

## Summaries of EU Legislation

Text Document information

Collapse all | Expand all

## Title and reference

Railway safety

Summaries of EU legislation: direct access to the main summaries page.

## Languages and formats available

HTML BG ES CS DA DE ET EL EN FR GA HR IT LV LT HU MT NL PL PT RO SK SL FI SV

## Multilingual display

Language 1  Language 2  Language 3  Display

## Text

## Railway safety

While the safety level of rail transport in the European Union (EU) is generally very good, particularly in comparison with its main competitor, road transport. This Directive aims to establish a more competitive and safer railway system which covers the entire European market instead of confining itself mainly to national markets.

### ACT

Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification [See amending act(s)].

### SUMMARY

The Directive applies to the railway system of the Member States and covers safety requirements for the system as a whole, including infrastructure and traffic management, and the interaction between railway undertakings and infrastructure managers.

In this connection, the Directive focuses on four major aspects:

- the setting up, in each Member State, of an authority responsible for supervising safety;
- the mutual recognition of safety certificates delivered in the Member States;
- the establishment of common safety indicators (CSIs) in order to assess that the system complies with the common safety targets (CSTs) and facilitate the monitoring of railway safety performance;
- the definition of common rules for safety investigations.

#### Development and management of safety

Safety rules and standards, such as operating rules, signalling rules, requirements on staff and technical requirements applicable to rolling stock have been devised mainly nationally.

These national safety rules, should gradually be replaced by rules based on common standards, established by technical specifications for interoperability (TSIs). The Commission has the power to suspend the implementation of a national safety rule for a maximum of six months.

In this connection, the Member States will ensure that:

- railway safety is generally maintained and continuously improved, taking into consideration the development of European legislation;
- safety rules are laid down, applied and enforced in an open and non-discriminatory manner;
- responsibility for the safe operation of the railway system and the control of risks associated with it is borne by the infrastructure managers and railway undertakings;

- information is collected on common safety indicators through annual reports in order to assess the achievement of the CSTs and monitor the general development of railway safety.

In order to coordinate the different rules, a distinction must be drawn between two sets of actors:

- infrastructure managers, which are bodies or companies responsible, in particular for establishing, building and maintaining infrastructure or a part of it, and safety. In some Member States, however, safety may be delegated to railway undertakings.
- Railway undertakings, which are public or private undertakings engaged in the supply of goods and/or passenger transport services by rail.

#### Safety certification

In order to be granted access to the railway infrastructure, a railway undertaking must hold a safety certificate. This safety certificate may cover the whole railway network of a Member State or only a defined part thereof.

For **international transport services** it should be enough to approve the safety management system in one Member State and give the approval European validity.

Adherence to **national laws** on the other hands should be subject to additional certification in each Member State.

The safety certificate must be renewed upon application by the railway undertaking at intervals not exceeding five years. It must be wholly or partly updated whenever the type or extent of the operation is substantially altered.

A railway undertaking applying for authorisation to **place rolling stock in service in another Member State** will submit a technical file concerning the rolling stock or type of rolling stock to the relevant safety authority, indicating its intended use on the network.

In addition to the safety requirements laid down in the certificate, licensed railway undertakings must comply with national requirements, compatible with European law and applied in a non-discriminatory manner, relating to health, safety and social conditions, including legal provisions relating to driving time, and the **rights of workers and consumers**.

An essential aspect of safety is the training and certification of staff, particularly of train drivers. The training covers operating rules, the signalling system, the knowledge of routes and emergency procedures.

#### Maintenance of vehicles

Before it is placed in service or used on the network, each vehicle is assigned a maintenance entity (which may be, in particular, a railway undertaking or an infrastructure manager). The entity ensures the working order of vehicles by introducing a system of maintenance in accordance with the vehicle's maintenance book and the applicable safety requirements.

#### National safety authority

Each Member State must establish a safety authority which is independent from railway undertakings, infrastructure managers, applicants for certificates and procurement entities. It will respond promptly to requests and applications, communicate its requests for information without delay and adopt all its decisions within four months after all requested information has been provided.

