accidents that occurred over the last few years which could be classified as serious in their consequences (at least one fatality, five or more serious injuries, or extensive damage), it can be seen that the major influence on the accident rate in the Spanish network is that of third party activity: accidents to persons or at level crossings.



N° DE ACCIDENTES GRAVES SEGÚN TIPOS	No OF SERIOUS ACCIDENTS BY TYPE
Descarrilamentos	Derailments
Colisiones	Collisions
Sobre personas	To persons
En pasos a nivel	At level crossings
Otros	Other

The number of **deaths** since 2012 has increased very slightly compared with 2011 (lowest in the historical series). In particular, there was an increase in the number of fatalities due to accidents to persons and running over obstacles (collision), i.e. items outside the railway system itself.

The same is true regarding **serious injuries**, also increasing in 2012 due to the increase in victims of running over obstacles (collision), which went from 0 to 3, and those seriously injured by being run over (from 7 to 11).



MUERTOS Y HERIDOS GRAVES EN ACCIDENTES SIGNIFICATIVOS	FATALITIES AND SERIOUS INJURIES IN SIGNIFICANT ACCIDENTS
Muertos	Fatalities
Heridos graves	Serious injuries

Below is a breakdown of the number of **fatalities by different types of accident**.

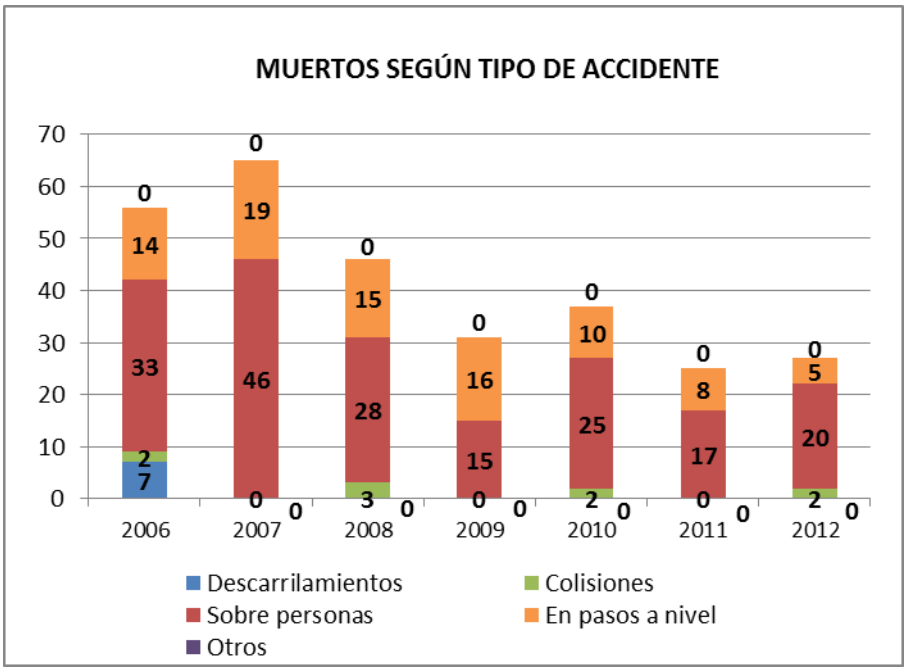
In 2012 the number of fatalities in accidents to persons increased slightly, from 17 in 2011 to 20 deaths in 2012.

However, the number of accident victims at level crossings fell again this year.

The chart shown below indicates that there were two fatalities due to collisions. It is important to remember the definition of collision[7] in Royal Decree 810/2007 in its new Annex 1, since this includes running over obstacles. For this year in particular, the three collisions actually consisted of running over obstacles.

The two fatalities in collisions were due to a road vehicle being struck outside of railway activity.

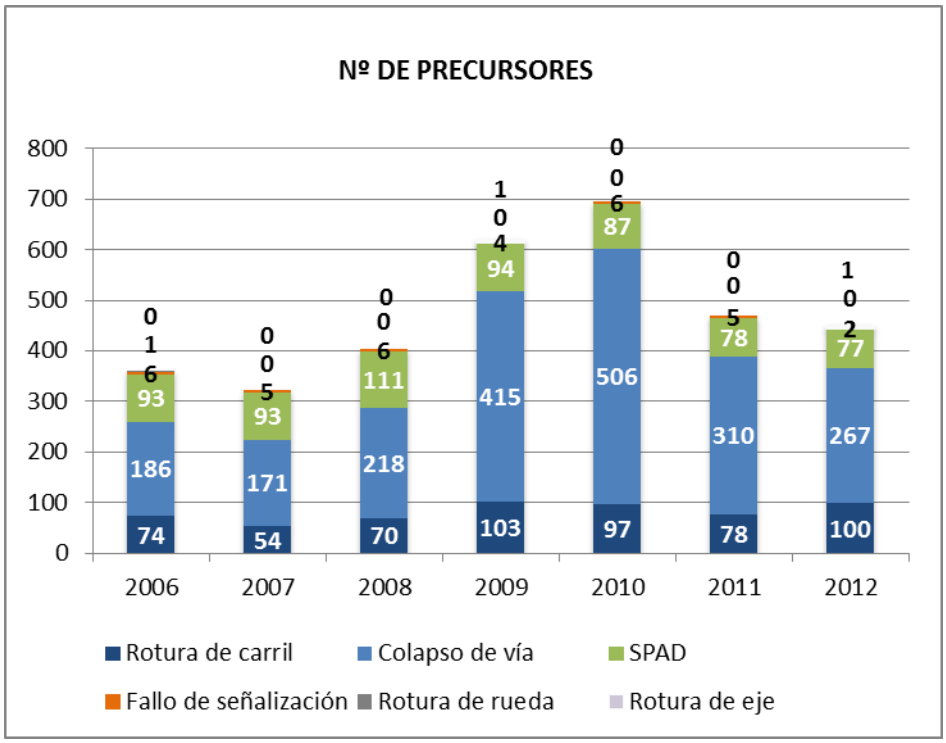
7 *'Collisions of trains, including collisions with obstacles within the clearance gauge', front to front, front to end or a side collision between a part of a train and a part of another train, or with:*
a) shunting rolling stock,
b) objects fixed or temporarily present on or near the track (except at level crossings if lost by a crossing vehicle or user).



MUERTOS SEGÚN TIPO DE ACCIDENTE	FATALITIES BY TYPE OF ACCIDENT
Descarrilamentos	Derailments
Colisiones	Collisions
Sobre personas	To persons
En pasos a nivel	At level crossings
Otros	Other

Finally, the graph below compares the various **accident precursors** observed in recent years. The graph illustrates that there is no clear trend in the different types of precursor. Despite this, in 2011 there was a decrease in the amount of all types of precursors summarised here, except for broken rails.

It should be pointed out that there were hardly any broken axles and/or wheels, only three such incidents occurring over the period 2006-2012.



N° DE PRECURSORES	No OF PRECURSORS
Rotura de carril	Broken rail
Colapso de via	Line collapse
SPAD	SPAD
Fallo de señalización	Signalling failure
Rotura de rueda	Broken wheel
Rotura de eje	Broken axle

The following conclusions can be drawn from the analysis of railway accident data for 2012:

- An overall fall in the accident rate is observed on the General Interest Rail Network managed by ADIF compared with previous years (-10% compared with 2011, 115 accidents as against 128), confirming the steady downward trend of the last few years.
- One significant accident occurred in the network managed by TP Ferro. This is the first accident of this type since it began operations.
- Some of the strategic guidelines of the last few years have shown positive results, such as the focus on eliminating level crossings or their protection.

3. RESULTS OF SAFETY RECOMMENDATIONS

The investigation of accidents and incidents occurring on the network is a fundamental tool in detecting and preventing risk situations. This investigation must include accidents and accident precursors which, although without serious personal or financial repercussions, display particular characteristics such as recurring in time or in a geographical area or the fact that their causes may be attributable to railway management.

Accordingly, for every accident investigated a report is drawn up ascertaining the causes and making specific recommendations with a view to improving railway facilities, seeking possible guidelines for the conduct of the persons involved and, in short, preventing it from recurring.

In 2012 the Rail Accident Investigation Commission opened a total of 80 cases over the entire national network, of which a total of 14 accidents and 9 incidents were finally investigated, broken down into 9 derailments, 1 level crossing accident, 4 collisions (2 resulting in derailments), 4 signal overruns (resulting in 2 near collisions), 2 near collisions, 1 broken axle, 1 case of points being forced open and 1 case of runaway rolling stock.

Of the aforementioned total, in 2012, a total of 10 accidents and 6 incidents were investigated within the General Interest Rail Network run by the railway infrastructure manager ADIF, to which this report relates, according to the definition given in the Safety Directive 49/2004/EC. Of those, 7 were classified as derailments, 1 as a level crossing accident, 2 as collisions, 2 as passing a signal, 1 as points being forced open, 2 as near collisions and 1 as a broken axle.

A summary is given below of the **more important safety recommendations** put forward in 2012 from the previously mentioned events whose investigation had been completed:

- **To: Department of Railways**
  - Modifications to the existing regulations on the management of alarms that occur in hot axle detector equipment.
  - To modify the protection conditions of a level crossing.

- **To: Railway Undertakings**
  - To analyse the feasibility of preventing establishing the pre-set speed when running on sight.
  - To analyse the feasibility of establishing a systematic procedure for monitoring and assessing compliance with maximum speeds by driving staff.
  - To improve the definition of the maintenance instructions for certain equipment, in addition to providing training for the maintainer's operatives and carrying out random checks on their proper implementation.
  - Study of using other types of materials for some train components in order to reduce wear and grease requirements.
  - Training and refresher courses.

- **To: Infrastructure managers**
  - To analyse, in specific cases, the feasibility of making changes in signalling and beacons, e.g. in areas of reduced visibility or on buffered lines with heavy traffic.
  - To study the possibility of installing buffers that absorb and cushion the impact of trains on those lines where a large number of passenger trains end their journey.
  - Specific improvements in the infrastructure, for example:
    - Restoring geometric parameters of track
    - Cleaning and improving the track superstructure in a specific area to prevent premature deformations
    - Immediate maintenance after inspection (auscultation) and detection of areas with out-of-tolerance parameters
  - Training and refresher courses.
  - To set up a programme for the prevention of human error in matters related to track work.
  - To perform an audit of infrastructure corrective maintenance.

The Department of Railways tracks the degree of compliance with these recommendations by the parties involved.

To do so, it makes periodic requests for information from the agency to which the recommendation was addressed, requesting data on its degree of compliance. When it is considered that it has reached a sufficient level of implementation of the recommendation, it is reported to the Rail Accident Investigation Commission for closure.

Section D (1.3) sets out the most significant actions taken in compliance with these recommendations. This is not an exhaustive list, and shows only the most significant since, in principle, work is being done to achieve compliance with all the recommendations of the CIAF.

E. MAIN CHANGES IN LEGISLATION, REGULATIONS AND ADMINISTRATIVE PROVISIONS

Although not directly linked to rail safety, the following Act approved in 2012 is of major importance for the configuration of the Spanish railway system:

- **ROYAL DECREE-LAW 22/2012 OF 20 JULY, ADOPTING MEASURES REGARDING RAIL INFRASTRUCTURES AND SERVICES.**

  It covers a series of measures in various infrastructure and transport policy areas. These are:

  - Revitalisation of the sector, identifying 31 July 2013 as the start date for the liberalisation of passenger traffic.
  - Restructuring of the public enterprise RENFE-Operadora into four lines of activity:
    - Passengers;
    - Freight and logistics;
    - Manufacturing and maintenance;
    - Asset management.
  - Abolition of the public enterprise Ferrocarriles Españoles de Vía Estrecha (FEVE), distributing its assets, rights and obligations between the public enterprises of ADIF and RENFE-Operadora or to the companies formed therein.

F. EVOLUTION OF SAFETY CERTIFICATION AND AUTHORISATION

1. NATIONAL LEGISLATION ON THE ISSUANCE OF SAFETY CERTIFICATES AND AUTHORISATIONS

The national legislation on the issuance of safety certificates and authorisations is Royal Decree 810/2007, transposing Safety Directive 49/2004/EC, whose Title II deals with the requirements and conditions for the granting, maintenance, suspension and revocation of these documents.

Based on this regulation, **nine Safety Certificates were issued in 2012** (counting parts A and B separately) to the following railway undertakings (more information in Section F (3) of this report):

- Activa Rail;
- Acciona Rail Services;
- Continental Rail;
- FGC Mobilitat;
- SNCF.

The assessment process prior to the issue of safety certificates for the aforementioned railway undertakings was based on (EU) Regulation No 1158/2010 of the Commission of 9 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates.

