EST Annex B

Common Safety Method for Monitoring

CSM for Monitoring

Applicable from Click here to enter a date.
## Amendment table

<table>
<thead>
<tr>
<th>Reference</th>
<th>Date</th>
<th>Description and comments</th>
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<tr>
<td>TECH-21014</td>
<td>25.5.2021</td>
<td>First draft for review by WG TECH 43</td>
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<tr>
<td>Version 1</td>
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<td>TECH-21014</td>
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<td>Second draft for review by WG TECH 44. Modifications in track changes compared to version 1.</td>
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<td>TECH-21014</td>
<td>5.10.2021</td>
<td>Third draft for review by WG TECH 45. Version in which the tracked changes of version 2 and the changes made during WG TECH 44 have been accepted. There are no further changes compared to version 2.</td>
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EST Uniform Rules (Appendix H to COTIF 1999)

Annex B to the EST Uniform Rules:

“Common Safety Method for Monitoring”

(CSM for Monitoring)

This CSM for Monitoring has been developed in accordance with COTIF 1999 in the version of 1 March 2019 and in particular with Article 8 of the EST Uniform Rules (Appendix H to COTIF).

Article 1
Subject matter

This document lays down the Common Safety Method for Monitoring in accordance with Article 8 § 3 letter b) of the EST UR (Appendix H to COTIF); it is further referred to as the ‘CSM for Monitoring’.

This Regulation establishes a common safety method (CSM) for monitoring, enabling the effective management of safety in the railway system during its operation and maintenance activities and, where appropriate, improving the management system.

Article 2
Scope and aim

§ 1 This CSM for Monitoring is applicable to railway undertakings and infrastructure managers that operate trains in the scope of the EST UR and to entities in charge of maintenance.

§ 2 This CSM for Monitoring shall be applied by railway undertakings, infrastructure managers for:

a) monitoring the correct application and the effectiveness of all the processes and procedures in the safety management system, including the technical, operational and organisational risk control measures;

b) monitoring whether the application of the safety management system has the expected result; and

c) identification of non-compliances and the implementation of corrective and preventive measures.

This Regulation shall apply to railway undertakings, infrastructure managers after receiving a safety certificate or safety authorisation and entities in charge of maintenance.

This Regulation shall be used for the following:

(a) to check the correct application and the effectiveness of all the processes and procedures in the management system, including the technical, operational and organisational risk control measures. In case of railway undertakings and infrastructure managers, checking will include the technical, operational and organisational elements that are necessary for the issue of the certification/authorisation specified in Article 10(2)(a) and 11(1)(a) and the provisions adopted to obtain the certification/authorisation specified in
Article 10(2)(b) and 11(1)(b) of Directive 2004/49/EC;
(b) to check the correct application of the management system as a whole, and if the management system achieves the expected outcomes; and
(c) to identify and implement appropriate preventive, corrective or both types of measures if any relevant instance of non-compliance to points (a) and (b) is detected

§ 3 This CSM for Monitoring shall be applied by entities in charge of maintenance for checking the correct application of the system of maintenance in accordance with the ECM Regulation, Annex A to ATMF UR.

§ 4 Footnotes provide explanations and are not part of the rules.

Article 3
Definitions

The definitions of Article 2 of the EST UR, Article 2 of the APTU Uniform Rules (Appendix F to COTIF) and Article 2 of the ATMF Uniform Rules (Appendix G to COTIF) shall apply.

In addition, for the purposes of this CSM for Monitoring the following definitions shall apply:

a) “Interfaces” means all points of interaction during a system or subsystem life-cycle, including operation and maintenance where different actors of the rail sector will work together in order to manage the risks;

b) “actors” means all parties which are, directly or through contractual arrangements involved in the activity(ies) of the railway undertaking or infrastructure manager and as such influence the safety of the system;

1 For definitions in the EU text, see Article 2 of European Union Commission Regulation (EU) 1078/2012 of 16 November 2012.
Article 4
Interaction with other international agreements

§ 1 This CSM for Monitoring is based on the provisions of European Union Commission Regulation (EU) 1078/2012 of 16 November 2012 on a common safety method for monitoring to be applied by railway undertakings, infrastructure managers after receiving a safety certificate or safety authorisation and by entities in charge of maintenance, hereinafter referred to as the EU Regulation on CSM for Monitoring.

§ 2 Monitoring in compliance with the EU Regulation on CSM for Monitoring taking place after the entry into force of this CSM for Monitoring shall be deemed in compliance with this CSM for Monitoring.

§ 3 The texts of this CSM for Monitoring which appear across two columns are identical in substance to corresponding texts of the EU Regulation on CSM for Monitoring.

Texts which appear in two columns differ; the left-hand column contains the OTIF rules, the right-hand column shows corresponding texts from EU rules.

Texts in the right-hand column are strictly for information only and do not necessarily appear in the order as they appear in the EU Regulation on CSM for Monitoring.

