

GENERAL CONTRACT OF USE FOR WAGONS

GCU

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CONTENTS

PREAMBLE

CHAPTER I - OBJECT, SCOPE OF APPLICATION, TERMINATION, FURTHER DEVELOPMENT OF THE CONTRACT, DISCONTINUANCE OF BEING A SIGNATORY

Article 1	Object
Article 2	Scope of application
Article 3	Termination
Article 4	Further development of the contract
Article 5	Discontinuance of being a signatory
Article 6	In abeyance

CHAPTER II – RIGHTS AND OBLIGATIONS OF THE WAGON KEEPER

Article 7	Technical admission and maintenance of wagons
Article 8	Inscriptions and signs on the wagon. Identification of wagons
Article 9	Keeper's right of deployment

CHAPTER III – RIGHTS AND OBLIGATIONS OF THE RU

Article 10	Acceptance of wagons
Article 11	Refusal of wagons
Article 12	Handling of wagons
Article 13	Wagon periods for carriage and liability
Article 14	Deployment of empty wagons
Article 15	Information to be supplied to the keeper
Article 16	Handover of a wagon to third parties
Article 17	Acceptance of a wagon from third party keepers

CHAPTER IV - ASCERTAINMENT AND HANDLING OF DAMAGE TO WAGONS IN THE CUSTODY OF AN RU

Article 18	Ascertainment of damage
Article 19	Handling of damage
Article 20	Handling of lost wagons and removable accessories
Article 21	Handling of bogies

CHAPTER V - LIABILITY IN THE EVENT OF THE LOSS OR OF DAMAGE TO A WAGON

Article 22	Liability of the user RU
Article 23	Amount of compensation
Article 24	Liability of previous users
Article 25	Obligation to mitigate losses
Article 26	Settlement of damages

CHAPTER VI - LIABILITY IN THE EVENT OF DAMAGE CAUSED BY A WAGON

Article 27	Principle of liability
------------	------------------------

CHAPTER VII - LIABILITY FOR STAFF AND OTHER PERSONS

Article 28	Principle of liability
------------	------------------------

CHAPTER VIII - OTHER PROVISIONS

Article 29	Loading guidelines
Article 30	Accountancy and payment
Article 31	Obligation to pay damages
Article 32	Competent jurisdiction
Article 33	Limitation
Article 34	Languages
Article 35	Entry into force

APPENDICES

Appendix 1	List of signatory keepers and RUs
Appendix 2	Definitions
Appendix 3	Documents relating to the conveyance of empty wagons
Appendix 4	Wagon damage report
Appendix 5	Calculating compensation for a wagon or bogie in the event of loss or damage
Appendix 6	Compensation for loss of use
Appendix 7	Spare parts
Appendix 8	Internal Regulations for the application and further development of the GCU
Appendix 9	Irregularities to freight wagons in operation and follow-up actions
Appendix 10	Minimum condition and measures to restore fitness to run of wagons
Appendix 11	Inscriptions and signs on wagons
Appendix 12	Catalogue of damage to wagons
Appendix 13	List of repairs which may be carried out by the RU at the place of the wagon's immobilisation or in the nearby vicinity
Appendix 14	Additional conditions for the use of wagons on ferries and in exchange with railways operating on standard or broad-gauge lines
Appendix 15	Wagon Performance Message (WPM)
Appendix 16	Wagon Vehicle Data

PREAMBLE

The use of wagons by railway undertakings (RU)¹ as a means of transport necessitates the adoption of contractual provisions setting out the rights and obligations of each party.

In order to ensure the safety and to improve the efficiency and competitiveness of railway freight traffic, the wagon keepers and RUs listed in Appendix 1 hereby agree to apply the provisions of the present GENERAL CONTRACT FOR USE OF WAGONS (GCU).

¹ Terms marked with an asterisk (*) are explained in Appendix 2 (Definitions)

CHAPTER I

OBJECT, SCOPE OF APPLICATION, TERMINATION, FURTHER DEVELOPMENT OF THE CONTRACT, DISCONTINUANCE OF BEING A SIGNATORY

Article 1: Object

- 1.1 This contract, including its appendices, sets out the conditions for the provision of wagons for use as a means of transport by RUs in national and international traffic within the scope of application of the COTIF in force.

Commercial conditions for the use of wagons are outside the scope of this contract.

- 1.2 The provisions of this contract shall apply to wagon keepers and RUs* as wagon users.
- 1.3 Use of a wagon includes the loaded and empty run, as well as cases in which the wagon is in the custody of a signatory RU.
- 1.4 Use and custody begin when the wagon is accepted by the RU and end with the handover of the wagon to the keeper or to another authorised party, for example another signatory RU, the contractual consignee of the goods carried, or the operator of private sidings authorised to take delivery of the wagon.

Article 2: Scope of application

- 2.1 This contract shall take precedence in international rail traffic over the CUV Uniform Rules (Annex D to the 1999 COTIF) and in domestic rail traffic over any national regulations that may be applicable, to the extent that this is admissible.
- 2.2 Admission shall be effective from the first day of the following month, provided that the application has been received by the GCU Bureau at least fifteen days before.
- 2.3 The provisions of this multilateral contract shall apply between the signatories to the extent that they have not concluded other provisions between themselves.
- 2.4 The GCU Bureau shall publish an updated list of signatories (Appendix 1, available on the website at www.gcubureau.org) every month, on the first day of the calendar month in question.

Article 3: Termination

- 3.1 Any signatory may withdraw from this contract at the end of each calendar year, subject to at least six months' notice being provided in writing and sent to the GCU Bureau. Termination and the date from which this becomes effective shall be published monthly by the GCU Bureau together with the list referred to in Article 2.4.
- 3.2 In addition, any signatory that has voted against a proposed modification to the contract may, within six weeks of the proposal being adopted by the majority of the signatories, withdraw from the contract by giving written notice to the GCU Bureau, with effect from the date on which the modification enters into force.

Article 4: Further development of the contract

The parties to the GCU shall adopt an Internal Regulation (Appendix 8) for the further development of the contract. The GCU Bureau shall be responsible for editing and coordinating any such modifications of the GCU.

Article 5: Discontinuance of being a signatory

If a signatory is more than six months in arrears for an outstanding amount of more than 100 euros according to section I point 12 of Appendix 8, and, if the signatory has not paid the amount within two months after an additional request for payment has been sent, the discontinuance of its being a signatory shall be published in the monthly list according to article 2.4. From then on it shall be considered to be a third party according to articles 16 and 17.

Article 6: in abeyance

CHAPTER II

RIGHTS AND OBLIGATIONS OF THE WAGON KEEPER

Article 7: Technical admission and maintenance of wagons

- 7.1 The keeper shall ensure that his wagons are technically admitted* in accordance with the national and international laws and regulations in force at the time of admission and that they remain technically admitted throughout the period of their use.
- 7.2 The keeper shall ensure that his wagons are maintained in accordance with the laws, regulations, and mandatory standards in force. In particular, it shall appoint a certified Entity in Charge of Maintenance (ECM) and ensure that the latter integrates the maintenance provisions of the GCU, in particular of Appendix 10, into its maintenance system.
- 7.3 For the purposes of this contract and vis-à-vis the other signatories, the keeper is considered to be, and have the responsibilities of, the entity in charge of maintenance for his wagons, even if it has designated a legally separate ECM. ECMs are not parties to this agreement.
- 7.4 The keeper must provide the impacted user railway undertakings with the information on its wagons which is required for safe railway operations in electronic format as soon as possible. The provision of technical wagon data and additional data – where relevant – is provided for in Appendix 16.

Upon request and without delay, the keeper shall, make reliable maintenance information available to any user RU, as well as restrictions affecting operations (including the Maintenance File and Maintenance Record File) and, if required, further information, which may be necessary and sufficient to support safe operations or clarify incidents.

- 7.5 On behalf of its ECM, the keeper authorises the RU – on the basis of the public law applicable to the ECM that governs the subcontracting of maintenance functions – to carry out repairs in accordance with the requirements of Appendix 10. The ECM's responsibility for the outcome of the subcontracted maintenance functions and for performance monitoring remains unaffected.
- 7.6 The keeper must allow the RUs to conduct any inspections that may be necessary on wagons, as well as any required corrective measures during operation in accordance with Appendix 9.

Article 8: Inscriptions and signs on the wagon. Identification of the wagon

Without prejudice to the regulations in force, wagons shall carry the following inscriptions:

- indication of the keeper
- inscriptions and signs on the wagons as shown in Appendix 11
- where appropriate, the home station or region*

Article 9: Keeper's right of deployment

- 9.1 The keeper shall have the right of access to its wagons. Under this contract, the keeper may act through third parties authorised by it. In case of doubt, the keeper's instructions shall take precedence over any instructions from a third party claiming to be authorised by the keeper.

- 9.2 Except when justified for reasons of safety, only the keeper shall be authorised to issue instructions to RUs regarding the use of its wagons.
- 9.3 The keeper shall provide RUs with the instructions necessary for the carriage of empty wagons in good time.
- 9.4 Any request from a keeper for its wagons not to be handed over to certain RUs, whether signatory or third party, shall be met.

CHAPTER III

RIGHTS AND OBLIGATIONS OF THE RU

Article 10: Acceptance of wagons

Provided that the keeper complies with its obligations under Chapter II, RUs shall accept wagons within the scope of their commercial services* offered.

Article 11: Refusal of wagons

An RU may refuse wagons if:

- their acceptance is prohibited by a competent authority
- it is temporarily impossible to accept them for operating reasons specific to the RU concerned
- there are exceptional circumstances beyond the control of the RU (cases of force majeure in particular) that temporarily prevent the wagons being accepted
- the condition of the wagons does not meet technical and maintenance regulations or conform to current loading guidelines
- there are other substantial reasons which might affect the safe operation of the wagon; such reasons must be notified to the keeper

An RU may not refuse its own wagons when they are empty and fit to run.

Article 12: Handling of wagons

12.1 Each RU shall handle wagons with care and due diligence and shall carry out the legally required inspections. Detected damages shall be handled in accordance with Appendix 9. Similarly, it shall, in particular, carry out all of the safety-related inspections needed on wagons, irrespective of their keeper. The costs relating to these routine inspections shall not be separately invoiced to the keeper.

