GRAND-DUCHÉ DE LUXEMBOURG

Administration des Chemins de Fer - ACF

GRAND-DUCHY OF LUXEMBOURG

Luxembourg Railway Authority

Annual Report 2012

of the Luxembourg Railway Authority

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A.1 OBJECT OF THE REPORT

This report covers the activities of **ACF** *(**A**dministration des **C**hemins de **F**er)* [Luxembourg Railway Authority] in its capacity as **N**ational **S**afety **A**uthority **(NSA)** during the year 2012.

The objectives of the report are defined in Article 5 of the amended law of 22 July 2009 on railway safety. The report must contain information on:

a) progress with railway safety, including an inventory of the Common Safety Indicators (CSIs) defined in Annex 1 of Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways.
b) important amendments made to the rules applicable to railway safety,
c) changes in certification and authorisation as far as safety is concerned, and
d) the results of the monitoring of the Infrastructure Manager (IM) and railway undertakings (RUs) and the lessons that have been learnt,
e) the dispensations which have been granted pursuant to Article 20c (see Page 9 Article 20c(5).

As the above mentioned law requires ACF to organise the allocation of the paths and the access charges, this report also covers a brief overview of the services provided by ACF in this area.

A.2 SUMMARY

The National Safety Authority, called '**A**dministration des **C**hemins de **F**er **(ACF)**' was set up by the law of 22 July 2009 on railway safety. This law is the transposition of Safety Directive 2004/49/EC into Luxembourg legislation.

The ACF annual safety report 2012 deals with the activities of ACF and the Common Safety Indicators (CSI).

2012 is the fourth annual safety report prepared by ACF. Until now Luxembourg hasn't received any recommendations either from ERA or from the European Commission requiring an improvement of the safety level and, taking into account that all indicators in relation to accidents and precursors are decreasing, ACF concludes that the global safety level is good (see ANNEX C).

During 2012 no safety certificates of either type A or type B, according to the safety directive, were delivered. A request for a safety certificate part B registered in 2011 was still pending, due to missing documents and non-consideration of common operating rules by the applicant.

The first safety authorisation for the Luxembourg railway network Infrastructure Manager (IM), with a validity of one year, was issued in May. In November a request for the renewal of this authorisation was submitted by the IM. It is planned to deliver an authorisation for five years.

Due to limited human resources, ACF was only able to perform one safety inspection (on an RU having a Luxembourg A and B certificate) during 2012.

The following major safety-related events were recorded:

Events	2012	2011
Accidents at level crossings, including accidents involving pedestrians	0	0
Train collisions	0	0
Accidents to unauthorized persons on railway premises hit by moving vehicles (suicide could not be reliably proven)	0	1
Employee died during work caused by rolling stock in motion	0	0
Suicides	5	7
Broken rails	3	2
Track buckles	1	1
Wrong-side signalling failures	0	1
Signals passed at danger	5	11

Hereafter some safety related infrastructure characteristics:

Infrastructure characteristics	2012	2011
Tracks equipped with the Automatic Train Protection System MEMOR II+	100%	100%
Main fixed signals and caution fixed signals equipped with the Automatic Train Protection System MEMOR II+	100%	100%
Tracks equipped with ETCS Level 1	94%	88%
Main fixed signals and caution fixed signals equipped with ETCS Level 1	93%	87%
Active level crossings	106	106
Passive level crossings	31	32

B. PRELIMINARY SECTION

1. Introduction to the report

The annual report has been prepared in accordance with Article 18 of Directive 2004/49/EC and Article 5 of the modified law of 22 July 2009 on railway safety. The structure of this report is in accordance with the recommendations (model and guide) of the European Railway Agency.

This safety report is the fourth prepared by the Grand Duchy of Luxembourg.

It has been prepared firstly from information supplied by the railway undertakings (RUs) which had a safety certificate valid in Luxembourg for the year 2012, and by the Infrastructure Manager (IM) through their annual reports on safety, and secondly by adding some information produced by ACF as part of its activities.

ACF has carried out an audit on one RU as far as possible but not with the frequency necessary. Thus the report only contains limited data relating to the ACF regarding paragraph d) of Article 5 of the amended law of 22 July 2009 on railway safety.

Regarding the common safety indicators ACF has applied Commission Directive 2009/149/EC of 27 November 2009 amending Directive 2004/49/EC of the European Parliament and of the Council as regards Common Safety Indicators and common methods to calculate accident costs.

In accordance with Article 5 of the amended law of 22 July 2009, ACF has sent a report to the Ministry of Sustainable Development and Infrastructures on the work it has done and a copy to the European Railway Agency. The report can be consulted on its Internet site www.railinfra.lu

ACF also supplies a paper version for a restricted distribution to national stakeholders and other interested people.

2. Information on the railway structure

- **Map of the network (see point A.1 of Annex A)**

The information in the Annex has been supplied by CFL, [*Société Nationale des Chemins de Fer Luxembourgeois* – Luxembourg National Railways] the Manager of the Luxembourg railway infrastructure.

- **For the list of the railway undertakings and Infrastructure Managers (see points A.2; A.2.1 and A2.2 of Annex A)**

3. Summary - General analysis of the trends (progress of railway safety, certification, etc.)

This document is the fourth safety report prepared by the Grand-Duchy of Luxembourg.

The **C**ommon **S**afety **I**ndicators (**CSI**s) provided in 2011 have not given rise to any comments from ERA or the European Commission. It is possible to see a reducing trend in all the indicators relating to accidents and to precursors since the start of collection of the figures in 2009.

In 2012 there were no fatal accidents, nor accidents resulting in people being seriously injured. However, five suicides had to be recorded.

The number of signals passed at danger has definitely decreased compared with 2011 to a level close to that of 2010.

Thus, in general, railway safety has held steady at a good level and even shows a downward trend. It is necessary to be very careful when interpreting the results of a small member State, because of the very small number of serious accidents, a single accident causing several deaths and/or serious injuries can reverse the trends that are currently favourable.

No new legal Luxembourg text nor any amendment of existing texts have been published during the year in question.

In 2012 the Luxembourg State did not issue any Part A or Part B safety certificates in accordance with Directive 2004/49/EC.

An application made in 2011 has been put on hold due to missing documents and the overlooking of certain operating rules by the applicant.

Both Luxembourg RUs have Part A and B certificates, a third RU from another member State has a Part B certificate.

In May 2012 the first safety approval, valid for a period of one year, was issued to the Infrastructure Manager (IM) of the national rail network. For this purpose ACF carried out a double evaluation, firstly one based on the draft regulation (EU) prepared by ERA, and the second based on Commission Regulation (EU) No 1169/2010 of 10 December 2010 on a common safety method for assessing conformity with the requirements for obtaining a railway safety authorisation which only came into force after the submission of the application.

During this year of validity, the IM must comply completely with the requirements of the above mentioned regulation. An application for the renewal of the safety approval for a period of validity of five years was made by the IM in November 2012.

C. ORGANISATION

1. Presentation of the organisation

ACF was created by Article 3 of the amended law of 22 July 2009 on railway safety. It is placed under the authority of the member of the government having the railway in his remit, at present the Ministry of Sustainable Development and infrastructures (MDDI).

The remits of ACF are defined in Articles 4.1, 4.2 and 20c of the law mentioned above.

Article 4.1. *The Administration is responsible for the maintenance and improvement of the level of safety in the railway industry in conformity with the national and international provisions applicable. For this purpose it must carry out the following tasks in an open, non-discriminatory and transparent manner:*

a) ensure that the rolling stock is duly registered and that the information regarding safety given in the national register is accurate and kept up to date;

b) examine the files with a view to the publication, renewal, re-examination, amendment, withdrawal and suspension by the Minister, of safety certificates and authorisations in accordance with the provisions of the current law and the Regulations of the Grand-Duchy, as well as checking that the conditions of validity are fulfilled;

c) check the conformity with the interoperability components laid down by the legislation and the regulations in force;

d) authorise in application of the legislation and the regulations in force the introduction of the sub-systems of a structural nature that make up the railway system used or operated in Luxembourg and check that they are used and maintained in accordance with the essential requirements that concern them;

e) carry out the tasks which are delegated to it in accordance with the current law and the regulations of the Grand-Duchy for the introduction into service of the rolling stock used on the Luxembourg railway system, in particular the authorisation of the introduction of new or substantially modified rolling stock which is not yet covered by a TSI and check that it is operated and maintained in accordance with the essential requirements that relate to it;

f) carry out the tasks delegated to it in accordance with the current law and the Regulations of the Grand-Duchy on the training and certification of the staff allocated to the tasks of safety on the Luxembourg railway system;

g) check, promote, apply, develop and publish the regulations regarding railway safety including the system of national safety rules;

h) assist and advise the Minister in carrying out his duties regarding railway safety and interoperability;

i) provide support to studies and activities connected with railway safety;

j) cooperate with its opposite numbers, in particular with a view to the harmonisation of the certification criteria for railway safety;

k) check during audits regarding freight wagons that the entity responsible for the maintenance is certified in accordance with the community and national law;

l) hold, revise and adapt the national register for vehicles ensuring that the vehicles are duly registered in the national vehicle register and that the information regarding safety given there is accurate and kept up to date.

***Art 4.2**. The Administration has the task of ensuring equitable and non-discriminatory access to the railway infrastructure for all railway undertakings and avoidance of any abuse of the dominant position of one or several railway undertakings to the detriment of others. For this purpose it organises the allocation of paths and the system of tariffs for the railway infrastructure as laid down respectively in Articles 22 and 25 of the amended law of 11 June 1999 on the access to the infrastructure and its use.*

***Art**. **20c** 1. Before any vehicle is put into service or used on the Luxembourg railway system it should be allocated to a maintenance entity which is listed in the national vehicle register.*

2. A railway undertaking, an Infrastructure Manager or a holder can be an entity responsible for the maintenance.

3. Without prejudice to the responsibility of the railway undertakings and Infrastructure Managers, for the safe operation of a train as specified in Article 12(3) the entity shall ensure by means of a maintenance system that the vehicles for which it is responsible for the maintenance are in a running condition that enables them to operate safely. To this end the entity responsible for the maintenance shall ensure that the vehicles are maintained in accordance with:

a) the maintenance book of each vehicle;

b) the requirements in force including the rules for maintenance and the provisions regarding TSI.

The entity responsible for maintenance carries out the maintenance itself or sub-contracts this to a maintenance workshop.

4. When it is a question of freight wagons, each entity responsible for maintenance must be certified by an accredited or recognised body. The process of accreditation and recognition is based on criteria of independence, competence and impartiality. The accreditation and the recognition are granted by the Minister after having asked the opinion of the Luxembourg Railway Authority.

When the entity responsible for the maintenance is a railway undertaking or an Infrastructure Manager, the conformity with the requirements shall be checked by the Luxembourg Railway Authority in accordance with the procedures in force for the certification and approval as far as safety is concerned. This certification is only applicable to the vehicles for which the railway undertaking or the Infrastructure Manager is the holder.

5. The obligations of identification and certification of the entity responsible for the maintenance can be covered by other measures in the following cases:

a) vehicles registered in a third country and maintained in accordance with the legislation of this country;

b) vehicles used on the railways or lines where the track gauge is different from that of the main railways of the European Union and for which the conformity with the requirements referred to in paragraph 3 is ensured by international agreements concluded with third countries;

c) *vehicles referred to in Articles 1(2) and 1(3), as well as special consignments or military traffic requiring the issue of an ad-hoc permit by the Luxembourg Railway Authority before they were put into service. In this case the exceptions are granted for maximum periods of five years.*

These other measures are introduced through the dispensations granted by the Luxembourg Railway Authority:

a) *during the registration of the vehicles to enable them to be identified and the entity responsible for their maintenance to be known;*

b) *during the issuing of authorisations and safety certificates to railway undertakings and Infrastructure Managers in accordance with the procedures in force for the certification and the approval as far as safety is concerned or the identification or certification of the entity responsible for the maintenance.*

These dispensations are identified and justified in the annual report on safety referred to in Article 5.

As specified in Article 32 of the amended law of 22 July 2009, ACF was officially set up on 1 August 2009.

At 31 December 2012, ACF was made up of a Director and four divisions.

- **The General Affairs Division** which has one member of staff doing the job of secretariat and finance.
- **The Legal Affairs Division** with 1 lawyer;
- **The Interoperability and Safety division** which has seven members of staff:

  Two are involved with the authorisation and introduction into service of railway rolling stock and associated subjects,

  One ensures the coordination in matters of railway interoperability and safety between the European Commission (DG Move), the ERA, the MDDI and the ACF, as well as with other railway organisations,

  One works on the preparation and revision of the various registers,

  One deals with the certification of railway undertakings, the Infrastructure Manager and the entities responsible for maintenance,

  One is responsible for the management of matters relating to the sub-systems control-command and signalling;

  One deals with the certification of training centres and train drivers.
- **The Paths Division** has ten staff to deal with the allocation and charging for paths.

At the end of 2012 the number of staff had increased to 20.

The recruitment of other railway experts and the setting up of an organisation that meets all the national and international obligations continues to be among the principle objectives of ACF.

2. Organisational charts

Annex B

3. Activities

General Affairs Division

Management of administrative matters regarding staff, mail, purchase of office materials, the telephone exchange, organisation of ACF staff travel arrangements, as well as the financial affairs of ACF.

