Safety Management System

Safety Management System (SMS)

The Safety Management System, according to the definition included in the Directive on railway safety, means the organisation and arrangements established by an infrastructure manager or a railway undertaking to ensure the safe management of its operations.

The Safety Management System includes all rules developed and implemented for the purposes of a given entity (i.a. internal regulations, procedures, and workplace instructions) regulating the operations of the entity with regard to safety (i.a. the division of responsibilities within the entity, including the responsibility of the management to train staff in the appropriate skills for carrying out particular tasks, and resources management) and facilitating the secure arrangement of relationships with other entities, including relations with the infrastructure manager and other railway undertakings, and with subcontractors.

The solutions adopted within the SMS is an enterprise’s capability to continuously identify threats in all aspects of its activities, including threats resulting from cooperation with other entities (e.g. the undertaking’s cooperation with the infrastructure manager), cooperation with subcontractors (e.g. services in terms of infrastructure or vehicle maintenance, traction services and staff outsourcing) and managing the risks associated with such threats.

Appropriately developed and efficient SMS procedures, on the one hand, should facilitate the active implementation of risk management measures (solutions implemented by enterprises making it possible to reduce the identified risk to an acceptable level), and, on the other hand, monitoring the effectiveness of the applied solutions and the continuous upgrading of the adopted procedures, instructions and regulations, in order to maintain the required level of safety of the performed activities.

Safety management systems are created on an obligatory basis by railway undertakings and infrastructure managers on the basis of the criteria stipulated in the common safety method for assessing conformity (Commission Regulations (EU) Nos 1158/2010 and 1169/2010) and the Regulation of the Minister of Transport of 19 March 2007 on safety management systems in rail transport.

The structure of the Safety Management System:
The basic elements of the Safety Management System, in accordance with the requirements of the Directive on railway safety and the applicable regulations (Regulations Nos 1158/2010 and 1169/2010) cover:

- Risk management procedures for all risk factors associated with the performed activities, provided maintenance services and supplied materials, the involvement of contractors and suppliers, and third-party actions;
- Procedures for the division of responsibilities and for control measures at various levels of management;
- Procedures related to the quantitative and qualitative objectives of an organisation in terms of maintaining and improving safety and plans and procedures developed to meet these objectives;
- Procedures aimed at meeting the requirements of existing and new technical and operating standards and other requirements;
- Change-management and risk-assessment procedures in the event of changes in the conditions of the activities carried out in line with the requirements of the common safety method on risk evaluation and assessment (Commission Regulation (EU) No 402/2013);
- Procedures for the system for managing staff skills;
- Procedures aimed at ensuring access to information and information recording;
- Procedures for reporting, investigating and analysing accidents, incidents and events which can potentially lead to accidents, and procedures for implementing the guidelines issued by relevant entities (event investigation commissions, the National Railway Accident Investigation Committee, the President of UTK);
- Procedures aimed at implementing internal audits of safety management systems and at monitoring the effectiveness of the applied solutions and their continuous upgrading on the basis of the requirements of the common safety method for monitoring (Commission Regulation (EU) No 1078/2012).

The assumptions of the management system certification process:

Creating and implementing a safety management system is a key requirement for obtaining safety authorisation by the railway infrastructure manager and of the safety certificate by the railway undertaking. The continuous application of SMS procedures and their upgrading is a prerequisite for maintaining the validity of the issued certificates and authorisations.

The certification or authorisation process consists of the verification of the applied management system with the criteria of the common safety method for assessing conformity (Commission Regulations (EU) Nos 1158/2010 and 1169/2010), including the completeness of the developed procedures and the assessment of the applicant’s general capability of the safe performance of duties of a railway undertaking or a railway
After obtaining a safety certificate or authorisation, the implementation and appropriate application of solutions adopted in safety management systems is verified by way of supervisory measures carried out on the basis of the requirements of the common safety method for supervision (Commission Regulation (EU) No 1077/2012).

The system of safety certification for railway undertakings and safety authorisation for railway infrastructure managers assumes a continuous exchange of information reporting remarks and irregularities on the function of a given entity between the certification and the supervision process. Information collected within the certification process constitutes one of the elements with an impact on the range of supervisory measures, while remarks gathered within the supervision process influence the process of renewing safety certificates and authorisations.