12.2 Each RU shall ensure that the procedures and regulations set out in this contract for restoring fitness to run* are integrated into its safety management system.

Article 13: Wagon periods for carriage and liability

13.1 The periods for carriage for loaded wagons depend on the transit periods for the goods being conveyed. Periods for carriage for empty wagons are subject to agreement. In the absence of such an agreement, the periods set out in Article 16 of the CIM for wagon-load consignments shall apply.

13.2 The user RU shall not be held liable for exceeding the periods for carriage if these are attributable to:

- fault on the part of the keeper
- an order placed by the keeper not resulting from a fault on the part of the user RU
- a defect on the wagon or its load
- circumstances which the user RU could not avoid and whose consequences it could not prevent
- justified refusal of the wagon or consignment as covered by Article 11

13.3 If these periods are exceeded for a reason ascribable to an RU, the keeper may claim compensation for loss of use of the wagons. Unless otherwise agreed, the amount of compensation for loss of use shall be calculated using Appendix 6. This amount, added to the compensation for damage specified in Article 23.2, may not exceed the amount payable for a wagon's loss. It shall be charged in addition to the compensation for loss granted under Articles 20.3 or 23.1.

Article 14: Deployment of empty wagons

- 14.1 The RU shall execute the instructions given by the keeper for the carriage of empty wagons within the scope of its commercial services offered.
- 14.2 The following documents, included in Appendix 3, shall be used for the carriage of empty wagons:
- wagon note
 - charges note
 - subsequent orders
 - notification of circumstances preventing carriage
 - notification of circumstances preventing delivery

These documents may be issued in paper format or recorded electronically.

The procedure agreed upon between parties to the contract of carriage for issuing these documents in electronic format must ensure the integrity and reliability of the information contained from the time of issue. The procedure agreed upon between parties to the contract of carriage for supplementing or amending the electronic wagon note must ensure amendments are identifiable. It must also ensure that the original information contained in the electronic wagon note is preserved. The electronic wagon note must be authenticated. Authentication may take the form of an electronic signature or other suitable procedure.

The arrangements for handling these documents in paper or electronic format are set out in the Wagon Note Guide of the CUV (GLW-CUV), published by the International Railway Transport Committee (CIT).

- 14.3 If the keeper has failed to issue instructions by the time the RU takes the wagon back after unloading at the latest, the RU shall be obliged to send the wagon back to its home station or region or to any other previously agreed upon station.

Article 15: Information to be supplied to the keeper

User RUs shall supply the keeper with information on the use of his wagons in a timely manner, via the communication platform (GCU Broker*), in accordance with the national and international laws and regulations in force. Details are set out in Appendices 4 (Wagon damage report) and 15 (Wagon Performance Message (WPM)).

Article 16: Handover of a wagon to third parties

An RU that hands over a wagon to a third party without authorisation from the keeper shall be liable to the latter, in particular, for any damage that may result therefrom. The liability of the third party remains unaffected.

Article 17: Acceptance of wagons from third party keepers

The present contract shall apply to wagons whose keepers are not GCU signatories from the moment they are accepted by a signatory RU as part of a handover or exchange.

In such cases, the RU which accepts the wagon is considered as its keeper vis-à-vis the other parties to the GCU for this run and for the empty return run following it. This is to be indicated in the CUV wagon note.

CHAPTER IV

ASCERTAINMENT AND HANDLING OF DAMAGE TO WAGONS IN THE CUSTODY OF AN RU

Article 18: Ascertainment of damage

- 18.1 If damage to a wagon or the loss or damage of removable accessories mentioned on the wagon is discovered or presumed by an RU, or the keeper claims they exist, the RU shall without delay and, if possible, in the keeper's presence, draw up a wagon damage report (as per Appendix 4) documenting the nature of the damage or loss and, insofar as possible, the cause and the time it took place.
- 18.2 When the damage or loss of parts does not prevent use of the wagon in traffic, the keeper does not need to be invited when the damage or loss is recorded.
- 18.3 A copy of the wagon damage report shall be sent to the keeper without delay.
- 18.4 If the keeper does not accept the contents of the wagon damage report, it may ask for the nature, cause, and extent of damage to be recorded by an expert appointed by the parties to the contract or by judicial means. This procedure shall be subject to the law of the country in which it takes place.
- 18.5 When a wagon sustains damage or loss of a part and is unable to run or be used as a result, the RU shall also inform the keeper immediately, providing the following information as a minimum:
- the wagon number
 - the status of the wagon (loaded or empty)
 - the date and place it was detached
 - reason for the detachment
 - details of the department to contact
 - probable duration of wagon unavailability (up to 6 working days; more than 6 working days).

Article 19: Handling of damage

- 19.1 The user RU, which detects the damage and detaches the wagon, shall arrange for the wagon to have its fitness to run restored in accordance with the provisions of Appendices 9 and 10 and put the wagon back into service. When Appendix 10 is used, the repair is carried out based on an authorisation by the ECM (Article 7.5).
- 19.2 If the cost of repairs is more than 850 euros, the keeper's agreement must first be sought, except in the case of brake block replacements or if Appendix 13 is applied by the RU. If the keeper does not respond after two working days (not including Saturdays), the repair work shall go ahead. If the keeper refuses the cost estimate for the repair, the keeper is responsible for repairing the damage.
- 19.3 When the damage does not affect the wagon's fitness to run, but makes its use difficult, the RU may carry out work to restore the fitness for use* of the wagon without the keeper's agreement, up to an amount of 850 euros in accordance with the provisions of Appendix 10.
- By separate agreement with the keeper, the RU may be authorised to carry out additional work.
- 19.4 If the cost of repairing the wagon exceeds the residual value calculated according to Appendix 5, the wagon shall be considered beyond repair from an economic point of view.

- 19.5 In cases where the RU carries out corrective measures in application of the provisions of Appendix 9, it shall do so with qualified staff and all due care. In the context of the preceding provision, "qualified staff" (operations staff) means staff possessing the competences and authorisations to take corrective measures, described in the RU's safety management system (SMS).

Repair work in application of the provisions of Appendix 10 may only be performed by approved workshops.

These approved workshops:

- hold a valid ECM certification for maintenance functions in accordance with the ECM Regulation/in accordance with applicable public law, which includes at least the maintenance delivery function

- and

- are listed in the European Agency for Railways Database of Interoperability and Safety (ERADIS)

- and

- are conversant with Appendices 7, 9, and 10 to the GCU and instruct their employees on changes to the GCU on a regular basis

- 19.6 The RU that has arranged the repair in accordance with Appendix 10 shall ensure that the workshop provides the notice of release to service* to the RU after completion of the work to put the wagon back into service, using the codes according to Appendix 10, Annex 6.

A copy of the notice of release to service and any additional information shall be sent to the keeper without delay either by the RU or by the workshop, if so provided in the contractual relationship between the RU and the workshop.

- 19.7 If one of the following cases applies, the wagon is considered removed from operation and a notice of return to operation provided by the keeper is necessary:

- the RU has detached a wagon in accordance with Appendix 9, point 2.2.5, Variation C
- the RU has detached a wagon in accordance with Appendix 9, point 2.2.5, Variation A and the workshop has applied Appendix 10, Module M00.001 to request additional maintenance instructions from the keeper
- the RU has requested the delivery of parts using the form H^R (Appendix 7 GCU)
- in its notice of release to service, the workshop has indicated restrictions for use which are different from the actions to be taken according to Appendix 9

The keeper shall provide a notice of return to operation to the RU on the basis of the notice of release to service

- 19.8 Upon completion of the repairs and without any specific instructions from the keeper, the RU shall forward the wagon to the destination station for which it was initially bound.

- 19.9 The management of spare parts is covered in Appendix 7.

- 19.10 The coverage of the cost of repair work is dealt with in Chapter V.

Article 20: Handling of lost wagons and removable accessories

- 20.1 A wagon shall be considered lost if it is not placed at the keeper's disposal within three months following the receipt of his search request by the RU to which he provided the wagon, or if the keeper has received no indication on the whereabouts of the wagon. This period shall be extended by the duration of the wagon's immobilisation for any reason not ascribable to the RU or due to damage.

- 20.2 Any removable accessory mentioned on the wagon shall be considered lost if it is not returned with the vehicle.

20.3 If an RU is liable, it shall pay the keeper:

- for a lost wagon, compensation calculated in accordance with Appendix 5
- for a lost accessory, compensation amounting to the value of the part in question

20.4 Upon receiving compensation, the keeper may request to be notified in writing when the wagon (or removable accessory) is found. In this case, the keeper may require that, within six months of receiving the notification, the wagon (or removable accessory) be returned to him against repayment of the compensation received. The period between payment of the compensation for loss of the wagon and repayment thereof by the keeper shall not qualify it for any compensation for loss of use.

Article 21: Handling of bogies

The provisions of this chapter shall apply in the same way as for the handling of bogies.

CHAPTER V

LIABILITY IN THE EVENT OF THE LOSS OF OR DAMAGE TO A WAGON

Article 22: Liability of the user RU

22.1 The RU which has custody of a wagon shall be liable to the keeper for any loss of or damage to the wagon or accessories unless it proves that the damage was not caused by fault on its part.

22.2 The RU shall not be liable if it brings proof of one of the following:

- circumstances that the RU was not able to avoid and the consequences of which it could not prevent
- fault of a third party
- insufficient maintenance by the keeper when the RU can prove that the wagon was properly used and inspected
- fault of the keeper

If the RU is found to be partly responsible, the damage shall be borne by the responsible parties in proportion to their respective share of responsibility.

The keeper cannot cite the existence of a hidden defect on its wagon as proof that there was no fault on its part.