The safety authority will carry out all inspections and investigations that are needed for the accomplishment of its tasks and be granted access to all relevant documents and to premises, installations and equipment of infrastructure managers and railway undertakings.

#### Accident and incident investigations

Serious train accidents, such as derailments and collisions with fatal consequences, occur rarely, but when they do they attract public interest and the interest of safety professionals all over Europe.

Criteria governing the independence of the **investigating body** are strictly defined so that this body has no link with the various actors of the sector. This body decides whether or not an investigation of such an accident or incident should be undertaken, and determines the extent of investigations and the procedure to be followed.

Each Member State must ensure that investigations of accidents and incidents are conducted by a permanent body, which comprises at least one investigator able to perform the function of investigator-in-charge in the event of an accident or incident.

#### References

Act	Entry into force	Deadline for transposition in the Member States	Official Journal
Directive 2004/49/EC	30.4.2004	30.4.2006	OJ L 164 of 30.4.2004
Amending act(s)	Entry into force	Deadline for transposition in the Member States	Official Journal
Directive 2008/110/EC	24.12.2008	24.12.2010	OJ L 345 of 23.12.2008

The successive amendments and corrigenda to Directive 2004/49/CE been incorporated into the original text. This consolidated version is of mere documentary value.

## RELATED ACTS

**Directive 2008/57/EC of 17 June 2008 of the European Parliament and of the Council on the interoperability of the rail system within the Community (Text with EEA relevance).** This Directive lays down the provisions relating to authorisations for placing in service of railway vehicles. This text recasts Directive 2001/16/EC on the interoperability of the trans-European conventional rail system and Directive 96/48/EC on the interoperability of the trans-European high speed rail system.

The procedures for authorisations for placing in service were previously regulated by Directive 96/48/EC (for the new or renewed parts of the rail system) and by Directive 2004/49/EC (concerning vehicles already in service).

Commission Regulation (EC) 653/2007 of 13 June 2007 on the use of a common European format for safety certificates and application documents in accordance with Article 10 of Directive 2004/49/EC of the European Parliament and of the Council and on the validity of safety certificates delivered under Directive 2001/14/EC (Text with EEA relevance).

Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (Text with EEA relevance).

Last updated: 10.06.2011

Top





**DIRECTIVE 2004/49/EC**  
**OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**  
**of 29 April 2004**

on safety on the Community's railways and amending  
Council Directive 95/18/EC on the licensing of railway undertakings and  
Directive 2001/14/EC on the allocation of railway infrastructure capacity  
and the levying of charges for the use of railway infrastructure and safety certification  
(Railway Safety Directive)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 71(1) thereof,

Having regard to the proposal from the Commission <sup>1</sup>,

Having regard to the Opinion of the European Economic and Social Committee <sup>2</sup>,

Having regard to the Opinion of the Committee of the Regions <sup>3</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>4</sup>, in the light of the joint text approved by the Conciliation Committee on 23 March 2004,

---

<sup>1</sup> OJ C 126 E, 28.5.2002, p. 332.

<sup>2</sup> OJ C 61, 14.3.2003, p. 131.

<sup>3</sup> OJ C 66, 19.3.2003, p. 5.

<sup>4</sup> Opinion of the European Parliament of 14 January 2003 (OJ C 38 E, 12.2.2004, p. 92), Council Common Position of 26 June 2003 OJ C 270 E, 11.11.2003, p. 25) and Position of the European Parliament of 23 October 2003 (not yet published in the Official Journal). Legislative Resolution of the European Parliament of 22 April 2004 and Council Decision of 26 April 2004.

Whereas:

- (1) In order to pursue efforts to establish a single market for rail transport services, initiated by Council Directive 91/440/EEC of 29 July 1991 on the development of the Community's railways <sup>1</sup>, it is necessary to establish a common regulatory framework for railway safety. Member States have until now developed their safety rules and standards mainly on national lines, based on national technical and operational concepts. Simultaneously, differences in principles, approach and culture have made it difficult to break through the technical barriers and establish international transport operations.
- (2) Directive 91/440/EEC, Council Directive 95/18/EC of 19 June 1995 on the licensing of railway undertakings <sup>2</sup> and Directive 2001/14/EC of the European Parliament and of the Council of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification <sup>3</sup> provide the first steps towards regulation of the European rail transport market by opening the market for international rail freight services. However, the provisions on safety have proved to be insufficient and differences between safety requirements remain, which affect the optimum functioning of rail transport in the Community. It is of particular importance to harmonise the content of safety rules, safety certification of railway undertakings, the tasks and roles of the safety authorities and the investigation of accidents.

