Explanatory document: ECM regulations for freight wagons

This is an explanatory document, not a regulation. This document aims at explaining the principles behind the OTIF ECM regulation A 94-30/1.2012 dated 1 May 2012. The contents of this document are for information only. In case of contradictions, incompatibilities, or any other misalignment between this document and the regulation, it should be regarded as an error or inaccuracy in this document.

1. Introduction

Member States must be able to have a sufficient degree of confidence that freight wagons operating on their territory are safely constructed and well maintained. Apart from basic operational checks, it is not realistic or efficient to assess fully the technical state of each wagon at each border crossing. Harmonised international rules for the construction and maintenance of wagons are therefore necessary.

Previously, technical and maintenance agreements were made between national railway companies in the framework of RIV. Typically, these national railways were responsible for all aspects of the railways, including operations, infrastructure management, maintenance, technical and safety rules, etc.

Today the OTIF Contracting States should rely on two pillars to ensure that a railway undertaking can operate freight wagons safely in international traffic, as illustrated in the following table.
Safe rail operations: the railway undertaking must observe the limits and conditions of use of the wagon

<table>
<thead>
<tr>
<th>Pillar 1: admission</th>
<th>Pillar 2: operation</th>
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<tbody>
<tr>
<td><strong>technical design and construction of the wagon</strong></td>
<td><strong>correct maintenance of the wagon</strong></td>
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</table>

Wagons must comply with the applicable UTPs (WAG and NOI). Compliance must be assessed and validated by an assessing entity, which must be independent from the manufacturer, keeper, railway undertaking and infrastructure manager.

Compliance of the technical design and construction is checked by an independent Assessing Entity during the process leading to the technical admission. After admission, compliance is managed under pillar 2.

Wagons must have an Entity in Charge of Maintenance (ECM) assigned to them, which must use a system of maintenance to ensure that the wagons for which it is responsible are in a safe operational state. The safety and regulatory compliance of the wagon and its operational and organisational environment must continue to be ensured.\(^1\)

The railway undertaking must operate wagons only on infrastructure compatible with the wagons.

Compliance with this second pillar must be maintained.

This document explains the ECM related regulations in the second pillar. (See OTIF ECM regulation A 94-30/1.2012 dated 1 May 2012).

2. The main actors

With the liberalisation of the rail market in the EU and some other OTIF Contracting States, several tasks and responsibilities have been allocated differently. For example, rules are now defined and adopted at government level, instead of being agreed between railways. An independent entity must assess whether the rules have been complied with. For the operation of freight wagons:

- The railway undertaking operates trains,
- The keeper owns or operates vehicles with the aim to make profit, and
- The Entity in Charge of Maintenance (ECM) takes responsibility for the maintenance of the vehicle.

These responsibilities may each be borne by separate entities or by a single entity. In international operations, it must be clear at all times and for each wagon who is the keeper\(^2\), the ECM and the railway undertaking.

*Any* organisation meeting the ECM requirements may be certified as an ECM. Therefore, a keeper or railway undertaking may also be certified as an ECM.

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\(^1\) E.g. by application of the Common Safety Methods for risk evaluation and assessment (UTP GEN-G)

\(^2\) The keeper of each wagon is identified by the Vehicle Keeper Marking (VKM), which is a 3-5 letter code marked on the wagon.
3. Principles

The ECM function may be exercised by any organisation meeting the ECM requirements, also by the railway undertaking, or by the keeper. However, in any case the ECM responsibilities should be separately identified and certified by an independent ECM certification body. (Part 4 of this document explains the requirements related to the ECM certification body)

After an ECM has been certified, it must be checked at least once a year. The competent authority in each Contracting State supervises ECMs.

An ECM’s ability to fulfil its tasks and obligations must be confirmed by an independent assessing entity recognised by one of the OTIF Contracting States.

ATMF Article 15(3) states that the railway undertaking is responsible for the safe operation of its trains and must ensure that vehicles are properly maintained. Wagons in international traffic are generally operated by different railway undertakings, while the ECM remains the same. The ECM regulation helps these railway undertakings to assume their responsibilities in a practical manner. It is the responsibility of the railway undertaking to check that a certified ECM is assigned to each wagon it operates. If this is confirmed, the railway undertaking may assume that the wagon is correctly maintained. If these checks reveal problems, the railway undertaking should have procedures in place to resolve the problem or refuse further carriage.

Every wagon in international traffic must have an ECM assigned to it and it is the duty of each railway undertaking to check this before operating a wagon.

It is imperative that information is exchanged between the ECM and the railway undertakings which operate the wagon. It is the responsibility of each railway undertaking to provide information to the ECM about the operating performance (km, tonne.km), malfunctions, accidents, repairs, etc. The ECM must have procedures in place to receive and use the data from the railway undertakings and to provide data relevant to the use of the wagons. Operational databases, such as RSRD⁴ and WIMO⁵, may help the ECM and railway undertakings to exchange these data.

The following picture illustrates the main actors and the exchange of information.

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3 The national vehicle register (NVR) may be a source of information for the railway undertaking to check is an ECM is assigned to a wagon, but because the NVR is not an operational register the NVR cannot be considered as proof.