However, there have been no applications by rail infrastructure managers for **SAFETY AUTHORISATIONS** throughout 2012. Accordingly, in the year covered by this report, the Department of Railways has not granted any safety authorisations.

2. AVAILABILITY OF SPANISH SAFETY RULES AND ALL OTHER RELEVANT NATIONAL LEGISLATION FOR RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

Information about Spanish safety rules and all other related national legislation can be found on the website of the Ministry of Infrastructure and Transport:

http://www.fomento.es/MFOM/LANG_CASTELLANO/DIRECCIONES_GENERALES/FERROCARRILES/_INFORMACION/NORMATIVA/

This information can also be found in ADIF's Network Statement, which is available at the following web address:

http://www.adif.es/es_ES/conoceradif/declaracion_de_la_red.shtml

The full texts of the Spanish safety regulations and laws can also be obtained on the website of the Official State Gazette (BOE), as they are published there before their entry into force:

http://www.boe.es/diario_boe/

3. PROCEDURAL ASPECTS

3.1. COMMENTS TAKEN FROM APPLYING THE PROCEDURE FOR ISSUING SAFETY AUTHORISATIONS AND SAFETY CERTIFICATES

In 2012, the Department of Railways assessed renewal of the safety certificate of railway undertakings which, in early 2012, still held a safety certificate issued in accordance with regulations prior to the Safety Directive 49/2004/EC and its transposition into national legislation by means of Royal Decree 810/2007.

In addition, it is continuing with the objective of adapting the management systems of the undertakings and managers to Regulations 1158/2010 and 1169/2010, respectively.

To do this, and to facilitate the process of obtaining their certificates, it has cooperated with undertakings during the drafting of documents, prior to the submission of a formal application, performing preliminary assessments of the draft documents of the safety management system and helping undertakings to interpret the different criteria contained in the aforementioned regulations.

This has enabled problems and difficulties to be avoided in subsequent assessment, and has served to shorten the actual issue times, since it has limited the supplementary information that had to be collected during the analysis of the application.

In this respect, our experience has shown that, in addition to cooperation with the railway undertakings, cooperation with the consulting sector that supports these undertakings in developing their systems is also a positive step.

This monitoring and cooperation from the initial phases of designing the undertakings' management systems has also assisted in the early implementation of the procedures relating to Regulations 352/2009 for risk assessment and 445/2011 for certifying entities responsible for wagon maintenance.

3.2. PART A SAFETY CERTIFICATES

In 2012, three Part A Safety Certificates were issued.

RAILWAY UNDERTAKING	TYPE OF CERTIFICATE	DATE OF ISSUE	FEE[8]
FGC Mobilitat	New	15/02/12	€ 11 041.89
Continental Rail	Renewal	24/05/12	€ 5 520.94
Acciona Rail Services	Renewal	10/07/12	€ 5 520.94

3.3. PART B SAFETY CERTIFICATES

The following table sets out some characteristics of the Part B safety certificates issued in 2012:

RAILWAY UNDERTAKING	TYPE OF CERTIFICATE	DATE OF ISSUE	REASONS FOR UPDATE	FEE
FGC Mobilitat	New	15/02/12	--	--
Continental Rail	Renewal	24/05/12	--	--
SNCF	Renewal	28/06/12	--	€ 5 520.94
Acciona Rail Services	Renewal	10/07/12	--	--
Activa Rail	Update	17/10/12	Extension of lines	€ 5 520.94
SNCF	Update	19/12/12	Extending validity of the certificate	--

3.4. SAFETY AUTHORISATIONS

In 2012, the Department of Railways did not issue any safety authorisations.

[8] *The amount of the fee corresponds to the issue of parts A and B of the safety certificate.*

G. SYSTEM SUPERVISION MEASURES

1. GENERAL LINES OF SUPERVISION

Supervising the correct implementation of the regulatory safety framework by the responsible officials may take place at different levels:

1. Generally speaking, checking may be indirectly achieved by monitoring the global accident rate of the system, through activities already described in this report such as:
   - Periodic monitoring of accident rate statistics and indicators for detecting significant deviations.
   - Supervising the annual reports of undertakings.
   - Monitoring safety recommendations.

2. It is also carried out through certifying and supervising the actors that are involved in the rail sector and provide services to railway undertakings and infrastructure managers.

   This line of supervision, which will be described in a little more detail below, was regarded as a priority throughout 2012, especially in two types of centres whose role is paramount in the safety of the system:

   - Those maintaining the rolling stock.

- Those providing training for railway staff with safety activities, of both undertakings and managers.

3. By means of audits and inspections by the undertakings and managers themselves, in particular, by ascertaining that the undertakings' internal monitoring procedures are applied.

4. Lastly, through training and dissemination measures for undertakings and managers to ensure that they are sufficiently aware of the rules and regulations that must be applied.

In any case, in 2012, no kind of relevant anomaly occurred, which could have resulted in any modification, revocation, suspension or serious warning regarding safety certificates or safety authorisations.

2. INSPECTION OF APPROVED ROLLING STOCK MAINTENANCE CENTRES

As has already been mentioned, a priority for the DGF is adequate checking of railway vehicle maintenance, as laid down in Spanish legislation. For this reason, maintenance centres have to be approved by the DGF, as stipulated in Order FOM/233/2006[9] for the exercise of their duties.

As at 31 December 2012, the maintenance centre sector was as follows:

- No of approved maintenance centres: 50
- No of active approved maintenance centres: 47
- No of approved facilities: 157

The DGF will carry out checks and inspections at least once a year, when there are reasonable doubts on possible breaches of the requirements, or randomly, at any time, checking continued compliance with the requirements demanded for granting approval.

Specifically, in 2012 a total of **86 inspections** of maintenance centres were made, covering all the approved maintenance centres.

As a general rule, these inspections were satisfactory, although in some instances recommendations were issued, compliance with which has been monitored in subsequent visits and inspections.

[9] *Order FOM 233/2006 of 31 January, regulating the conditions for the approval of railway rolling stock and maintenance centres and laying down the fees for certification of such stock.*

3. INSPECTION OF RAILWAY STAFF TRAINING CENTRES

Another supplementary activity of vital importance to the sector is staff training and so monitoring of the centres that perform this activity is also a priority for the DGF.

Visits to approved railway staff training centres are carried out pursuant to Article 53 of Order FOM 2872/2010[10], Title IX, Chapter I, concerning the system for inspecting approved railway staff centres and all the operations linked to the training of railway staff for the various operating licences set out in the aforementioned Order.

As of 31 December 2012, the number of approved railway staff training centres is 12.

The goal of the Department of Railways with regard to inspecting these centres, is to carry out at least one inspection a year at each training centre. In addition to the above, when a training centre submits a request for extending its facilities, the DGF carries out an inspection of the centre prior to issuing a decision.

[10] *Order FOM 2872/2010 of 5 November determining the conditions for obtaining operating licences enabling the exercise of railway staff functions relating to traffic safety, as well as the operating conditions of approved training centres and those for the medical examination of such staff.*

4. INTERNAL MONITORING OF UNDERTAKINGS AND MANAGERS

In 2012, the railway undertakings and infrastructure managers carried out the procedures laid down in their supervision plans with satisfactory levels of success in meeting their forecasts.

INSPECTIONS		RAILWAY UNDERTAKINGS:
Number of inspections of RUs and IMs in 2012	Load Inspections:	1 097
	Technical Inspection of Equipment in Service (ITMS)	7 122
	Accompaniment of trains	15 774
	Inspection of trains before they go into service	3 725
	Inspections of manoeuvres	698
	Alcohol and drug tests	10 101
	Inspection visits to Driving Centres, Residences, Production and Management Centres	708
	INFRASTRUCTURE MANAGERS:	
	4 149 scheduled inspections and audits (counting the 1 938 wagons and 49 cars inspected), as opposed to the 3 970 planned, which means a compliance of 107%. In addition, there were 2 390 unscheduled inspections, which gives a total of 6 539 carried out in 2012 (including 239 safety audits), with 2 124 anomalies detected between scheduled and unscheduled inspections, 47% of them low-level, 34% medium level and 19% high level[11], the latter being basically concentrated on inspections of wagons and loads.	

[11] *Anomalies, types and measures:*

For handling, analysis and subsequent action, three types of anomalies have been identified, each level being associated with different measures:

Low level: *Anomaly not entailing the establishment of immediate restrictions on the infrastructure (speed limits, etc.) or stock.*

Medium level: *Anomaly entailing the establishment of immediate restrictions on the infrastructure or stock but allowing traffic to continue running subject to immediate repair or overhaul.*

High level: *Anomaly preventing any kind of traffic whether it is linked to the infrastructure or the stock.*

H. IMPLEMENTATION OF COMMISSION REGULATION (EC) No 352/2009

The implementation of Commission Regulation (EC) No 352/2009, on a Common Safety Method for risk evaluation and assessment, by the different actors in the system has been consolidated in 2013.

In the first place, implementation has been extended to **CHANGES IN ROLLING STOCK**, through the implementation of **Circular Decision No 1/2011**[12]. Listed below are several noteworthy examples of practical applications in the last year:

- Adaptation of Iberian gauge Spanish vehicles for international traffic:
  - Adaptation of the 100 series for French lines.
  - Change of bogies for locomotives and electrical capture equipment.
- Internal modifications for changing functionality for the passenger:
  - Change in preferred seating for tourist seats in coaches.
  - Reduction in the number of coaches in modular compositions of the *Tren Hotel*.
  - Modification to provide accessibility for self-propelled units on commuter service.
- Technical modifications for improving the operation of mechanical components of the vehicles.
  - Change in set of brake resistances.

[12] *Circular Decision 1/2011 on the validation procedure for modified railway vehicles, pursuant to Order FOM/233/2006 of 31 January, on rolling stock.*

- Change of auto variable valve relay.
- Improvement of the pantograph in high-speed self-propelled units.
- Replacement of brake pads.
- Installation of couplers in wagon body ends.
- Improved detection of overheating in traction motors.
- Implementation of overflow valve on the brake distributor in diesel trains.
- Improving external power supply to the battery charger of electric self-propelled units.
- Modification to the warning regarding clearance and closure of access doors in self-propelled units.

- Modifications for changing the performance and capacity of vehicles.
  - Increased height of the lower floor in car carrier wagons.
  - Elimination of drop-sides on platform wagons.
  - Replacement of the tank and redesign of the wiring for the increased load capacity in auxiliary stock.
- Deployment of signalling equipment or traffic control:
  - Deployment of ERTMS/ETCS signalling system levels 0, 0+ASFA, 1 and 2 in self-propelled units and locomotives.
  - Deployment of GSM-R equipment in self-propelled units and locomotives.
  - Replacement of data recorders, with other more modern, latest generation equipment.
- Software modifications in vehicles of different type, such as:
  - Improvements for optimising performance in vehicle control functions and information management of internally generated warnings.
  - Improvements in the passenger public address system and adaptation to the new hardware.
  - Improvement in procedures for diagnosing the generation of false failures in the brake control unit.
  - Improvement in the performance of video monitoring and storage of incidents in the event recorder.
  - Migration of a version of the control software between high-speed series.
  - Upgrading the legal recorder software.
  - Improvement in fault diagnosis for maintenance work and vehicle peformance during travel in degraded conditions.
  - Improvement of the electrical performance of equipment and management of the restaurant car waste tank in high-speed trains.

Secondly, the annual reports of the railway undertakings have begun to incorporate results of implementing Regulation 352/2009 in other areas, within the risk management procedures of their safety management systems. The following are some representative examples:

- Extending the scope of operations, due to starting the operation of new lines.
- Bringing new trains into operation.
- Entry into force of new regulations or amendments to existing ones.
- Processing of instructions related to any traffic operation, in both a trial and a commercial situation.

For its part, the railway infrastructure manager **ADIF** has implemented the common safety method for assessing risks when making improvements or changes in safety facilities, by reviewing the corresponding procedure in its safety management system.

In addition, it should be pointed out that the Department of Railways, while waiting for a system of accreditation and/or **RECOGNITION OF ASSESSMENT BODIES** to be defined, recognises safety assessors as laid down in Annex II to Regulation (EC) No 352/2009.

In 2012, the following bodies were recognised:

UNDERTAKING	SCOPE	CONCESSION DATE
AUXITEC	Infrastructure Energy Control, Command, Signalling and Telecommunications Rolling stock	20/03/12
ECA BUREAU VERITAS	Infrastructure Energy Control, Command, Signalling and Telecommunications Rolling stock	27/06/12
EPTISA, Servicios de Ingeniería S.L.	Infrastructure	14/12/12
INGENIERÍA DE INSTALACIONES Y TRENES, S.L.	Energy Control, Command, Signalling and Telecommunications Rolling stock	14/12/12
AIRTREN	Control, Command, Signalling and Telecommunications Rolling stock	14/12/12

These recognitions are being made on a temporary and provisional basis, until, with the revision of Regulation (EC) No 352/2009, the accreditation requirements and procedures for safety assessment bodies are more precisely defined. When the new regulation enters

into force, they will have to be reviewed and the undertakings will have to pass an accreditation process.