---

<sup>1</sup> OJ L 237, 24.8.1991, p. 25. Directive as amended by Directive 2001/12/EC of the European Parliament and of the Council (OJ L 75, 15.3.2001, p. 1).

<sup>2</sup> OJ L 143, 27.6.1995, p. 70. Directive as amended by Directive 2001/13/EC of the European Parliament and of the Council (OJ L 75, 15.3.2001, p. 26).

<sup>3</sup> OJ L 75, 15.3.2001, p. 29. Directive as amended by Commission Decision 2002/844/EC (OJ L 289, 26.10.2002, p. 30).

- 
- (3) Metros, trams and other light rail systems are in many Member States subject to local or regional safety rules and are often supervised by local or regional authorities and not covered by the requirements on Community interoperability or licensing. Trams are furthermore often subject to road safety legislation and could therefore not be fully covered by railway safety rules. For these reasons and in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty, Member States should be allowed to exclude such local rail systems from the scope of this Directive.
- (4) Safety levels in the Community rail system are generally high, in particular compared to road transport. It is important that safety is at the very least maintained during the current restructuring phase, which will separate functions of previously integrated railway companies and move the railway sector further from self-regulation to public regulation. In line with technical and scientific progress, safety should be further improved, when reasonably practicable and taking into account the competitiveness of the rail transport mode.
- (5) All those operating the railway system, infrastructure managers and railway undertakings, should bear the full responsibility for the safety of the system, each for their own part. Whenever it is appropriate, they should cooperate in implementing risk control measures. Member States should make a clear distinction between this immediate responsibility for safety and the safety authorities' task of providing a national regulatory framework and supervising the performance of the operators.

- 
- (6) The responsibility of infrastructure managers and railway undertakings for operating the railway system does not preclude other actors such as manufacturers, maintenance suppliers, wagon keepers, service providers and procurement entities from assuming responsibility for their products or services in accordance with the provisions of Council Directive 96/48/EC of 23 July 1996 on the interoperability of the trans-European high-speed rail system <sup>1</sup> and of Directive 2001/16/EC of the European Parliament and of the Council of 19 March 2001 on the interoperability of the trans-European conventional rail system <sup>2</sup> or of other relevant Community legislation.
- (7) Requirements on safety of the subsystems of the trans-European rail networks are laid down in Directive 96/48/EC and Directive 2001/16/EC. However, those Directives do not define common requirements at system level and do not deal in detail with the regulation, management and supervision of safety. When minimum safety levels of the subsystems are defined by technical specifications for interoperability (TSIs) it will be increasingly important to establish safety targets at the system level as well.
- (8) Common safety targets (CSTs) and common safety methods (CSMs) should be gradually introduced to ensure that a high level of safety is maintained and, when and where necessary and reasonably practicable, improved. They should provide tools for assessment of the safety level and the performance of the operators at Community level as well as in the Member States.

---

<sup>1</sup> OJ L 235, 17.9.1996, p. 6.

<sup>2</sup> OJ L 110, 20.4.2001, p. 1.

- 
- (9) Information on safety of the railway system is scarce and not generally publicly available. It is thus necessary to establish common safety indicators (CSIs) in order to assess that the system complies with the CSTs and to facilitate the monitoring of railway safety performance. However, national definitions relating to the CSIs may apply during a transitional period and due account should therefore be taken of the extent of the development of common definitions of the CSIs when the first set of CSTs is drafted.
- (10) National safety rules, which are often based on national technical standards, should gradually be replaced by rules based on common standards, established by TSIs. The introduction of new specific national rules which are not based on such common standards should be kept to a minimum. New national rules should be in line with Community legislation and facilitate migration towards a common approach to railway safety. All interested parties should therefore be consulted before a Member State adopts a national safety rule that requires a higher safety level than the CSTs. In such cases the new draft rule should be subject to examination by the Commission, which should adopt a Decision if it appears that the draft rule is not in conformity with Community legislation or constitutes a means of arbitrary discrimination or a disguised restriction on rail transport operation between Member States.
- (11) The current situation, in which national safety rules continue to play a role, should be regarded as a transitional stage, leading ultimately to a situation in which European rules will apply.