Legal Affairs Division

Preparation and signature of the conditions of use of the Luxembourg railway infrastructure between on one hand the national safety authority and the Infrastructure Manager and on the other hand the railway undertakings.

Contribution to the preparation of Luxembourg legal texts, in particular the transposition of European legal texts into Luxembourg law.

Interoperability and Safety Division

a) European organisations

Participation in the plenary meetings of the European national safety authorities with the ERA and in the related 'workshops'.

Participation in the meetings of the various working groups (TSI Wagons, TSI Locomotives and Passenger Vehicles, Mutual Acceptance of Rolling Stock, National Reference Document, National Vehicle Register, Register of the Types of Vehicles, Infrastructure Register, National Safety Rules, Entity in Charge of Maintenance, ERTMS Focus Group, Safety Performance, Working Group Article 35 of the Train Driver Directive) at the ERA in Lille. The decision on whether or not ACF should participate in working groups depends on the importance of the subject compared with the availability of human resources.

Participation in the meetings for the mutual recognition between Belgium, Holland, France, Luxembourg, Switzerland and Spain, the object of which is the adaptation of the BeNeFLuChE protocol to the new stipulations of the European regulations.

Participation in the meetings of the Railway Interoperability and Safety Committee (RISC Committee) at the European Commission on behalf of MDDI. This committee, which is composed of representatives of Member States, the European Commission and ERA, was set up by Directive 96/48/EC of 23 July 1996 on the Interoperability of the trans-European high speed rail system and deals with all the subjects concerned with railway interoperability and safety.

Active participation in different 'workshops' organised by the European Commission dealing with railway interoperability and safety and the 'Task Force' on the national safety rules.

Participation in plenary meetings and in meetings of the 'Regulatory Subgroup' of ILGGRI (International Liaison Group of Government Railway Inspectorates).

b) National organisations

Participation in the MDDI working group for the transposition into Luxembourg law of the European texts and, in particular Directive 2007/59/EC of the European Parliament and the Council of 23 October 2007 on the certification of train drivers operating locomotives and trains on the railway system in the Community, and its adaptation.

Submission to the Minister of a draft of a Grand-Duchy Regulation on the titles of legitimation of the Luxembourg Railway Administration.

Preparation of the draft Grand-Duchy Regulation on the accreditation of training centres.

Preparation of the draft Grand-Duchy Regulation on the recognition of examiners.

Preparation and publication of the practical guide and the forms explaining the procedure to obtain a train driver's licence published on our internet site.

Notification of the processing at the *Commission Nationale pour la Protection des Données* [National Committee for the Protection of Data] on the subject of data relative to driver's licences to be processed by ACF on the basis of a legal obligation.

Preparation and publication of the 'National Reference Document' and of the 'National Legal Frame' pursuant to the decision of the Commission 2011/155/EU of 9 March 2011 on the publication and management of the reference document referred to Article 27(4) of Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community.

c) Authorisation of sub-systems and activities other than those mentioned under a) and b)

Consultation with the CFL IM on the subject of the construction of a new line linking the stations of Luxembourg and Bettembourg as well as the application of the different procedures, in particular, the adoption of a common safety method for the assessment and the evaluation of the risks, in the area of new introductions to service of a rearrangement or renewal of sub-systems.

Introduction of a national vehicle register with the registration of a total of 4 996 vehicles, made up of 4 699 wagons, 16 coaches, 71 locomotives, 11 powered vehicles (works vehicles) and 199 multiple unit vehicles.

Introduction of a national register of train driver's licences with the printing of 168 train driver's licences.

Recognition of four doctors and two industrial psychologists to assist in the certification of train drivers.

Management of the file and putting forward of opinions to the Minister on the approval of three competent bodies.

Management of four files dealing with the application for authorisation to put into service and/or give type approval for locomotives.

Management of the file relating to the application by a builder for type approval for three car double deck railcars.

Management of the file relating to the equipment of railcars with a new ground to train bi-mode analogue/GSM-R radio and preparation of two authorisations to put into service applicable to a fleet of 10 railcars.

Management of the file dealing with making locomotives conform with the IMs requirements imposed on the national infrastucture and the registration of these.

Analysis of the files and taking decisions regarding requests for authorisation of rolling stock to run exceptionally on the Luxembourg railway system (122 cases dealt with).

Analysis of the file and giving an opinion at the request of the Minister concerning the abolition of a level crossing.

Preparing an authorisation for the putting into service of a new version of software '7th' applicable to double deck driving trailers.

Preparation of an authorisation for the registration of a railcar on the Luxembourg railway system as a historic vehicle.

Preparation of eight authorisations for the putting into service of machines acquired by the IM to carry out various maintenance work on the railway system and four y type authorisations for the above mentioned vehicles.

Preparation of the authorisations for the putting into service of four locomotives of a railway undertaking following the fitting of the MEMOR II+ system.

Preparation of the authorisations for the putting into service of 36 articulated pocket vehicles, fitted for the transport of containers, swap bodies and semi-trailers for a railway undertaking and the type approval.

Preparation of the authorisations to register the first lot of 30 hopper wagons and a second lot of 42 hopper wagons for a railway undertaking.

Admission to traffic of 100 articulated flat bogie wagons of type S(g)mmns, fitted for the transport of swap bodies.

Examination of a file on the application for the authorisation of the putting into service of components of the sub-system control-command and signalling on the Luxembourg railway system.

Monitoring the changes in the file regarding the introduction of the ERTMS/ETCS Level 1 system on the national railway system. Discussion with the Luxembourg Infrastructure Manager and various national authorities on the criteria for the putting into service of on-board ETCS equipment.

Examination of the files regarding the changes to the equipment involved in the safety of frontier sections.

d) Certification regarding safety

Examination of the file for the application for a safety certificate B of a railway undertaking.

Granting a safety approval valid for a year to the Infrastructure Manager (IM)

Examination of the file regarding the application for the renewal of the approval with a period of validity of five years presented by the IM.

Paths Division

Allocation for the 2012 timetable valid from 12 December 2011 to 8 December 2012, of 1,553 paths of which 1,147 were for passenger traffic and 228 for freight traffic. 174 paths were for running empty stock trains and 4 paths were for service trains. These 1,553 paths represent 357,533 trains planned to run 8,828,010 km.

31 advice timetables regarding 770 amendments, creations or cancellations of paths have been published during the monthly updates of the 2012 timetable.

Preparation of 933 traffic advices concerning 27 300 modifications, creations or cancellations of trains at short notice (request up to five days in advance).

Publication of 9 352 traffic advices (short term) by post 24h/24h concerning last minute changes.

In total 355 011 trains have actually run and covered 8 646 483km in 2012. This number does not take account of the trips run by the IM.

Preparation of the 2013 timetable, beginning on 9 December 2012 and remaining in force until 14 December 2013. 1 676 paths have been allocated of which 1 269 are for passenger trains, 194 for freight trains and 213 for empty stock trains representing 366 542 trains planned to run 9 164 385km.

Amendment and publication of the *Document de référence du réseau* [network reference document] 2013 and 2014.

Participation at two General Assemblies of RailNetEurope (RNE), as well as in various working groups of RNE.

Support of railway undertakings at the meetings of the Forum Train Europe (FTE).

Consulting member of the meetings of the Management Committee Corridor C (2).

D. THE DEVELOPMENT OF RAILWAY SAFETY

1. Initiatives aimed at maintaining/improving the safety performance

Table D.1.1 – Safety measures triggered by accidents / precursors of accidents

Accidents/precursors that led to the measure		**Safety measures decided**	
Date	**Place**	**Description of the event**	
25/01/2012	Goebelsmühle	Acceptance of a train in a barred track	Preparation of an order of station A, dealing with arrangements for the barring of tracks on the main line and in a station
28/02/2012 13/03/2012	Line 3 Luxembourg – Wasserbillig; Level crossings 72 and 73	Following a work site external to CFL carried out under a permission obtained from the administration in charge of the transport network close to the railway line at Manternach, some level crossing installations were damaged by the work site machines.	After intervention on the site by managers of the IM some organisational measures were made at the work site to eliminate the potential dangers. These measures have been recorded by correspondence and e-mails.
24/03/2012 17/11/2012 19/12/2012	Dudelange Luxembourg Pétange	Signal passed at danger	Driver suspended Medical examination of aptitude Psychological assessment Checking of professional knowledge by a qualified instructor . Practical test on the driving simulator After resuming his driving duties First shift accompanied by a qualified instructor Supervision increased by further turns accompanied by a qualified instructor during the next year
11/04/2012	Bettembourg Station	Bursting of the points of the double junction crossing 96 branch a/b by a shunting movement made up of two maintenance machines belonging to the IM.	The report on the incident, together with some comments, is discussed in the training and further training courses given to the IMs staff in order to illustrate, by means of a practical example, the importance of coming to a proper agreement before starting a shunting movement.
30/05/2012	Lorentzweiler	Forgetting to announce the departure of a train and to request the closing of the gates of level crossing 18.	Publishing of a station order, dealing with information supplied to the teams working on the main line on the running of trains and the operation of the barriers.

Accidents/precursors that led to the measure		Safety measures decided	
Date	**Place**	**Description of the event**	
25/06/2012	Noertzange Station	The work on the platform of track 2 hindered the passenger service to the trains. Following excavations, there was a real danger that passengers alighting from trains would be injured.	After discussion on site with the site supervisor the private company made all the holes safe with cover plates. The length of the work was also limited to 10 m.
02/07/2012	Differdange Station	Following a lack of coordination between the IM staff a shunting movement occupied a track that was to be used by a passenger train.	The incident report with comments is discussed in the training and retraining courses given to staff, to illustrate that no movement must take place without a valid shunting agreement.
02/07/2012	Belvaux-Soleuvre Station	Passing by a passenger train of an SMA inadvertently installed in the track 2 at km 9.870.	The report of the incident completed by comments is considered in future during the preparation of an organisation chart of the managerial staff of work sites in order that the member of staff who introduces the safety measures at the start of the work site should also be present during the lifting of the measures at the end of the work.
28/09/2012	Bettembourg	Passing the fixed block signal SFVb115b track 235 during a shunting movement by two locomotives working in multiple. After seeing that he had passed the signal the driver set back and changed driving cab. When signal SFVb235 cleared, the driver resumed his journey without advising the responsible train controller. On arrival at Thionville the driver advised his local manager.	<u>Individual Measures</u>: Temporary suspension of the authority of the member of staff to drive on the Luxembourg railway system Analysis of the event with the driver and feeding his driver's safety device. Continuing training, evaluation and completion of the achievement of the class room objectives by a supervisor accompanying the driver when he drives his first train on the Luxembourg railway system. <u>Collective measures:</u> Presentation of the event to other drivers of the residence during the continuous training days and making them aware by display and commentary of a feedback form.

Accidents/precursors that led to the measure		Safety measures decided	
Date	**Place**	**Description of the event**	
22/10/2012	Differdange Station	Passing a main fixed signal at danger for all trains by the driver of a service train.	Driver suspended. Meeting with his managers in the IM (Infrastructure Maintenance Service). Checking of professional knowledge After resuming his driving duties, accompanied by another driver during his first shift back at work. The report of the incident, with comments, is discussed during the training courses and further training courses given to the staff of the IM.
24/10/2012	Differdange tertiary network	Derailment of a locomotive after packing work in a point	Preparation of a note defining a verification procedure before the announcement 'free and passable' after the completion of work liable to affect the correct operation of a point.

Table D.1.2 – Safety measures resulting from other reasons

Description of the cause	Description of the field concerned	Safety measures decided
Publication of Service Instruction No 99	Communication to do with operating technique	Making a documentary film on the application in practice of the provisions of Service Instruction No 99
Feedback of experience from IM	Communication to do with operating technique	Campaign to measure and make people aware of the communications to do with operating technique
Feedback of experience from IM	Use of portable horns with gas cartridges	Introduction of a note to remind staff that it is imperative to use approved equipment
Feedback of experience from IM	Measures to be taken in the case of snow falls	Introduction of a note on the measures to be taken by IM staff to guarantee the clearing of platforms used by passengers and points. Cancellation of three notes that had become obsolete

2. Detailed information on the analysis of the trends

Salient facts	2012	2011
Accidents at level crossings, including accidents involving pedestrians	0	0
Train collisions, including those with obstacles within the loading gauge	0	0
Fatal accidents to trespassers on railway premises struck by moving rolling stock	0	1
Fatal accidents to staff	0	0
Suicides	5	7
Broken rails	3	2
Cases of track buckling	1	1
Signalling failures that affected safety	0	1
Signals passed at danger without authorisation	5	11

Infrastructure characteristics	2012	2011
Lines fitted with the MEMORII+ automatic train protection system	100%	100%
Main fixed signals and advance fixed signals fitted with MEMORII+	100%	100%
Lines fitted with ETCS level 1	94%	88%
Main fixed signals and advanced fixed signals fitted with ETCS level 1	93%	87%
Level crossings with active equipment	106	106
Level crossings with passive equipment	31	32

No significant accident was recorded in 2012 nor was anybody seriously injured or killed.

It is possible to see a reducing trend in all the indicators relating to accidents and to precursors since the start of collection of the figures in 2009. (See Annex C).

The number of signals passed at danger which showed a sharp rise in 2011 has dropped considerably to reach a level close to that of 2010. No serious accident resulted for the signals passed at danger in 2012.

