

## 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,
  - 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.

## ANNEX II

## Notification of national safety rules

National safety rules that are to be notified to the Commission according to the procedure described in Article 8 include:

1. rules concerning existing national safety targets and safety methods;
2. rules concerning requirements on safety management systems and safety certification of railway undertakings;

3. rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock that is not yet covered by a TSI. The notification shall include rules for exchange of rolling stock between railway undertakings, registration systems and requirements on testing procedures;
4. common operating rules of the railway network that are not yet covered by TSIs, including rules relating to the signalling and traffic management system;
5. rules laying down requirements on additional internal operating rules (company rules) that must be established by infrastructure managers and railway undertakings;
6. rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification as far as they are not yet covered by a TSI;
7. rules concerning the investigation of accidents and incidents.

## ANNEX III

### Safety Management Systems

#### 1. Requirements on the safety management system

The safety management system must be documented in all relevant parts and shall in particular describe the distribution of responsibilities within the organisation of the infrastructure manager or the railway undertaking. It shall show how control by the management on different levels is secured, how staff and their representatives on all levels are involved and how continuous improvement of the safety management system is ensured.

#### 2. Basic elements of the safety management system

The basic elements of the safety management system are:

- (a) a safety policy approved by the organisation's chief executive and communicated to all staff;
- (b) qualitative and quantitative targets of the organisation for the maintenance and enhancement of safety, and plans and procedures for reaching these targets;
- (c) procedures to meet existing, new and altered technical and operational standards or other prescriptive conditions as laid down
  - in TSIs, or
  - in national safety rules referred to in Article 8 and Annex II, or
  - in other relevant rules, or
  - in authority decisions,and procedures to assure compliance with the standards and other prescriptive conditions throughout the life-cycle of equipment and operations;
- (d) procedures and methods for carrying out risk evaluation and implementing risk control measures whenever a change of the operating conditions or new material imposes new risks on the infrastructure or on operations;
- (e) provision of programmes for training of staff and systems to ensure that the staffs competence is maintained and tasks carried out accordingly;

- (f) arrangements for the provision of sufficient information within the organisation and, where appropriate, between organisations operating on the same infrastructure;
- (g) procedures and formats for how safety information is to be documented and designation of procedure for configuration control of vital safety information;
- (h) procedures to ensure that accidents, incidents, near misses and other dangerous occurrences are reported, investigated and analysed and that necessary preventive measures are taken;
- (i) provision of plans for action and alerts and information in case of emergency, agreed upon with the appropriate public authorities;
- (j) provisions for recurrent internal auditing of the safety management system.

#### ANNEX IV

##### Declarations for network specific part of safety certificate

The following documents must be submitted to enable the safety authority to deliver the network-specific part of the safety certificate:

- documentation from the railway undertaking on the TSIs or parts of TSIs and, where relevant, national safety rules and other rules applicable to its operations, its staff and its rolling stock and how compliance is ensured by the safety management system,
- documentation from the railway undertaking on the different categories of staff employed or contracted for the operation, including evidence that they meet requirements of TSIs or national rules and have been duly certified,
- documentation from the railway undertaking on the different types of rolling stock used for the operation, including evidence that they meet requirements of TSIs or national rules and have been duly certified.

To avoid duplication of work and to reduce the amount of information only summary documentation should be submitted concerning elements that comply with TSIs and other requirements of Directives 96/48/EC and 2001/16/EC.

#### ANNEX V

##### Principal content of accident and incident investigation report

- (1) Summary

The summary shall contain a short description of the occurrence, when and where it took place and its consequences. It shall state the direct causes as well as contributing factors and underlying causes established by the investigation. The main recommendations shall be quoted and information shall be given on the addressees.
- (2) Immediate facts of the occurrence
  - 1. The occurrence:
    - date, exact time and location of the occurrence,

- description of the events and the accident site including the efforts of the rescue and emergency services,
  - the decision to establish an investigation, the composition of the team of investigators and the conduct of the investigation.
2. The background to the occurrence:
- staff and contractors involved and other parties and witnesses,
  - the trains and their composition including the registration numbers of the items of rolling stock involved,
  - the description of the infrastructure and signalling system - track types, switches, interlocking, signals, train protection,
  - means of communication,
  - works carried out at or in the vicinity of the site,
  - trigger of the railway emergency plan and its chain of events,
  - trigger of the emergency plan of the public rescue services, the police and the medical services and its chain of events.
3. Fatalities, injuries and material damage:
- passengers and third parties, staff, including contractors,
  - cargo, luggage and other property,
  - rolling stock, infrastructure and the environment.
4. External circumstances:
- weather conditions and geographical references.
- (3) Record of investigations and inquiries
1. Summary of testimonies (subject to the protection of identity of the persons):
- railway staff, including contractors,
  - other witnesses.
2. The safety management system:
- the framework organisation and how orders are given and carried out,
  - requirements on staff and how they are enforced,
  - routines for internal checks and audits and their results,
  - interface between different actors involved with the infrastructure.
3. Rules and regulations:
- relevant Community and national rules and regulations,
  - other rules such as operating rules, local instructions, staff requirements, maintenance prescriptions and applicable standards.
4. Functioning of rolling stock and technical installations:
- signalling and control command system, including registration from automatic data recorders,
  - infrastructure,
  - communications equipment,
  - rolling stock, including registration from automatic data recorders.
5. Documentation on the operating system:

- measures taken by staff for traffic control and signalling,
  - exchange of verbal messages in connection with the occurrence, including documentation from recordings,
  - measures taken to protect and safeguard the site of the occurrence.
6. Man-machine-organisation interface:
- working time applied to the staff involved,
  - medical and personal circumstances with influence on the occurrence, including existence of physical or psychological stress,
  - design of equipment with impact on man-machine interface.
7. Previous occurrences of a similar character.
- (4) Analysis and conclusions
1. Final account of the event chain:
- establishing the conclusions on the occurrence, based on the facts established in heading (3).
2. Discussion:
- analysis of the facts established in heading (3) with the aim of drawing conclusions as to the causes of the occurrence and the performance of the rescue services.
3. Conclusions:
- direct and immediate causes of the occurrence including contributory factors relating to actions taken by persons involved or the condition of rolling stock or technical installations,
  - underlying causes relating to skills, procedures and maintenance,
  - root causes relating to the regulatory framework conditions and application of the safety management system.
4. Additional observations:
- deficiencies and shortcomings established during the investigation, but without relevance to the conclusions on causes.
- (5) Measures that have been taken
- Record of measures already taken or adopted as a consequence of the occurrence.
- (6) Recommendations

(1) OJ L 14, 21.1.2003, p. 1.