I. DEROGATIONS RELATING TO THE CERTIFICATION SCHEME IN ENTITIES RESPONSIBLE FOR MAINTENANCE

Article 14a(8) of Directive 2008/110/EC states the following:

'8. Member States may decide to fulfil the obligations to identify the entity in charge of maintenance and to certify it through alternative measures, in the following cases:

a) Vehicles registered in a third country and maintained according to the law of that country;

b) Vehicles which are used on networks or lines the track gauge of which is different from that of the main rail network within the Community and for which fulfilment of the requirements referred to in paragraph 3 are ensured by [international] agreements with third countries;

c) Vehicles identified in Article 2(2), and military equipment and special transport requiring an ad hoc national safety authority permit to be delivered prior to the service. In this case derogations shall be granted for periods not longer than five years.

Such alternative measures shall be implemented through derogations to be granted by the relevant national safety authority:

a) When registering vehicles pursuant to Article 33 of the Railway Interoperability Directive, as far as the identification of the entity in charge of maintenance is concerned;

b) When delivering safety certificates and authorisations to railway undertakings and infrastructure managers pursuant to Articles 10 and 11 of this Directive, as far as the identification or certification of the entity in charge of maintenance is concerned.

Such derogations shall be identified and justified in the annual safety report referred to in Article 18 of this Directive. Where it appears that undue safety risks are being taken

on the Community rail system, the Agency shall immediately inform the Commission thereof. The Commission shall make contact with the parties involved and, where appropriate, request the Member State to withdraw its derogation decision.'

In 2012, the Department of Railways did not issue any derogation based on the previously described article regarding the certification of entities responsible for maintenance.

This Department has made a major effort to publicise to the sector the importance of being certified in accordance with Commission Regulation (EU) No 445/2011[13] no later than 31 May 2013.

[13] *Commission Regulation (EU) No 445/2011 of the Commission of 10 May 2011 on a system of certification of entities in charge of maintenance for freight wagons and amending Commission Regulation (EC) No 653/2007.*

J. CONCLUSIONS AND PRIORITIES

In 2012, as in previous years, the functions covered by this report were performed by the Department of Railways, which is in a gradual process of consolidating its expertise and structure regarding safety and interoperability.

With regard to the overall accident rate of the system during this year, there has been a consolidation of the values of recent years, maintaining similar orders of magnitude. The effort made in some fields has produced results, such as the action on level crossings, achieving very low values.

In the coming years, one of the main lines of work is related to the thorough restructuring of the national railway system that is expected from Royal Decree Law 22/2012. The year 2013 may be a year of transition before an approaching liberalisation of the domestic passenger market, which will have a significant impact on the regulation and supervision structures of the sector.

Other lines of action are related to the implementation of European regulations during 2013, such as Regulations 1077/2012 and 1078/2012, whose entry into force is set for mid-2013.

Another priority for the DGF is the implementation of Regulation 445/2011. It should be borne in mind that, in Spain, the DGF itself has been designated as the certifying body for the maintenance systems of the entities in charge of wagon maintenance. In 2013, there will be a major effort to certify these entities before the deadline of 31 May laid down in the Regulation.

K. SOURCES OF INFORMATION

References:

[1] *'Network Statement 2013 - Updated'* – ADIF.

[2] '*Network Statement 2013*' – TP Ferro.

[3] *DIRECTIVE 49/2004/EC* OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 29 April 2004.

[4] *'Annual Accident Report 2012'* – Department of Traffic Safety, Renfe-Operadora.

[5] *'Annual Report on Accidents on the General Interest Rail Network, 2012' – Department of Traffic Safety, ADIF.*

[6] *'2012 Annual Report on Traffic Safety'* – Department of Traffic Safety, RENFE-Operadora.

[7] *'Safety Report 2012'* – Department of Safety and Training, Continental Rail.

[8] *'Safety Report 2012'* - Comsa Rail Transport, S.A.U.

[9] *'Annual Safety Report 2012'* – Activa Rail S.A.

[10] *'Annual Safety Report 2012'* – Department of Traffic Safety, ADIF.

[11] *'Annual Report on Operations, Maintenance and Rail Safety 2012'* – TP Ferro.

[12] '*Annual Rail Safety Report 2012*' – TP Ferro.

[13] *'Annual Safety Report 2012'* – Tracción Rail.

[14] *'Annual Safety Report 2012'* – Logitren Ferroviaria S.A.

[15] *'SNCF Annual Safety Report, Travel* in Spain – 2012'

[16] *'Annual Safety Report 2012 of Ferrovial Railway'*

[17] *ROYAL DECREE 810/2007* of 22 June approving the Regulations on Traffic Safety on the General Interest Rail Network.

Websites consulted:

[18] www.fomento.es

[19] www.adif.es

[20] www.tpferro.com

In addition to all the above references, further information supplied by the various rail operators and railway infrastructure managers was used in writing this report.

L. ANNEXES

ANNEX A: INFORMATION ON THE RAILWAY STRUCTURE

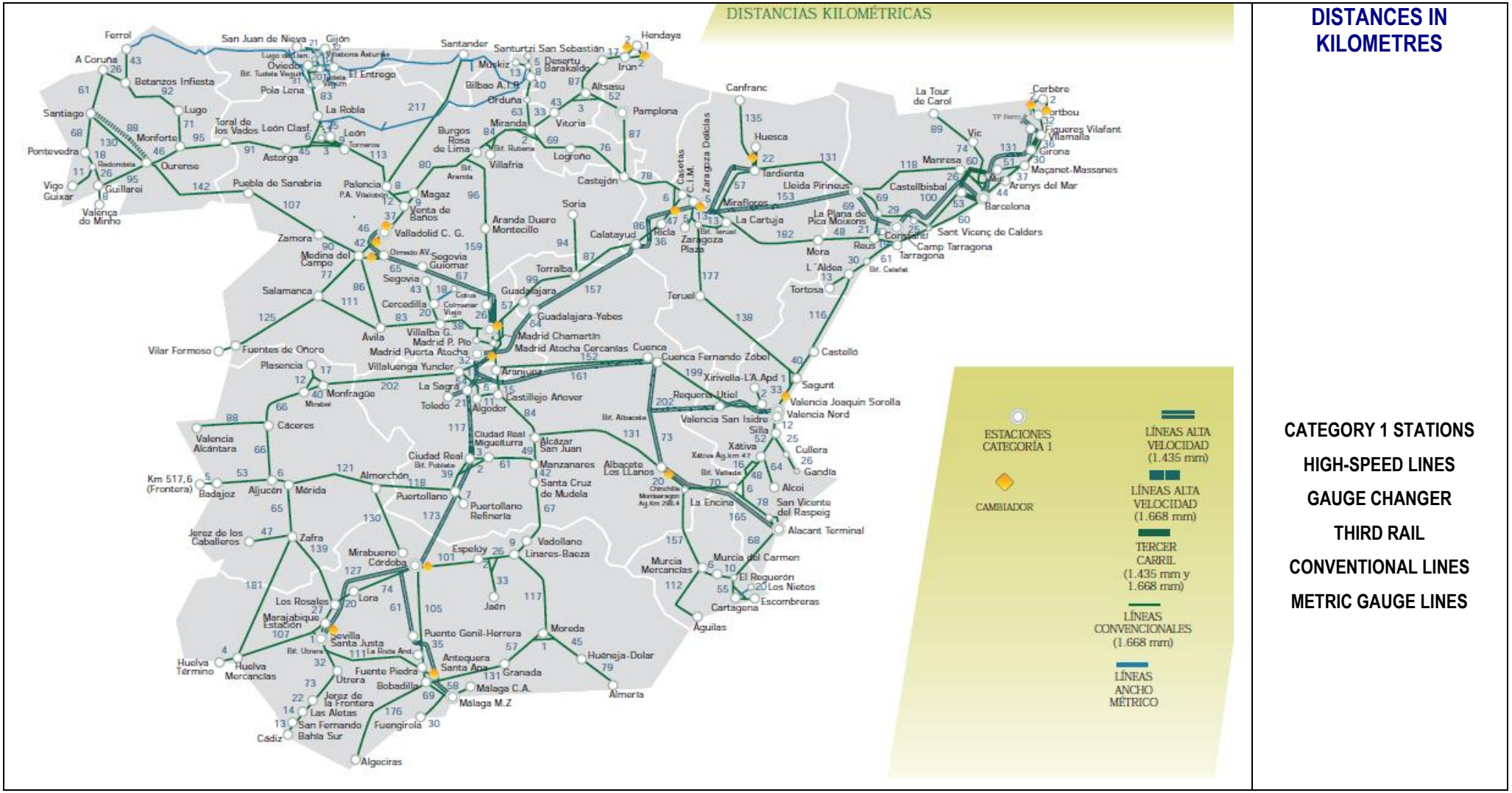
ANNEX B: ORGANISATIONAL CHARTS OF THE DEPARTMENT OF RAILWAYS

ANNEX C: DETAILS OF TRENDS IN COMMON SAFETY INDICATORS - DEFINITIONS USED

ANNEX D: CHANGES IN SAFETY CERTIFICATION AND AUTHORISATION – NUMERICAL DATA

ANNEX A: Information on the railway structure

ANNEX A.1: Network plans



DISTANCES IN KILOMETRES

CATEGORY 1 STATIONS

HIGH-SPEED LINES

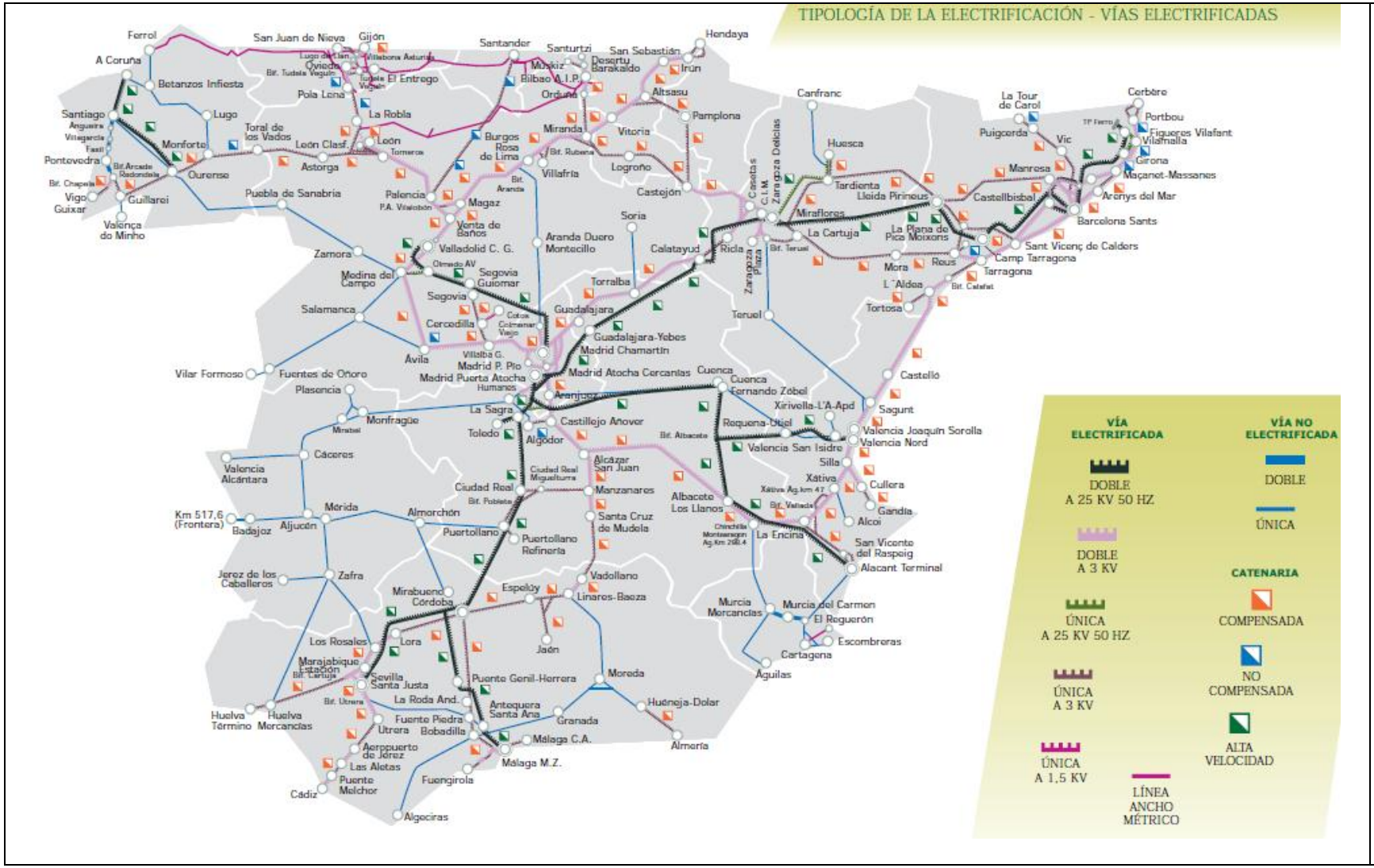
GAUGE CHANGER

THIRD RAIL

CONVENTIONAL LINES

METRIC GAUGE LINES

Source: Network Statement 2013. ADIF



TYPE OF ELECTRIFICATION - ELECTRIFIED LINES

ELECTRIFIED LINE

NON-ELECTRIFIED LINE

DOUBLE

SINGLE

CATENARY

COMPENSATED

UNCOMPENSATED

HIGH-SPEED

METRIC GAUGE LINE

Source: Network Statement 2013. ADIF

TRACK GAUGE AND GAUGE CHANGERS

TALGO GAUGE-CHANGE SYSTEM

CAF GAUGE-CHANGE SYSTEM

TRANFESA AXLE-CHANGING SYSTEM (FREIGHT)

