

Wagon Condition Programme (WCP): Workstream V

The Duties of ECMs and OEMs, Component Suppliers and Suppliers of
Safety Critical Services: A Review of Applicable Legislation and Guidance

29th January 2025



Introduction

Following several high-profile freight safety incidents the Freight Safe Programme launched a project to assess and reduce the risk, if any, arising from wagon condition; the Wagon Condition Programme (WCP).

Within the WCP there are five workstreams looking at various aspects of wagon condition. Workstream V is tasked with creating clarity around the division of and understanding of duties between Entities in Charge of Maintenance (ECMs) and original equipment manufacturers, component suppliers and suppliers of safety critical services such as equipment overhaul (collectively 'Suppliers').

The Problem

The remit for the Workstream describes a concern that the present rail legislative framework in GB could result in an overlap of duties between ECMs and Suppliers or, worse, some gaps in safety management. This is largely because the retained Regulation (EU) 2019/779 has the potential to cause confusion as to who is responsible for managing safety critical components and services.

In particular, the concern is that ECMs certified to Regulation (EU) 2019/779 could erroneously rely on Suppliers to manage safety critical components without Suppliers having the legal duty to do so. This concern also reflects an interpretation by some that RAIB's Recommendation 3 in the Llangennech report¹ implied that suppliers have significant responsibility for managing the safety of components and services.

Accordingly, the objective of the Workstream is to provide absolute clarity on the roles and responsibilities of the ECM and Suppliers to assure the safety of services and components. This will require the Workstream to:

1. review all applicable law and guidance to seek clarity as to who is responsible for assuring safety.
2. Identify any gaps and deficiencies in the law; and
3. identify the obligations of the ECM and Suppliers and give absolute certainty on who is responsible for safety.

Approach Adopted

A working group of 20 knowledgeable professionals was assembled to review railway legislation and industry documents to identify the obligations in law and in guidance relating to OEMs and Suppliers. A workshop was held to identify the most relevant and pertinent clauses in these documents.

The documents reviewed were:

- Commission Implementing Regulation (EU) 2019/779 of 16 May 2019

¹ Recommendation 3 in the RAIB Llangennech investigation report was placed on 20 March 2025 in Arlington Fleet Services

- The Railways and Other Guided Transport Systems (Safety) Regulations (ROGS) 2006 No.599 as amended up to and including The Railways and Other Guided Transport Systems (Safety)(Amendment) Regulations 2023
- Rolling Stock – Freight Wagons National Technical Specification Notice (WAG NTSN), publication 1 January 2021
- RIS-2750-RST Supplier Assurance Issue 1.1 dated December 2021

Purpose and Structure of this Document

This document sets out the findings of the document review, the implications for ECMs and Suppliers and recommendations for industry action. The principal relevant clauses from legislation and industry guidance are set out in Appendix One.

This paper concludes that the obligations on ECMs are substantially the same in both legislative regimes and that the responsibility for the management of safety critical components (SCCs) is essentially the same. It will also identify where there is a problem which potentially leaves a gap in assuring the safety of services and components.

Analysis of the Problem

The perceived problem is that the current statutory arrangements leave a gap in who is responsible for assuring safety of services and components. This refers to the potential confusion created by the post-Brexit legislative position for the certification of ECMs².

Various EU Exit railway regulations were passed which had the combined effect in summary of:

1. revoking Commission Regulation (EU) 445/2011 on a system of certification for ECMs in the UK.
2. incorporating a substantial amount of Regulation (EU) 445/2011 as Schedules 9 and 10 of ROGS.
3. revoking Commission Implementing Regulation (EU) 2019/779; and
4. publishing a retained UK version of Regulation (EU) 2019/779³ for Channel Tunnel traffic.

The amendments gave an ECM with international traffic (ie cross border through the Channel Tunnel traffic under COTIF) the option of certification under the retained version of EU 2019/779 for its domestic wagons too. This option ensured that such an ECM would not need two certifications for its operations in GB. It is worth noting that ROGS allows an ECM with vehicles for use on domestic GB traffic only, to choose Regulation (EU) 2019/779 as its system of certification.

The remit identifies that this complicated framework has the potential to cause confusion between ECMs and Suppliers, when it comes to the management of SCCs. This is because Regulation (EU) 2019/779 has obligations on manufacturers and ECMs to identify and trace SCCs which appear not to be present in ROGS.

What the Law Says – ROGS and NTSNs (see also Appendix One)

All ECMs are subject to ROGS and in particular Clause 18A which lays out the legislative obligations, including the options for ECM Certification.

In summary form, Clause 18 A (1) states that no person may place in service or use a vehicle on the UK mainline railway unless that vehicle has an ECM assigned to it, and, if that vehicle is a freight vehicle, that ECM holds—

² For a full explanation see: ORR document – Guidance for Entities in Charge of Maintenance in Great Britain; and GMGN 2697 Application of the Entity in Charge of Maintenance Regulations

³ More recently referred to as the Assimilated 2019 EU ECM Regulation

- a certificate issued in the UK in accordance with Schedule 10.
- a certificate issued in the UK in accordance with the retained 2019 EU ECM Regulation; or
- a certificate issued in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation if that person places in service or uses a vehicle in circulation on railway lines across the territory of two states; or that certificate was issued by a certification body accredited by the UK national accreditation body.