22.3 The RU shall not be liable for:

- loss of or damage to removable accessories that is not listed on both sides of the wagon
- loss of and damage to removable accessories (filling hoses, tools, etc.) provided that it cannot be shown to be at fault

22.4 To facilitate the handling of damage and take account of the normal wear and tear of the wagon, the quality of its maintenance and its use by third parties, the damage catalogue in Appendix 12 shall be applied as follows:

- damage assigned to the keeper shall be borne by the keeper; independently of this, the keeper may, for damage in excess of 850 euros, seek recourse against an RU, if it can bring proof that the RU in question was at fault
- damage assigned to the RU shall be borne by the user RU up to a maximum of 850 euros
- damage assigned to the RU in excess of 850 euros shall be handled in accordance with the provisions of Article 22.1

Article 23: Amount of compensation

- 23.1 In the event of loss of the wagon or its accessories, the amount of compensation shall be calculated in accordance with Appendix 5.
- 23.2 In the event of damage to the wagon or its accessories, compensation shall be limited to the cost of repairs. Compensation for loss of use shall be granted in accordance with Article 13.3 and compensation for the change in operational value for damaged wheelsets in accordance with Appendix 6, Part II. When a request is sent to the keeper for spare parts to carry out repair work, the period of loss of use shall be suspended between the date of the request and the date on which the parts are received. The total amount of compensation (for loss of use and for reprofiling wheelsets) may not exceed the amount that would be payable for loss of the wagon.

Article 24: Liability of previous users

- 24.1 When the RU which has custody of a wagon is exempt from liability, each previous user in the current chain of use (loaded or empty run) shall be liable to the keeper for any damage to the wagon and for the loss of or damage to its accessories in accordance with Article 22, if the RUs following it in the chain of use were able to exonerate themselves under the terms of Article 22.
- 24.2 Outside of the current chain of use, the previous user shall only be liable to the keeper if the keeper can prove that this user caused the damage and if this user cannot exonerate himself under Article 22.

Article 25: Obligation to mitigate losses

When payment is made for damage caused to wagons, the parties to the contract shall abide by the general principles associated with the obligation to limit the resulting losses.

Article 26: Settlement of damages

The user RU or workshop acting as its auxiliary shall invoice the cost of repairing the wagon to the keeper, with the exception of costs for which the user RU is liable under the terms of Article 22. When the previous user is liable for the damage, the keeper shall send that user an invoice for the cost of the repairs for which he was himself invoiced by the user RU or workshop. The keeper may claim compensation for loss of use, in accordance with Article 13.

CHAPTER VI

LIABILITY IN THE EVENT OF DAMAGE CAUSED BY A WAGON

Article 27: Principle of liability

- 27.1 The keeper or a previous user subject to this contract shall be liable for damage caused by the wagon provided that they can be shown to be at fault. The keeper shall be presumed to be at fault if it has not correctly fulfilled its duties under Article 7, unless this breach of duty did not cause or contribute to the damage.
- 27.2 The liable party shall indemnify the user RU against any third-party claims if the user RU is not at fault.
- 27.3 Where the user RU is partly responsible, the compensation shall be borne by each party in proportion to its respective share of responsibility.
- 27.4 When a third party is solely or partly responsible for the damage, the parties to the contract shall primarily hold the third party liable when settling the claim. In particular, the signatory which has a contract with the third party shall pursue the claim vis-à-vis the third party as a matter of priority.
- 27.5 Upon request, the keeper shall be required to provide proof of its civil liability insurance in accordance with applicable laws.

CHAPTER VII

LIABILITY FOR STAFF AND OTHER PERSONS

Article 28: Principle of liability

The signatories shall be liable for their employees and other persons whose services they make use of to perform the contract, insofar as these employees and other persons are acting within the scope of their functions.

CHAPTER VIII

OTHER PROVISIONS

Article 29: Loading guidelines

The RUs shall ensure that shippers comply with the UIC Loading Guidelines in force.

Article 30: Accountancy, payments, and interest on late payments

- 30.1 The EURO (ISO code: EUR) shall be used as the sole monetary unit for all accounts and payments.
- 30.2 Payment must be made within 60 days following the date of receipt of the invoice, accompanied by the appropriate supporting documentation. An invoice is considered to be paid once the full amount due is credited on the account specified by the creditor.
- 30.3 If the payment period is exceeded, the creditor may charge interest for late payment from the sixty-first (61st) day for the unpaid amount.
- 30.4 The yearly interest rate is calculated as follows: the interest rate applied by the European Central Bank to its most recent main refinancing operations (MRO) plus 800 basis points. Basis for the calculation is the interest rate in force on the 1st of January of the calendar year in which the invoice was established.

Article 31: Obligation to pay damages

When a signatory fails by its own fault to meet an obligation which is due under this contract, it shall compensate the affected signatory for the direct damages suffered.

Article 32: Competent jurisdiction

Unless otherwise agreed between the parties, the competent jurisdiction shall be that in which the defendant is established.

Article 33: Limitation

- 33.1 The period of limitation for actions based on Chapter III shall be one year. The period of limitation for actions based on Chapters V and VI shall be three years.
- 33.2 The period of limitation shall run as follows:
- a) for claims brought under Chapter III, from the day on which the agreed period or the periods specified in the CIM expire
 - b) for claims brought under Chapter V, from the day on which the loss of or damage to the wagon was recorded or the day on which the keeper could consider the wagon or the accessories lost in accordance with Article 20
 - c) for claims brought under Chapter VI, from the day on which the damage occurred

Article 34: Languages

The present contract exists in English, German, and French; each language version has the same contractual value.

Two GCU members with different national languages must carry out their correspondence in one of the official GCU languages. The fields in the form in Appendix 4 must thus be written in at least one of those three languages. Invoices may be issued in the national language of the place of issue. The provisions of Annex 6 of Appendix 10 (coding of interventions) remain unaffected.

Article 35: Entry into force

This contract shall enter into force on 1.7.2006.

APPENDIX 1 TO THE GENERAL CONTRACT OF USE

LIST OF SIGNATORY KEEPERS AND RUs
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The updated list of signatories, and address details as defined in Article 2.4 of the GCU, can be found in the database on the GCU Bureau website:

www.gcubureau.org/signatories

Each signatory is obliged, depending on its own organisation, to enter the information relating to it directly on the above website in accordance with the format specified therein.

APPENDIX 2

TO THE GENERAL CONTRACT OF USE FOR WAGONS

DEFINITIONS

Preliminary remarks

In the GCU, different terms are used for different situations, in each case consistently. Changing designations for identical ideas are avoided. If forms and electronic information systems still use outdated terms, this does not prevent their continued use, provided that it is clarified with which current definitions the earlier terms correspond. Existing forms can be used up in any case. Definitions from legal regulations are only repeated here to the extent that they are concretised and summarised for the conditions in the use of freight wagons - without contradicting the legal definition - see e.g. "ECM", "RU", "keeper", "maintenance" system, safety management system.

COMMERCIAL SERVICE	Denotes the services and commercial conditions offered by an RU to keepers and other RUs. These services comprise, in particular, the routes served, the products or goods accepted in the trains, the different ways of carriage and the prices of the services provided.
COMPETENT NATIONAL AUTHORITY	The national authority responsible for technical admission in accordance with the laws and regulations in force in each country.
ENTITY IN CHARGE OF MAINTENANCE (ECM)	An organisation responsible for the maintenance of a vehicle and entered as such in an official register designated for this purpose.
FITNESS FOR USE	Suitability of a wagon for use as a means of transport for the safe carriage of goods.
FITNESS TO RUN	Wagon that is fit to run on its own wheels in freight trains under normal operating conditions, where appropriate at the end of a train, without representing a hazard for operations.
GCU BROKER	The website and IT interface provided by the GCU Bureau for the electronic communication and information system to be used by the contracting parties.
HOME STATION; GEOGRAPHICAL AREA	Home station: designated station marked on the wagon and to which an empty wagon must be sent if no other instruction is received from the keeper. Geographical area: geographical area covering a number of stations in a given region to which an empty wagon must be returned if no other instruction is received from the keeper.
INFRASTRUCTURE MANAGER	Any entity or undertaking responsible in particular for the establishment and maintenance of railway infrastructure. This may also include the management of infrastructure control and safety systems. The functions of infrastructure manager across all or part of a network may be entrusted to several different entities or companies.
MAINTENANCE	The combination of all technical and administrative actions during the life cycle of a wagon or its parts intended to retain it in, or restore it to, a state in which it can perform the required function.

PREVIOUS USER	An RU that used a wagon of which it was not the keeper, having subsequently handed it over to another RU for use.
RAILWAY UNDERTAKING (RU)	Any officially licensed private or public rail freight transport undertaking that uses freight wagons as a means of transport.
RELEASE TO SERVICE	The justified and recorded assurance, accompanied by documentation where appropriate, given by the entity delivering the maintenance to the fleet-maintenance manager, that maintenance has been delivered according to the maintenance orders (see ECM Regulation).
REPAIR	Physical action taken to restore the fitness to run or fitness for use of a damaged wagon.
RETURN TO OPERATION	A notification from the entity in charge of maintenance (or other authorised parties through subcontracting) to the user, such as a railway undertaking or keeper, based on the release to service. Transmitted in written form (minimum requirements: wagon number, date, release to service number, and, if applicable, restrictions on use), or via an electronic communication system, with the assurance that all maintenance work arranged in accordance with the GCU has been completed, and that the vehicle previously taken out of service is in a condition in which it can be used safely, subject to any restrictions on use.
TECHNICAL ADMISSION	Procedure by the competent national authority to approve a railway vehicle for running.
TSI	Technical Specification for Interoperability for the trans-European conventional rail system.
WAGON KEEPER OR KEEPER	means the person or entity that, being the owner of a wagon or having the right to use it, exploits the wagon as a means of transport and is registered as keeper of the wagon in the competent official vehicle register, or, if the wagon is not registered in the competent official vehicle register or such a register is not existing, the person or entity that has declared to the GCU Bureau to be keeper of the wagon.
WAGON NOTE	Forwarding and deployment document accompanying a wagon making an empty run (see specimen in Appendix 3).
WAGON TARE	Total mass of the unloaded wagon, expressed in kilograms and marked on each side of the wagon (for marking rules, see Appendix 11). The marked tare must not differ from the actual observed mass of the wagon by more than 100 kilograms (heavier/lighter) per wheelset on the wagon.