CATEGORY 1 STATIONS

IBERIAN TRACK GAUGE

EUROPEAN TRACK GAUGE

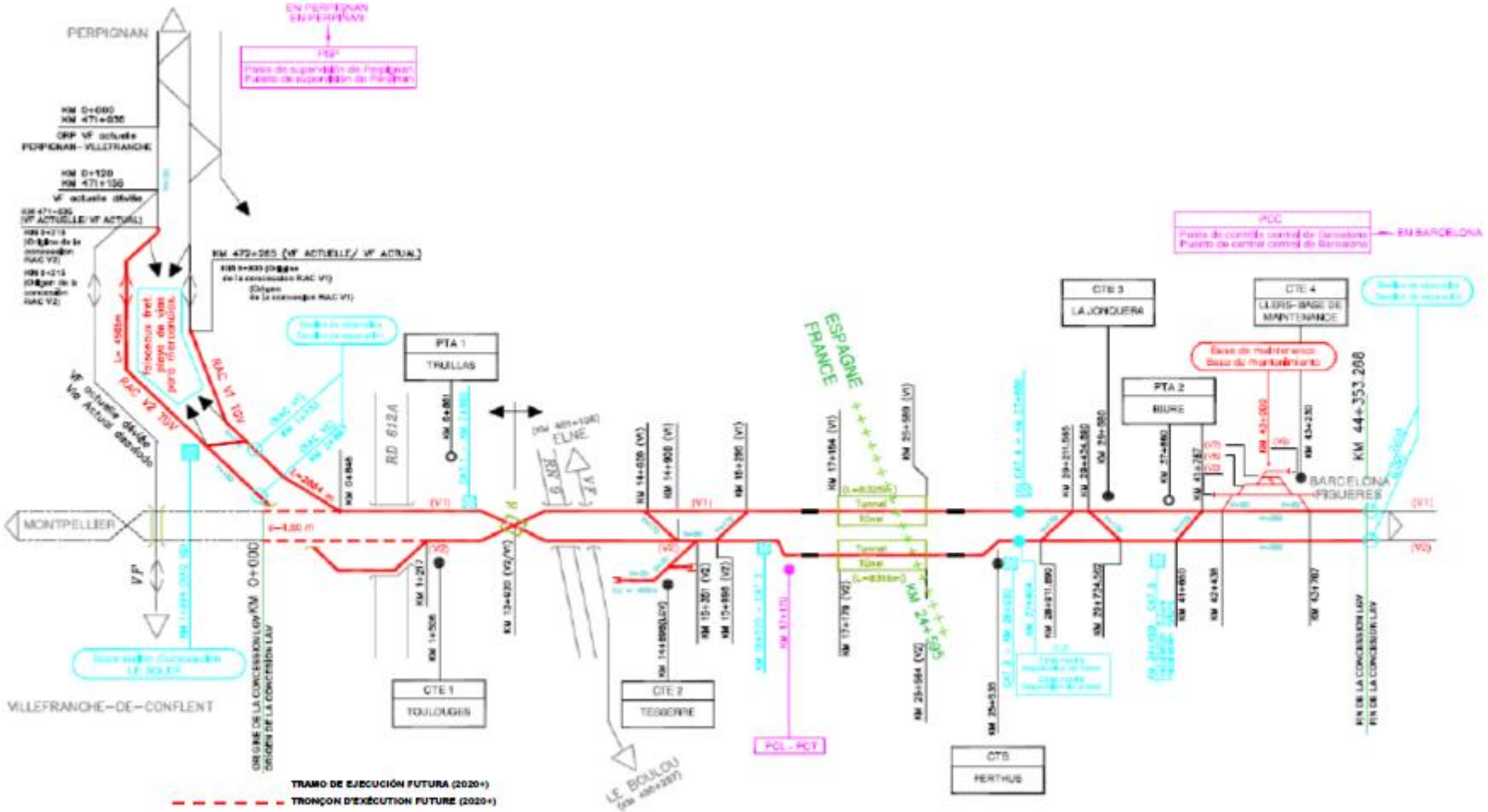
THIRD RAIL

METRIC TRACK GAUGE

Source: Network Statement 2013. ADIF

Geographical scope of the International Section

Source: Network Statement 2013. TP Ferro



Connection points with the two rail networks (International Section)

Source: Network Statement 2013. TP Ferro

ANNEX A.2: List of infrastructure managers and railway undertakings with safety certificates

A.2.1. Rail infrastructure managers

Name	Address	Website / Link to network statement	Safety authorisation (number / date)	Date of commence-ment of trading	Total track length/gauge	Length of electrified track / network voltages	Total length of double/single track	Total length of high-speed line	ATP equipment used	Number of level crossings	Number of signals
ADIF	C/ Sor Ángela de la Cruz, 3 Madrid 28020, Spain	www.adif.es	ES2120100001 29/04/2010	01/01/2005	2 158 km / 1 435 mm 11 681 km / 1 668 mm 18 km / 1 000 mm 119 km / mixed **13 976 total km**	6 443 km line / 3 000 Vdc 2 343 km line / 25 kVac **8 786 km electrified**	8 666 km single track 5 310 km double track **19 286 total km**	2 343 km	12 050 km / ASFA 1 809 km / ERTMS 498 km / LZB 450 km / ATP-EBICAB	2 400	[No data]
TP Ferro	Ctra. Llers a Hostalets GIP-5107, Km. 1 Llers 17730 Spain	www.tpferro.com	ES2120100002 15/12/2010	19/12/2010	20 km/1 435mm	**20 km / 25 000 V (AC)**	20 km double track	20 km	ERTMS	0	[No data]

A.2.2. Railway Undertakings

Name	Address	Website	Safety certificate 14/2001/EC (Number / date)	Safety certificate A-B 49/2004/EC (Number / date)	Date of commence-ment of trading	Type of traffic (freight, etc.)	Number of locomotives	Number of suburban train set elements	Number of coaches/ wagons	Number of drivers/safety personnel	Volume of passenger transport	Volume of freight transport
Acciona Rail Services	Avda. de Suiza, 18-20 Coslada 28820, (Madrid) Spain	www.acciona-railservices.com	-	ES1120120004 ES1220120005 10/07/2012	28/01/2007	Freight	-	-	-	-	-	< 500 mill. Ton-km/year
Activa Rail	Musgo, 1 Madrid 28023 Spain	www.transfesa.com	-	ES1120110001 26/04/2011 ES1220120006 17/10/2012	27/06/2008	Freight	7	-	127 wagons	Drivers: 29 / certificate B Safety: 2	-	< 500 mill. Ton-km/year
Alsa Ferrocarril	Avda. de la Industria, 60 Tres Cantos 28760 (Madrid) Spain	http://www.alsa.es/	-	ES1120110004 ES1120110008 15/12/2011	-	Freight	-	-	-	-	-	< 500 mill. Ton-km/year

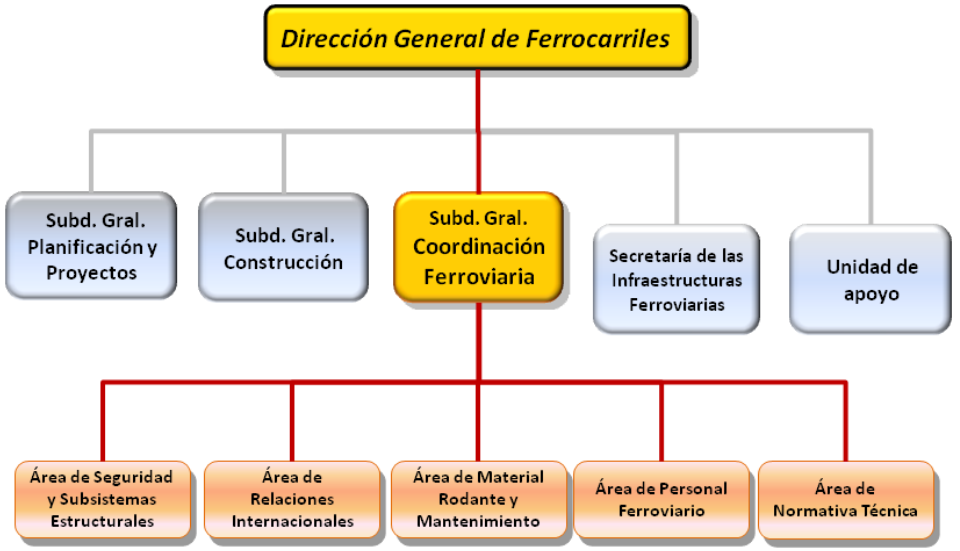
Name	Address	Website	Safety certificate 14/2001/EC (Number / date)	Safety certificate A-B 49/2004/EC (Number / date)	Date of commence-ment of trading	Type of traffic (freight, etc.)	Number of locomotives	Number of suburban train set elements	Number of coaches/ wagons	Number of drivers/safety personnel	Volume of passenger transport	Volume of freight transport
Comsa Rail Transport	C/ Viriato, 47 Barcelona 08014 Spain	www.comsaemte.com	-	ES1120070001 02/07/2007 ES1220110002 05/05/2011	15/01/2008	Freight	9 (own) 7 (Takargo)	-	Wagons: 100 (own) 36 (hired) 125 (Takargo) 40 (traction)	Drivers: 39 / certificate B 3 / certificate A Safety: 1	-	< 500 mill. Ton-km/year
Continental Rail	C/ Orense, 11 – 2º I Madrid 28020 Spain	www.continentalrail.es	-	ES1120120002 ES1220120002 24/05/2012	15/02/2007	Freight	12	-	Wagons: 170	Drivers: 22 Safety: 1	-	< 500 mill. Ton-km/year
FESUR	Ctra. Badajoz, 32 Jerez de los Caballeros 06380 (Badajoz) Spain	-	-	ES1120110003 ES1220110007 18/11/2011	-	Freight	-	-	-	-	-	< 500 mill. Ton-km/year
Ferrovial Railway	C/ Ribera del Loira, 42 Madrid 28042 Spain	www.ferrovial.com	-	ES1120110005 ES1220110009 20/12/2011	20/12/2011	Freight	2	-	-	Drivers: 3 / certificate B 1 / certificate A Safety: 1	-	< 500 mill. Ton-km/year
FGC Mobilitat	Cardenal Sentmenat, 4 Barcelona 08017 Spain	www.fgc.cat	-	ES1120120001 ES1220120001 15/02/2012	-	Freight	-	-	-	-	-	< 500 mill. Ton-km/year
Logitren Ferroviaria	Avda. del Puerto, 332 Valencia 46024 Spain	www.logitren.es	-	ES1120100003 28/06/2010 ES1220110005 27/04/2011	26/05/2010	Freight	2	-	18 wagons	Drivers: 8 Safety: 2	-	< 500 mill. Ton-km/year