For international (ie Channel Tunnel) traffic, Clause 18 A (1A) states that no person may place in service or use a vehicle to operate a cross-border service unless that vehicle has an ECM assigned to it, and that ECM holds either a certificate issued to an ECM in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation (valid on the terms of its original issue) or a certificate issued in the UK to an ECM in accordance with the retained 2019 EU ECM Regulation.

This means that all ECMs have to comply with ROGS but can choose to obtain their ECM certification under the system of certification set out in either:

- ROGS Schedule 10;
- 2019 EU ECM Regulation or
- The retained 2019 EU ECM Regulation⁴

The Difference between ROGS Schedule 10 and the retained 2019 EU ECM Regulation

Regulation (EU) 2019/779 introduced significant obligations in regard to SCCs in Article 4 (see Appendix Two), which are not present in ROGS. Namely, that:

- Manufacturers shall undertake an initial risk assessment to identify SCCs and manage through the maintenance file
- ECMS must take into account the initial list of SCCs by the manufacturer and manage through the maintenance file
- ECMs must add to the list if it obtains evidence that a component is a SCC
- Manufacturers shall provide technical and engineering support for SCCs if such is requested by the ECM.

It could be assumed therefore, that an ECM using ROGS Schedule 10 for its certification has fewer or no obligations in respect of SCCs, than an ECM using Regulation (EU) 2019/779. Furthermore, that the use of Regulation (EU) 2019/779 by an ECM places new obligations on its Suppliers. In this scenario it maybe thought that Suppliers have to behave differently depending on who the relevant ECM is, which is clearly untenable.

The Wagon NTSN also contains clauses on SCCs which may cause confusion (see Appendix Three) as they are qualified with 'Channel Tunnel only'. For example, Clause 4.4 Operating rules:

For the safety critical components (Channel Tunnel only) (see also 4.5), the specific operational and operational traceability requirements are developed by the designers/manufacturers at design phase and through a collaboration between designers/manufacturers and the concerned railway undertakings or the concerned wagon keeper after vehicles have entered into operation.

It would seem therefore that there is plenty of room for misunderstanding regarding the management of SCCs. The review of the workstream however suggests that this is not correct for 5 reasons:

⁴ means Commission Implementing Regulation (EU) 2019/779 as it has effect in the UK after IP completion day;

1. ROGS contains significant references to SCCs which place equivalent obligations on ECMs
2. The systems of certification contained in ROGS Schedule 10 and Regulation (EU) 2019/779 have almost identical wording
3. The articles in Regulation (EU) 2019/779 do not have effect in GB rail law
4. The ECM interviews conducted by Workstream IV found no evidence of confusion or lack of understanding in ECMs
5. There is a varying degree of understanding amongst manufacturers and suppliers with regards to SCCs and railway legislation. Moreover, Suppliers are not subject to it.

Each of these points will be considered below:

1. ROGS contains significant references to SCCs

Clause 18A of ROGS (see Appendix One) imposes the general obligation that ECMs must ensure by means of a system of maintenance, that a vehicle for which it is in charge of maintenance is in a safe state of running.

ROGS makes it clear that there are obligations on the ECM to identify and manage safety critical suppliers and manufacturers of SCCs. Specifically, in Schedule 10:

- Paragraph 29.1 states that ECMs must have procedures to identify safety related products and services.
- Paragraph 30 states that ECMs must have a procedure to identify and manage all maintenance activities affecting safety and safety-critical components.
- Paragraph 4.4 makes it clear that ECMs are responsible for the outcome of the maintenance activities they manage and must establish a system to monitor performance of those activities.

ECMs have additional duties under ROGS Schedule 10 paragraph 29, when making use of contractors and/or suppliers for safety related products and services. They must have a structured approach to ensure that subcontracted activities are managed appropriately in order for the ECM's objectives to be achieved. The ECM must also have procedures to verify that 'contractors, subcontractors and suppliers' are competent and have a maintenance and management system that is adequate and documented. In addition, ECMs must define the requirements that such contractors and suppliers must meet and monitor their awareness of the risks they present to the ECM's operations.

Moreover, Suppliers must supply information about SCCs given that Paragraph 5.2 states that all parties involved in the maintenance process must exchange relevant information about maintenance. The Supplier's detailed knowledge of the component maybe key to an ECM managing its degradation in service and complying with Paragraph 30.

The statement in Paragraph 5.2 is not qualified to mean only the exchange of information amongst the four ECM functions and so must be taken to include Suppliers.

In summary, ROGS makes it clear that the responsibility for identifying and managing SCCs and safety related processes is with the ECM. ECMs are obliged to ensure that Suppliers understand what is required of them and to ensure that it is achieved. Suppliers must co-operate by providing relevant information.

2. The systems of certification contained in ROGS Schedule 10 and Regulation (EU) 2019/779 have almost identical wording

The wording of the system of certification set out in Regulation (EU) 2019/779 is almost identical to that in ROGS Schedule 10 with a few changes to odd words and layout. For example, where ROGS

states an obligation as a 'must' is changed to 'shall' in Regulation (EU) 2019/779. A comparison of the two texts for paragraphs 29 and 30 of ROGS is contained in Appendix Four.