APPENDIX 3 TO THE GENERAL CONTRACT OF USE

DOCUMENTS RELATING TO THE CONVEYANCE OF EMPTY WAGONS.

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- 3.1 Wagon note
 - 3.2 Wagon note for Combined Transport
 - 3.3 Charges note
 - 3.4 Subsequent orders
 - 3.5 Notification of prevention of conveyance
 - 3.6 Notification of prevention of handover

3.1 Wagon note

1-30 To be completed by the consignor / À remplir par l'expéditeur **X** Mark the box applicable with a cross – Désigner par une croix ce qui convient
(Boxes – Cases 20, 22, 23, 30, 52, 58)

Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. *Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur.*

Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. *Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.*

30 CIM Consignment Note ☐ **CUV Wagon Note** ☐
Lettre de voiture CIM **Lettre wagon CUV**

1 Consignor (name, address) – Expéditeur (nom, adresse)
Signature
VAT no. N° TVA

2 E-Mail
Tel.
Fax

3 Consignee (name, address, country) – Destinataire (nom, adresse, pays)
VAT no. N° TVA

4 E-Mail
Tel.
Fax

7 Consignor's declarations – Déclarations de l'expéditeur

8 Consignor's reference – Référence expéditeur

9 Documents attached – Annexes

10 Delivery point – Lieu de livraison
11 Station – Gare
Country – Pays

12 Point – Lieu

13 Commercial specification – Conditions commerciales
14 Wagon no. – Wagon N°

15 Section – Parcours
by – par

16 Acceptance – Prise en charge
month – day – hour
mois – jour – heure

17 Sectional invoicing – Facturation partielle

18 Payment instructions – Paiement des frais
including – y compris
up to – jusqu'à

19 Carriage charges paid – Franco de port
Incoterms

20 Description of the goods – Désignation de la marchandise
21 Exceptional consignment – Transport exceptionnel
yes – oui
22 RID
yes – oui
23 NHM code
24 Mass (weight) – Masse
25 Declaration of value – Déclaration de valeur
Currency
26 Interest in delivery – Intérêt à la livraison
Monnaie
27 Cash on delivery – Remboursement
Currency
28 Examination – Vérification
by – par

29 Customs endorsements – Indications douanières

31 Prepayment coding – Code d'affranchissement
32 Route – Itinéraires

33 Customs procedures – Opérations douanières

34 Charges note – Bulletin d'affranchissement
yes – oui
returned renvoyé
month – day
mois – jour

35 Notification of payment no. – Avis d'encaissement N°
returned renvoyé
month – day
mois – jour

36 Formal report no. – Procès-verbal N°
made out by établi par
month – day
mois – jour

37 Extension of transit time – Prolongation du délai de livraison
Code from – du to – au place – lieu

38 Carrier's declarations – Déclarations du transporteur

39 Other carriers – Autres transporteurs
Name, address – Nom, adresse
Section – Parcours
Status
Qualité

40 Contractual carrier – Transporteur contractuel
Signature
b) Simplified transit procedure for rail – Procédure simplifiée de transit ferroviaire
yes – oui
Code for the principal – Code principal obligé

41 Date of arrival – Date d'arrivée
Arrival no. – Arrivage N°
Original

42 Made available – Mise à disposition
month – day – hour
mois – jour – heure

43 Acknowledgement of receipt – Quitteuse du destinataire

44 Consignment number – Identification de l'envoi
Country – Pays
Station – Gare
Undertaking – Entreprise
Consign't no. Exp. N°

45 Place and date completed – Lieu et date d'établissement

46 Date, signature

47 Point 6.7.8

48 © 2008 CIT

Original

1

Charging sections (continued) – Sections de taxation (suite)										Charges paid – Franco		To pay – Port dû	
										Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
										Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
													86 Ex. Rate
													90
D	Section Parcours	70					71	72		73		81	82
		75			76		77		78		83 Cours	84	
											87	88	
											91	92	
E	Section Parcours	70					71	72		73		83 Ex. Rate	84
		75			76		77		78		87	88	
											91	92	
											83 Cours	84	
F	Section Parcours	70					71	72		73		83 Ex. Rate	84
		75			76		77		78		87	88	
											91	92	
											83 Cours	84	
G	Section Parcours	70					71	72		73		83 Ex. Rate	84
		75			76		77		78		87	88	
											91	92	
											83 Cours	84	
										Brought forward from supplementary sheets Report des feuilles supplémentaires			92
										Grand total – Montant général			94

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Invoice
Feuille de route

2

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							86 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

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Section
Parcours

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Section
Parcours

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Section
Parcours

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Brought forward from the front – Report du recto

A

Charges

B

Frais

C

Charges

Frais

1-30 To be completed by the consignor / À remplir par l'expéditeur **X** Mark the box applicable with a cross – Désigner par une croix ce qui convient
Boxes – Cases 20, 22, 23, 30, 52, 58

Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur.

Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.

30 CIM Consignment Note ☐ **CUV Wagon Note** ☐
Lettre de voiture CIM **Lettre wagon CUV**

1 Consignor (name, address) – Expéditeur (nom, adresse)
Signature
VAT no. / N° TVA
4 Consignee (name, address, country) – Destinataire (nom, adresse, pays)
Signature
VAT no. / N° TVA

2 E-Mail
3 Tel.
5 Fax
6 E-Mail
7 Consignor's declarations – Déclarations de l'expéditeur
8 Consignor's reference – Référence expéditeur

9 Documents attached – Annexes
10 Delivery point – Lieu de livraison
11 Station – Gare
12 Country – Pays
13 Commercial specification – Conditions commerciales
14 Information for the consignee – Informations pour le destinataire
15 Description of the goods – Désignation de la marchandise
22 Exceptional consignment – Transport exceptionnel
yes / oui ☐
23 RID yes / oui ☐
24 NHM code
25 Mass (weight) – Masse
26 Declaration of value – Déclaration de valeur
Currency
27 Interest in delivery – Intérêt à la livraison
Monnaie
28 Cash on delivery – Remboursement
Currency
48 Examination – Vérification
by – par

16 Acceptance – Prise en charge
month – day – hour / mois – jour – heure
17 Point – Lieu
18 Wagon no. – Wagon N°
19 Section – Parcours
by – par
20 Payment instructions – Paiement des frais
including – y compris up to – jusqu'à
☐ Carriage charges paid – Franco de port
☐ Incoterms
39 Customs endorsements – Indications douanières

70 Section – Parcours
71 Charges
72 Freight
73 Charges
74 Freight
75 Charges
76 Freight
77 Charges
78 Freight
79 Charges
80 Freight
81 Charges
82 Freight
83 Charges
84 Freight
85 Charges
86 Freight
87 Charges
88 Freight
89 Charges
90 Freight
91 Charges
92 Freight
93 Charges
94 Freight
95 Charges
96 Freight
97 Charges
98 Freight
99 Charges
100 Freight

40 Prepayment coding – Code d'affranchissement
41 Route – Itinéraires
42 Customs procedures – Opérations douanières
43 Charges note – Bulletin d'affranchissement
yes / oui ☐ returned / renvoyé
month – day / mois – jour
44 Notification of payment no. – Avis d'encaissement N°
returned / renvoyé
month – day / mois – jour
45 Formal report no. – Procès-verbal N°
made out by / établi par
month – day / mois – jour
46 Extension of transit time – Prolongation du délai de livraison
Code from – du to – au place – lieu
47 Carrier's declarations – Déclarations du transporteur
48 Other carriers – Autres transporteurs
Name, address – Nom, adresse
Section – Parcours
Status / Qualité
49 a) Contractual carrier – Transporteur contractuel
Signature
b) Simplified transit procedure for rail – Procédure simplifiée de transit ferroviaire
yes / oui ☐
Code for the principal / Code principal obligé
50 Date of arrival – Date d'arrivée
Arrival no. – Arrivage N°
51 Made available – Mise à disposition
month – day – hour / mois – jour – heure
52 Acknowledgement of receipt – Quitance du destinataire
53 Consignment number – Identification de l'envoi
Country – Pays
Station – Gare
Undertaking / Entreprise
Consign't no. / Exp. N°
54 Place and date completed – Lieu et date d'établissement

3

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Arrival note/Customs
Bulletin d'arrivée/Douane

3

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							86 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

D

Section
Parcours

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Parcours

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Charges

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Frais

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C

Charges

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Brought forward from the front – Report du recto

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Duplicate
Duplicata

4

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							86 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

D

Section
Parcours

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Charges

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Brought forward from the front – Report du recto

3000 CIT



Duplicate invoice
Souche d'expédition

5

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							86 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
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				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

D

Section
Parcours

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Section
Parcours

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Charges

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Frais

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C

Charges

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Brought forward from the front – Report du recto