Name	Address	Website	Safety certificate 14/2001/EC (Number / date)	Safety certificate A-B 49/2004/EC (Number / date)	Date of commence-ment of trading	Type of traffic (freight, etc.)	Number of locomotives	Number of suburban train set elements	Number of coaches/ wagons	Number of drivers/safety personnel	Volume of passenger transport	Volume of freight transport
RENFE[14] Operadora	Avenida Pío XII, 110 Madrid 28036 Spain	www.renfe.es	-	ES1120110002 ES1220110006 24/05/2011	01/01/2005	Passengers Freight	654	5 964	Coaches: 1 495 Wagons: 13 469	Drivers: 5 150 Safety: 203	>200 mill. passengers / year	> 500 mill. Ton-km/year
Tracción Rail	Almendralejo, 5 Seville 41019 Spain	www.azvi.es	-	ES1120080001 24/03/2008 ES1220090005 27/07/2009	02/2008	Freight	4	-	-	Drivers: 9 Safety: 1	-	< 500 mill. Ton-km/year
SNCF	76 Boulevard Magenta Paris 75010 France	www.sncf.com	-	ES1220120007 19/12/2012	19/12/2010	Passengers	-	10	-	Drivers: 14	< 200 mill. passengers / year	-

[14] *Approximate data.*

ANNEX B: Organisational charts of the Department of Railways

B.1. Charts: Internal organisation

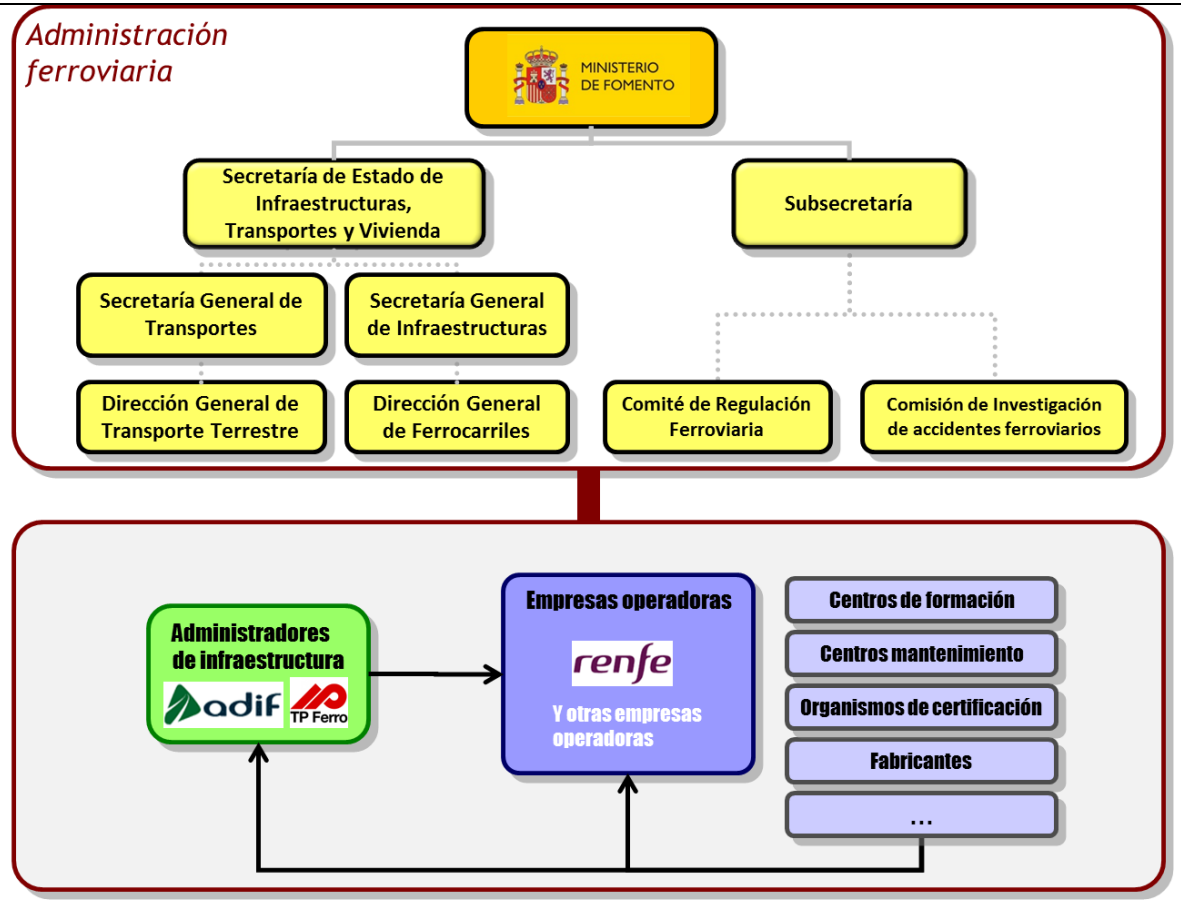


(*) Estructura orgánica procedente del Real Decreto 452/2012, de 5 de marzo.

		Department of Railways		
Planning and Projects Sub-Dept.	Construction Sub-Dept.	Railway Coordination Sub-Dept.	Secretary of Railway Infrastructures	Support Unit
Safety and Structural Subsystems	International Relations	Rolling Stock and Maintenance	Railway Staff	Technical Regulations

(*) Organic structure arising from Royal Decree 452/2012 of 5 March.

B.2. Diagram: Relationship with other national bodies



(*) Estructura orgánica procedente del Real Decreto 452/2012, de 5 de marzo.

Railway Administration
MINISTRY OF INFRASTRUCTURE AND TRANSPORT

Secretary of State for Infrastructure, Transport and Housing
Under-secretary

General Secretary for Transport
General Secretary for Infrastructure

Department of Land Transport
Department of Railways
Rail Regulation Committee
Rail Accident Investigation Commission

Infrastructure manager
ADIF

Operating undertakings
RENFE
and other operating undertakings

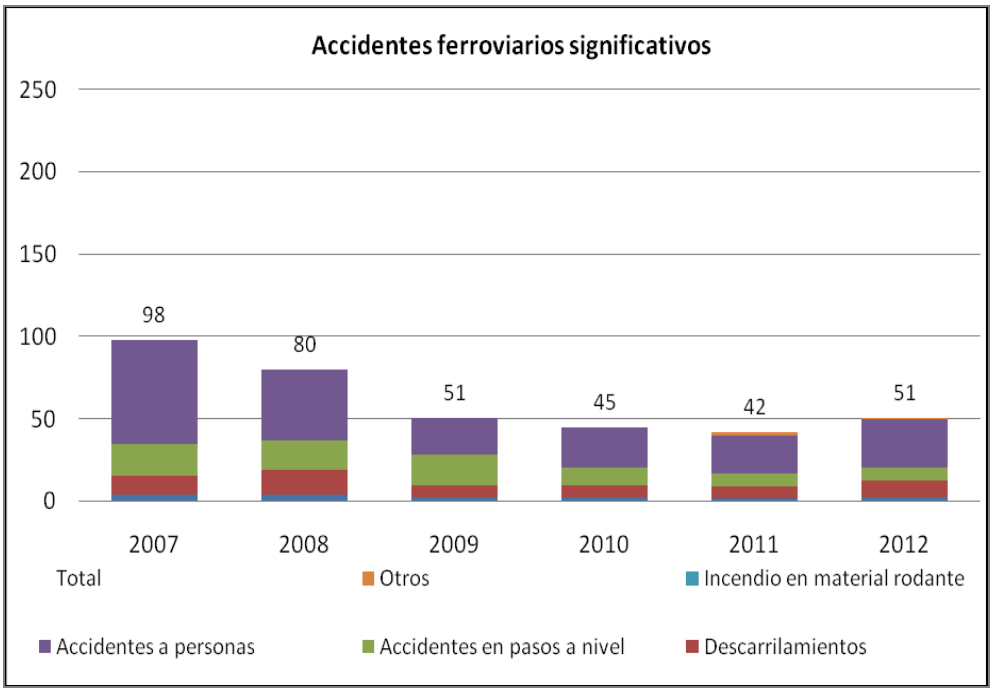
Training centres
Maintenance centres
Certification bodies
Manufacturers

(*) Organic structure arising from Royal Decree 452/2012 of 5 March.

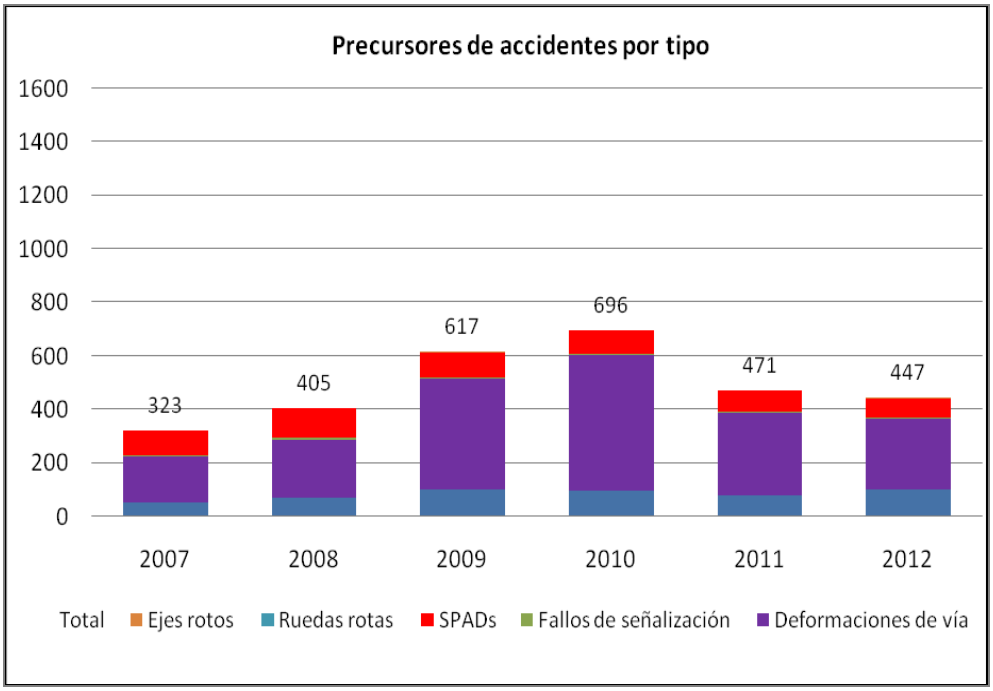
ANNEX C: Details of Trends in Common Safety Indicators – Definitions used

C.1. CSI DATA

OVERALL SUMMARY

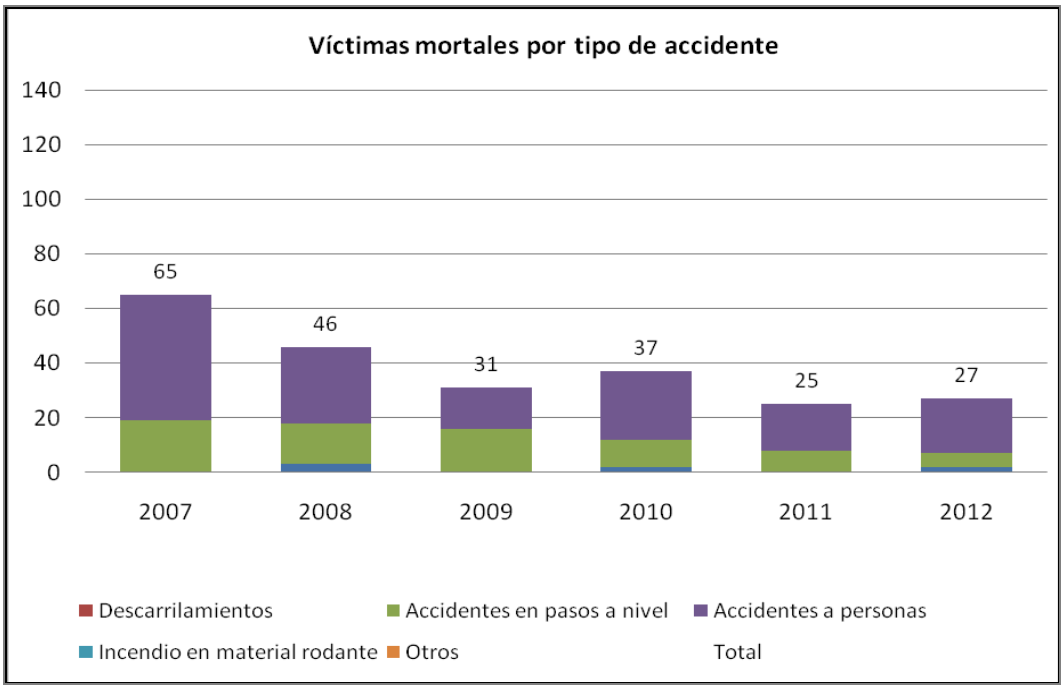


Accidentes ferroviarios significativos	Significant rail accidents
Incendio en material rodante	Fire in rolling stock
Accidentes a personas	Accidents to persons
Accidentes en pasos a nivel	Level-crossing accidents
Descarrilamientos	Derailments