The conclusion is that whether an ECM is seeking certification under ROGS Schedule 10 or under the Annexes of Regulation 2019/779 the requirements are essentially the same. There should therefore be no confusion as to the obligations of ECMs arising from the two versions of safety regulation.

3. The articles in Regulation (EU) 2019/779 do not have effect in GB rail law

In ROGS it is clear that Regulation (EU) 2019/779 is retained for cross border (Channel Tunnel) traffic only but that ECMs can use the Annexes as a system of certification which is deemed equivalent to ROGS Schedule 10. This provision for certification does not have the effect of bringing into force the obligations on manufacturers contained in Article 4.

There is a potential conflict however, in that the Wagon NTSN is in full effect in the UK and has provisions regarding SCCs for Channel Tunnel traffic (see Appendix Three). These provisions mean that for the authorisation of new vehicles and for the upgrade or renewal of existing vehicles, if those vehicles are intended for international cross border traffic through the Channel Tunnel, manufacturers and ECMs have duties similar to those set out in Article 4 of Regulation (EU) 2019/779.

4. The evidence from the ECM interviews conducted by Workstream IV is that there is no confusion

ECMs were questioned about their interpretation of the law during the interviews conducted as part of the Workstream IV investigation of Freight Risk. There was no evidence of confusion in any ECM and all had processes which comply with the law.

The interviewer concluded that all interviewees had a good understanding of the applicable ECM legislative and standards requirements. All ECMs sampled had mature maintenance systems, monitoring, and continuous improvement processes in place. However, it was apparent that, as recorded above, maintenance systems, ECM processes, and in some cases possibly company culture, were not uniform and therefore there is work to do. All interviewees demonstrated a good level of understanding of the fundamental ECM legislative and standards requirements.

Furthermore, all ECMs have valid ECM certificates issued by a certification body which is overseen by an accreditation body. It is unlikely that an ECM which was unclear as to its applicable system of certification and how to implement it would obtain certification.

This is reinforced further by evidence from the certification body which confirmed that they had found no evidence of confusion or misunderstanding of the legal requirements during their certification and surveillance audits.

5. Suppliers are unaware of railway legislation and not directly subject to it

The problem presupposes that suppliers have a knowledge of the legal situation outlined above and are left confused by it. Also, that their obligations in respect of identifying and managing SCCs come into force or are rescinded by the choice of an ECM to seek certification under one regime or another.

The workstream has found that there is a wide variation in the knowledge of railway legislation amongst Suppliers. Whilst many manufacturers have a good understanding of their legal obligations and are providing lists of SCCs, some GB Suppliers of services and components do not

have a detailed knowledge of railway legislation. Accordingly, there is little evidence that knowledge of the finer points of the two ECM Regulations causes confusion amongst Suppliers.

During the discussion, ORR observed that it has been unable to use the railway legal framework to bring enforcement action against a supplier or manufacturer. In the past, ORR has taken action by involving the HSE and applying the Health and Safety At Work legal framework.

RIS-2750 Supplier Assurance

RIS-2750-RST was reviewed by the workstream. It was agreed that it may be helpful in showing an ECM how to manage suppliers and comply with ROGS.

Issues Arising during the Workstream discussions

During the Workstream discussions it became apparent that there were issues which had the potential to leave a gap in the assurance of safety critical components and processes. These mainly relate to the exchange of pertinent information between the ECM and the Supplier, some of which resemble those identified in the Llangennech report.

Many of these issues would be addressed by applying the provisions in ROGS Schedule 10 relating to the ECM 3 Maintenance Management function and ECM 4 Maintenance Delivery function to the ECM - Supplier relationship.

Recommendation 8 of the Llangennech report includes a requirement to:-

'address the... (d) quality and management assurance processes that encompass ECMs, workshops, contractors and suppliers of specialised services.'

Conclusions

The workstream has concluded that there is no confusion amongst ECMs and Suppliers about their roles in delivering safety assurance arising from this legal complexity.

The responsibility for identifying and managing SCCs and safety related processes is with the ECM, whether that ECM is seeking certification under ROGS Schedule 10 or under the Annexes of Regulation 2019/779.

Suppliers involved in the maintenance process must exchange relevant information about maintenance.

There are however issues relating to the contractual relationships between some ECMs and Suppliers and to the flow and availability of information.

Recommendation

The Workstream recommends that the issues identified relating to information exchange should be progressed through the work of the RSSB led Recommendation 8 Working Group and that more Supplier representatives should be recruited to support this work.

APPENDIX ONE - WHAT THE LAW SAYS (ROGS & NTSNS)

The Appendices contain extracts from the law and industry documents deemed most relevant by the workstream members and form the basis for the conclusions set out in the main document. To ease reading some words have been omitted (shown by '...') but only where they have no bearing on the meaning.

Extracts from ROGS**Definitions Used in ROGS**

"2011 EU ECM Regulation" means Commission Regulation (EU) No 445/2011 on a system of certification of entities in charge of maintenance for freight wagons and amending Regulation (EC) No 653/2007 as it had effect or as it has effect in EU law, as the context dictates;

"2019 EU ECM Regulation", save in the expression "retained 2019 EU ECM Regulation", means Commission Implementing Regulation (EU) 2019/779 laying down detailed provisions on a system of certification of entities in charge of maintenance of vehicles pursuant to Directive (EU) 2016/798 of the European Parliament and of the Council and repealing Commission Regulation (EU) No 445/2011 as it had effect or as it has effect in EU law, as the context dictates;

"cross-border service" means a service for the carriage of passengers or goods by way of the tunnel system.