☐ To be completed by the combined transport operator or the customer forwarding haulier À remplir par l'entreprise de transport combiné ou le client/remettant		☒ Mark the box applicable to a cross – Désigner par une croix ce qui convient (Boxes – Cases 20, 22, 23, 30, 32, 59)	
30 CIM Consignment Note for Combined Transport Lettre de voiture CIM transport combiné Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur. Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles types de l'entreprise de transport ferroviaire. VAT no. N° TVA		CUV Wagon Note for Combined Transport Lettre wagon CUV transport combiné VAT no. N° TVA	
1 Consignor (name, address) – Expéditeur (nom, adresse) Signature		2 E-Mail Tel Fax 5 E-Mail Tel Fax	
4 Consignee (name, address, country) Destinataire (nom, adresse, pays) VAT no. N° TVA		7 Consignor's declarations Déclarations de l'expéditeur 8 Consignor's reference – Référence expéditeur	
10 Delivery point Lieu de livraison Station – Gare		9 Documents attached – Annexes 16 Acceptance Prise en charge Point – Lieu 18 Wagon no. – Wagon N°	
13 Commercial specification – Conditions commerciales		17 19 Section – Parcours	
15 Information for the consignee – Informations pour le destinataire		20 Payment instructions Paiement des frais ☐ Carriage charges paid Franco de port ☐ Incoterms	
21 No UTI / Type UTI / Length UTI / Net mass (weight) / Tare UTI / Description of the goods N° UTI / Type UTI / Longueur UTI / Masse nette / Tare UTI / Désignation de la marchandise UTI 1 Seal nos – Scellés N° Reference – Référence		22 Exceptional consignment Transport exceptionnel 23 RID 24 NHM Code UTI 1 NHM Code UTI 2 Gross mass (weight) UTI 1 Masse brute UTI 2 Total 25 Declaration of value Déclaration de valeur Currency 27 Interest in delivery Intérêt à la livraison Monnaie 28 Cash on delivery Remboursement Currency 48 Examination Vérification	
UTI 2 Seal nos – Scellés N° Reference – Référence		29 Customs endorsements Indications douanières 49 Prepayment Bullein d'affranchissement 50 Route – Itinéraires 51 Customs procedures – Opérations douanières 52 Charges note Bulletin d'affranchissement 53 Notification of payment no. Avis d'encaissement N° 54 Formal report no. Procès-verbal N° 55 Extension of transit time – Prolongation du délai de livraison Code from – du to – au place – lieu	
56 Carrier's declarations – Déclarations du transporteur		57 Other carriers – Autres transporteurs Name, address – Nom, adresse Section – Parcours Status Qualité	
58 a) Contractual carrier – Transporteur contractuel Signature b) Simplified transit procedure for rail Procédure simplifiée de transit ferroviaire Code for the principal Code principal obligé		59 Date of arrival – Date d'arrivée Arrival no. – Arrivage N° 60 Made available Mise à disposition 61 Acknowledgement of receipt Quittance du destinataire 62 Consignment number Identification de l'envoi Country – Pays Station – Gare Undertaking Entreprise Consign't no. Exp. N° 63 Place and date completed – Lieu et date d'établissement	

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To be completed by the combined transport operator or the customer/forwarding haulier
A remplir par l'entreprise de transport combiné ou le client/remettant

X Mark the box applicable with a cross – Désigner par une croix ce qui convient
(Boxes – Cases 20, 22, 23, 30, 52, 58)

Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur.

Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.

30 CIM Consignment Note for Combined Transport
Lettre de voiture CIM transport combiné

CUV Wagon Note for Combined Transport
Lettre wagon CUV transport combiné

1 Consignor (name, address) – Expéditeur (nom, adresse)
2
3
 Signature
 VAT no. / N° TVA
4 Consignee (name, address, country) / Destinataire (nom, adresse, pays)
5
6
 E-Mail
 Tel.
 Fax
7 Consignor's declarations / Déclarations de l'expéditeur
8 Consignor's reference – Référence expéditeur
9 Documents attached – Annexes
10 Delivery point / Lieu de livraison
11
12
 Station – Gare
 Country – Pays
13 Commercial specification – Conditions commerciales
14
15 Information for the consignee – Informations pour le destinataire
16
17 Acceptance / Prise en charge
 month – day – hour
 mois – jour – heure
 Point – Lieu
18 Wagon no. – Wagon N°
19 Section – Parcours
 by – par
20 Payment instructions / Paiement des frais
 including – y compris
 up to – jusqu'à
☐ Carriage charges paid / Franco de port
☐ Incoterms
21 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods
 N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise
22 Exceptional consignment / Transport exceptionnel
 yes / oui
23 RID
 yes / oui
24 NHM Code UTI 1
25 Gross mass (weight) UTI 1
26 Declaration of value / Déclaration de valeur
 Currency
27 Interest in delivery / Intérêt à la livraison
 Monnaie
28 Cash on delivery / Remboursement
 Currency
29 Examination / Vérification
 by – par
30 UTI 1
 Seal nos – Scellés N°
 Reference – Référence
 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods
 N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise
 RID
 yes / oui
31 UTI 2
 Seal nos – Scellés N°
 Reference – Référence
32 Prepayment coding – Code d'affranchissement
33 Route – Itinéraires
34 Customs procedures – Opérations douanières
35 Charges note / Bulletin d'affranchissement
 yes / oui
 returned / renvoyé
 month – day / mois – jour
36 Notification of payment no. / Avis d'encaissement N°
 returned / renvoyé
 month – day / mois – jour
37 Formal report no. / Procès-verbal N°
 made out by / établi par
 month – day / mois – jour
38 Extension of transit time – Prolongation du délai de livraison
 Code from – du to – au place – lieu
39 Carrier's declarations – Déclarations du transporteur
40 Other carriers – Autres transporteurs
 Name, address – Nom, adresse
 Section – Parcours
 Status / Qualité
41 a) Contractual carrier – Transporteur contractuel
42 Date of arrival – Date d'arrivée
43 Made available / Mise à disposition
 month – day – hour / mois – jour – heure
44 Acknowledgement of receipt / Quitance du destinataire
45 Consignment number / Identification de l'envoi
 Country – Pays
 Station – Gare
 Undertaking / Entreprise
 Consig'n no. / Exp. N°
46 Place and date completed – Lieu et date d'établissement
47 Signature
 b) Simplified transit procedure for rail / Procédure simplifiée de transit ferroviaire
 yes / oui
 Code for the principal / Code principal obligé
 Invoice / Feuille de route
48 Date, signature

Invoice
Feuille de route

2

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							88 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

70

Section

Parcours

71

72

73

74

75

76

77

78

79

Charges

Frais

Charges

Frais

Charges

Frais

Charges

Frais

70

Section

Parcours

71

72

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74

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76

77

78

79

Charges

Frais

Charges

Frais

Charges

Frais

Charges

Frais

70

Section

Parcours

71

72

73

74

75

76

77

78

79

Charges

Frais

Charges

Frais

Charges

Frais

Charges

Frais

70

Section

Parcours

71

72

73

74

75

76

77

78

79

Charges

Frais

Charges

Frais

Charges

Frais

Charges

Frais

Brought forward from the front – Report du recto

Version: 1-jan-2026

15

14

To be completed by the combined transport operator or the customer/forwarding haulier
A remplir par l'entreprise de transport combiné ou le client/remettant

X Mark the box applicable with a cross – Désigner par une croix ce qui convient
(Boxes – Cases 20, 22, 23, 30, 52, 58)

Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur.

Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.

30 CIM Consignment Note for Combined Transport
Lettre de voiture CIM transport combiné

CUV Wagon Note for Combined Transport
Lettre wagon CUV transport combiné

1 Consignor (name, address) – Expéditeur (nom, adresse)
2
3
 Signature
 VAT no. / N° TVA
4 Consignee (name, address, country) / Destinataire (nom, adresse, pays)
5
6
 E-Mail
 Tel.
 Fax
7 Consignor's declarations / Déclarations de l'expéditeur
8 Consignor's reference – Référence expéditeur
9 Documents attached – Annexes
10 Delivery point / Lieu de livraison
11
12
 Station – Gare
 Country – Pays
13 Commercial specification – Conditions commerciales
14
15 Information for the consignee – Informations pour le destinataire
16
17 Acceptance / Prise en charge
 month – day – hour / mois – jour – heure
 Point – Lieu
18 Wagon no. – Wagon N°
19 Section – Parcours
 by – par
20 Payment instructions / Paiement des frais
 including – y compris / up to – jusqu'à
☐ Carriage charges paid / Franco de port
☐ Incoterms
21 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods / N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise
22 Exceptional consignment / Transport exceptionnel
 yes / oui
23 RID
 yes / oui
24 NHM Code UTI 1
25 Gross mass (weight) UTI 1
26 Declaration of value / Déclaration de valeur
 Currency
27 Interest in delivery / Intérêt à la livraison
 Monnaie
28 Cash on delivery / Remboursement
 Currency
29 Examination / Vérification
 by – par
30 UTI 1
 Seal nos – Scellés N°
 Reference – Référence
 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods / N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise
31 RID
 yes / oui
32 Customs endorsements / Indications douanières
33 UTI 2
 Seal nos – Scellés N°
 Reference – Référence
34 Section – Parcours
35 Charges
36 Route – Itinéraires
37 Customs procedures – Opérations douanières
38 Charges note / Bulletin d'affranchissement
 yes / oui
 returned / renvoyé
 month – day / mois – jour
39 Notification of payment no. / Avis d'encaissement N°
 returned / renvoyé
 month – day / mois – jour
40 Formal report no. / Procès-verbal N°
 made out by / établi par
 month – day / mois – jour
41 Extension of transit time – Prolongation du délai de livraison
 Code from – du to – au place – lieu
42 Carrier's declarations – Déclarations du transporteur
43 Other carriers – Autres transporteurs
 Name, address – Nom, adresse
 Section – Parcours
 Status / Qualité
44 a) Contractual carrier – Transporteur contractuel
45 Date of arrival – Date d'arrivée
46 Made available / Mise à disposition
 month – day – hour / mois – jour – heure
47 Acknowledgement of receipt / Quittance du destinataire
48 Consignment number / Identification de l'envoi
 Country – Pays
 Station – Gare
 Undertaking / Entreprise
 Consig'n no. / Exp. N°
49 Place and date completed – Lieu et date d'établissement
50 Signature
51 b) Simplified transit procedure for rail / Procédure simplifiée de transit ferroviaire
 yes / oui
52 Code for the principal / Code principal obligé
53 Arrival note / Customs Bulletin d'arrivée/Douane
54 Date, signature

Arrival note/Customs
Bulletin d'arrivée/Douane

3

Charging sections (continued) – Sections de taxation (suite)										Charges paid – Franco		To pay – Port dû	
										Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
										Cash on delivery (brought forward from the front) Remboursement (Report du recto) }			80
													88 Ex. Rate
													90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										Brought forward from supplementary sheets Report des feuilles supplémentaires			92
										Grand total – Montant général			94

D	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
E	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
F	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
G	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							

I To be completed by the combined transport operator or the customer/forwarding haulier
A remplir par l'entreprise de transport combiné ou le client/remettant

X Mark the box applicable with a cross – Désigner par une croix ce qui convient
(Boxes – Cases 20, 22, 23, 30, 52, 58)

Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur.

Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.