It appears that the measures taken by the RU responsible for the great majority of signals passed at danger, nine in 2011 compared with three in 2012, have borne fruit. For information we would mention that this RU has introduced:

- some general measures in the basic training and the continuing training programmes (action on behaviour),
- coaching of drivers by its instructors and
- a group of tutor drivers taking charge of and instructing each candidate driver individually.

The implementation of ETCS level 1 on the infrastructure side is making steady progress.

Railway safety can be considered to be high and shows a positive tendency. However, it is necessary to be aware that because of the small size of the network (275 km of line) very few serious accidents are recorded. A single accident causing several deaths and/or serious injuries could radically change the current trends.

3. Results of the safety recommendations

L'Administration des Enquêtes Techniques (AET) [Administration for Technical Investigations] was set up by the law of 19 May 2008. In 2009 it published its first safety recommendations together with the *Bureau d'Enquêtes sur les Accidents de Transport Terrestre* (BEA-TT France) [Land Transport Accident Investigation Bureau], as part of the technical report on the railway accident at Zoufftgen. This accident, which occurred in 2006, resulted in the death of six people.

Following this accident 21 recommendations were made 15 of which have been implemented or are in the course of being implemented, 5 have been rejected and 1 did not concern the staff of Luxembourg State Railways. All these recommendations were given in the report for 2009.

Below there is some information on the progress with recommendation R8:

Recommendation R8 (CFL, SNCF, RFF): examine the feasibility of extending SAAT (Système d'Annonce Automatique des Trains SNCF) [the SNCF Automatic Train Announcing System ATAS] to Bettembourg, by displaying the first train announced on the VCP (Visual Control Panel).

The automatic train announcement systems such as the ZNL [*Zugnummernmeldeanlage* – train number announcement system] 800 of CFL or the ATAS of SNCF are only aids to operation and never affect the safety of train running. They can only contribute indirectly to the improvement of safety.

CFL and SNCF have taken the decision to develop an interface to connect the ZNL 800 and ATAS systems. This interface is in the trial phase between Longwy (SNCF) and Rodange (CFL).

Following various technical problems during the test phase of the connection interface of the ZNL 800 CFL and SAAT SNCF systems between Longwy and Pétange the introduction of this interconnection installation between Bettembourg and Thionville has had to be put back to the start of the 2014 financial year.

In 2012 the AET wrote in its final report on the accident at work that occurred on 3 February 2009 on the tertiary network at Differdange (an old industrial railway that

today forms part of the National rail network), the following recommendations (*Extracts from the AET technical report*):

R1: Ensure that for coupling and uncoupling operations on the Luxembourg railway system, including the network called 'tertiary', the regulations regarding health and safety should comply with the following arrangements:

- *before staff go between two vehicles, the rakes of vehicles must be at a complete stand and immobilised, with the buffers in contact;*
- *the vehicles can only be moved after the staff have moved out of the way.*

The regulations and the health and safety rules have been reviewed by the IM and the RUs and amended where necessary.

R2: Ensure that staff are made aware of the existing health and safety rules for coupling and uncoupling operations as well as, more particularly, the provisions of recommendation R1.

This is done during the initial and continuing training and by supervising the staff concerned.

R3: Ensure that where there is a steep inclination of the remote control box, the time to activate the rapid braking should be defined in such a way as to initiate an emergency brake application as soon as possible after the inclination of the box.

Only one RU uses the remote control on the national rail network, including the tertiary network. On the type of remote control used the time to activate the emergency brake application can be set between three and five seconds (values given by the builder that cannot be changed by the user). This function avoids initiation of brake applications when the shunter has to get down to move into the Berne space between two vehicles or to get out from it. The RU in question decided to put the delay at 4 seconds to enable

- firstly to guarantee an emergency brake application after a delay for safety reasons and
- secondly to avoid untimely brake applications by a delay too short during the coupling operations which would expose the staff to other safety risks.

Regarding the other remote controls used on the national rail network (the values vary between 2.2 and 5 seconds). A study on the harmonisation of the response time is in progress.

E. IMPORTANT CHANGES MADE TO THE LEGISLATIVE, REGULATORY AND ADMINISTRATIVE ARRANGEMENTS

1. Legislation

None

2. Regulations

- **Amendment No 1 to the General Regulations for Technical Operation (GRO) of Parts 01, 07, 08, and 09**
  Came into force on 10 September 2012.
- **Amendment No 2 to the General Regulations for Technical Operation (GRO) of Parts 07, and 08**
  Came into force on 10 September 2012.

- **Rectification of Annex I to the General Regulations for Technical Operation (GRO) by the Infrastructure Manager**
  Document reissued in 2012.

- **Adaptation of the frontier instruction CFL - DB Netz**
  Reissue of the 2 Annexes (1 and 3) on 1 November 2012.

- **Adaptation of the frontier instruction (11/6) Line 42 INFRABEL/CFL**
  Conditions of operation of the frontier section Bellain - Gouvy, applicable from 30 November 2012.

- **Service Instruction No 99, Methodology of communication**
  Applicable from 1 June 2012.

- **Note QSE 04122012.a 'Preparation and distribution of the summary report in case of incident/accident' RGE 11.**
  New report form developed by common agreement with the *Administration des Enquêtes Techniques* (AET) [Technical Investigation Department].

F. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

1. National legislation - dates of introduction - availability

1.1. Issue of safety certificates pursuant to Article 10 of Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways.

Chapter IV of the amended law of 22 July 2009 regarding railway safety contains the general provisions for obtaining a safety certificate Part A and Part B. The law was published on 27 July 2009 in Mémorial (The Official Journal of the Grand-Duchy of Luxembourg). This law came into force on 1 August 2009.
The Grand-Duchy Regulation of 21 September 2009 on the certification of the safety of railway undertakings specifies the details of the conditions for obtaining and validating safety certificates, as well as the procedures for their preparation. It also lays down the conditions and the procedure for renewing, re-examining and withdrawal of the certificates. The regulation in question came into force on 5 October 2009, the date of its publication in Mémorial.

1.2. Date from which safety certificates were issued pursuant to Article 11 of Directive 2004/49/EC

Chapter V of the amended law of 22 July 2009 on railway safety contains the general provisions for obtaining a safety authorisation. This law came into force on 1 August 2009.
The amended Grand-Duchy Regulation of 21 September 2009 on the certification of the railway Infrastructure Manager specifies the conditions for obtaining and validating the safety authorisation, as well as the procedures for its preparation. It also lays down the conditions and procedure for renewing, re-examining and withdrawal of the authorisations. The regulation in question came into force on 5 October 2009, the date of its publication in Mémorial.

1.3. Existence of national safety rules or other national legislation relating to railway undertakings and Infrastructure Managers.

The Luxembourg legal texts are officially published in the Mémorial (The Official Journal of the Grand Duchy of Luxembourg). They can also be consulted at any time on the Legilux website http://legilux.public.lu/).

The national safety rules relative to Annex II of Directive 2004/49/EC are distributed on request to interested parties by ACF. The Manager of the CFL Infrastructure supplies its documents containing the operating rules to railway undertakings that have a safety certificate for the Luxembourg railway infrastructure.
The technical rules regarding the authorisation to introduce rolling stock into service are published on www.railinfra.lu

2. Numerical data (Annex E)

3. Procedural aspects

3.1. Part A safety certificates

3.1.1. Reasons for which a revision/amendment of Part A certificates has been requested (for example, for a change of the type of service, an extension of the traffic or the size of the company).

No request for revision/amendment was registered in 2012.

3.1.2. Principal reasons in the case where the average time to issue Part A safety certificates has exceeded the four months laid down in Article 12(1) of the Directive on railway safety.

No case in 2012.

3.1.3. Details of requests by foreign national safety authorities to check or access information regarding the Part A certificate of a railway undertaking that has been certified in Luxembourg, but which requests a Part B certificate in another member State.

No request was recorded in 2012.

3.1.4. Summary of the problems regarding the mutual acceptance of the Part A safety certificate valid throughout the Community.

No problem in 2012.

3.1.5. Charge made by the national safety authority to issue a Part A safety certificate.

At present no charge is made for the issue of a Part A certificate, a preliminary draft of the legal text is now being prepared.

3.1.6. Summary of the problems in the use of standardised formats for Part A certificates, in particular regarding the categories relative to the type and extent of the service.

No problem in 2012.

3.1.7. Summary of the current problems/difficulties met by the National Safety Authority in the procedures for application for Part A certificates.

The evaluation of whether the application meets the criteria given in Commission Regulation No 1158/2010 for a common safety method to assess if the application conforms with the requirements to obtain a railway safety certificate is not straight forward as there is no 'European check list' of the documents to be supplied.

Without a detailed examination of the application, it is impossible to establish whether or not the file is complete which results in a long delay.

3.1.8. Summary of the problems mentioned by the railway undertakings when they request a Part A safety certificate.

No problem reported in 2012.

3.1.9. Procedure for the feedback of information (for example, by questionnaire) that enables railway undertakings to give their opinion on the procedures/practices for granting certificates or complaining.

There is no feed-back procedure; any railway undertaking can contact ACF to make their views known. No feed-back was received in 2011.

3.2. Part B safety certificates

3.2.1. Reasons for which a revision/modification of Part B safety certificates was requested (for example, for a change regarding the types of services, the amount of traffic, the lines to be operated, the type of rolling stock, the category of staff, etc.).

No request for revision/amendment was registered in 2012.

3.2.2. Principal reasons in the case where the average time to issue Part B safety certificates has exceeded the four months laid down in Article 12(1) of the Directive on railway safety.

No case in 2012.

3.2.3. Charge made by the national safety authority to issue a Part B safety certificate.

At present no charge is made for the issue of a Part B certificate; a draft of the legal text is now being prepared.

3.2.4. Summary of the problems in the use of standardised formats for Part B certificates, in particular regarding the categories relative to the type and extent of the service.

No problem in 2012.

3.2.5. Summary of the current problems/difficulties met by the National Safety Authority in the procedures for application for Part B certificates.

The evaluation of whether the application meets the criteria given in Commission Regulation (EC) No 1158/2010, for a common safety method to assess if the application conforms with the requirements to obtain a railway safety certificate, is not straight forward as there is no 'European check list' of the documents to be supplied.

Without a detailed examination of the application, it is impossible to establish whether or not the file is complete which results in a long delay.

3.2.6. Summary of the problems mentioned by the railway undertakings when they request a Part B safety certificate.

No problem reported in 2012.

3.2.7. Procedure for the feedback of information (for example, by questionnaire) that enables the railway undertakings to give their opinion on the procedures/practices for granting certificates or complaining.

There is no feed-back procedure; any railway undertaking can contact ACF to make their views known. No feed-back was received in 2012.

3.3. Safety authorisations

3.3.1. Reasons for the revision/amendment of the safety authorisations.

No request for revision/amendment was registered in 2012.

3.3.2. Principal reasons in the case where the average time to issue safety authorisations has exceeded the four months laid down in Article 12(1) of the Safety Directive.

No case in 2012.

3.3.3. Summary of the problems/difficulties frequently met by the National Safety Authority in the procedures for requesting safety authorisations.

The evaluation of whether the application meets the criteria given in the Commission Regulation (EC) No 1169/2010, for a common safety method to assess if the application conforms with the requirements to obtain a railway safety certificate, is not straight forward as there is no 'European check list' of the documents to be supplied.

Without a detailed examination of the application, it is impossible to establish whether or not the file is complete which results in a long delay.

3.3.4. Summary of the problems reported by the Infrastructure Managers during their request for a safety authorisation.

No problem reported in 2012.

3.3.5. Procedure for the feedback of information (for example, by questionnaire) that enables Infrastructure Managers to give their opinion on the procedures/practices for granting authorisations or complaining.

There is no feed-back procedure; the Infrastructure Manager can contact ACF to make his views known.

3.3.6. Charge made by the national safety authority to issue a safety authorisation.

At present no charge is made for the issue of a safety authorisation; a draft of the legal text is now being prepared.

G. SUPERVISION OF THE RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

1. Description of the supervision of railway undertakings and Infrastructure Managers

1.1. Audits/Inspections/Check lists

Due to the lack of staff in the Interoperability and Safety Division, the supervision of the RUs and the IM was limited to an audit carried out on one of the RUs which was holder of A and B certificates issued by the Luxembourg Ministry of Sustainable Development and Infrastructure. The audit was mainly concerned with the service condition of the hauled rolling stock.

1.2. Aspects connected with the vigilance/sensitive points to be monitored by NSA

/

2. Description of the coverage of the legal aspects within the annual reports from the Infrastructure Managers and railway undertakings – Availability of the annual reports before 30 June (pursuant on Article 9(4) of the Railway Safety Directive)

ACF has received, the annual reports of CFL as Infrastructure Manager and all the railway undertakings that have a safety certificate for the Luxembourg railway infrastructure, i.e.