- (12) The development of CSTs, CSMs and CSIs as well as the need to facilitate progress towards a common approach to railway safety requires technical support at Community level. The European Railway Agency established by Regulation (EC) No / of the European Parliament and of the Council <sup>1</sup> is set up to issue recommendations concerning CSTs, CSMs and CSIs and further harmonisation measures and to monitor the development of railway safety in the Community.
- (13) In carrying out their duties and fulfilling their responsibilities, infrastructure managers and railway undertakings should implement a safety management system, fulfilling Community requirements and containing common elements. Information on safety and the implementation of the safety management system should be submitted to the safety authority in the Member State concerned.
- (14) The safety management system should take into account the fact that Council Directive 89/391/EC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work <sup>2</sup> and its relevant individual directives are fully applicable to the protection of the health and safety of workers engaged in railway transport. The safety management system should also take account of Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail <sup>3</sup>.

---

<sup>1</sup> OJ L

<sup>2</sup> OJ L 183, 29.6.1989, p. 1.

<sup>3</sup> OJ L 235, 17.9.1996, p. 25. Directive as last amended by Commission Directive 2003/29/EC (OJ L 90, 8.4.2003, p. 47).

- 
- (15) To ensure a high level of railway safety and equal conditions for all railway undertakings, they should be subject to the same safety requirements. The safety certificate should give evidence that the railway undertaking has established its safety management system and is able to comply with the relevant safety standards and rules. For international transport services it should be enough to approve the safety management system in one Member State and give the approval Community validity. Adherence to national rules on the other hand should be subject to additional certification in each Member State. The ultimate aim should be to establish a common safety certificate with Community validity.
- (16) In addition to the safety requirements laid down in the safety certificate, licensed railway undertakings must comply with national requirements, compatible with Community law and applied in a non-discriminatory manner, relating to health, safety and social conditions, including legal provisions relating to driving time, and the rights of workers and consumers as provided for in Articles 6 and 12 of Directive 95/18/EC.
- (17) Every infrastructure manager has a key responsibility for the safe design, maintenance and operation of its rail network. In parallel to safety certification of railway undertakings the infrastructure manager should be subject to safety authorisation by the safety authority concerning its safety management system and other provisions to meet safety requirements.
- (18) Member States should make efforts to assist applicants wishing to enter the market as railway undertakings. In particular they should provide information and act promptly on requests for safety certification. For railway undertakings operating international transport services, it is important for the procedures to be similar in different Member States. Although the safety certificate will contain national parts for the foreseeable future, it should nevertheless be possible to harmonise the common parts of it and facilitate the creation of a common template.

- (19) Certification of train staff and authorisation of placing in service of in-use rolling stock for the different national networks are often insurmountable barriers to new entrants. Member States should ensure that facilities for the training and certification of train staff necessary to meet requirements under national rules are available to railway undertakings applying for a safety certificate. A common procedure should be established for authorisation of placing in service of in-use rolling stock.
- (20) Driving times and rest periods for train drivers and train staff performing safety tasks have an important impact on the safety level of the rail system. These aspects fall under Articles 137 to 139 of the Treaty and are already subject to negotiations between the social partners under the Sectoral Dialogue Committee set up in accordance with Commission Decision 98/500/EC<sup>1</sup>.
- (21) The development of a safe Community railway system requires the establishment of harmonised conditions for delivering the appropriate licences to train drivers and on-board accompanying staff performing safety tasks, for which the Commission has announced its intention to propose further legislation in the near future. As far as other staff charged with safety-critical tasks are concerned, their qualifications are already being specified under Directives 96/48/EC and 2001/16/EC.

---

<sup>1</sup> Commission Decision 98/500/EC of 20 May 1998 on the establishment of Sectoral Dialogue Committees promoting the Dialogue between the social partners at European level (OJ L 225, 12.8.1998, p. 27).