"cross-border UK-issued ECM certificate" means a certificate issued in the United Kingdom to an entity in charge of maintenance by an accredited or recognised body or by a safety authority in accordance with the retained 2019 EU ECM Regulation.

"EU ECM certificate" means a certificate issued to an entity in charge of maintenance in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation as may be applicable.

"maintenance workshop" means a mobile or fixed entity composed of staff, including those with management responsibility, tools and facilities organised to deliver maintenance of vehicles, parts, components or sub-assemblies of vehicles.

"retained 2019 EU ECM Regulation" means Commission Implementing Regulation (EU) 2019/779 laying down detailed provisions on a system of certification of entities in charge of maintenance of vehicles pursuant to Directive (EU) 2016/798 of the European Parliament and of the Council and repealing Commission Regulation (EU) No 445/2011, as it has effect in the UK after IP completion day;

"UK-issued ECM certificate", save in the expression "cross-border UK-issued ECM certificate", means a certificate issued in the United Kingdom to an entity in charge of maintenance by an accredited or recognised body or by a safety authority in accordance with Schedule 10

ROGS Part 2 - Safety Management, Certification and Authorisation**Clause 18A**

(1) No person may place in service or use a vehicle on the mainline railway unless that vehicle has an entity in charge of maintenance assigned to it, and that entity in charge of maintenance

(a) is registered in relation to that vehicle in the National Vehicle Register; and

(b) where the vehicle is a freight wagon, holds—

(i) a UK-issued ECM certificate.

(ii) a cross-border UK-issued ECM certificate; or

(iii) if that person is compliant with the requirements set out in paragraphs (1ZA) or (1ZB), an EU ECM certificate.

(1ZA) Before 1st November 2023, ...

(iZB) On or after 1st November 2023, a person is compliant with the requirements referred to in paragraph (1)(b)(iii) if that person—

(a) places in service or uses a vehicle in circulation on railway lines across the territory of two states: or

(b) has an EU ECM certificate that was issued by a certification body accredited by the UK national accreditation body.

(1A) No person may use a vehicle to operate a cross-border service unless that vehicle has an entity in charge of maintenance assigned to it, and that entity in charge of maintenance—

(a) is registered in relation to that vehicle in the National Vehicle Register; and

(b) holds either an EU ECM certificate valid on the terms of its original issue or a cross-border UK-issued ECM certificate, where it is required to do so in accordance with the retained 2019 EU ECM Regulation.

(2) Each entity in charge of maintenance must ensure, by means of a system of maintenance, that a vehicle for which it is in charge of maintenance is in a safe state of running.

(3) The requirement for a system of maintenance referred to in paragraph (2) is that a vehicle must be maintained in accordance with—

(a) the maintenance file for the vehicle.

(b) applicable maintenance rules; and

(c) applicable NTSNs.

(4) Schedule 9 (applications for UK-issued ECM certificates by entities in charge of maintenance) and Schedule 10 (system of certification of entities in charge of maintenance in respect of Great Britain) have effect.

Clause 18 A ECM Certification options

(Text simplified by inserting the definitions and omitting some words)

UK Mainline Railway

No person may place in service a vehicle on the mainline railway unless that vehicle has an ECM assigned to it, and that ECM holds—

(i) a certificate issued in the UK to an ECM in accordance with Schedule 10 (a **UK-issued ECM certificate**);

(ii) a certificate issued in the UK to an ECM in accordance with the retained 2019 EU ECM Regulation (a **cross-border UK-issued ECM certificate**); or

(iii) a certificate issued to an ECM in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation as may be applicable (an **EU ECM certificate**) if that person

(a) places in service or uses a vehicle in circulation on railway lines across the territory of two states: or

(b) has a certificate issued to an ECM in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation (an **EU ECM certificate**) that was issued by a certification body accredited by the UK national accreditation body.

Channel Tunnel/Cross Border Railway

No person may use a vehicle to operate a cross-border service unless that vehicle has an ECM assigned to it, and that ECM—

(b) holds either a certificate issued to an ECM in accordance with the 2011 EU ECM Regulation or the 2019 EU ECM Regulation as may be applicable (an **EU ECM certificate**) valid on the terms of its original issue or a certificate issued in the UK to an ECM in accordance with the retained **2019 EU ECM Regulation** (a **cross-border UK-issued ECM certificate**), where it is required to do so in accordance with the retained 2019 EU ECM Regulation.

ROGS Schedule 10 PART 1

Principles

Maintenance system

4 (1) The maintenance system is to be composed of the following functions—

(a) the management function, which supervises and coordinates the maintenance functions referred to in paragraphs (b) to (d) and ensures the safe state of the freight wagon in the railway system.

(b) the maintenance development function, which is responsible for the management of the maintenance documentation, including the configuration management, based on design and operational data as well as on performance and return on experience.

(c) the fleet maintenance management function, which manages the freight wagon's removal for maintenance and its return to operation after maintenance.

(d) the maintenance delivery function, which delivers the required technical maintenance of a freight wagon or parts of it, including the release to service documentation.

(2) The entity in charge of maintenance must ensure that the functions referred to in sub paragraph (1) comply with the requirements and assessment criteria set out in Part 4.