For applicable EU law consult the Official Journal of the European Union.

§ 4 The following table lists the terms used in this CSM for Monitoring and the corresponding terms used in the EU Regulation on establishing CSM for Monitoring:

<table>
<thead>
<tr>
<th>This CSM</th>
<th>EU Regulation</th>
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<tr>
<td>This CSM for Monitoring</td>
<td>This Regulation</td>
</tr>
<tr>
<td>Safety certificate</td>
<td>Single safety certificate</td>
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Article 5
Monitoring process

§ 1 Each railway undertaking, infrastructure manager and entity in charge of maintenance:
   a) shall be responsible for conducting the monitoring process set out in the Annex;
   b) shall ensure that risk control measures implemented by their contractors are also monitored in compliance with this CSM for Monitoring. To this end, they shall apply the monitoring process set out in the Annex or require their contractors to apply this process through contractual arrangements.

§ 2 The monitoring process shall contain the following activities:
   a) the definition of a strategy, priorities and plan(s) for monitoring;
   b) the collection and analysis of information;
   c) the drawing up of an action plan for instances of unacceptable non-compliance with requirements laid down in the management system;
   d) the implementation of the action plan, if such a plan is drawn up;
   e) the evaluation of the effectiveness of action plan measures, if such a plan is drawn up.

Article 6
Exchange of information between the involved actors

§ 1 Railway undertakings, infrastructure managers and entities in charge of maintenance, including their contractors, shall ensure through contractual arrangements that any relevant safety-related information resulting from applying the monitoring process set out in the Annex is exchanged between them, to enable the other party to take any necessary corrective actions to ensure continuous achievement of the safety performance of the railway system.

§ 2 If, through the application of the monitoring process, railway undertakings, infrastructure managers and entities in charge of maintenance identify any relevant safety risk as regards defects and construction non-conformities or malfunctions of technical equipment, including those of structural sub-systems, they shall report those risks to the other parties involved to enable them to take any necessary corrective actions to ensure continuous achievement of the safety performance of the railway system.

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Article 7
Reporting

§ 1 Supervisory Authorities may require reporting from railway undertakings which have a safety certificate valid on their territory.

Reporting from infrastructure managers is subject to the provisions applicable in the state where the infrastructure is located.

§ 2 [Reserved]

§ 3 The annual maintenance report of entities in charge of maintenance of freight wagons as required by Article 8 point 5 and Annex 5 of Annex A to ATMF, shall include information about the experience of entities in charge of maintenance in applying this Regulation.

The infrastructure managers and railway undertakings shall report to the national safety authority on the application of this Regulation through their annual safety reports in accordance with Article 9(4) of Directive 2004/49/EC.

The national safety authority shall report on the application of this Regulation by the railway undertakings, infrastructure managers, and as far as it is aware of it, by the entities in charge of maintenance in accordance with Article 18 of Directive 2004/49/EC.

The annual maintenance report of entities in charge of maintenance of freight wagons set out in point I. 7.4 (k) of Annex III to Regulation (EU) No 445/2011, shall include information about the experience of entities in charge of maintenance in applying this Regulation. The Agency shall gather this information in coordination with the respective certification bodies.

The other entities in charge of maintenance that do not fall under the scope of Regulation (EU) No 445/2011 shall also share their experience with the Agency on the application of this Regulation. The Agency shall coordinate the sharing of experience with these entities in charge of maintenance.

Regulation and, when necessary, shall make recommendations to the Commission with a view to improving this Regulation.

The national safety authorities shall support the Agency in collecting such information from railway undertakings and infrastructure managers.

The Agency shall submit to the Commission not later than three years after the entry into force of this Regulation a report analysing the effectiveness of the method and of the experience of railway undertakings, infrastructure managers and entities in charge of maintenance in applying this Regulation.

§ 4 [Reserved]

§ 5 [Reserved]

§ 6 [Reserved]

§ 7 [Reserved]
ANNEX

The monitoring process

1. GENERAL

1.1 The inputs to the monitoring process shall be all the processes and procedures contained in the management system, including technical, operational and organisational risk control measures.

1.2 The activities referred in Article 3(2) of the monitoring process are described in Sections 2 to 6.

1.3 This monitoring process is repetitive and iterative, as shown in the diagram below in the Appendix.

2. DEFINITION OF A STRATEGY, PRIORITIES AND PLAN(S) FOR MONITORING

2.1 Based on their management system, each railway undertaking, infrastructure manager and entity in charge of maintenance shall be responsible for defining its strategy, priorities and plan(s) for monitoring.

2.2 The decision on what to prioritise shall take into account information from areas that give rise to the greatest risks and, if not monitored effectively, could lead to adverse consequences for safety. An order of priority for monitoring activities shall be set, and the time, effort and resources required shall be indicated. Prioritisation shall also take into account results from previous applications of the monitoring process.