- 
- (22) As part of the new common regulatory framework for railway safety, national authorities should be set up in all Member States to regulate and supervise railway safety. To facilitate cooperation between them at Community level, they should be given the same minimum tasks and responsibilities. The national safety authorities should be granted a high degree of independence. They should carry out their tasks in an open and non-discriminatory way to help to create a single Community rail system and cooperate to coordinate their decision-making criteria, in particular concerning safety certification of railway undertakings operating international transport services.
- (23) Serious accidents on the railways are rare. However, they can have disastrous consequences and raise concern among the public about the safety performance of the railway system. All such accidents should, therefore, be investigated from a safety perspective to avoid recurrence and the results of the investigations should be made public. Other accidents and incidents could be significant precursors to serious accidents and should also be subject to safety investigations, when it is necessary.
- (24) A safety investigation should be kept separate from the judicial inquiry into the same incident and be granted access to evidence and witnesses. It should be carried out by a permanent body that is independent of the actors of the rail sector. The body should function in a way which avoids any conflict of interest and any possible involvement in the causes of the occurrences that are investigated; in particular, its functional independence should not be affected if it is closely linked to the national safety authority or regulator of railways for organisational and legal structure purposes. Its investigations should be carried out under as much openness as possible. For each occurrence the investigation body should establish the relevant investigation group with necessary expertise to find the immediate causes and underlying causes.

- (25) The reports on investigations and any findings and recommendations provide crucial information for the further improvement of railway safety and should be made publicly available at Community level. Safety recommendations should be acted upon by the addressees and actions reported back to the investigating body.
- (26) Since the objectives of the proposed action, namely to coordinate activities in the Member States to regulate and supervise safety and to investigate accidents and to establish at Community level common safety targets, common safety methods, common safety indicators and common requirements of safety certificates, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale of the action, be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.
- (27) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedure for the exercise of implementing powers conferred on the Commission <sup>1</sup>.

---

<sup>1</sup> OJ L 184, 17.7.1999, p. 23.

- (28) This Directive aims at reorganising and bringing together the relevant Community legislation on railway safety. Consequently, provisions for safety certification of railway undertakings that were previously set out in Directive 2001/14/EC should, together with all references to safety certification, be repealed. Directive 95/18/EC included requirements on safety qualifications of operational staff and on safety of rolling stock that are covered by the requirements on safety certification of this Directive and should therefore no longer be part of the licensing requirements. A licensed railway undertaking should hold a safety certificate in order to be granted access to the railway infrastructure.
- (29) The Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. Those penalties must be effective, proportionate and dissuasive,

HAVE ADOPTED THIS DIRECTIVE:



## CHAPTER II

## DEVELOPMENT AND MANAGEMENT OF SAFETY

Article 4

## Development and improvement of railway safety

1. Member States shall ensure that railway safety is generally maintained and, where reasonably practicable, continuously improved, taking into consideration the development of Community legislation and technical and scientific progress and giving priority to the prevention of serious accidents.

Member States shall ensure that safety rules are laid down, applied and enforced in an open and non-discriminatory manner, fostering the development of a single European rail transport system.

2. Member States shall ensure that measures to develop and improve railway safety take account of the need for a system-based approach.

3. Member States shall ensure that the responsibility for the safe operation of the railway system and the control of risks associated with it is laid upon the infrastructure managers and railway undertakings, obliging them to implement necessary risk control measures, where appropriate in cooperation with each other, to apply national safety rules and standards, and to establish safety management systems in accordance with this Directive.

Without prejudice to civil liability in accordance with the legal requirements of the Member States, each infrastructure manager and railway undertaking shall be made responsible for its part of the system and its safe operation, including supply of material and contracting of services, vis-à-vis users, customers, the workers concerned and third parties.

4. This shall be without prejudice to the responsibility of each manufacturer, maintenance supplier, wagon keeper, service provider and procurement entity to ensure that rolling stock, installations, accessories and equipment and services supplied by them comply with the requirements and the conditions for use specified, so that they can be safely put into operation by the railway undertaking and/or infrastructure manager.

