

Office of Rail Transport

<https://utk.gov.pl/en/railway-safety/maintenance-management/6365,Maintenance-Management-System.html>
20.05.2024, 04:14

Maintenance Management System

The maintenance management system

The term “Maintenance Management System” (*MMS*) covers a set of procedures and instructions aimed at minimising the risk associated with the maintenance of railway vehicles and, consequently, ensuring the safe movement of vehicles within the railway network. The system should ensure vehicle maintenance is in line with the maintenance documentation for a given vehicle and guidelines and resolutions stemming from the applicable regulations, including the *Technical Specifications for Interoperability*. The development and implementation of Maintenance Management Systems is the duty of the so-called *Entities in Charge of Maintenance* (ECM).

The Entity in Charge of Maintenance

The notion of an entity in charge of maintenance was first introduced in 2008 by [Directive 2008/110/EC of the European Parliament and of the Council of 16 December 2008 amending Directive 2004/49/EC on safety on the Community’s railways](#). The role of the ECM can be performed by any competent entity able to manage the maintenance process of specific vehicles in a systematic way. The entity is allocated to a specific vehicle or group of vehicles in the National Vehicle Register conducted by the President of UTK.

The EU legislative bodies introduced the term of entity in charge of maintenance, as a transparent allocation of responsibility for the maintenance of a specific vehicle which so far has often been dispersed between various categories of entities operating in the rail transport sector, i.a. the railway undertaking, keeper or the company carrying out the repairs.

The entity in charge of maintenance is obliged to ensure that the vehicles for which it is responsible are able to move safely within the railway network. The instrument enabling the achievement of this goal is the above-mentioned Maintenance Management System, i.e. a set of procedures and instructions to be implemented by the entity in order to minimise the risks associated with maintenance activities.

In the case of freight wagons, entities in charge of their maintenance are obliged to obtain the appropriate certification in line with [Commission Regulation \(EU\) No 445/2011 of 10 May 2011 on a system of certification of entities in charge of maintenance for freight wagons and amending Regulation \(EC\) No 653/2007](#). The certification of other types of entities in charge of

maintenance, i.e. those dealing with the maintenance of passenger carriages, locomotives and traction units, is not currently required. The regulation also introduces the possibility of a voluntary certification of maintenance workshops.

The requirements concerning Maintenance Management Systems

[Commission Regulation No 445/2011](#) specifies a number of requirements to be met by a Maintenance Management System and the assessment criteria used in the certification process. The characteristic feature of Maintenance Management Systems is their division into four component functions:

- The management function, which enables supervision over three so-called maintenance functions specified in subsequent subsections, and their coordination, and also enables the ensuring of the safety of freight wagons in the rail system;
- The maintenance development function, which is responsible for the management of the vehicles' maintenance documentation based on design documentation and on performance and return on experience;
- The rolling stock maintenance management function, also referred to as fleet management, which manages the freight wagon's removal for maintenance and its return to operation after maintenance; and
- The maintenance delivery function, which delivers the required technical maintenance of a freight wagon or parts of it.

The entity in charge of maintenance has to perform only the first of the mentioned functions, i.e. maintenance management. Other functions can be outsourced. However, regardless of outsourcing of part of the functions, the responsibility for the safety of wagons still lies with the entity in charge of maintenance. At the same time, the entity in charge of maintenance is obliged to verify the competence of the engaged subcontractors.

In order to facilitate the verification of subcontractors' competence, the Regulation introduced the possibility of the voluntary certification of contractors with regard to maintenance functions. It is carried out on the basis of the same criteria and methods as the ECM certification, but with a scope limited to selected maintenance functions. Holding a certificate for the maintenance function by a given subcontractor creates a presumption of conformity with the relevant requirements set out in [Regulation No 445/2011](#) in the scope appropriate for the scope of certification, in line with Article 8 (1) of the Regulation. Also the outsourcing entity, i.e. the entity in charge of maintenance, is not obliged to demonstrate that the engaged contracting party that implements particular maintenance functions meets the requirements of the regulation.

Each of the four component functions of the Maintenance Management System must meet the criteria specified in Annex III to [Regulation No 445/2011](#). With reference to the management functions, the criteria are usually consistent with the ones specified for safety management systems and are also focused on such aspects as risk assessment, monitoring and continuous improvement, structure and responsibility, competence management, information, documentation and contracting activities.

Due to their specific features, the three remaining functions of maintenance management systems are subject to other requirements than those applicable to safety management systems. Among the most important of them are:

- In terms of the second function, i.e. maintenance development:
 - Identifying maintenance activities and managing them;
 - Ensuring compliance with the interoperability requirements;
 - Preparing the first maintenance documentation for a vehicle;
 - Managing changes in maintenance documentation on the basis of, i.a., operating data;
 - Supervision over devices, installations and equipment;
- In the area of the third function, i.e. rolling stock maintenance management:
 - Verifying the competence of entities carrying out maintenance work before delegating the appropriate orders to them;
 - Preparing maintenance orders;
 - Managing the referral of vehicles for maintenance when required and removing rolling stock from operation in the event of the necessity to carry out unscheduled maintenance works;
 - Controlling the performed work and preparing notices of return to operation;
- In terms of the fourth function, i.e. maintenance delivery:
 - The verification of the order and accompanying documents and the provision of all the documents (standards, instructions, etc.) necessary to complete the order;
 - Managing materials and elements, including ensuring their compliance with requirements, and the appropriate storage and handling;
 - Supervision over devices, installations and measurement equipment;
 - The verification of the quality of order completion and of the issuing of the document confirming the release to service.

Creating and implementing a Maintenance Management System is a condition for obtaining a certificate of an entity in charge of maintenance or a maintenance function certificate. This issue is verified at the stage of the certification process carried out by the President of UTK, and later during supervision over the certificate holder.