30 CIM Consignment Note for Combined Transport ☐ **CUV Wagon Note for Combined Transport** ☐ **40** **41** **42** **43**
Lettre de voiture CIM transport combiné **Lettre wagon CUV transport combiné** **44** **45** **46** **47**

1 Consignor (name, address) – Expéditeur (nom, adresse) **2** **3** **7** Consignor's declarations – Déclarations de l'expéditeur **8** Consignor's reference – Référence expéditeur

Signature E-Mail Tel. Fax **9** Documents attached – Annexes

VAT no. No TVA **4** Consignee (name, address, country) – Destinataire (nom, adresse, pays) **5** **6** E-Mail Tel. Fax

10 Delivery point – Lieu de livraison **11** **12** **16** Acceptance – Prise en charge month – day – hour mois – jour – heure **17**

Station – Gare Country – Pays **13** Commercial specification – Conditions commerciales **14** **18** Wagon no. – Wagon N° **19** Section – Parcours by – par

15 Information for the consignee – Informations pour le destinataire **20** Payment instructions – Paiement des frais including – y compris up to – jusqu'à **21** Section invoicing – Facturation contractuelle

21 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods – No UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise **22** Exceptional consignment – Transport exceptionnel yes – oui **23** RID yes – oui **24** NHM Code UTI 1 **25** Gross mass (weight) UTI 1 **26** Declaration of value – Déclaration de valeur

UTI 1 Seal nos – Scellés N° Reference – Référence **27** Interest in delivery – Intérêt à la livraison **28** Cash on delivery – Remboursement

No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods – No UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise **29** RID yes – oui **30** Customs endorsements – Indications douanières **31** Examination – Vérification

UTI 2 Seal nos – Scellés N° Reference – Référence **32** by – par

33 Section Parcours **34** **35** **36** **37** **38** **39** **40** **41** **42** **43** **44** **45** **46** **47** **48** **49** **50** **51** **52** **53** **54** **55** **56** **57** **58** **59** **60** **61** **62** **63** **64** **65** **66** **67** **68** **69** **70** **71** **72** **73** **74** **75** **76** **77** **78** **79** **80** **81** **82** **83** **84** **85** **86** **87** **88** **89** **90** **91** **92** **93** **94** **95** **96** **97** **98** **99** **100** **101** **102** **103** **104** **105** **106** **107** **108** **109** **110** **111** **112** **113** **114** **115** **116** **117** **118** **119** **120** **121** **122** **123** **124** **125** **126** **127** **128** **129** **130** **131** **132** **133** **134** **135** **136** **137** **138** **139** **140** **141** **142** **143** **144** **145** **146** **147** **148** **149** **150** **151** **152** **153** **154** **155** **156** **157** **158** **159** **160** **161** **162** **163** **164** **165** **166** **167** **168** **169** **170** **171** **172** **173** **174** **175** **176** **177** **178** **179** **180** **181** **182** **183** **184** **185** **186** **187** **188** **189** **190** **191** **192** **193** **194** **195** **196** **197** **198** **199** **200** **201** **202** **203** **204** **205** **206** **207** **208** **209** **210** **211** **212** **213** **214** **215** **216** **217** **218** **219** **220** **221** **222** **223** **224** **225** **226** **227** **228** **229** **230** **231** **232** **233** **234** **235** **236** **237** **238** **239** **240** **241** **242** **243** **244** **245** **246** **247** **248** **249** **250** **251** **252** **253** **254** **255** **256** **257** **258** **259** **260** **261** **262** **263** **264** **265** **266** **267** **268** **269** **270** **271** **272** **273** **274** **275** **276** **277** **278** **279** **280** **281** **282** **283** **284** **285** **286** **287** **288** **289** **290** **291** **292** **293** **294** **295** **296** **297** **298** **299** **300** **301** **302** **303** **304** **305** **306** **307** **308** **309** **310** **311** **312** **313** **314** **315** **316** **317** **318** **319** **320** **321** **322** **323** **324** **325** **326** **327** **328** **329** **330** **331** **332** **333** **334** **335** **336** **337** **338** **339** **340** **341** **342** **343** **344** **345** **346** **347** **348** **349** **350** **351** **352** **353** **354** **355** **356** **357** **358** **359** **360** **361** **362** **363** **364** **365** **366** **367** **368** **369** **370** **371** **372** **373** **374** **375** **376** **377** **378** **379** **380** **381** **382** **383** **384** **385** **386** **387** **388** **389** **390** **391** **392** **393** **394** **395** **396** **397** **398** **399** **400** **401** **402** **403** **404** **405** **406** **407** **408** **409** **410** **411** **412** **413** **414** **415** **416** **417** **418** **419** **420** **421** **422** **423** **424** **425** **426** **427** **428** **429** **430** **431** **432** **433** **434** **435** **436** **437** **438** **439** **440** **441** **442** **443** **444** **445** **446** **447** **448** **449** **450** **451** **452** **453** **454** **455** **456** **457** **458** **459** **460** **461** **462** **463** **464** **465** **466** **467** **468** **469** **470** **471** **472** **473** **474** **475** **476** **477** **478** **479** **480** **481** **482** **483** **484** **485** **486** **487** **488** **489** **490** **491** **492** **493** **494** **495** **496** **497** **498** **499** **500** **501** **502** **503** **504** **505** **506** **507** **508** **509** **510** **511** **512** **513** **514** **515** **516** **517** **518** **519** **520** **521** **522** **523** **524** **525** **526** **527** **528** **529** **530** **531** **532** **533** **534** **535** **536** **537** **538** **539** **540** **541** **542** **543** **544** **545** **546** **547** **548** **549** **550** **551** **552** **553** **554** **555** **556** **557** **558** **559** **560** **561** **562** **563** **564** **565** **566** **567** **568** **569** **570** **571** **572** **573** **574** **575** **576** **577** **578** **579** **580** **581** **582** **583** **584** **585** **586** **587** **588** **589** **590** **591** **592** **593** **594** **595** **596** **597** **598** **599** **600** **601** **602** **603** **604** **605** **606** **607** **608** **609** **610** **611** **612** **613** **614** **615** **616** **617** **618** **619** **620** **621** **622** **623** **624** **625** **626** **627** **628** **629** **630** **631** **632** **633** **634** **635** **636** **637** **638** **639** **640** **641** **642** **643** **644** **645** **646** **647** **648** **649** **650** **651** **652** **653** **654** **655** **656** **657** **658** **659** **660** **661** **662** **663** **664** **665** **666** **667** **668** **669** **670** **671** **672** **673** **674** **675** **676** **677** **678** **679** **680** **681** **682** **683** **684** **685** **686** **687** **688** **689** **690** **691** **692** **693** **694** **695** **696** **697** **698** **699** **700** **701** **702** **703** **704** **705** **706** **707** **708** **709** **710** **711** **712** **713** **714** **715** **716** **717** **718** **719** **720** **721** **722** **723** **724** **725** **726** **727** **728** **729** **730** **731** **732** **733** **734** **735** **736** **737** **738** **739** **740** **741** **742** **743** **744** **745** **746** **747** **748** **749** **750** **751** **752** **753** **754** **755** **756** **757** **758** **759** **760** **761** **762** **763** **764** **765** **766** **767** **768** **769** **770** **771** **772** **773** **774** **775** **776** **777** **778** **779** **780** **781** **782** **783** **784** **785** **786** **787** **788** **789** **790** **791** **792** **793** **794** **795** **796** **797** **798** **799** **800** **801** **802** **803** **804** **805** **806** **807** **808** **809** **810** **811** **812** **813** **814** **815** **816** **817** **818** **819** **820** **821** **822** **823** **824** **825** **826** **827** **828** **829** **830** **831** **832** **833** **834** **835** **836** **837** **838** **839** **840** **841** **842** **843** **844** **845** **846** **847** **848** **849** **850** **851** **852** **853** **854** **855** **856** **857** **858** **859** **860** **861** **862** **863** **864** **865** **866** **867** **868** **869** **870** **871** **872** **873** **874** **875** **876** **877** **878** **879** **880** **881** **882** **883** **884** **885** **886** **887** **888** **889** **890** **891** **892** **893** **894** **895** **896** **897** **898** **899** **900** **901** **902** **903** **904** **905** **906** **907** **908** **909** **910** **911** **912** **913** **914** **915** **916** **917** **918** **919** **920** **921** **922** **923** **924** **925** **926** **927** **928** **929** **930** **931** **932** **933** **934** **935** **936** **937** **938** **939** **940** **941** **942** **943** **944** **945** **946** **947** **948** **949** **950** **951** **952** **953** **954** **955** **956** **957** **958** **959** **960** **961** **962** **963** **964** **965** **966** **967** **968** **969** **970** **971** **972** **973** **974** **975** **976** **977** **978** **979** **980** **981** **982** **983** **984** **985** **986** **987** **988** **989** **990** **991** **992** **993** **994** **995** **996** **997** **998** **999** **1000**

56 Carrier's declarations – Déclarations du transporteur **57** Other carriers – Autres transporteurs Name, address – Nom, adresse Section – Parcours Status – Qualité

58 a) Contractual carrier – Transporteur contractuel **59** Date of arrival – Date d'arrivée **60** Made available – Mise à disposition month – day – hour mois – jour – heure **61** Acknowledgement of receipt – Quitance du destinataire **62** Consignment number – Identification de l'envoi Country – Pays Station – Gare Undertaking – Entreprise Consig'n no. – Exp. N°

Signature **63** Place and date completed – Lieu et date d'établissement

b) Simplified transit procedure for rail – Procédure simplifiée de transit ferroviaire yes – oui **64** Duplicate – Duplicata Code for the principal – Code principal obligé

4 Date, signature

Point 6, 7, 8

110 2102

Duplicate
Duplicata

4

Charging sections (continued) – Sections de taxation (suite)										Charges paid – Franco		To pay – Port dû	
										Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
										Cash on delivery (brought forward from the front) Remboursement (Report du recto) }			80
													88 Ex. Rate
													90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										83 Ex. Rate	84	85	86 Ex. Rate
										87	88	89	90
										83 Cours	84	85	86 Cours
										87	88	89	90
										Brought forward from supplementary sheets Report des feuilles supplémentaires			92
										Grand total – Montant général			94