- CFL - Infrastructure Manager (10 June 2013)
- CFL - Railway Undertaking (10 June 2013)
- CFL cargo (10 June 2013)
- SNCF - SNCF Fret (5 June 2013)

3. Number of inspections carried out at the IM and RUs in 2012

AUDITS	At RUs that have a Part A safety certificate	At RUs that have a Part B safety certificate	At IMs that have a safety authorisation	At RUs that have a safety certificate 2001/14
Planned	1	1	0	0
Un-planned	0	0	0	0
Carried out	1	1	0	0

4. Number of audits carried out at IMs and RUs in 2012

AUDITS	At RUs that have a Part A safety certificate	At RUs that have a Part B safety certificate	At IMs that have a safety authorisation	At RUs that have a safety certificate 2001/14
Planned	0	0	0	0
Un-planned	0	0	0	0
Carried out	0	0	0	0

5. Summary of the relevant corrective measures/actions (amendment, withdrawal, suspension, serious warning, etc.) related to safety aspects following these audits/inspections

In general the class of wagons examined during the audit was in a satisfactory condition. However the RU was invited to complete the inscriptions on these special wagons in order to guarantee that any operator that had to handle these wagons could do it safely. As these wagons run on fixed routes, the RU is invited to supply an examination document to train the members of staff at the different terminals. In addition the position of the footboards does not enable staff to climb on the wagons in a safe manner. ECM has been advised to contact the builder of the wagons in order to find a practical solution.

6. Short summary/description of the complaints from Infrastructure Managers on the subject of the railway undertakings, to do with the conditions in their Part A/Part B certificate

No complaint recorded in 2012.

7. Short summary/brief description of the complaints from railway undertakings on the subject of the Infrastructure Managers, to do with the conditions in their authorisation

No complaint recorded in 2012.

H. REPORT ON THE APPLICATION OF THE CSMS ON THE RISK EVALUATION AND ASSESSMENT

Commission Regulation (EC) No 352/2009 of 24 April 2009 on the adoption of a common safety method (CSM) on risk evaluation and assessment will only apply from 1 July 2012.

However it applies from 19 July 2010;
a) to all significant technical modifications to vehicles, such as are defined in Article 2(c), of Directive 2008/57/EC.
b) to all significant modifications to the structural sub-systems, when Article 15(1) of Directive 2008/57/CE or a TSI requires it.

The letters sent by ACF to the sector and the meetings held on this subject have borne fruit. In 2011 a single application was received while in 2012 the RUs and the IM have applied the CSMs for the 11 projects listed below:

- changing of the sand injectors on a class of locomotives
- updating the on-board software on a class of locomotives
- changes in the organisation of work for the servicing of two different customers (operations carried out by a single operator)
- change in the level of service for a customer following work on the public network
- change in the procedure for fuelling locomotives with gas oil in a marshalling yard
- rail service for a new freight customer
- rectification of the safety management system
- modification of the system of neutralisation of an emergency brake application following an alarm signal
- operational change regarding the visual check of clearance of a block section
- modification of the components of the point for counting wheelsets.

I. ALTERNATIVE MEASURES TAKING THE FORM OF DEROGATIONS TO THE SYSTEM OF CERTIFICATION OF THE ENTITIES RESPONSIBLE FOR MAINTENANCE

No decision regarding possible alternative measures to the system of certification of the entities in charge of maintenance has been taken by the Grand-Duchy of Luxembourg. No request on this subject has been received in 2012.

J. CONCLUSIONS – PRIORITIES

Due to its recent creation ACF is not able to plot the progress of the level of safety on the Luxembourg railway infrastructure in accordance with Directive 2004/49/EC and is thus still unable to draw conclusions regarding its development.

However, in view of the number of serious accidents since 2009 (none occurred during 2012) and the number of warning signs of accidents and incidents that occurred, the level of safety can be considered to be high and moving in a positive direction.

The progressive installation of ETCS on the whole of the Luxembourg railway system and on the tractive units will further reduce the risk of passing signals at danger.

In order for this to become a reality, a high percentage of the rolling stock running on the Luxembourg railway system must also be fitted with ETCS. The percentage of train kilometres run with ETCS (14% in 2012) remains low but has increased since the first annual report (2% in 2009). This increase results from the increase firstly in the percentage of signals fitted with ETCS and secondly the number of vehicles so fitted.

The completion on the infrastructure side (at present 93% of the signals are fitted with the ETCS system) will, according to the IM's forecasts, be achieved in 2014 with an authorisation to put into service for 2015.

With the issue of a safety licence to the IM in 2012, all the railway stakeholders comply with the European and Luxembourg legal arrangements and have a safety management system.

The main objective of ACF is to maintain at least the current level of safety, and indeed to improve it in conjunction with all the people concerned.

The recruitment of staff to ACF to enable it to better meet its national and international obligations remains a major task. The introduction of a formal method of operation and administration, that is to say a modelling of the principle processes, followed by the preparation of the procedures that are relative to it is another (implementation of a management system). The introduction of a set of principles for an effective document management system will be initiated in 2013.

The limited number of people who have the necessary experience and ability to carry out the tasks of monitoring, auditing and advising in the railway sector is a major problem for recruiting suitable staff. The human resources situation at ACF, however, remains worrying.

K. SOURCES OF INFORMATION

- Publications in MEMORIAL (The Official Journal of the Grand Duchy of Luxembourg) for details see Chapter E.1
- ACF internal information
- Annual reports for 2012 received from the Infrastructure Manager and railway undertakings
- The reports of the Administration for Technical Investigations (AET)

L. ANNEXES

Annex A: Information on the railway structure

Annex B: Organisation charts of the National Safety Authority

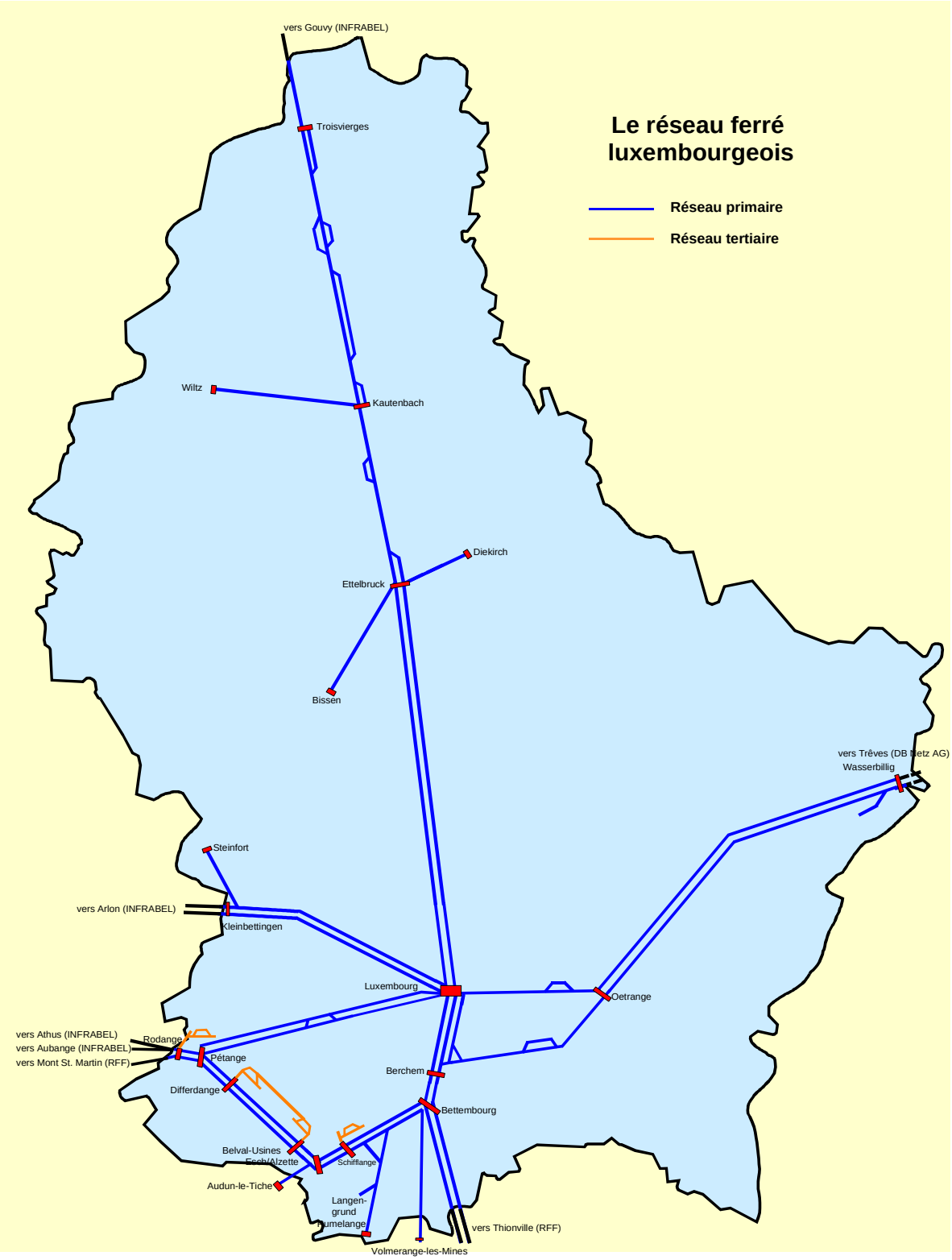
Annex C: Information on Common Safety Indicators CSI – Definitions used

Annex D: Important amendments to the legislation and the regulations

Annex E: Changes in the certification and safety authorisation – Numerical information

Annex A: Information on the railway structure

A.1 Map of the system



Tertiary network: NON-TEN part of the network such as is referred to in the law of 18 December 2006
Map supplied by CFL

The Luxembourg rail network	
Primary network (blue)	Tertairy network (red)

A.2 List of railway undertakings and Infrastructure Managers

Infrastructure Manager (at 31 December 2012)

Name:	CFL
Address:	9, place de la Gare, L-1616 Luxembourg
Web site:	www.cfl.lu
Safety authorisation:	001-1
Valid until:	4 May 2013

Railway Undertakings (at 31 December 2012)

a. Carriage of passengers and freight

In 2012 no RU had a certificate to carry passengers and freight.

b. Carriage of passengers

Name:	CFL
Address:	9, place de la Gare, L-1616 Luxembourg
Web site:	www.cfl.lu
Safety Certificate Part A:	LU 11 2009 0001
Valid until:	16 September 2014
Safety Certificates Part B:	LU 12 2009 0001
Valid until:	16 September 2014

c. Carriage of freight

Name:	SNCF
Address:	34, rue du Commandant Mouchotte, F-75699 Paris Cedex 14
Web site:	www.sncf.com
Safety Certificate Part A:	No FR 11 2009 0021
Valid until:	28 June 2012
Safety Certificate Part B	No LU12 2011 0002
Valid until:	8 July 2016

Name:	CFL cargo SA
Address:	11, boulevard J.F. Kennedy, L-4170 Esch-sur-Alzette
Web site:	www.cfl.lu (espace CFL cargo)
Safety Certificate Part A:	LU 11 2011 0001
Valid until:	4 December 2016
Safety Certificates Part B	LU 12 2011 0003
Valid until:	4 December 2016

A.2.1. Infrastructure Manager

Name	Société Nationale des Chemins de Fer Luxembourgeois [Luxembourg National Railways] (CFL)
Address	9, place de la Gare L-1616 Luxembourg
Web site	www.cfl.lu
Link to the system reference document	www.railinfra.lu
Safety authorisation (number/date)	001-1 / 4 May 2012
Date of start of commercial activity	Law of 10 May 1995 regarding the management of the infrastructure
Total length of the railway/gauge	621 km / 1,435 mm Tertiary network: 58.5 km / 1435 mm
Length of the railway electrified/voltage	43.5 km / 3kV 546.5 km / 25kV Tertiary network: 7.7 km / 25kV
Total length of double track/single track	154 km / 121 km
Total length of the high speed lines	0 km
ATP equipment used	MEMOR II+ / ETCS level 1
Number of level crossings	137 Tertiary network: 7
Number of main colour light signals	533

Abbreviations: LGV = Lignes à Grande Vitesse [High speed lines] (as per Directive 96/48/CE)
ATP = Automatic Train Protection
PN = Passage à niveau [level crossing]

A.2.2. Railway undertakings

A.2.2.1. CFL

Name	Société Nationale des Chemins de Fer Luxembourgeois [Luxembourg National Railways] (CFL)
Address:	9, place de la Gare L-1616 Luxembourg
Web site:	www.cfl.lu
Safety certificate as specified in 2001/14/CE (number/date)	/
Date of start of commercial activity	Law of 16 June 1947
Safety Certificate Part A - B as specified in 2004/49/EC (number/date)	A - No LU11 2009 0001 / 20/12/2009 B - No LU11 2009 0001 / 20/12/2009
Type of carriage (freight, etc.)	Passengers to the exclusion of high speed services
Number of locomotives	57
Number of electric multiple units/diesel railcars	46 railcars
Number of coaches	76 coaches 20 driving trailers
Number of wagons	
Number of train drivers	299
Number of staff on board trains carrying out safety tasks (excluding drivers)	263 (train crew)
Volume of passenger traffic	377,45 million passenger kilometres 7.96 million passenger train kilometres
Volume of freight traffic	

A.2.2.2. SNCF

Name	SNCF
Address	34, rue du Commandant Mouchotte F-75699 Paris Cedex 14
Web site	www.sncf.com
Safety certificate as specified in 2001/14/CE (number/date)	N°002-1 / 29 June 2011
Date of start of commercial activity	in Luxembourg: 8 November 2005
Safety Certificate Part A - B as specified in 2004/49/EC (number/date)	A – No FR11 2012 0007 / 24 May 2012 B - No LU12 2011 0002 / 8 July 2011
Type of carriage (freight, etc.)	Freight
Number of locomotives	27 plus 446 limited Bettembourg Annex 5.1.1 Safety Certificate Part B Luxembourg
Number of electric multiple units/diesel railcars	
Number of coaches	
Number of wagons	14,345
Number of train drivers	115
Number of staff on board trains carrying out safety tasks (excluding drivers)	
Volume of passenger traffic	
Volume of freight traffic	1,323,500 tonnes

A.2.2.3. CFL cargo S.A.