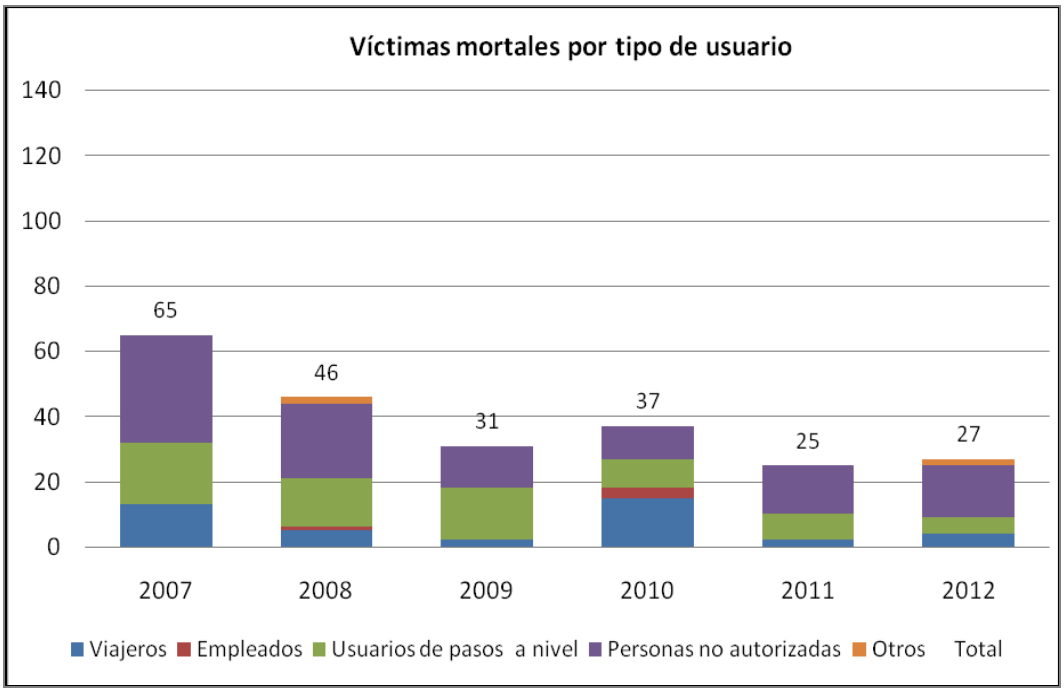


Precursores de accidents por tipo	Accident precursors by type
Total	Total
Ejes rotos	Broken axles
Ruedas rotas	Broken wheels
SPADs	SPADs
Fallos de señalización	Signalling failures
Deformaciones de via	Track buckling

FATALITIES

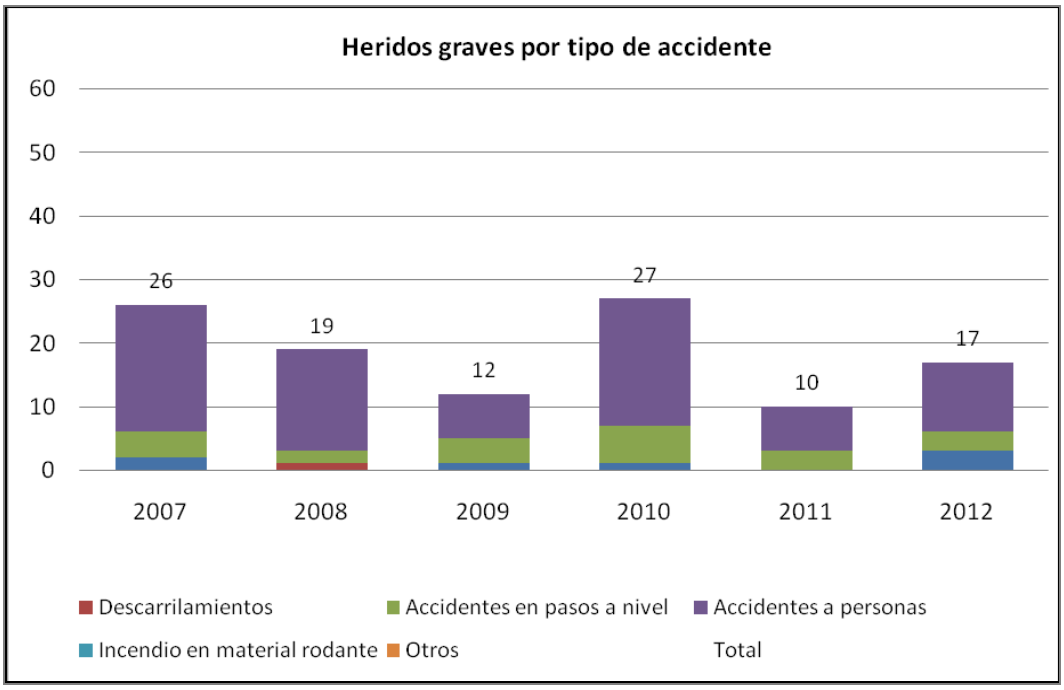


Victimas mortales por tipo de accidente	Fatalities by type of accident
Descarrilamientos	Derailments
Accidentes en pasos a nivel	Level-crossing accidents
Accidentes a personas	Accidents to persons
Incendio en material rodante	Fire in rolling stock
Otros	Other
Total	Total

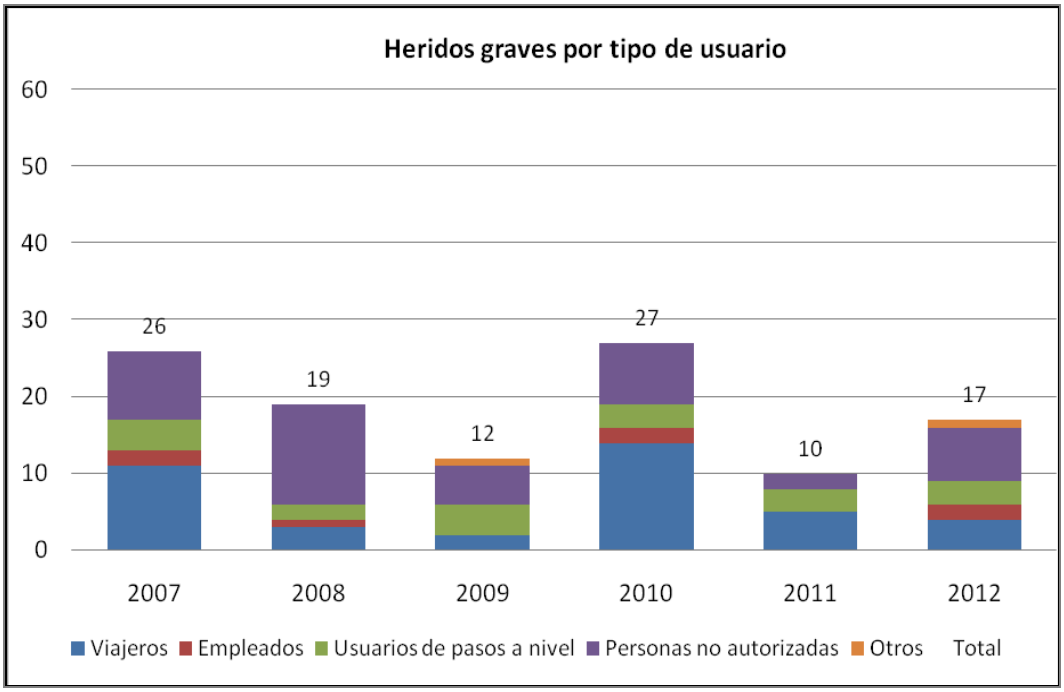


Victimas mortales por tipo de usuario	Fatalities by type of user
Viajeros	Passengers
Empleados	Employees
Usuarios de pasos a nivel	Level-crossing users
Personas no autorizadas	Unauthorised persons
Otros	Other
Total	Total

SERIOUS INJURIES



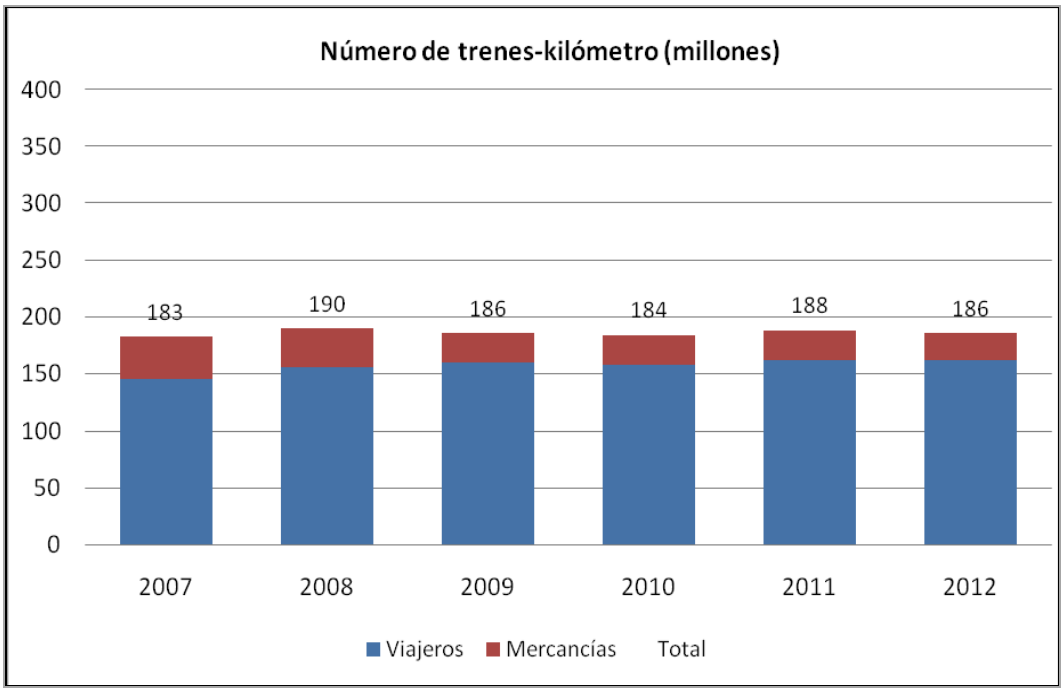
Heridos graves por tipo de accidente	Serious injuries by type of accident
Descarrilamientos	Derailments
Accidentes en pasos a nivel	Level-crossing accidents
Accidentes a personas	Accidents to persons
Incendio en material rodante	Fire in rolling stock
Otros	Other
Total	Total



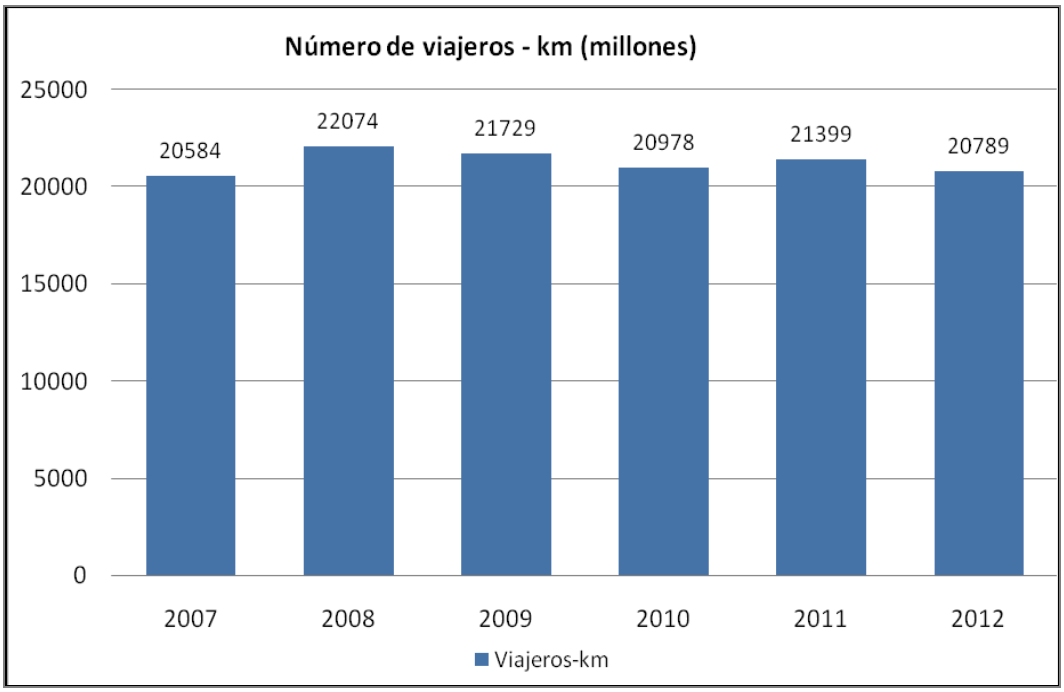
Heridos graves por tipo de usuario	Serious injuries by type of user