(3) The entity in charge of maintenance must carry out the management function itself but may outsource the maintenance functions referred to in paragraphs (b) to (d) of sub paragraph (1), or parts of them, to other contracting parties subject to the provisions of paragraph 8. Where it resorts to outsourcing, the entity in charge of maintenance must ensure that the principles set out in Part 2 are applied.

(4) Regardless of the outsourcing arrangements in place, the entity in charge of maintenance is responsible for the outcome of the maintenance activities it manages and must establish a system to monitor performance of those activities.

Relationships between parties in the maintenance process

5. (1) Each railway undertaking or infrastructure manager must ensure that the freight wagons it operates, before their departure, have a certified entity in charge of maintenance and that the use of the wagon corresponds to the scope of the certificate.

(2) All parties involved in the maintenance process must exchange relevant information about maintenance in accordance with the criteria listed in paragraphs 27 and 28.

ROGS Schedule 10 PART 4

Requirements and Assessment criteria for organisations applying for a
UK Issued ECM certificate in respect of maintenance functions outsourced
by an entity in charge of maintenance

SECTION 1*Management Function Requirements and assessment criteria***Risk assessment: a structured approach to assess risks associated with the maintenance of freight wagons, including those directly arising from operational processes and the activities of other organisations or persons, and to identify the appropriate risk control measures**

22. (1) The organisation (ie ECM] must have procedures for—

- (a) analysing risks relevant to the extent of operations carried out by the organisation, including the risks arising from defects and construction non-conformities or malfunctions throughout the lifecycle; (b) evaluating the risks referred to in paragraph (a);
- (c) developing and putting in place risk control measures.

Contracting activities – a structured approach to ensure that subcontracted activities are managed appropriately in order for the organisation's objectives to be achieved

29. (1) The organisation must have procedures in place to ensure that safety related products and services are identified.

(2) When making use of contractors and/or suppliers for safety related products and services, the organisation must have procedures in place to verify at the time of selection that—

- (a) contractors, subcontractors and suppliers are competent.
- (b) contractors, subcontractors and suppliers have a maintenance and management system that is adequate and documented.

(3) The organisation must have a procedure to define the requirements that such contractors and suppliers have to meet.

(4) The organisation must have procedures to monitor the awareness of suppliers and/or contractors of risks they entail to the organisation's operations.

(5) When the maintenance/management system of a contractor or supplier is certified, the monitoring process described in paragraph 23 may be limited to the results of the contracted operational processes referred to in paragraph 23(1)(b).

(6) At least the basic principles for the following processes must be clearly defined, known and allocated in the contract between the contracting parties—

- (a) responsibilities and tasks relating to railway safety issues.
- (b) obligations relating to the transfer of relevant information between both parties.
- (c) the traceability of safety-related documents.

SECTION 2*Requirements and assessment criteria for the maintenance development function*

30. The organisation must have a procedure to identify and manage all maintenance activities affecting safety and safety-critical components.

SECTION 3*Requirements and assessment criteria for the fleet maintenance management function*

37. The organisation must have a procedure to check the competence, availability and capability of the entity responsible for maintenance delivery before placing maintenance orders. This requires that the maintenance workshops are duly qualified to decide upon the requirements for technical competences in the maintenance delivery function.
38. The organisation must have a procedure for the composition of the work package and for the issue and release of the maintenance order.
39. The organisation must have a procedure to send freight wagons for maintenance in due time.
40. The organisation must have a procedure to manage the removal of freight wagons from operation for maintenance or when defects have been identified.
41. The organisation must have a procedure to define the necessary control measures applied to the maintenance delivered and the release to service of the freight wagons.
42. The organisation must have a procedure to issue a notice to return to operation, taking into account the release to service documentation.
43. When the competence management process is applied to the fleet maintenance management function, at least the return to operation must be taken into account.
44. When the information process is applied to the fleet maintenance management function, at least the following elements need to be provided to the maintenance delivery function—
- (a) applicable rules and technical specifications.
 - (b) the maintenance plan for each freight wagon.
 - (c) a list of spare parts, including a sufficiently detailed technical description of each part to allow like-for-like replacement with the same guarantees.
 - (d) a list of materials, including a sufficiently detailed description of their use and the necessary health and safety information.
 - (e) a dossier that defines the specifications for activities affecting safety and contains intervention and in-use restrictions for components.
 - (f) a list of components or systems subject to legal requirements and a list of these requirements, including brake reservoirs and tanks for the transport of dangerous goods.
 - (g) all additional relevant information related to safety according to the risk assessment performed by the organisation.
45. When the information process is applied to the fleet maintenance management function, at least the return to operation, including restrictions on use relevant to users (railway undertakings and infrastructure managers), needs to be communicated to interested parties.
46. When the documentation process is applied to the fleet maintenance management function, at least the following elements need to be recorded—
- (a) maintenance orders.
 - (b) return to operation, including restrictions on use relevant to railway undertakings and infrastructure managers.