Name	CFL cargo SA
Address	11, boulevard J.F. Kennedy Kennedy, L-4170 Esch-sur-Alzette
Web site:	www.cfl.lu (espace CFL cargo)
Safety certificate as specified in 2001/14/EC (number/date)	A - No LU01 2011 0001 / 28 November 2011
Date of start of commercial activity	5 December 2006
Safety Certificate Part A - B as specified in 2004/49/EC (number/date)	A - No LU11 2011 0001 / 5 December 2011 B - No LU12 2011 0003 / 5 December 2011
Type of carriage (freight, etc.)	Freight
Number of locomotives	69 of which 49 for the national railway
Number of electric multiple units/diesel railcars	0
Number of coaches	0
Number of wagons	3,921 of which 918 are on hire
Number of train drivers	69
Number of staff on board trains carrying out safety tasks (excluding drivers)	0
Volume of passenger traffic	0
Volume of freight traffic	759 million tonne-km

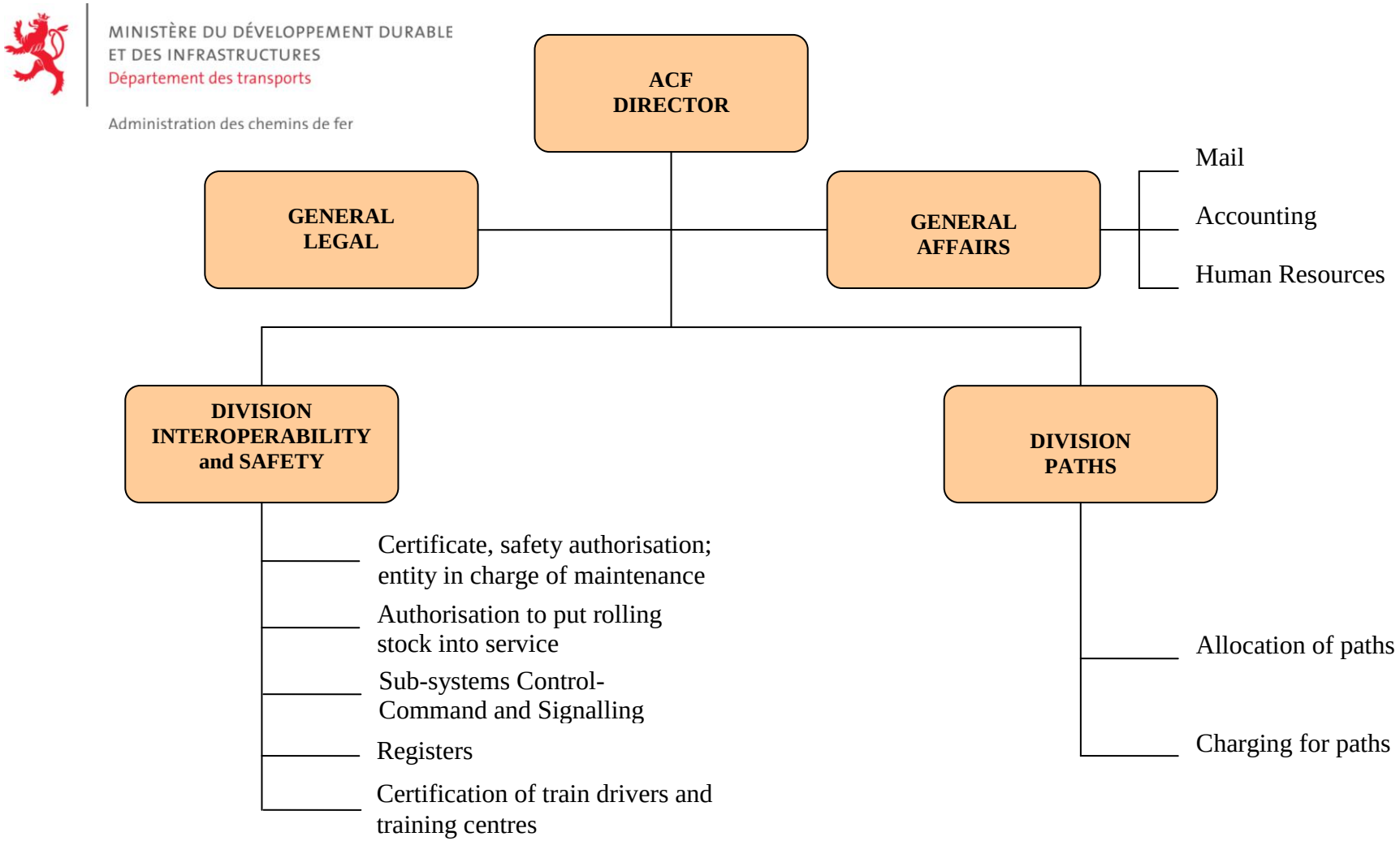
ANNEX B: Organisation chart of the National Safety Authority

B.1. Internal organisation

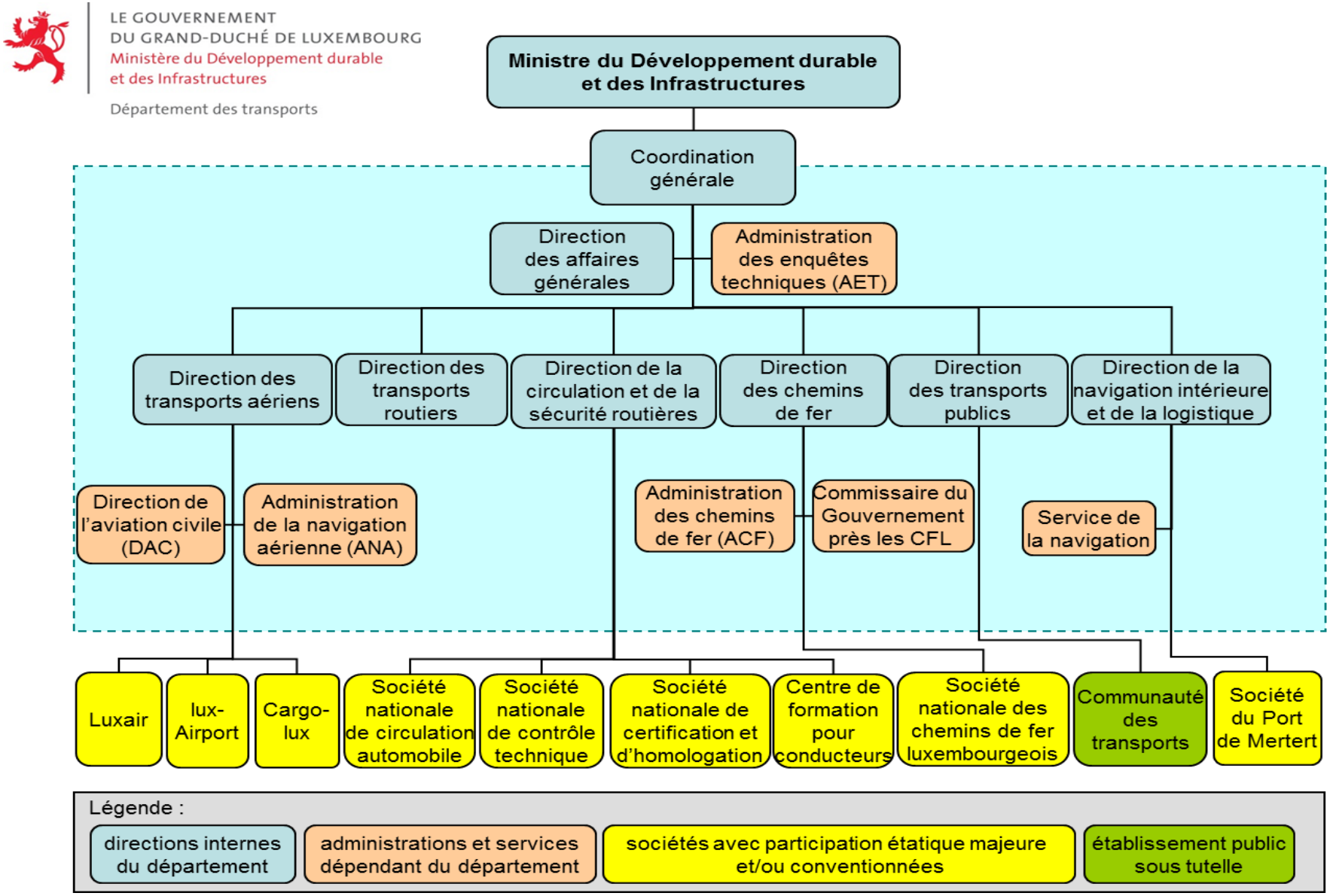
B.2. Relations with other National bodies

ANNEX B: Organisation chart of the National Safety Authority

B.1. Internal organisation at 31 December 2012



B2. Relations with other national authorities



THE GOVERNMENT
OF THE GRAND-DUCHY OF LUXEMBOURG
Ministry of Sustainable Development
and Infrastructure

Transport Department

<table>
<tr><td colspan="10">Ministry of Sustainable Development and Infrastructure</td></tr>
<tr><td colspan="10">General coordination</td></tr>
<tr><td colspan="5">Department for General Affairs</td><td colspan="5">Administration for Technical Investigations (AET)</td></tr>
<tr><td colspan="2">Department for Air Transport</td><td colspan="2">Department for Road Transport</td><td colspan="1">Department for Traffic and Road Safety</td><td colspan="3">Department for Railways</td><td colspan="2">Department for Public Transport</td><td colspan="2">Department for Internal Navigation and Logistics</td></tr>
<tr><td>Department for Civil Aviation (DAC)</td><td>Administration of Aerial Navigation (ANA)</td><td colspan="3"></td><td>Luxembourg Railway Administration (ACF)</td><td>Government Commissioner at CFL</td><td></td><td colspan="2">River Navigation Services</td><td></td></tr>
<tr><td>Luxair</td><td>Lux-Airport</td><td>Cargo-lux</td><td>National Body for Car Traffic</td><td>National Body for Technical Inspection</td><td>National Body for Certification and Type Approval</td><td>Training Centre for Drivers</td><td>Luxembourg National Railways</td><td colspan="2">Community Transport</td><td>Port Mertert Company</td></tr>
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<tr><td colspan="2">Internal Sections in the Department</td><td colspan="3">Administrations and Dependent Services in the Department</td><td colspan="3">Companies with Major State Participation and/or Approved</td><td colspan="3">Public Bodies under Supervision</td></tr>
</table>

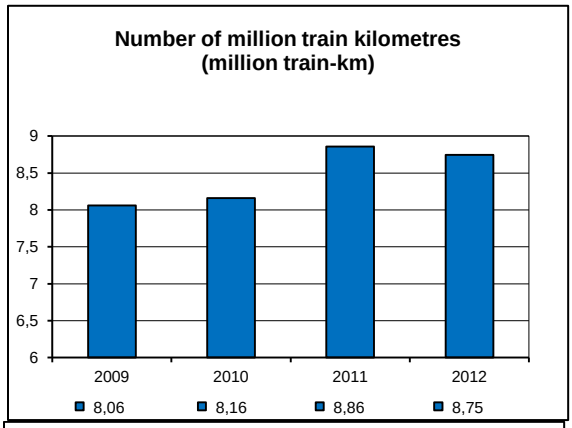
Annex C: CSI Information - Definitions used

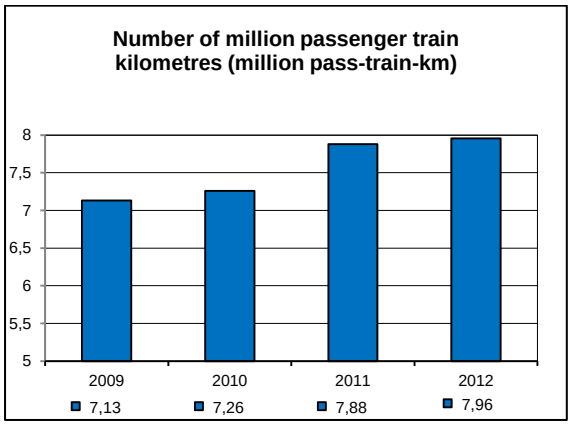
CSI Common Safety Indicators)