2.3 The monitoring process shall identify as early as possible instances of non-compliance in the application of the management system that might result in accidents, incidents, near-misses or other dangerous occurrences. It shall lead to the implementation of measures to remedy such instances of non-compliance.

2.4 The monitoring strategy and plan(s) shall define either quantitative or qualitative indicators or a mixture of both that can:
   (a) give early warnings of any deviation from the expected outcome, or assurance that the expected outcome is achieved as planned;
   (a) give information about unwanted outcomes;
   (b) support decision making.

3. COLLECTION AND ANALYSIS OF INFORMATION

3.1 The collection and analysis of information shall be carried out according to the strategy, priorities and plan(s) defined for the monitoring.

3.2 For each defined indicator referred to in point 2.4, the following shall be carried out:
   (a) a collection of necessary information;
   (b) an evaluation as to whether the processes, procedures, technical, operational and organisational risk control measures are correctly implemented;
(c) a check on whether the processes, procedures, technical, operational and organisational risk control measures are effective and whether they achieve the expected outcomes;

(d) an evaluation of whether the management system as a whole is correctly applied and whether it achieves the expected outcomes;

(e) an analysis and evaluation of instances of identified non-compliance with points (b), (c) and (d), as well as identification of their causes.

4. **DRAWING UP OF AN ACTION PLAN**

4.1 For identified instances of non-compliance that are considered unacceptable, an action plan shall be drawn up. This shall:

(a) lead to the enforcement of correctly implemented processes, procedures, technical, operational and organisational risk control measures as specified, or;

(b) improve existing processes, procedures, technical, operational and organisational risk control measures, or;

(c) identify and implement additional risk control measures.

4.2 The action plan shall in particular include the following information:

(a) objectives and results expected;

(b) corrective, preventive or both types of measures required;

(c) person responsible for implementing actions;

(d) dates by which actions are to be implemented;

(e) person responsible for evaluating the effectiveness of the action plan measures in accordance with Section 6;

(f) a review of the impact of the action plan on the monitoring strategy, priorities and plan(s).

4.3 For managing safety at interfaces the railway undertaking, infrastructure manager or entity in charge of maintenance shall decide, in agreement with the other actors involved, who shall be in charge of implementing the required action plan or parts of it.

5. **IMPLEMENTATION OF THE ACTION PLAN**

5.1 The action plan defined in Section 4 shall be implemented so as to correct identified instances of non-compliance.

6. **EVALUATION OF THE EFFECTIVENESS OF THE ACTION PLAN MEASURES**

6.1 Correct implementation, appropriateness and effectiveness of measures identified in the action plan shall be checked using the same monitoring process as described in this Annex.

6.2 Evaluation of the action plan's effectiveness shall in particular include the following actions:
(a) verification of whether the action plan is correctly implemented and completed according to schedule;
(b) verification of whether the expected outcome is achieved;
(c) verification of whether in the meantime the initial conditions have changed and the risk control measures defined in the action plan are still appropriate for the given circumstances;
(d) verification of whether other risk control measures are necessary.

7. **EVIDENCE FROM THE APPLICATION OF THE MONITORING PROCESS**

7.1 The monitoring process shall be documented to prove it has been applied correctly. This documentation shall be made available primarily for internal assessment purposes. Upon request:

(a) railway undertakings and infrastructure managers shall make this documentation available to the national safety authority;
(b) entities in charge of maintenance shall make this documentation available to the certification body. If interfaces are managed through contracts, the entities in charge of maintenance shall make this documentation available to the respective railway undertakings and infrastructure managers.

7.2 The documentation produced under point 7.1. shall include in particular:

(a) a description of the organisation and staff appointed to carry out the monitoring process;
(b) the results of the different activities of the monitoring process listed in article 3(2) and in particular the decisions made;
(c) in the case of instances of identified non-compliance that are considered unacceptable, a list of all necessary measures to be implemented to achieve the required outcome.
## Appendix

### Framework for the monitoring process

**MONITORING PROCESS**

1. **Define (or review) a strategy, priorities and plan(s) for monitoring all the concerned processes, procedures, and technical, operational, organisational risk control measures**

2. **Define (or review) the associated qualitative, quantitative or a mixture of both indicators**

3. **Collection and analysis of information**
   - Are non compliances identified?
   - Analysis and evaluation of non compliances
   - Are non compliances acceptable?

4. **Drawing up of an action plan**
5. **Implementation of the action plan**
6. **Evaluation of the effectiveness of the action plan measures**

**System of Maintenance of Entity in charge of maintenance**

**Infrastructure Manager Safety Management System**

**Railway Undertaking Safety Management System**

**Analysis and evaluation of information**

**Risk Identification and Risk Evaluation Process**

**Develop associated processes, procedures, and technical, operational, organisational risk control measures**