SECTION 4

Requirements and assessment criteria for the maintenance delivery function

47. The organisation must have procedures to—
- (a) check the completeness and appropriateness of the information delivered by the fleet maintenance management function in relation to the activities ordered.
 - (b) control the use of the required, relevant maintenance documents and other standards applicable to the delivery of maintenance services in accordance with maintenance orders.
 - (c) ensure that all relevant maintenance specifications in the maintenance orders are available to all involved staff (e.g. they are contained in internal working instructions).
 - (d) ensure that all relevant maintenance specifications, as defined in applicable regulations and specified standards contained in the maintenance orders, are available to all involved staff (e.g. they are contained in internal working instructions).
48. The organisation must have procedures to ensure that—
- (a) components (including spare parts) and materials are used as specified in the maintenance orders and supplier documentation.
 - (b) components and materials are stored, handled and transported in a manner that prevents wear and damage and as specified in the maintenance orders and supplier documentation.
 - (c) all components and materials, including those provided by the customer, comply with relevant national and international rules as well as with the requirements of relevant maintenance orders.
49. The organisation must have procedures to determine, identify, provide, record and keep available suitable and adequate facilities, equipment and tools to enable it to deliver the maintenance services in accordance with maintenance orders and other applicable specifications, ensuring—
- (a) the safe delivery of maintenance, including the health and safety of maintenance staff.
 - (b) ergonomics and health protection, also including the interfaces between users and information technology systems or diagnostic equipment.
50. Where necessary to ensure valid results, the organisation must have procedures to ensure that its measuring equipment is—
- (a) calibrated or verified at specified intervals, or prior to use, against international, national or industrial measurement standards; where no such standards exist, the basis used for calibration or verification must be recorded.
 - (b) adjusted or re-adjusted as necessary.
 - (c) identified to enable the calibration status to be determined.
 - (d) safeguarded from adjustments that would invalidate the measurement result.
 - (e) protected from damage and deterioration during handling, maintenance and storage.
51. The organisation must have procedures to ensure that all facilities, equipment and tools are correctly used, calibrated, preserved and maintained in accordance with documented procedures.
52. The organisation must have procedures to check that the performed maintenance tasks are in accordance with the maintenance orders and to issue the notice to release to service that includes eventual restrictions of use.
53. When the risk assessment process, in particular paragraph 22.4, is applied to the maintenance delivery function, the working environment includes not only the workshops where maintenance

is done but also the tracks outside the workshop buildings and all places where maintenance activities are performed.

54. When the competence management process is applied to the maintenance delivery function, at least the following activities affecting safety must be taken into account—

- (a) joining techniques, including welding and bonding.
- (b) non-destructive testing.
- (c) final vehicle testing and release to service.
- (d) maintenance activities on brake systems, wheel sets and draw gear and maintenance activities on specific components of freight wagons for the transport of dangerous goods, such as tanks, valves, etc.
- (e) other identified specialist areas affecting safety.

55. When the information process is applied to the maintenance delivery function, at least the following elements must be provided to the fleet maintenance management and maintenance development functions—

- (a) works performed in accordance with the maintenance orders.
- (b) any possible fault or defect regarding safety which is identified by the organisation.
- (c) the release to service.

56. When the documentation process is applied to the maintenance delivery function, at least the following elements must be recorded—

- (a) clear identification of all facilities, equipment and tools related to activities affecting safety.
- (b) all maintenance works performed, including personnel, tools, equipment, spare parts and materials used and taking into account—
 - (i) relevant national rules where the organisation is established.
 - (ii) requirements laid down in the maintenance orders, including requirements regarding records.
 - (iii) final testing and decision regarding release to service.
- (c) the control measures required by maintenance orders and the release to service.
- (d) the results of calibration and verification, whereby, for computer software used in the monitoring and measurement of specified requirements, the ability of the software to perform the desired task must be confirmed prior to initial use and reconfirmed as necessary.
- (e) the validity of the previous measuring results when a measuring instrument is found not to conform to requirements.

APPENDIX TWO
Extracts from Commission Implementing Regulation (EU) 2019/779**From the Recitals:**

Whereas:

(6) Safety-critical components require particular attention and priority in maintenance procedures. However, the criticality aspects of any component are related to the particular design of the vehicle and to the particular functions of the component. It is therefore not possible to establish an exhaustive list of safety-critical components. The essential elements of safety-critical components should be set out.

(7) When designing a new type of vehicle, the manufacturer should determine the criticality of the functions and components of their products by a risk-based analysis and record them in the technical file referred to in Article 15(4) of Directive (EU) 2016/797 of the European Parliament and of the Council (3). The determination of the criticality should take into account how the component is intended to be used and the environment in which it will be used. The entity in charge of maintenance should have access to the relevant parts of the technical file to ensure it is fully aware of the criticality of the components for each type of vehicles under its responsibility. The entity in charge of maintenance should identify criticalities by observing and analysing the failures and tracing all its interventions and be obliged to provide information at least on the safety critical components identified as such by the manufacturer.

(8) Where the entity in charge of maintenance considers that new safety-critical components should be included in the technical file or components should be reclassified as non-safety-critical, it should promptly inform the manufacturer, the holder of the vehicle type authorisation and the holder of the vehicle authorisation to allow taking the necessary measures, including a revision of the technical file, if needed.

Article 4. Safety-critical components

1. For managing safety-critical components, the entity in charge of maintenance shall take into account the initial identification of safety-critical components by the manufacturer of the vehicle together with any specific maintenance instructions recorded in the technical files of subsystems referred to in Article 15(4) of Directive (EU) 2016/797.