Viajeros	Passengers
Empleados	Employees
Usuarios de pasos a nivel	Level-crossing users
Personas no autorizadas	Unauthorised persons
Otros	Other
Total	Total

REFERENCE DATA



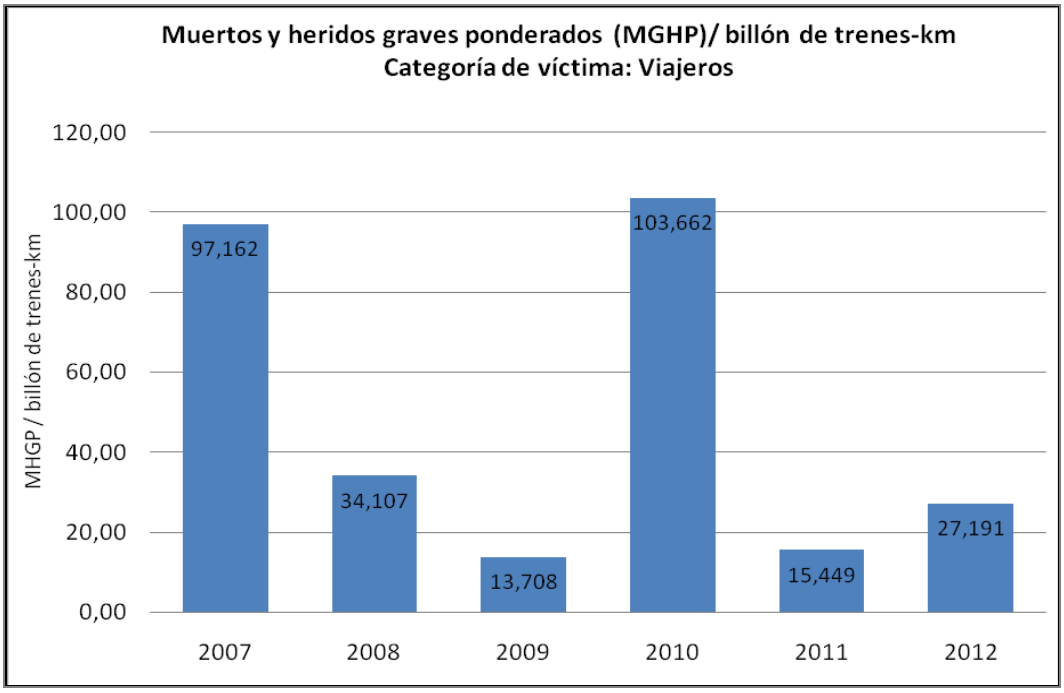
Número de trenes-kolómetro (millones)	Number of train-kilometres (millions)
Viajeros	Passengers
Mercancías	Freight
Total	Total



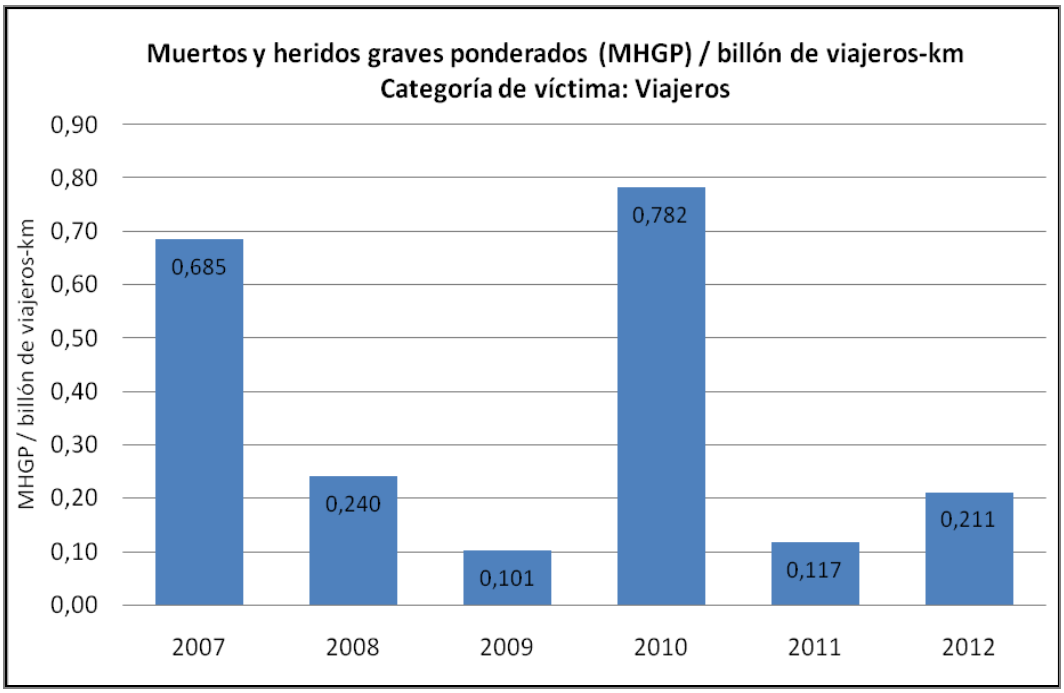
Número de viajeros – km (millones)	**Number of passenger-km (millions)**
Viajeros-km	**Passenger-km**

RISK INDICATORS BY CATEGORY OF PERSONS INVOLVED

PASSENGERS

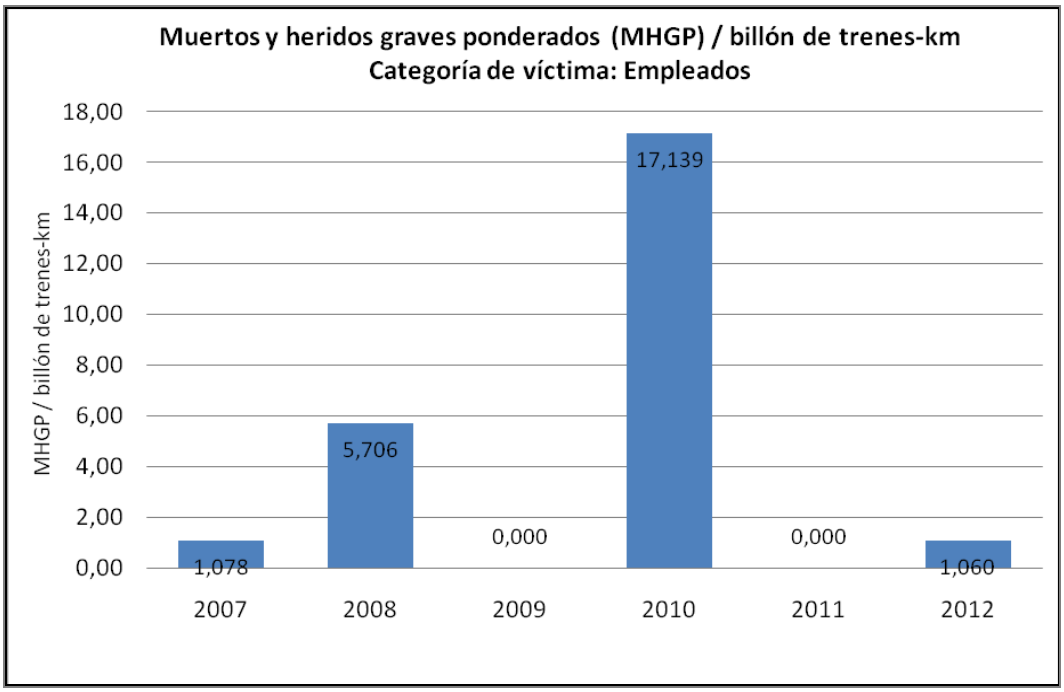


Muertos y heridos graves ponderados (MHGP)/billón de trenes-km	Weighted fatalities and serious injuries (WFSI)/billion train-km
Categoría de victima: Víajeros	Category of victim: Passengers
MHGP/billón de trenes-km	WFSI/billion train-km

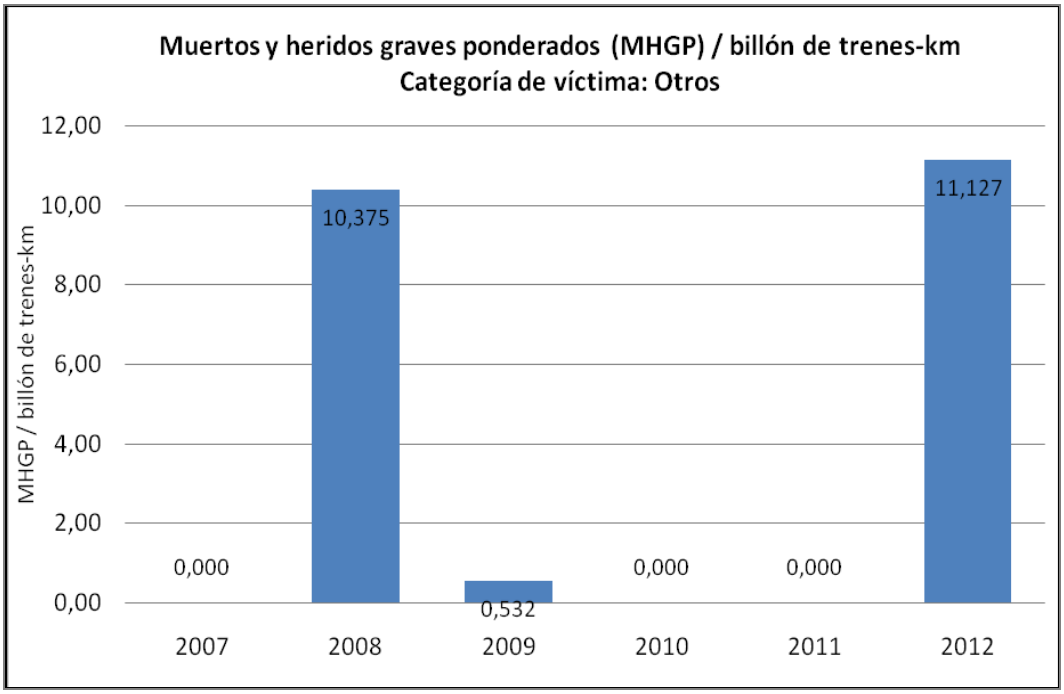


Muertos y heridos graves ponderados (MHGP)/billón de viajeros-km	Weighted fatalities and serious injuries (WFSI)/billion passenger-km
Categoría de victima: Víajeros	Category of victim: Passengers
MHGP/billón de viajeros-km	WFSI/billion passenger-km

EMPLOYEES / OTHER



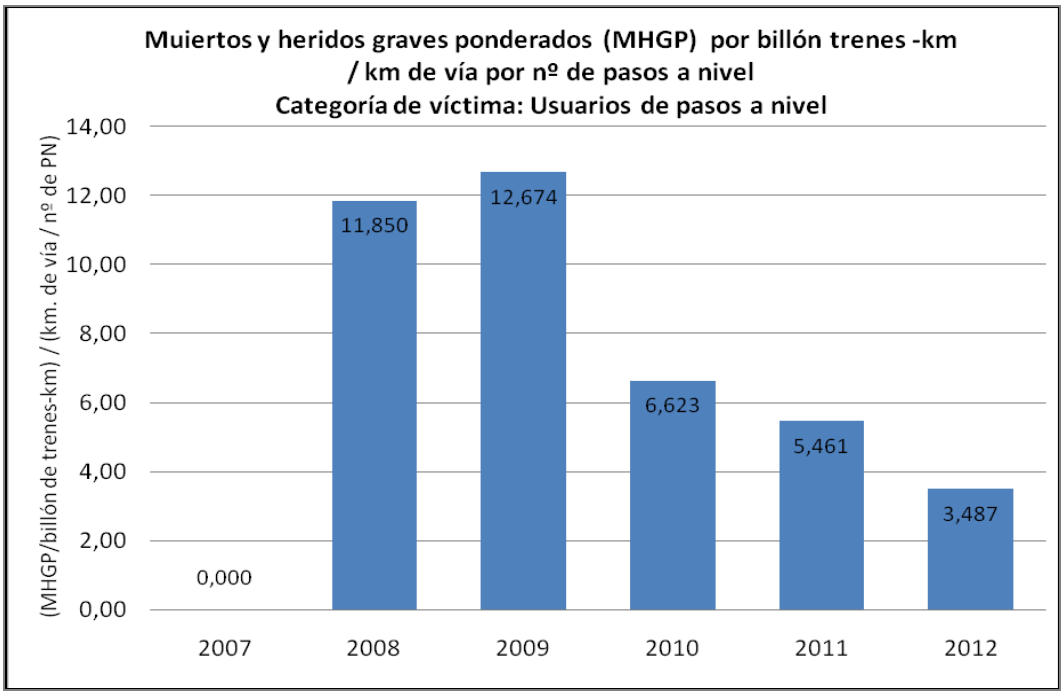
Muertos y heridos graves ponderados (MHGP) billón de trenes-km	Weighted fatalities and serious injuries (WFSI) billion train-km
Categoría de victima: Empleados	Category of victim: Employees
MHGP/billón de trenes-km	WFSI/billion train-km