### Article 5

#### Common safety indicators

1. In order to facilitate the assessment of the achievement of the CST and to provide for the monitoring of the general development of railway safety Member States shall collect information on common safety indicators (CSIs) through the annual reports of the safety authorities as referred to in Article 18.

The first reference year for the CSIs shall be --<sup>\*</sup>; they shall be reported on in the annual report the following year.

The CSIs shall be established as set out in Annex I.

---

<sup>\*</sup> Two years after the year of entry into force of this Directive.

**ANNEX I****Common Safety Indicators**

Common Safety Indicators to be reported by the safety authorities:

Indicators relating to activities referred to in Article 2(2), (a) and (b), should be accounted for separately, if they are submitted.

If new facts or errors are discovered after the submission of the report the indicators for one particular year shall be amended or corrected by the safety authority at the first convenient opportunity and at the latest in the next annual report.

For indicators relating to accidents under heading 1 below, Regulation (EC) No 91/2003 of the European Parliament and of the Council of 16 December 2002 on rail transport statistics <sup>1</sup> shall be applied as far as the information is available.

(1) Indicators relating to accidents

1. Total and relative (to train kilometres) number of accidents and a break-down on the following types of accidents:
  - collisions of trains, including collisions with obstacles within the clearance gauge,

---

<sup>1</sup> OJ L 14, 21.1.2003, p. 1.

- derailments of trains,
- level-crossing accidents, including accidents involving pedestrians at level-crossings,
- accidents to persons caused by rolling stock in motion, with the exception of suicides,
- suicides,
- fires in rolling stock,
- others.

Each accident shall be reported under the type of the primary accident, even if the consequences of the secondary accident are more severe, e.g. a fire following a derailment.

2. Total and relative (to train kilometres) number of persons seriously injured and killed by type of accident divided into the following categories:

- passengers (also in relation to total number of passenger-kilometres),
- employees including the staff of contractors,



- level-crossing users,
- unauthorised persons on railway premises,
- others.

(2) Indicators relating to incidents and near-misses

1. Total and relative (to train kilometres) number of broken rails, track buckles and wrong-side signalling failures.
2. Total and relative (to train kilometres) number of signals passed at danger.
3. Total and relative (to train kilometres) number of broken wheels and axles on rolling stock in service.

(3) Indicators relating to consequences of accidents

1. Total and relative (to train kilometres) costs in euro of all accidents where, if possible, the following costs should be calculated and included:
  - deaths and injuries,

- compensation for loss of or damage to property of passengers, staff or third parties
  - including damage caused to the environment,
- replacement or repair of damaged rolling stock and railway installations,
- delays, disturbances and re-routing of traffic, including extra costs for staff and loss of future revenue.

From the above costs shall be deducted indemnity or compensation recovered or estimated to be recovered from third parties such as motor vehicle owners involved in level crossing accidents. Compensation recovered by insurance policies held by railway undertakings or infrastructure managers shall not be deducted.

2. Total and relative (to number of hours worked) number of working hours of staff and contractors lost as a consequence of accidents.

(4) Indicators relating to technical safety of infrastructure and its implementation

1. Percentage of tracks with Automatic Train Protection (ATP) in operation, percentage of train kilometres using operational ATP systems.
2. Number of level crossings (total and per line kilometre). Percentage of level crossings with automatic or manual protection.

(5) Indicators relating to the management of safety

Internal audits accomplished by infrastructure managers and railway undertakings as set out in the documentation of the safety management system. Total number of accomplished audits and the number as a percentage of audits required (and/or planned).

(6) Definitions

The reporting authorities may use nationally applied definitions of the indicators and methods for calculation of costs when data according to this Annex are submitted. All definitions and calculation methods in use shall be explained in an Annex to the annual report described in Article 18.

---

(2) Indicator relating to the management of the

Internal audit accomplished by internal audit, which is to be included in the documentation of the audit, and which is to be included in the audit report and the number as a percentage of the total number of audits.

(6) Definitions

The reporting authorities are not to be held responsible for the calculation of the indicators for calculation of costs when they are calculated as a percentage of the total number of audits and calculation methods in the audit report.

Article 16