2. The entity in charge of maintenance shall, either directly or via the keeper provide information to the railway undertakings and infrastructure managers operating the vehicles, keepers, manufacturers, holders of vehicles authorisations and holders of the type of authorisation of vehicles, subsystems or components, as most appropriate and shall in particular, inform them of exceptional maintenance findings beyond wear and tear.

3. Where during the maintenance of a vehicle an entity in charge of maintenance becomes aware of evidence suggesting a component not previously identified as safety critical should be considered as such, it shall inform the manufacturer, the holder of the vehicle type authorisation and the holder of the vehicle authorisation without delay.

4. To confirm if the component is safety critical the manufacturer, when it can be identified, shall perform a risk assessment. It shall take into account the component's intended use and the environment in which it is intended to be used. As appropriate, the entity in charge of maintenance shall adjust its maintenance procedures to ensure monitoring and the safe maintenance of the component.

5. Safety critical components including those identified under paragraph 4 above, shall be recorded in and managed through the relevant vehicle documentation as follows:

(a) manufacturers shall manage information on safety critical components and appropriate maintenance instructions related to them through reference in the technical file of subsystems referred to in Article 15(4) of Directive (EU) 2016/797; and

(b) entities in charge of maintenance shall manage safety critical components and appropriate maintenance instructions as well as relevant maintenance activities in the maintenance file or documentation referred to in Article 14 of Directive (EU) 2016/798.

6. The entity in charge of maintenance shall inform the rail sector and the rail supply industry about new or unexpected safety relevant findings including exceptional maintenance findings beyond wear and tear, in relation to vehicles, subsystems or other components, when the related risks are relevant for more actors and are likely to be poorly controlled. The entity in charge of maintenance shall use the Safety Alert IT or another informatics tool provided by the Agency for this purpose.

7. At the request of the entity in charge of maintenance or of the keeper of the vehicle, the manufacturers shall provide technical and engineering support for safety-critical components and their safe integration.

Article 5 Obligations of parties involved in the maintenance process

3. All parties involved in the maintenance process such as railway undertakings, infrastructure managers, keepers, entities in charge of maintenance, as well as manufacturers of vehicles, subsystems or components, shall exchange relevant information about maintenance in accordance with the criteria listed in Sections I.7 and I.8 of Annex II.

ANNEX II

9. Contracting activities – a structured approach to ensure that subcontracted activities are managed appropriately in order for the organisation's objectives to be achieved

9.1 The organisation shall have procedures in place to ensure that safety-related products and services are identified.

9.2. When making use of contractors or suppliers, or both, for safety-related products and services, the organisation shall have procedures in place to verify at the time of selection that:

(a) contractors, subcontractors and suppliers are competent.

(b) contractors, subcontractors and suppliers have a maintenance and management system that is adequate and documented.

9.3. The organisation shall have a procedure to define the requirements that such contractors and suppliers have to meet.

9.4. The organisation shall have procedures to monitor the awareness of suppliers and/or contractors of risks they entail to the organisation's operations.

9.5. When the maintenance or management system of a contractor or supplier is certified, the monitoring process described in point 3 may be limited to the results of the contracted operational processes referred to in point 3.1(b).

9.6. At least the basic principles for the following processes shall be clearly defined, known and allocated in the contract between the contracting parties:

(a) responsibilities and tasks relating to railway safety issues.

(b) obligations relating to the transfer of relevant information between both parties.

© the traceability of safety-related documents.

II. Requirements and Assessment criteria for the maintenance development function

1.The organisation shall have a procedure to identify and manage:

- (a) all maintenance activities affecting safety.
- (b) all safety-critical components.

APPENDIX THREE
Extracts from the WAGON NTSN**4.4 Operating rules**

For the safety critical components (Channel Tunnel only) (see also 4.5), the specific operational and operational traceability requirements are developed by the designers/manufacturers at design phase and through a collaboration between designers/manufacturers and the concerned railway undertakings or the concerned wagon keeper after vehicles have entered into operation.

4.5 Maintenance Rules

The following documents being part of the technical file as required in regulation 17(2) of and Schedule 4 to the Railways (Interoperability) Regulations 2011 are necessary to undertake maintenance activities on the units:

general documentation (point 4.5.1),
the maintenance design justification file (point 4.5.2),
and the maintenance description file (point 4.5.3).

On the basis of these three documents, the entity in charge of maintenance shall define a maintenance plan and appropriate maintenance requirements at maintenance operational level under its sole responsibility (not in the scope of the assessment against this NTSN).

The following only applies to wagons that access the Channel Tunnel:

- The documentation includes a list of safety critical components. Safety critical components are components for which a single failure has a credible potential to lead directly to a serious accident, which is defined as any train collision or derailment of trains resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other accident with the same consequences which has an obvious impact on railway safety regulation or the management of safety; ‘extensive damage’ means damage that can be immediately assessed by the investigating body to cost at least EUR 2 million in total.
- The safety critical components and their specific servicing, maintenance and maintenance traceability requirements are identified by the designers/manufacturers at design phase and through a collaboration between designers/manufacturers and the concerned entities in charge of maintenance after vehicles have entered into operation.