Muertos y heridos graves ponderados (MHGP) billón de trenes-km	Weighted fatalities and serious injuries (WFSI) billion train-km
Categoría de victima: Otros	Category of victim: Other
MHGP/billón de trenes-km	WFSI/billion train-km

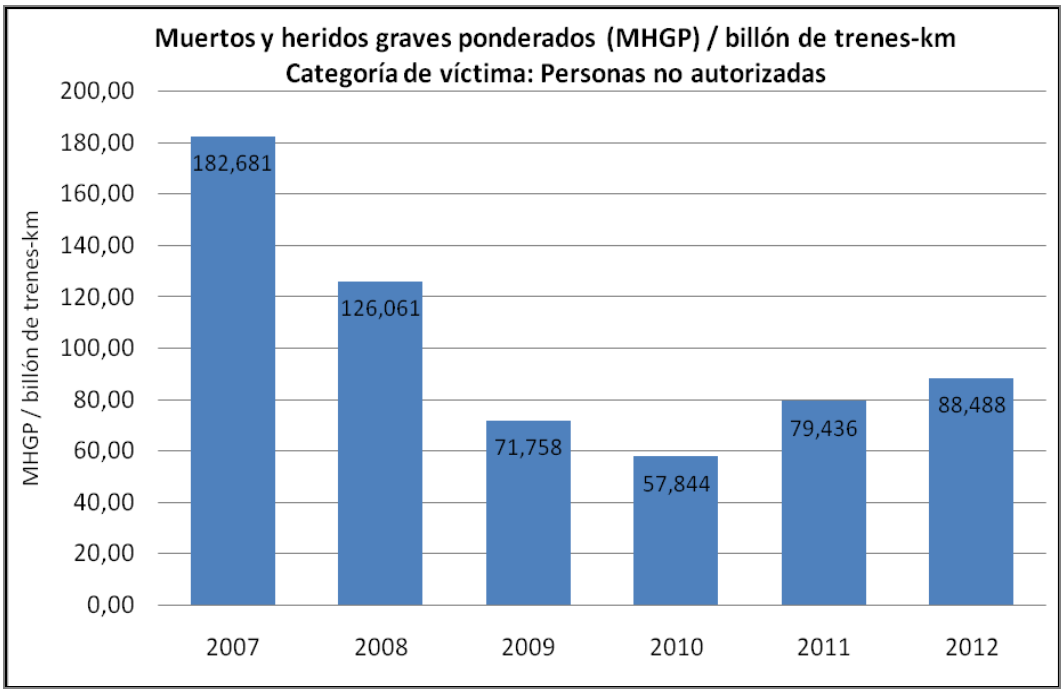
LEVEL-CROSSING USERS

Muertos y heridos graves ponderados (MHGP)/billón de trenes-km	Weighted fatalities and serious injuries (WFSI)/billion train-km
Categoría de victima: Usuarios de pasos de nivel	Category of victim: Level-crossing users
MHGP/billón de trenes-km	WFSI/billion train-km

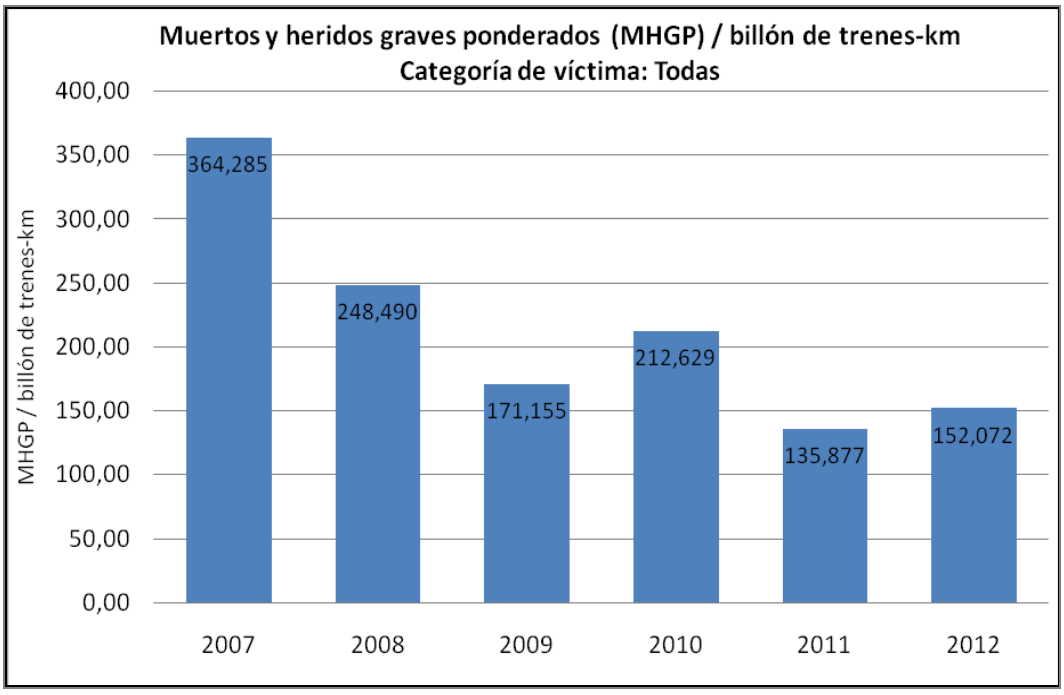


Muertos y heridos graves ponderados (MHGP) billón de trenes-km : km de via por n° de pasos a nivel	Weighted fatalities and serious injuries (WFSI) per billion train-km: km of track per No of level crossings
Categoría de victima: Usuarios de pasos a nivel	Category of victim: Level-crossing users
MHGP/billón de trenes-km) / (km de via/n° de PN)	(WFSI/billion train-km) / (km of track/No of LC)

UNAUTHORISED PERSONS/TOTAL



Muertos y heridos graves ponderados (MHGP)/billón de trenes-km	Weighted fatalities and serious injuries (WFSI)/billion train-km
Categoría de victima: Personas no autorizadas	Category of victim: Unauthorised persons
MHGP/billón de trenes-km	WFSI/billion train-km



Muertos y heridos graves ponderados (MHGP)/billón de trenes-km	Weighted fatalities and serious injuries (WFSI)/billion train-km
Categoría de victima: Todas	Category of victim: All
MHGP/billón de trenes-km	WFSI/billion train-km

C.2. DEFINITIONS USED IN THE ANNUAL REPORT

For the period covered by this report, i.e. 2012, the indicators will be reported trying to follow, as far as possible, the definitions set out in Directive 149/2009/EC, approving the amended New Annex I to the Safety Directive 49/2004/EC, regarding Common Safety Indicators and common methods of calculating accident costs.

C.2.1. NATIONAL DEFINITIONS

There follows a series of comments on the Common Safety Indicator data provided:

- **Significant accidents**, as defined in Directive 149/2009/EC, occurring on the RFIG run by the Railway Infrastructure Manager ADIF have been included, as well as the significant accident that occurred on the network run by TP Ferro in 2012.

- The '**Other persons**' category, as defined in Regulation No 91/2003, has been broken down into the following groups:
  - Level-crossing users
  - Unauthorised persons
  - Other persons

C.3. ABBREVIATIONS:

ICS	Common Safety Indicator [CSI]
ERA	European Railway Agency
PN	Level crossing [LC]
MLN	10^6
BLN	10^9
ANS	National Safety Authority [NSA]
DGF	Department of Railways
CIAF	Rail Accident Investigation Commission
EF	Railway Undertaking [RU]
AI	Infrastructure Manager [IM]
NNS	National safety standards
RFIG	General Interest Railway Network
SGS	Safety Management System [SMS]
SW	Software

ANNEX D: Changes in safety certification and authorisation

E.1. Safety certificates pursuant to Directive 49/2004/EC

	Total number of certificates	Number of Part A certificates in ERADIS
E.1.1. Number of Part A safety certificates issued in the year covered by this report and previous years that remain valid at the end of 2012	11	10[15]

		Total number of certificates	Number of Part B certificates in ERADIS
E.1.2. Number of Part B safety certificates issued by DGF in the year covered by this report and previous years that remain valid in 2012	Number of Part B certificates whose Part A was issued in Spain	11	10[15]
	Number of Part B certificates whose Part A was issued in another Member State	1	0[16]

		A	R	P
E.1.3. Number of new applications for Part A certificates made by railway undertakings in 2012	new certificates	1	0	0
	updated / amended certificates	1[17]	0	0
	renewed certificates	2	0	1

15 *In the period between June 2012 and early 2013, the DGF extended the safety certificate for COMSA Rail Transport, while revising the relevant documentation for its renewal, which occurred in 2013. This extension was not reported to ERADIS.*

16 *As of 31 December 2012, the Department of Railways had not been able to report the Part B certificates issued to SNCF with certificate numbers EU ES1220120004 and ES1220120007 since their corresponding Part A was not available in ERADIS.*

17 *On 26/06/12 the Part A safety certificate ES1120120003 was issued to Acciona Rail Services, being modified on 10/07/12 by certificate No ES1120120004 for correcting errors. Both certificates were reported to ERADIS.*

			A	R	P
E.1.4. Number of new applications for Part B certificates made by railway undertakings in 2012	whose Part A was issued in Spain	new certificates	1	0	0
		updated / amended certificates	2[18]	0	0
		renewed certificates	2	0	1
	whose Part A was issued in another Member State	new certificates	0	0	0
		updated / amended certificates	1	0	0
		renewed certificates	1	0	0

A = Request accepted, certificate already issued
R = Requests rejected, certificate was not issued
P = On 31 December 2012, the application was still pending.

	Total number of certificates revoked in 2012	Number of revoked certificates in ERADIS (revoked in 2012)
E.1.5. Number of Part A certificates revoked in 2012	0	0
E.1.6. Number of Part B certificates revoked in 2012	0	0

E.1.7. List of countries where the railway undertaking applicants for a Part B safety certificate in Spain have already obtained their Part A safety certificate	
Name of the RU	**Member State where the Part A Safety Certificate was issued**
Société Nationale des Chemins de Fer Français (SNCF)	France (Part A certificate number: FR1120120007)

18 *On 26/06/12 the Part B safety certificate ES1220120003 was issued to Acciona Rail Services, being modified on 10/07/12 by certificate No ES1220120005 for correcting errors. Both certificates were reported to ERADIS.*

E.2. Safety authorisations pursuant to Directive 49/2004/EC

	Total number of safety authorisations
E.2.1. Number of safety authorisations issued to infrastructure managers in the year covered by this report and previous years that remain valid at the end of 2012	2

		A	R	P
E.2.2. Number of applications for safety authorisations submitted by infrastructure managers in 2012	new authorisations	0	0	0
	updated / amended authorisations	0	0	0
	renewed authorisations	0	0	0

A = Application approved, authorisation already issued
R = Application rejected, no authorisation issued
P = Case pending, no authorisation issued to date

E.2.3. Number of Safety Authorisations revoked in the year covered by this report	0

E.3. Procedural aspects – Part A Safety Certificates[19]

	New	Updated / modified	Renewed
Average time, from receipt of the application with all the necessary information to the final issue of a Part A safety certificate to railway undertakings in 2012	3 months	-	2.75 months

[19] *In regard to applications for Part A of the Safety Certificate, Parts A and B were assessed together, so that the average time period corresponds to the issue of both parts of the safety certificate.*

E.4. Procedural aspects – Part B Safety Certificates

		New	Updated / modified	Renewed
Average time, from receipt of the application with all the necessary information to the final issue of a Part B safety certificate to railway undertakings in 2012	whose Part A was issued in your Member State	3 months	2.75 months	2.75 months
	whose Part A was issued in another Member State	-	-	1 month

E.5. Procedural aspects – Safety authorisations

	New	Updated / modified	Renewed
Average time from receipt of the application with all necessary information to the final issue of a safety authorisation to infrastructure managers in 2012	-	-	-