4 Rolling Stock Reference Databases

5 Wagon and Intermodal Unit Operational Database
The ECM must exchange information about the operating performance and technical state of the wagon with all railway undertakings that operate the wagon. This exchange of information should be determined by contractual arrangements.

In practice the ECM often does not have contractual arrangements with the railway undertaking. In such case, the contractual arrangements between keeper and railway undertaking should ensure the exchange of the required information.

### 4. Organisation and discharge of responsibilities

Whether an organisation can become an ECM must be assessed and certified by an independent ECM certification body. ECM certification bodies must at least meet the criteria as set out in Annex II of the OTIF ECM regulation. The ECM certification body may be a governmental entity or a private company. According to OTIF’s ECM regulations, every Contracting State must notify the OTIF Secretary General of certification bodies that have their place of business on their territory.

A list of certification bodies and certified ECMs with their place of business in non-EU Contracting States is published in the ECM register on the OTIF website. The EU entries are registered in the ERADIS database, which is accessible through the ERA website.

All ECMs and ECM certification bodies are registered either on the ERA or the OTIF website.

It is not mandatory for Contracting States to have an ECM Certification Body on its territory, since applicant ECMs can use the services of ECM Certification Bodies from other Contracting States. The existence of an ECM Certification Body in a particular Contracting State is not a prerequisite for application of the ECM regulations.

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6 Information exchange as set out in the requirements of Article 5 §§ 2, 3 and 5 of the ECM regulation.
Registered ECMs and ECM certification bodies may work internationally.

The diagram above illustrates that Contracting States may have one or more certification bodies, or none. These certification bodies are also qualified to assess and certify applicant ECMs abroad.

5. Functions of an ECM

Every wagon must have one ECM assigned to it. This ECM bears full responsibility for the maintenance of the wagon. However, this does not mean that the ECM must perform all the ECM functions itself; it may also outsource some functions under its own responsibility. The following functions are set out in the ECM regulation:

a. The management function (a) supervises and coordinates the other functions (b) to (d) and may not be outsourced.

b. The maintenance development function (b) is responsible for the management of the maintenance documentation. This includes the configuration management, for example for keeping track of the maintenance information of the relevant parts of each wagon.

c. The fleet maintenance management function (c) manages the wagon’s removal for maintenance and its return to operation after maintenance.

d. The maintenance delivery function (d) delivers the required maintenance of a wagon, or parts of it.

Even though the ECM may outsource selected functions, it still has final responsibility for the result of all outsourced activities.

The following diagram illustrates the different functions (a) to (d), which comprise the activities of the ECM.
6. OTIF ECM regulations compared to the EU regulations

The OTIF ECM Regulations are equivalent to the corresponding EU Regulation\(^7\). In other words, ECMs certified under the EU regime are equivalent to those certified under the OTIF regime. The ECM certification bodies may also assess and certify ECMs in all OTIF Contracting States, whether their place of business is inside or outside the EU.

So-called “self-declarations”, which are valid in the EU in accordance with Article 12(6) of the EU Regulation, are exempt from the need for EU/OTIF equivalence. Self-declarations do not meet the requirement of ATMF Article 15 § 2, which requires ECM certifications to be issued by external auditors.

| ECM self-declarations are not valid in OTIF. All wagons in international freight traffic outside the EU (including wagons coming from the EU) must have an ECM assigned to it which is certified by an ECM certification body. |

In addition, Article 7(8) of the EU Regulation sets out the relations between the safety management system (SMS) of railway undertakings and the ECM responsibilities. This Article permits EU railway undertakings that maintain wagons themselves to have their ECM capacity assessed as part of the SMS certification. In the absence of harmonised SMS requirements in OTIF, this is not possible for railway undertakings outside the EU.

7. Implementation

The OTIF ECM regulation entered into force on 1 May 2012 and will be implemented in stages. Some key milestones and duties are summarised below:

A. By 1 August 2012:
   • Contracting States must notify the OTIF Secretary General of the ECM certification bodies having their place of business on their territory.
   • Certification bodies are permitted to issue certificates on the basis of national law equivalent to the OTIF ECM regulation, or on the basis of the MoU⁸. Such certificates expire on 31 May 2015 at the latest.

B. By 31 May 2014:
   • Certificates for maintenance workshops with the maintenance delivery function (not other functions) may be issued on the basis of national law equivalent to the OTIF ECM regulation. Such certificates expire on 31 May 2017 the latest.

C. From 1 August 2012:
   • All (new or renewed) ECM certificates must be issued by a certification body in accordance with the ECM regulation.

D. From 31 May 2013:
   • All entities in charge of maintenance for freight wagons must be certified in accordance with the ECM regulation.

8. Summary

An ECM is an entity with full responsibility for the state of maintenance of a wagon.

ECMs are assessed and certified by independent certification bodies in accordance with the ECM regulations. From 31 May 2013, all ECMs must be certified in accordance with the ECM regulation.

Each freight wagon in international operation must have an ECM assigned to it. The railway undertaking operating a train must check this and may only operate wagons to which an ECM is assigned.

Railway undertakings and ECMs must exchange information about the wagons. Electronic databases can support these exchanges.

⁸ Memorandum of Understanding establishing basic principles of a common system of certification of entities in charge of maintenance for freight wagons, signed by several EU Member States and Switzerland.