4.5.2 Maintenance design justification file

The maintenance design justification file explains how maintenance activities are defined and designed in order to ensure that the rolling stock characteristics will be kept within permissible limits of use during its lifetime. The file shall give input data in order to determine the criteria for inspection and the periodicity of maintenance activities. The maintenance design justification file consists of:

- For Channel Tunnel, precedents, principles and methods used to identify the safety critical components and their specific operational, servicing, maintenance and traceability requirements.

4.5.3 Maintenance description file

The maintenance description file includes the following:

- Safety critical components list (Channel Tunnel only): The safety critical components list shall contain the specific servicing, maintenance and servicing/maintenance traceability requirements

- Maintenance plan i.e. the structured set of tasks to perform the maintenance including the activities, procedures and means. The description of this set of tasks includes:
 - (c) Checks and tests in particular of safety relevant parts; these include visual inspection and non-destructive tests (where appropriate e.g. to detect deficiencies that may impair safety)

APPENDIX FOUR
Side by side comparison of wording in ROGS Schedule 10: 29 and 30 with EU Regulation 2019/779

ROGS Schedule 10	EU Regulation 2019/779 ANNEX II
<p>Contracting activities – a structured approach to ensure that subcontracted activities are managed appropriately in order for the organisation's objectives to be achieved</p> <p>29. (1) The organisation must have procedures in place to ensure that safety related products and services are identified.</p> <p>(2) When making use of contractors and/or suppliers for safety related products and services, the organisation must have procedures in place to verify at the time of selection that—</p> <p>(a) contractors, subcontractors and suppliers are competent.</p> <p>(b) contractors, subcontractors and suppliers have a maintenance and management system that is adequate and documented.</p> <p>(3) The organisation must have a procedure to define the requirements that such contractors and suppliers have to meet.</p> <p>(4) The organisation must have procedures to monitor the awareness of suppliers and/or contractors of risks they entail to the organisation's operations.</p> <p>(5) When the maintenance/management system of a contractor or supplier is certified, the monitoring process described in paragraph 23 may be limited to the results of the contracted operational processes referred to in paragraph 23(1)(b).</p> <p>(6) ...</p>	<p>9. Contracting activities – a structured approach to ensure that subcontracted activities are managed appropriately in order for the organisation's objectives to be achieved</p> <p>9.1 The organisation shall have procedures in place to ensure that safety-related products and services are identified.</p> <p>9.2. When making use of contractors or suppliers, or both, for safety-related products and services, the organisation shall have procedures in place to verify at the time of selection that:</p> <p>(a) contractors, subcontractors and suppliers are competent.</p> <p>(b) contractors, subcontractors and suppliers have a maintenance and management system that is adequate and documented.</p> <p>9.3. The organisation shall have a procedure to define the requirements that such contractors and suppliers have to meet.</p> <p>9.4. The organisation shall have procedures to monitor the awareness of suppliers and/or contractors of risks they entail to the organisation's operations.</p> <p>9.5. When the maintenance or management system of a contractor or supplier is certified, the monitoring process described in point 3 may be limited to the results of the contracted operational processes referred to in point 3.1(b).</p> <p>9.6...</p>
<p style="text-align: center;">SECTION 2</p> <p style="text-align: center;"><i>Requirements and assessment criteria for the maintenance development function</i></p> <p>30. The organisation must have a procedure to identify and manage all maintenance activities affecting safety and safety-critical components.</p>	<p>II. Requirements and Assessment criteria for the maintenance development function</p> <p>1.The organisation shall have a procedure to identify and manage:</p> <p>(a) all maintenance activities affecting safety.</p> <p>(b) all safety-critical components.</p>

APPENDIX FIVE - WORKSTREAM PARTICIPANTS
Members of the Group

The contributing members of the Workstream are listed below.

<u>Name</u>	<u>Representing</u>	<u>Area of Experience/Expertise</u>
R Allen	Ermewa SA	ECM, vehicle maintenance
A Aitken	Wabtec UK Ltd	Engineering, Bogie supplier
A Martlew	Direct Rail Services	FOC, ECM, Engineering, vehicle maintenance
D Barney	Victa Railfreight Ltd	ECM, vehicle engineering
J Brown	Greenbrier Wagon Swidnica Sp	Wagon manufacturing
L Bryant	Davis Wagon Services Ltd	ECM, vehicle maintenance and manufacture
J Campbell	Arlington Fleet Services Ltd	maintenance and overhauler
R Campbell	VTG Rail UK Ltd	ECM, vehicle maintenance
S Cressey	DB Cargo (UK) Ltd	ECM, vehicle maintenance
D Cooper	Touax Rail Services	ECM, vehicle maintenance
T Gabb	Freightliner Ltd	FOC, ECM, Engineering, vehicle maintenance
J Houghton	Colas Rail	FOC, ECM, vehicle maintenance
S Hunt	Aegis Certification Services Ltd	Certification Engineer
A Nicholas	Knorr-Bremse Rail Systems (UK) Ltd	Engineering, Brake equipment
C Parker	VTG Rail UK Ltd	ECM, vehicle maintenance
G Peasley	GB Railfreight Ltd	FOC, ECM, vehicle maintenance
A Steele	EG Steele & Co Ltd	Engineering, Component overhaul
D Thompson	Lucchini Unipart Rail Ltd	Engineering, Component overhaul
S Taylor	20 March 2025(ST) Rail Wagon Association	facilitator

Advisors

Paul Fray	ORR
Cencen Gong	RSSB
Paul Ferraby	RSSB