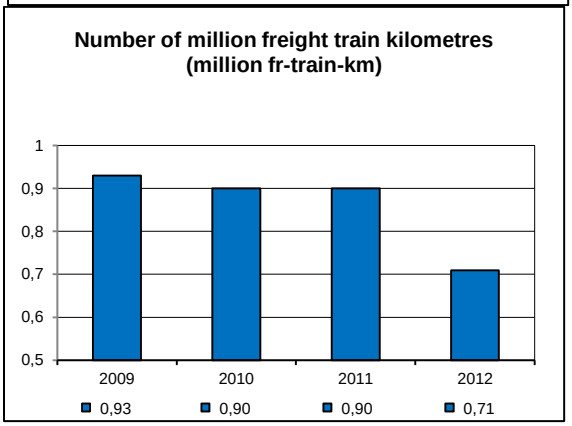
C.1. CSI Information

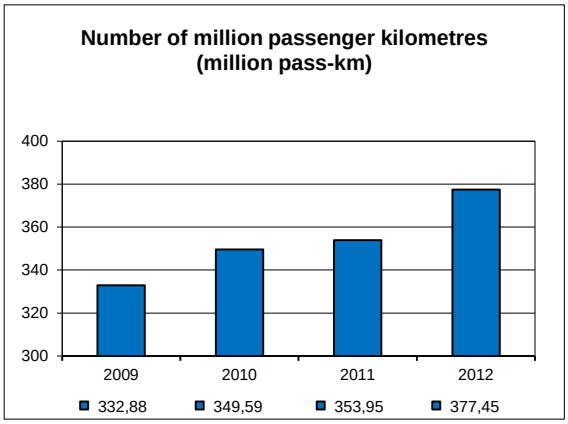
Reference information

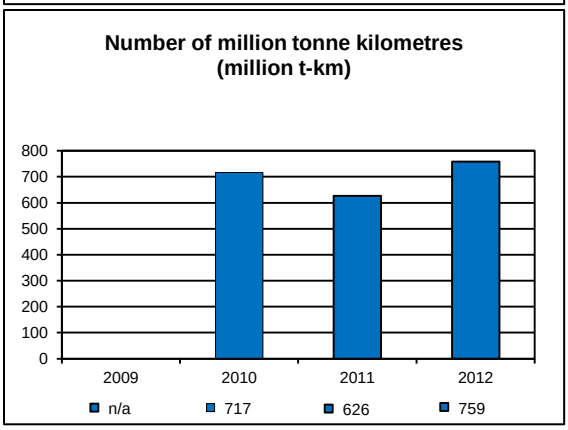
Reference documents 2012	
Number of million train kilometres (million train-km)	8.75
Number of million passenger train kilometres (pass train-km)	7.96
Number of million freight train kilometres (million fr train-km)	0.71
Number of million other train kilometres (million o.train km)	0.08
Number of million passenger kilometres (million pass-km)	377.45
Number of million tonne kilometres (million t-km)	759









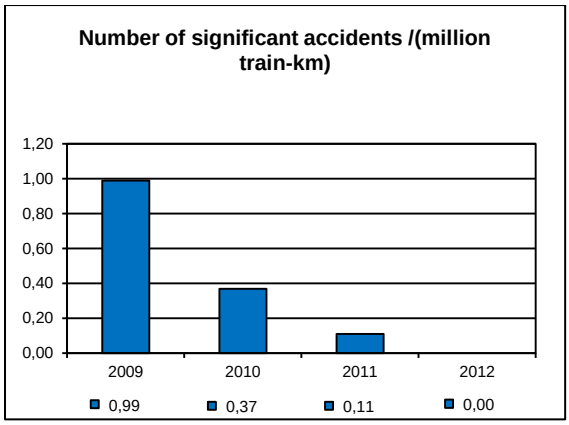


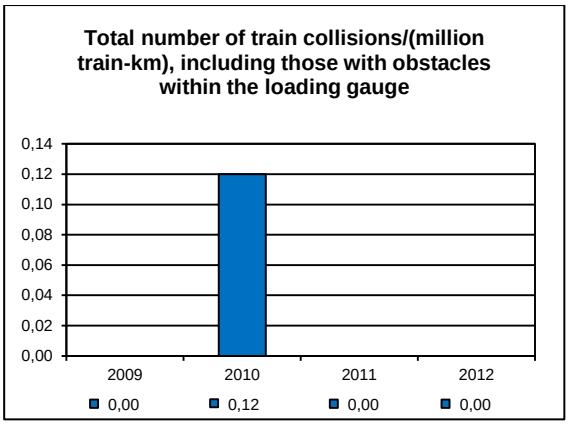
* For 2009, the number of tonne kilometres has not been communicated to ACF.

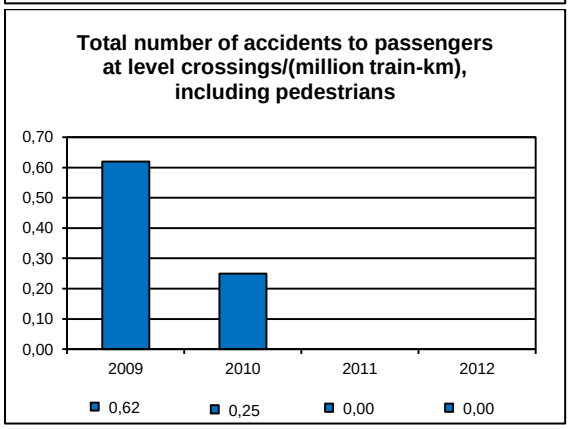
C.1.1 Indicators regarding accidents

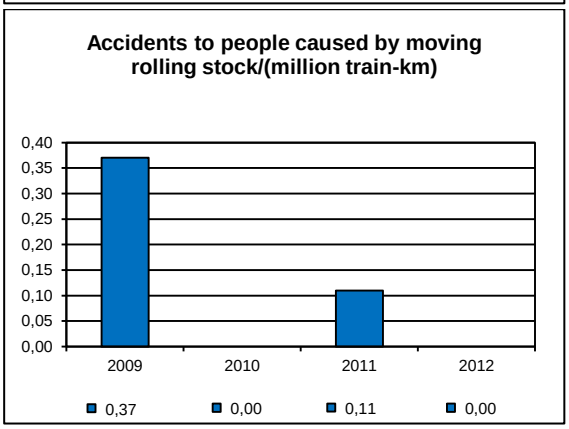
C.1.1.1 Total and number per million train kilometres (million train-km) of significant accidents and breakdown according to the types of accidents

Types of accident 2012	Number	Number per million train-km
Train collisions, including those with obstacles within the loading gauge	0	0.00
Derailments of trains	0	0.00
Accidents at level crossings, including pedestrians	0	0.00
Accidents to persons caused by moving rolling stock	0	0.00
Fires in rolling stock	0	0.00
Others	0	0.00
Total	0	0.00









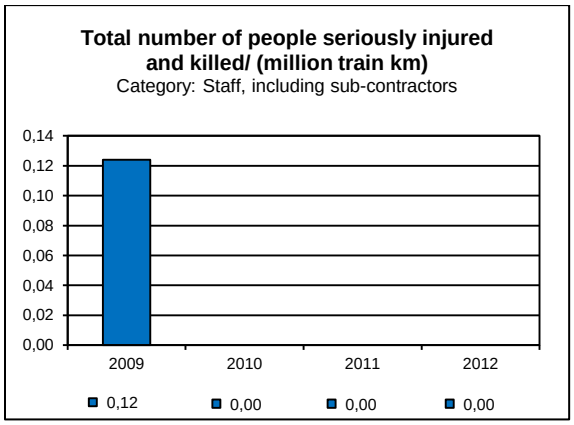
Nombre total d'accidents significatifs/(Mio km-train)	Number of significant accidents /(million train-km)
Nombre total de collisions de trains//(Mio km-train), y compris avec obstacles à l'intérieur du gabarit	Total number of train collisions/(million train-km), including those with obstacles within the loading gauge
Nombre total d'accidents aux passages à niveau//(Mio km-train), y compris piétons	Total number of accidents to passengers at level crossings/(million train-km), including pedestrians
Nombre d'accidents de personnes causés par matériel roulant en mouvement//(Mio km-train)	Number of accidents to persons caused by moving rolling stock/(million train-km)

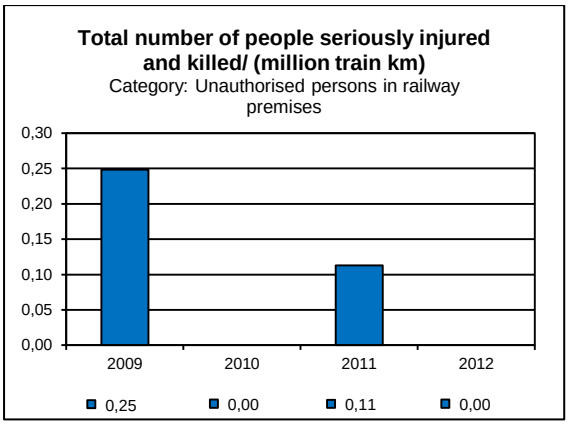
Since the first report was written in 2009 there has been no significant accident in the categories 'Derailment of trains' 'Fires on rolling stock' and 'Others'.

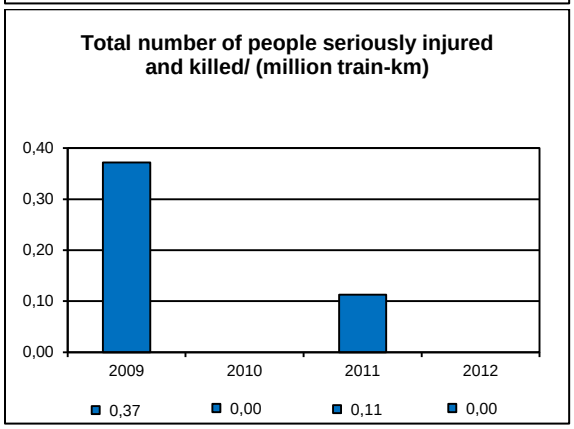
C.1.1.2 Total and number per million train kilometres (million train-km) of people seriously injured and people killed by types of person and by type of accident

Types of people 2012	Number	Number per million train-km	Number per million pass-km	Number per million pass-train-km
Passengers	0	0.00	0.00	0.00
Staff, including sub-contractors	0	0.00		
Users of level crossings	0	0.00		
Unauthorised persons in railway premises	0	0.00		
Others	0	0.00		
Total	0	0.00		

Number per million pass-km = number per million passenger-km
Number per million train-km = number per million passenger train-km







Nombre de personnes grièvement blessées et tués/(Mio km-t)	Total number of people seriously injured and killed/ (million train km)
Catégorie: Personnels, y compris sous-traitants	Category: Staff, including sub-contractors
Catégorie: Personnes non autorisées se trouvant dans les emprises ferroviaires	Category: Unauthorised persons railway premises
Nombre total de personnes grièvement blessées et tuées/(Mio km-t)	Total number of people seriously injured and killed/ (million train-km)

In 2012 nobody was reported to be seriously injured or killed.

C.1.2 Indicators relating to dangerous goods

Total and number per million train kilometres (million train-km) of accidents during the carriage of dangerous goods

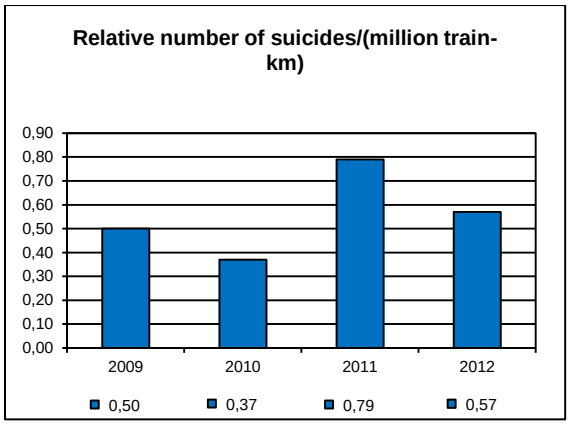
Accidents with dangerous goods 2012	Number	Number per million train-km
Accidents implicating at least one railway vehicle carrying dangerous goods	0	0.00
Accidents of this type involving the release of dangerous substances	0	0.00
Total	0	0.00

Since the first annual report in 2009, no accident has been reported during the transport of dangerous goods.