D	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
E	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
F	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							
G	70	Section Parcours							71	72	Charges	70								
	75								73	74		Frais	70							

To be completed by the combined transport operator or the customer/forwarding haulier A remplir par l'entreprise de transport combiné ou le client/remettant		X Mark the box applicable with a cross – Désigner par une croix ce qui convient (Boxes – Cases 20, 22, 23, 30, 52, 58)	
Notwithstanding any clause to the contrary, carriage of goods shall be subject to the CIM Uniform Rules. In addition, the carrier's General Terms and Conditions of Carriage shall apply. Nonobstant toute clause contraire, le transport des marchandises est soumis aux Règles uniformes CIM. Sont en outre applicables les conditions générales de transport du transporteur. Except as otherwise agreed, the haulage of empty wagons shall be subject to the CUV Uniform Rules. In addition the relevant contractual conditions of the railway undertaking shall apply. Sauf convention contraire, l'acheminement des wagons vides est soumis aux Règles uniformes CUV. Sont en outre applicables les conditions contractuelles topiques de l'entreprise de transport ferroviaire.		30 CIM Consignment Note for Combined Transport Lettre de voiture CIM transport combiné	
1 Consignor (name, address) – Expéditeur (nom, adresse) Signature VAT no. / N° TVA		2 3 E-Mail Tel. Fax	
4 Consignee (name, address, country) / Destinataire (nom, adresse, pays) VAT no. / N° TVA		5 6 E-Mail Tel. Fax	
10 Delivery point / Lieu de livraison 11		12	
Station – Gare Country – Pays		13 Commercial specification – Conditions commerciales 14	
15 Information for the consignee – Informations pour le destinataire		7 Consignor's declarations / Déclarations de l'expéditeur 8 Consignor's reference – Référence expéditeur	
21 No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods / N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise UTI 1 Seal nos – Scellés N° Reference – Référence		22 Exceptional consignment / Transport exceptionnel yes / oui 23 RID yes / oui 24 NHM Code UTI 1 NHM Code UTI 2 25 Gross mass (weight) UTI 1 Masse brute UTI 2 Total	
No UTI/Type UTI/Length UTI/Net mass (weight)/Tare UTI/Description of the goods / N° UTI/Type UTI/Longueur UTI/Masse nette/Tare UTI/Désignation de la marchandise UTI 2 Seal nos – Scellés N° Reference – Référence		26 Declaration of value / Déclaration de valeur Currency 27 Interest in delivery / Intérêt à la livraison Monnaie 28 Cash on delivery / Remboursement Currency 48 Examination / Vérification	
56 Carrier's declarations – Déclarations du transporteur		57 Other carriers – Autres transporteurs Name, address – Nom, adresse Section – Parcours Status / Qualité	
58 a) Contractual carrier – Transporteur contractuel Signature b) Simplified transit procedure for rail / Procédure simplifiée de transit ferroviaire yes / oui Code for the principal / Code principal obligé		59 Date of arrival – Date d'arrivée Arrival no. – Arrivage N° Duplicate invoice / Souche d'expédition 5 Date, signature	
70 Section Parcours 71 72 73 74 75 76 77 78 79 Charges		49 Prepayment coding – Code d'affranchissement 50 Route – Itinéraires 51 Customs procedures – Opérations douanières 52 Charges note / Bulletin d'affranchissement yes / oui returned / renvoyé month – day / mois – jour 53 Notification of payment no. / Avis d'encaissement N° returned / renvoyé month – day / mois – jour 54 Formal report no. / Procès-verbal N° made out by / établi par month – day / mois – jour 55 Extension of transit time – Prolongation du délai de livraison Code from – du to – au place – lieu	
60 Made available / Mise à disposition month – day – hour / mois – jour – heure 61 Acknowledgement of receipt / Quitance du destinataire		62 Consignment number / Identification de l'envoi Country – Pays Station – Gare Undertaking / Entreprise Consign's no. / Exp. N° 29 Place and date completed – Lieu et date d'établissement	



Duplicate invoice
Souche d'expédition

5

Charging sections (continued) – Sections de taxation (suite)				Charges paid – Franco		To pay – Port dû	
				Invoicing currency Monnaie d'encaissement	Tariff currency Monnaie du tarif	Tariff currency Monnaie du tarif	Invoicing currency Monnaie d'encaissement
				Cash on delivery (brought forward from the front) Remboursement (Report du recto)			80
							88 Ex. Rate
							90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				83 Ex. Rate	84	85	86 Ex. Rate
				87	88	89	90
				81	82		
				83 Cours	84	85	86 Cours
				87	88	89	90
				81	82		
				Brought forward from supplementary sheets Report des feuilles supplémentaires			92
				Grand total – Montant général			94

70

Section

Parcours

75

76

77

78

71

72

73

74

70

Section

Parcours

75

76

77

78

71

72

73

74

70

Section

Parcours

75

76

77

78

71

72

73

74

70

Section

Parcours

75

76

77

78

71

72

73

74

A

Charges

B

Frais

C

Charges

Frais

Brought forward from the front – Report du recto

[illegible]

1

23

© 2005 CILT

Accounting copy
Bulletin comptable

2

[illegible]

© 2005 CILT

Audit copy
Bulletin de contrôle

3

[illegible]

3.4 Subsequent orders

Subsequent orders – Ordre ultérieur

2013-01-01

CIT 7

Consignor (name, address) – Expéditeur (nom, adresse)		Consignment number – Identification de l'envoi ☐ CIM Consignment Note Lettre de voiture CIM ☐ CUV Wagon Note Lettre wagon CUV Country – Pays Station – Gare Undertaking Entreprise Consign't no. Exp. N°															
Consignee (name, address, country) – Destinataire (nom, adresse, pays)		Acceptance, point, date – Prise en charge, lieu, date month – day – hour mois – jour – heure															
Delivery point – Lieu de livraison		Wagon no./No. UTI – Wagon N°/N° de l'UTI															
Station – Gare Country – Pays Postal address of the carrier – Adresse postale du transporteur		Address of the carrier to carry out the instructions Adresse du transporteur chargé de l'exécution des ordres															
Instructions – Ordre – Mark the box applicable with a cross ☒ – Attach the duplicate of the consignment note – Mettre une ☒ dans la case en regard de la modification demandée – Joindre le duplicata de la lettre de voiture <table border="1"> <thead> <tr> <th>Code</th> <th>Amendment – Modification</th> </tr> </thead> <tbody> <tr> <td>☐ 1</td> <td>Hold en route to await subsequent orders Arrêt en cours de route en attendant des ordres ultérieurs</td> </tr> <tr> <td>☐ 2</td> <td>Postpone delivery to await subsequent orders Ajournement de la livraison en attendant des ordres ultérieurs</td> </tr> <tr> <td>☐ 3</td> <td>Deliver to... (name, address, e-mail address or telephone or fax no.) at the delivery point Livraison au lieu de destination à... (nom, adresse, adresse e-mail ou numéro de téléphone ou de télécopieur)</td> </tr> <tr> <td>☐ 4</td> <td>Forward to... (delivery point) for... (name, address, e-mail address or telephone or fax no.) via... (route) Expédition à... (lieu de livraison) à... (nom, adresse, pays, adresse e-mail ou numéro de téléphone ou de télécopieur) via... (itinéraire)</td> </tr> <tr> <td>☐ 5¹</td> <td>Complete customs' and other administrative authorities' formalities Accomplissement des formalités exigées par les douanes ou par d'autres autorités administratives ☐ in my presence – en ma présence ☐ in the presence of my representative – en présence de mon mandataire ☐ I shall complete them – par mes soins ☐ my agent will complete them² – par mon mandataire² ☐ including payment of customs duties and other charges³ avec paiement des droits de douane et autres frais³ </td> </tr> <tr> <td>☐ 6</td> <td>Other instructions Autre modification</td> </tr> </tbody> </table> Additional information for codes 3 to 6 Indications complémentaires relatives aux codes 3 – 6		Code	Amendment – Modification	☐ 1	Hold en route to await subsequent orders Arrêt en cours de route en attendant des ordres ultérieurs	☐ 2	Postpone delivery to await subsequent orders Ajournement de la livraison en attendant des ordres ultérieurs	☐ 3	Deliver to... (name, address, e-mail address or telephone or fax no.) at the delivery point Livraison au lieu de destination à... (nom, adresse, adresse e-mail ou numéro de téléphone ou de télécopieur)	☐ 4	Forward to... (delivery point) for... (name, address, e-mail address or telephone or fax no.) via... (route) Expédition à... (lieu de livraison) à... (nom, adresse, pays, adresse e-mail ou numéro de téléphone ou de télécopieur) via... (itinéraire)	☐ 5 ¹	Complete customs' and other administrative authorities' formalities Accomplissement des formalités exigées par les douanes ou par d'autres autorités administratives ☐ in my presence – en ma présence ☐ in the presence of my representative – en présence de mon mandataire ☐ I shall complete them – par mes soins ☐ my agent will complete them ² – par mon mandataire ² ☐ including payment of customs duties and other charges ³ avec paiement des droits de douane et autres frais ³	☐ 6	Other instructions Autre modification	Please carry out these subsequent orders in compliance with CIM Article 19 §§ 3–5. Nous vous prions d'exécuter les présents ordres ultérieurs dans les conditions prévues à l'article 19 §§ 3 à 5 CIM. ☐ Agreement of customs office of departure given Accord donné par le bureau de douane de départ ☐ Informing the customs office of departure not necessary Information du bureau de douane de départ non nécessaire Remarks – Remarques:	
Code	Amendment – Modification																
☐ 1	Hold en route to await subsequent orders Arrêt en cours de route en attendant des ordres ultérieurs																
☐ 2	Postpone delivery to await subsequent orders Ajournement de la livraison en attendant des ordres ultérieurs																
☐ 3	Deliver to... (name, address, e-mail address or telephone or fax no.) at the delivery point Livraison au lieu de destination à... (nom, adresse, adresse e-mail ou numéro de téléphone ou de télécopieur)																
☐ 4	Forward to... (delivery point) for... (name, address, e-mail address or telephone or fax no.) via... (route) Expédition à... (lieu de livraison) à... (nom, adresse, pays, adresse e-mail ou numéro de téléphone ou de télécopieur) via... (itinéraire)																
☐ 5 ¹	Complete customs' and other administrative authorities' formalities Accomplissement des formalités exigées par les douanes ou par d'autres autorités administratives ☐ in my presence – en ma présence ☐ in the presence of my representative – en présence de mon mandataire ☐ I shall complete them – par mes soins ☐ my agent will complete them ² – par mon mandataire ² ☐ including payment of customs duties and other charges ³ avec paiement des droits de douane et autres frais ³																
☐ 6	Other instructions Autre modification																
Place, date Lieu, date	Signature of the consignor/consignee Signature de l'expéditeur/du destinataire	Place, date Lieu, date	Signature of the carrier Signature du transporteur														