C.1.3 Indicators regarding suicides

Total and number of suicides per million train kilometres (million train-km)

Suicides 2012	Number	Number per million train-km
Total	5	0.57

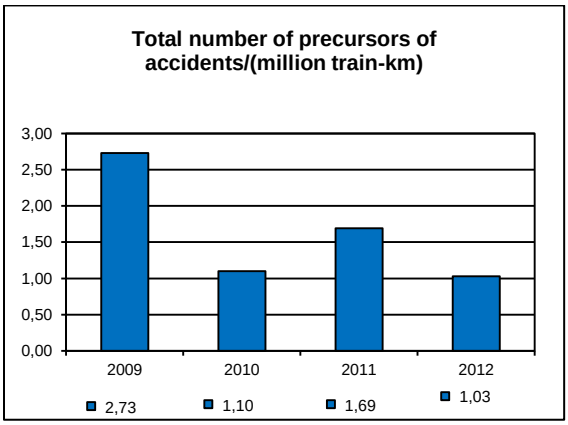


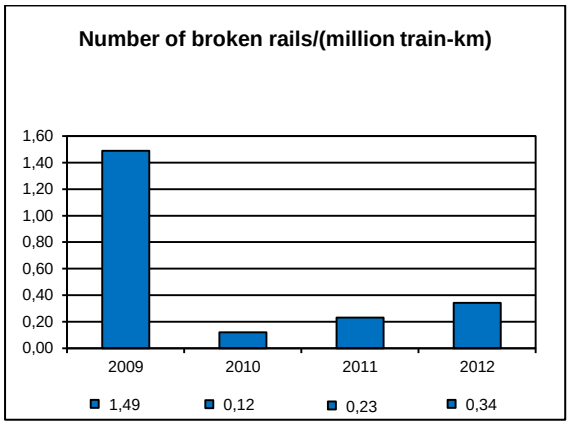
Nombre relatif de suicide/(Mio km-train)	Relative number of suicides/(million train-km)

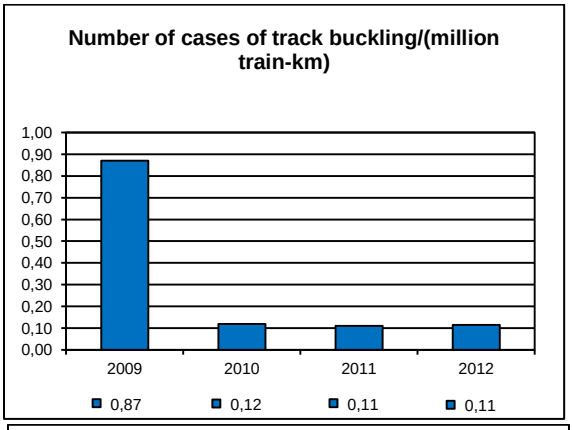
C.1.4 Indicators regarding the precursors of accidents

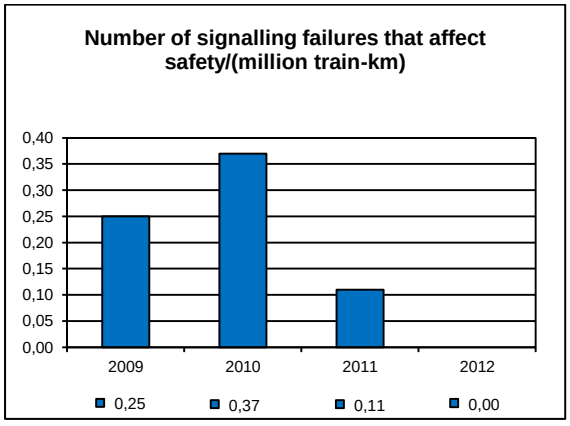
Total and number of precursors per million train kilometres (million train-km) and by type of precursor

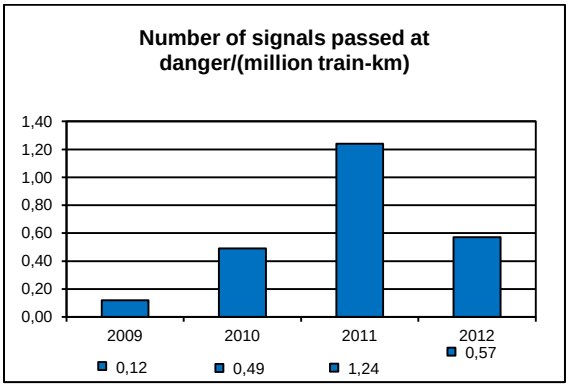
Types of precursor	Number	Number per million train-km
Broken rails	3	0.34
Cases of track buckling	1	0.11
Signalling failures that affected safety	0	0.00
Signals at danger passed without authorisation	5	0.57
Broken wheels and axles of rolling stock in service	0	0.00
Total	9	1.03











Nombre total des précurseurs d'accidents//(Mio km-train)	Total number of precursors of accidents/(million train-km)
Nombre de ruptures de rail /(Mio km-train)	Number of broken rails/(million train-km)
Nombre de gauchissements de la voie//(Mio km-train)	Number of cases of track buckling/(million train-km)
Nombre de pannes de signalisation contraires à la sécurité//(Mio km-train)	Number of signalling failures that affect safety/(million train-km)

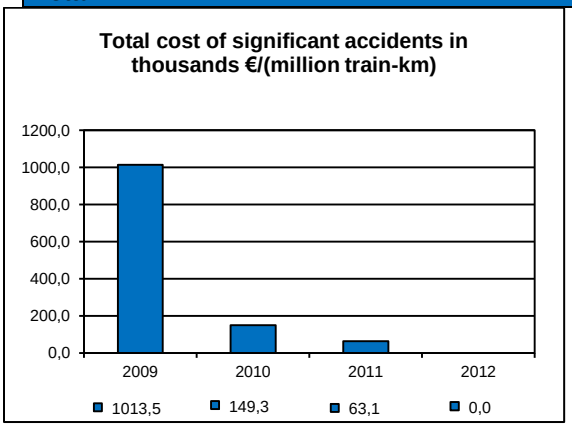
Nombre de signaux fermés franchis sans autorisation//(Mio km-train)	Number of signals passed at danger/(million train-km)

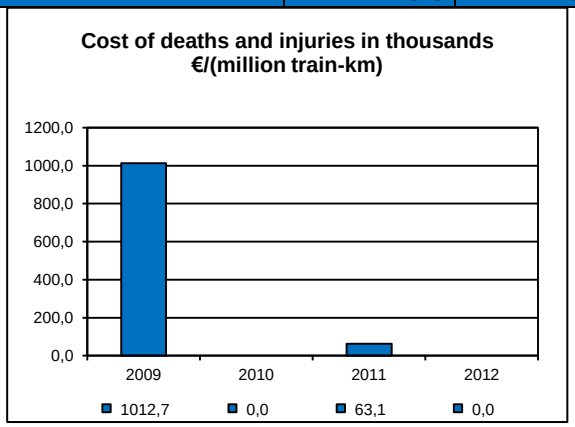
Since the first annual report was produced in 2009, no fractured wheels and wheelsets have been found on rolling stock in service. Reduction in the number of signals passed at danger in 2012 compared with 2011.

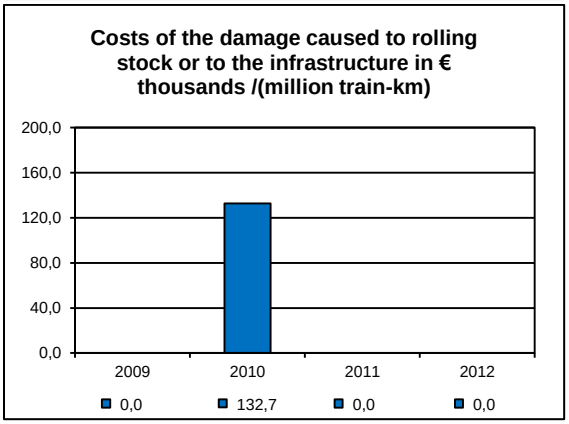
C.1.5 Indicators regarding the economic aspects of accidents

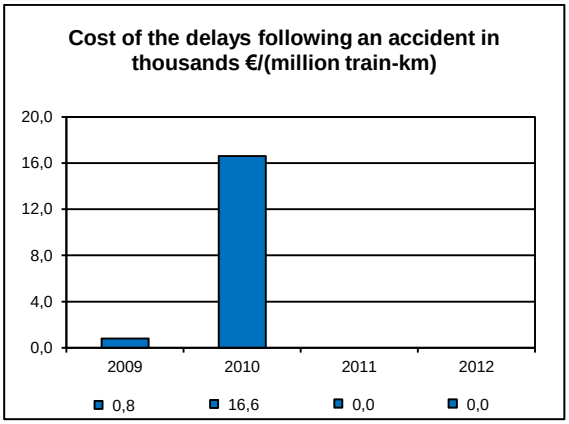
Total and cost per million train kilometres (million train-km) in euro and by type of cost.

Types of cost	€ thousands	€ thousands per million train-km
Number of deaths and serious injuries multiplied by the value of prevention of a death or serious injury.	0.0	0.0
Costs and damage caused to the environment	0.0	0.0
Costs of the damage caused to rolling stock or to the infrastructure	0.0	0.0
Signals at danger passed without authorisation	0.0	0.0
Costs of delays following accidents	0.0	0.0
Total	0.0	0.0









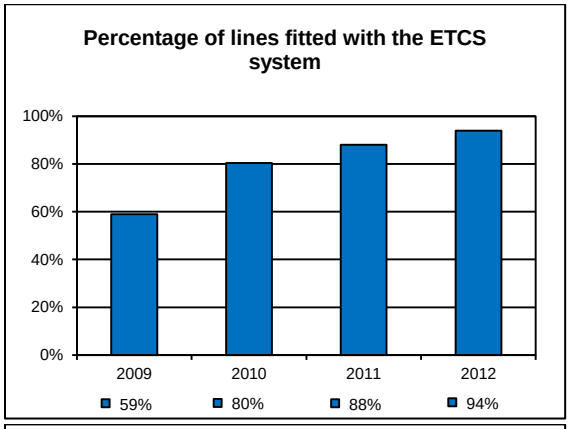
Coût total des accidents significatifs en milliers€/(Mio km-train)	Total cost of significant accidents in thousands €/(million train-km)
Coût des décès et blessés en milliers€/(Mio km-train)	Cost of deaths and injuries in thousands €/(million train-km)
Coût des dommages matériels causés au matériel roulant ou à l'infrastruc. en milliers€/(Mio km-train)	Costs of the damage caused to rolling stock or to the infrastructure in € thousands /(million train-km)
Coût des retards à la suite d'un accident en milliers€/(Mio km-train)	Costs of delays due to an accident in € thousands/(million train km)

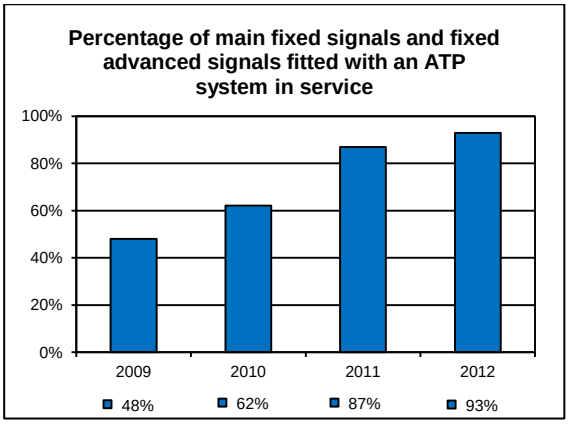
Note: In 2009 the part for the workers was chosen at 10% and that for the non-workers at 90% for the timetable periods in which the accidents occurred. Now, by analogy with the rules of the Association d'Assurance Accidents (AAA) [Association of Accident Insurers] on Health and Safety at Work, people returning from their work are subject to the legislation for accidents during a journey and should therefore, also be considered as workers. Consequently the division has been taken over the whole day by applying the rule laid down by AAA which applies a rate of 70% of workers and 30% of non-workers. Students travelling by rail have been counted as workers.

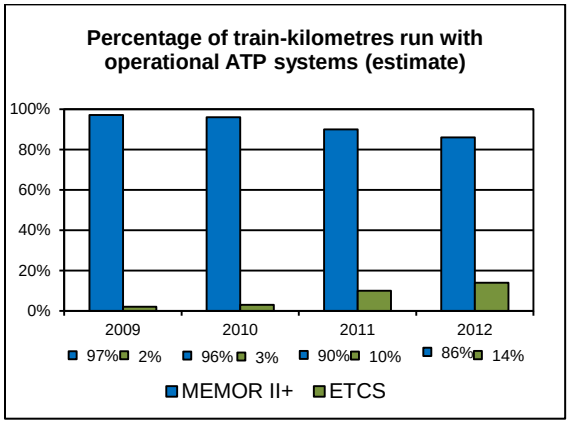
C.1.6 Indicators relative to technical safety of the infrastructure and its implementation

C.1.6.1 System of Automatic Train Protection (ATP)

2012 indicators	MEMOR II+	ETCS
Percentage of tracks fitted with an ATP system in service	100%	94%
Percentage of main fixed signals and fixed advanced signals fitted with an ATP system in service	100%	93%
Percentage of train-kilometres run with operational ATP systems (estimate)	86%	14%







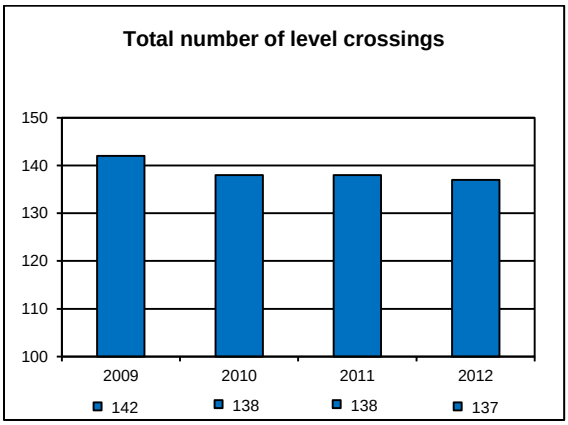
Pourcentage des voies dotées du système ETCS	Percentage of lines fitted with the ETCS system
Pourcentage des signaux fixes principaux et fixes avancés dotés du système ETCS	Percentage of main fixed signals and fixed advanced signals fitted with an ATP system in service
Pourcentage des kilomètres-train parcouru avec systèmes PAT opérationnels (estimation)	Percentage of train-kilometres run with operational ATP systems (estimate)

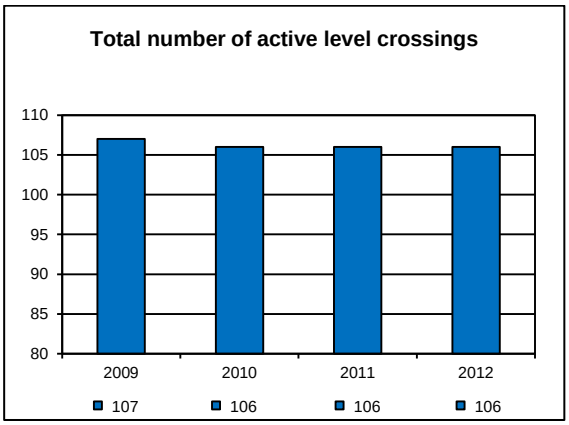
C.1.6.2 Number of level crossings (total, per line-kilometre and track kilometre) and by type of level crossing

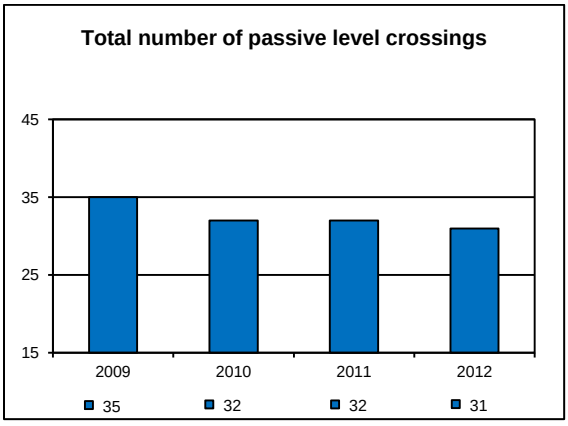
a) Active level crossings by type	Number	by km of line (275 km)	by km of track (621 km)
i) Automatic warning on the user's side	3	0.0109	0.0048
ii) Automatic protection on the user's side	0	0.0000	0.0000
iii) Automatic protection and warning on the user's side	82	0.2982	0.1320
iv) Automatic protection and warning on the user's side and protection on the rail side	0	0.0000	0.0000
v) Manual warning on the user's side	18	0.0655	0.0290
vi) Manual protection on the user's side	2	0.0073	0.0032
vii) Manual protection and warning on the user's side	1	0.0036	0.0016
Total	106	0.3855	0.1706

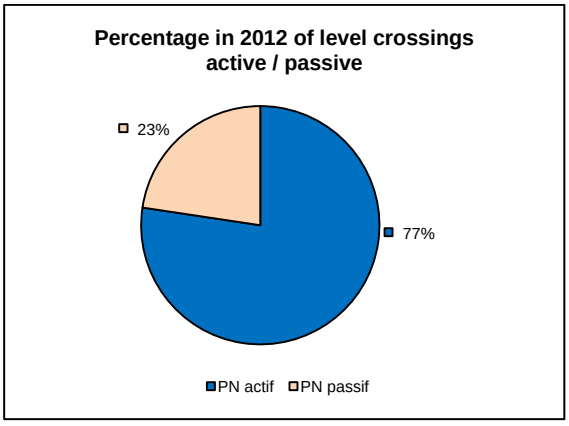
b) Passive level crossings	Number	by km of line (275 km)	by km of track (621 km)
Total	31	0.1127	0.0499

a) Active and passive level crossings	Number	by km of line (275 km)	by km of track (621 km)
Total	137	0.4982	0.2206









Nombre total de passages à niveau	Total number of level crossings
Nombre total de passages à niveau actifs	Total number of active level crossings
Nombre total de passages à niveau passifs	Total number of passive level crossings
Pourcentage 2012 passages à niveau actifs/passifs	Percentage in 2012 of level crossings active / passive

C.1.7 Indicators regarding safety management

Internal audits carried out by the Infrastructure Managers and railway undertakings, such as are defined in the documentation of the system of safety management. Total number of audits carried out and percentage of the audits required (and/or planned).

Internal audits 2012	CFL/IM	CFL/RU	CFL cargo	SNCF	Total
Number planned	42	213	146	0	401
Number carried out	36	213	146	0	395
Percentage of those planned carried out	86%	100%	100%		99%

C.2. Definitions used in the annual report

The common safety indicators supplied and the definitions used in this report are as given in Annex 1 and the Annex to Directive 2004/49/EC as amended by Directive 2009/149/EC of 27 November 2009.

C.3. Abbreviations

ACF	Luxembourg Railway Administration
AET	Administration for Technical Investigations
ANS	National Safety Authority
CFL/GI	CFL Infrastructure Manager
CFL/EF	CFL Railway undertaking
OM	Operations Manager
CDs	*Contrôle de Dégagement simple* [Simple check of release]
BEA-TT	Land Transport Accident Investigation Bureau (France)
EF	Railway undertaking (RU)
ERA	European Railway Agency (*Agence ferroviaire européenne*)
ETCS	European Train Control System
IM	Infrastructure Manager
IPCS	*Installations Permanentes de ContreSens* [Permanent reverse running installations]
CSI	Common Safety Indicator
MDDI	Ministry of Sustainable Development and Infrastructure
MEMOR II+	System to assist drivers, improvement of the crocodile system
Mémorial	The Official Journal of the Grand-Duchy
MR	Rolling stock
ATP	System of Automatic Train Protection
PD	*Poste Directeur* [Major signal box]
PDC	*Poste Directeur Centralisé* [Centralised traffic control centre]
LC	Level crossing
GDR	Grand Duchy regulation
GRO	General Regulations for Technical Operation
RNE	RailNetEurope
SAAT	*Système d'Annonce Automatique des Trains* [SNCF Automatic Train Announcement System]
SNCB	*Société Nationale des Chemins de fer Belges* [Belgian National Railways]
SNCF	*Société Nationale des Chemins de fer Français* [French National Railways]
SFP	*Signal Fixe Principal* [Fixed main signal]
SFVb	*Signal fixe de barrage* [Fixed shunting signal]
TSI	Technical Specification for Interoperability
TCO	*Tableau de Contrôle Optique* [Optical control panel]

Annex D: Important amendments to the legislation and the regulations

	Reference text Legal/regulatory	Date of entry into force	Reason for the introduction (state whether it is a new law or an amendment of the existing legislation)	Description
Legislation on railway safety and railway infrastructure	No new legal text			
Legislation on railway interoperability	No new legal text			
Legislation on certification of train drivers	No new legal text			
Rules regarding the objectives and methods of existing national safety .	No new legal text			
Rules regarding the requirements applicable to the management systems for safety and the safety certification of the railway undertakings	No new text			
Common rules of railway operation which are not yet covered by TSIs including the rules regarding the signalling system and traffic management.	CFL-DB Netz frontier instructions	1 November 2012	Amendment of the frontier instructions	Amendment of Annex No 1 (Regulation of the local details on the frontier section Igel - Wasserbillig) and revision of Annex No 3 (Common interfaces for RUs)

	Reference text Legal/regulatory	Date of entry into force	Reason for the introduction (state whether it is a new law or an amendment of the existing legislation)	Description
	CFL-Infrabel frontier instructions Frontier point Bellain (CFL-GI) – Gouvy (Infrabel)	30 November 2012	Amendment of the frontier instructions	New issue of the frontier instruction following the taking over of the Gouvy installations by the Block post 45 Liège
	General Regulations for Technical Operation (GRO) Amendment No 1 to Part 01	10 September 2012	Amendments to the arrangements of clause 4.8 of the Document de Référence du Réseau (DRR) System reference document	Cancelling the order of priority of trains
	General Regulations for Technical Operation (GRO) Amendment No 1 to Part 07	10 September 2012	Amendment of the arrangements of Clause 4.8 of the DRR	New order of priority given to trains by ACF
	General Regulations for Technical Operation (GRO) Amendment No 1 to Part 08	10 September 2012	Item 4.2.2.6.1 of the TSI 'Operating and Traffic Management' introduced by decision 2011/314/EU of the EC	Withdrawal of the general rule of drift braking
	General Regulations for Technical Operation (GRO) Amendment No 1 to Part 09	10 September 2012	Item 4.2.2.6.1 of the TSI 'Operating and Traffic Management' introduced by decision 2011/314/EU of the EC	Withdrawal of the general rule of drift braking
	General Regulations for Technical Operation (GRO) Amendment No 2 to Part 07	18 December 2012	Request by an RU to amend the rules of braking and of composition with the object of standardising the international rules in order to facilitate railway interoperability	Composition of freight trains
Common rules of railway operation which are not yet covered by TSIs, including rules regarding the signalling system and traffic management.	General Regulations for Technical Operation (GRO) Amendment No 2 to Part 08	18 December 2012	Request by an RU to amend the rules of braking and of composition with the object of standardising the international rules in order to facilitate railway interoperability	Amendment of the rules of braking

	Reference text Legal/regulatory	Date of entry into force	Reason for the introduction (state whether it is a new law or an amendment of the existing legislation)	Description
	General Regulations for Technical Operation (GRO) Annex I, 2012 edition -Additional information and details of application regarding the provisions of the GRO.	1 November 2012 1 November 2012 8 November 2012	New 2012 edition which replaces and supersedes the 2009 edition Issue of opinion 77866 Issue of opinion 78288	Doubling of line 7 and other amendments and adjustments
	Service Instruction No 99 (Methodology of communication)	25 May 2012	Cancels and replaces the CSI Vex/MT of N° 99 of 7 June 2012	
Rules defining the requirements applicable to additional internal rules (statutes of the company) which must be prepared by the Infrastructure Managers and the railway undertakings	No new text			
Rules concerning the requirements applicable to the staff who carry out critical safety tasks, including the selection criteria, the state of health, the professional training and the certification, if they are not yet covered by a TSI.	No new text			
Rules relating to the investigations into accidents and incidents	Note QSE-04122012.a of 4 December 2012 concerning RGO 11 and the Grand-Duchy Regulation of 7 November 2008	1 January 2013	Repeal of the note GR 04/0410 of 31 May 2010	Creation of a form 'Notification of railway incident/accident' by the Technical Investigation Department

Annex E: Changes in the certification and safety authorisation – Numerical information

E.1 Safety certificates issued in accordance with Directive 2001/14/EC

Number of certificates held in 2012 by railway undertakings that had a licence issued	by the Grand-Duchy of Luxembourg	0
	by another member State	0

E.2 Safety certificates issued in accordance with Directive 2004/49/EC

		New	Updated / amended	Renewed
E.2.1. Number of valid **Part A** certificates held in 2012 by railway undertakings registered	in the Grand Duchy of Luxembourg	0	0	2 (LU)
	by another member State	0	0	0

		New	Updated / amended	Renewed
E.2.2. Number of valid **Part B** certificates held in 2012 by railway undertakings registered	in the Grand Duchy of Luxembourg	0	0	2 (LU)
	by another member State	0	1 (LU)	0

			A	R	I
E.2.3. Number of applications for **Part A** certificates submitted in 2012 by registered railway undertakings	in the Grand-Duchy of Luxembourg	New certificates	0	0	0
		Certificates revised / amended	0	0	0
		Certificates renewed	0	0	0
	by another member State	New certificates	0	0	0
		Certificates revised / amended	0	0	0
		Certificates renewed	0	0	0

			A	R	I
E.2.4. Number of applications for **Part B** certificates submitted in 2012 by registered railway undertakings	in the Grand-Duchy of Luxembourg	New certificates	0	0	0
		Certificates revised / amended	0	0	0
		Certificates renewed		0	0
	by another member State	New certificates	0	0	1*
		Certificates revised / amended		0	0
		Certificates renewed	0	0	0

A = Request accepted, the certificate is already issued.
R = Request refused no certificate has been issued.
I = The matter is still under consideration, no certificate has yet been issued.
* = application submitted in 2011

E.2.5. List of countries where the RUs applying for a Part B certificate in your Member State have already obtained their safety certificate Part A.
Luxembourg France Belgium

E.3. Safety authorisations issued in accordance with Directive 2004/49/EC

	New	Updated / amended	Renewed
E.3.1. Number of valid safety authorisations held in 2012 by Infrastructure Managers registered in the Grand-Duchy of Luxembourg	1	0	0

		A	R	I
E.3.2. Number of requests for safety authorisations submitted in 2012 by Infrastructure Managers registered in the Grand-Duchy of Luxembourg	New authorisations	1*	0	0
	Authorisation revised / amended	0	0	0
	Authorisations renewed	0	0	1

A = Request accepted, the authorisation is already issued.
R = Request refused, no authorisation has been issued.
I = The matter is still under consideration, no authorisation has yet been issued.
* = application for authorisation submitted in 2011

E.4. Procedural aspects – Part A safety certificates

		New	Updated / amended	Renewed
Mean time between receipt of the application (after receipt of all the necessary information) and the final issue of a **Part A** safety certificate in 2012 for RUs holding a	licence issued by the Grand Duchy of Luxembourg			
	licence issued by another member State			

No Certificate A issued in 2012

E.5. Procedural aspects – Part B safety certificates

		New	Updated / amended	Renewed
Mean time between receipt of an application (after receipt of all the necessary information) and the final issue of a **Part B** safety certificate in 2012 for RUs holding a	licence issued by the Grand-Duchy of Luxembourg			
	licence issued by another member State			

No B certificate issued in 2012

E.6. Procedural aspects - Safety authorisations

		New	Updated / amended	Renewed
Mean time between receipt of an application (after receipt of all the necessary information) and the final issue of a safety authorisation in 2012 for the infrastructure managers*	registered in the Grand-Duchy of Luxembourg			
	registered in another member State			

* = the preparation of a single authorisation does not enable a mean delay to be given