¹Only the consignee is authorised to give such orders – Seul le destinataire est autorisé à donner de tels ordres²This order may only be given if the consignee is authorised to do so in accordance with CIM Article 15 § 4 b) – Cet ordre ne peut être donné que lorsque le destinataire y est autorisé en vertu de l'article 15 § 4 b) CIM³This order may only be given if the consignee is authorised to do so in accordance with CIM Article 15 § 4 c) – Cet ordre ne peut être donné que lorsque le destinataire y est autorisé en vertu de l'article 15 § 4 c) CIM

3.5 Notification of prevention of conveyance

2013-01-01

Circumstances preventing carriage – Empêchement au transport

CIT 8

Consignor (name, address) – Expéditeur (nom, adresse)		Consignment number – Identification de l'envoi ☐ CIM Consignment Note Lettre de voiture CIM ☐ CUV Wagon Note Lettre wagon CUV Country – Pays Undertaking Entreprise Station – Gare Consign't no. Exp. N°	
Consignee (name, address, country) – Destinataire (nom, adresse, pays)		Acceptance, point, date – Prise en charge, lieu, date month – day – hour mois – jour – heure	
Delivery point – Lieu de livraison		Wagon no./No. UTI – Wagon N°/N° de l'UTI	
Station – Gare Country – Pays Postal address of the carrier – Adresse postale du transporteur		Address of the carrier to carry out the instructions Adresse du transporteur chargé de l'exécution des instructions	

Circumstances preventing carriage – Empêchement au transport

- A** ☐ The consignment detailed above has had to be stopped in because of
L'envoi susmentionné a dû être arrêté à par suite de
- B** ☐ The consignment cannot be sent by another route
L'envoi ne peut pas être acheminé par un autre itinéraire
- C** ☐ Rerouting, subject to extra charges, is possible via
L'envoi peut être acheminé contre paiement des frais supplémentaires via

Please supply your instructions without delay. Please attach the duplicate of the consignment note if you ask to change the consignee or delivery point. The consignment will be forwarded to its delivery point without waiting for your instructions if the circumstances preventing carriage are resolved before the instructions arrive. See CIM Article 22 § 1 for charges. For consignments which cannot be forwarded see CIM Article 22 §§ 2 – 6.

Vous êtes prié de faire connaître vos instructions sans retard et d'y joindre le duplicata de la lettre de voiture si vous demandez une modification du destinataire ou du lieu de livraison. L'envoi sera acheminé sur son lieu de livraison, sans attendre vos instructions, si l'empêchement au transport vient à cesser avant l'arrivée de ces instructions. S'agissant des frais, voir art. 22 § 1 CIM. Pour les envois en souffrance, voir art. 22 §§ 2 – 6 CIM.

Instructions

Mark the box applicable with a cross [X] – Mettre une [X] dans la case code en regard de l'instruction demandée

Code	Instructions
☐ 1	Return to the consignor at the forwarding point Renvoi à l'expéditeur au lieu d'expédition
☐ 2	Forward to the delivery point when the circumstances preventing carriage are resolved Acheminer sur le lieu de livraison, dès que l'empêchement au transport aura cessé
☐ 3	Sell the goods A vendre
☐ 4	Forward to... (delivery point) for... (name, address, e-mail address or telephone or fax no.) via... (route) A livrer à... (lieu de livraison) à... (nom, adresse, pays, adresse e-mail ou numéro de téléphone ou de télécopieur) via... (itinéraire)
☐ 5	Take the following action (other instructions):... A traiter comme suit (autres instructions):...

Additional information for codes 1 to 5

Indications complémentaires relatives aux codes 1 à 5

Action taken on the instructions – Traitement des instructions

- ☐ The amendments have been copied to the duplicate of the consignment note which has been produced by the person entitled
Les modifications ont été reproduites sur le duplicata de la lettre de voiture, qui a été présenté par l'ayant droit
- ☐ Agreement of customs office of departure given
Accord donné par le bureau de douane de départ
- ☐ Informing the customs office of departure not necessary
Information du bureau de douane de départ non nécessaire

Place, date Lieu, date	Signature of the consignor/consignee Signature de l'expéditeur/du destinataire	Place, date Lieu, date	Signature of the carrier Signature du transporteur
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3.6 Notification of prevention of handover

Circumstances preventing delivery – Empêchement à la livraison

2013-01-01

CIT 9

Consignor (name, address) – Expéditeur (nom, adresse)	Consignment number – Identification de l'envoi ☐ CIM Consignment Note Lettre de voiture CIM ☐ CUV Wagon Note Lettre wagon CUV Country – Pays Undertaking Entreprise Station – Gare Consig't no. Exp. N°
Consignee (name, address, country) – Destinataire (nom, adresse, pays)	Acceptance, point, date – Prise en charge, lieu, date month – day – hour mois – jour – heure
Delivery point – Lieu de livraison	Wagon no./No. UTI – Wagon N°/N° de l'UTI
Station – Gare	Country – Pays

Postal address of the carrier – Adresse postale du transporteur

Circumstances preventing delivery – Empêchement à la livraison

The consignment detailed above cannot be delivered because: – L'envoi susmentionné n'a pas pu être livré pour les raisons suivantes:

- | | |
|---|---|
| A Consignee refuses goods because – Le destinataire refuse l'envoi
☐ not ordered – pour ne pas l'avoir commandé
☐ damaged – par suite d'avarie
☐ deteriorated – par suite de détérioration spontanée
☐ delayed arrival – par suite d'arrivée tardive

B Consignee refuses to pay – Le destinataire refuse le paiement
☐ carriage charges – du prix du transport
☐ customs duties – des droits de douane
☐ cash on delivery – du remboursement | C Consignee hasn't come forward despite being notified
Le destinataire ne se présente pas, malgré l'avis qui lui a été adressé

D Consignee cannot be contacted
Le destinataire ne peut pas être atteint

E Other reasons:...
Autres motifs:... |
|---|---|

Please supply your instructions without delay. Please attach the duplicate of the consignment note except where the consignee has refused the consignment. The consignment will be delivered to the consignee without waiting for your instructions if the circumstances preventing delivery are resolved before the instructions arrive. See CIM Article 22 § 1 for charges, for consignments which cannot be forwarded see CIM Article 22 §§ 2 – 6.

Vous êtes prié de faire connaître vos instructions, sans retard, et d'y joindre le duplicata de la lettre de voiture, sauf si le destinataire a refusé l'envoi. L'envoi sera livré au destinataire si l'empêchement à la livraison vient à cesser avant l'arrivée de vos instructions. S'agissant des frais, voir art. 22 § 1 CIM. Pour les envois en souffrance, voir art. 22 §§ 2 – 6 CIM.

Instructions

Mark the box applicable with a cross [X] – Mettre une [X] dans la case code en regard de l'instruction demandée

Code	Instructions
☐ 1	Re-attempt to deliver; if the circumstances preventing delivery reoccur, take the action shown in box... Présenter à nouveau l'envoi au destinataire; en cas de nouvel empêchement, l'envoi est à traiter selon chiffre...
☐ 2	Return to the consignor at the forwarding point Renvoi à l'expéditeur au lieu d'expédition
☐ 3	Sell the goods A vendre
☐ 4	Forward to... (delivery point) for... (name, address, e-mail address or telephone or fax no.) via... (route) A livrer à... (lieu de livraison) à... (nom, adresse, pays, adresse e-mail ou numéro de téléphone ou de télécopieur) via... (itinéraire)
☐ 5	Take the following action (other instructions):... A traiter comme suit (autres instructions):...

Additional information for codes 1 to 5

Indications complémentaires relatives aux codes 1 à 5

Action taken on the instructions – Traitement des instructions

- ☐ The amendments have been copied to the duplicate of the consignment note which has been produced by the person entitled
Les modifications ont été reproduites sur le duplicata de la lettre de voiture, qui a été présenté par l'ayant droit
- ☐ Agreement of customs office of departure given
Accord donné par le bureau de douane de départ
- ☐ Informing the customs office of departure not necessary
Information du bureau de douane de départ non nécessaire

Place, date Lieu, date Signature of the consignor/consignee Signature de l'expéditeur/du destinataire	Place, date Lieu, date Signature of the carrier Signature du transporteur
--	--

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APPENDIX 4 TO THE GENERAL CONTRACT OF USE

WAGON DAMAGE REPORT

This Appendix describes in more detail the information-related requirements laid out in article 18 to be applied upon the detection or presumption of loss or damage to a wagon.

In accordance with Article 18.1 GCU, the user RU has to send an electronical WDR to the wagon keeper for all wagons registered in the GCU database, by respecting the instructions given on the following pages of this guide.

The content of this WDR has to be sent as XML message, compliant with the GCU XSD schema. In case the user RU is not able to send the WDR as XML, the report must be created using the predefined GCU WDR PDF template as depicted hereafter. Own PDF templates or adaptations of the template must not be used. The XSD schema and the PDF template are available on the GCU website in their latest versions.

If a paper print-out is required, this has to comply with the GCU WDR PDF template.

If necessary, the user RU may attach photos, supplementary documents and information to the WDR.

The user RU has to conserve the WDR for the retention period set out in GCU article 33.

Should the user RU transfer a wagon to a third-party RU in accordance with GCU article 16, it remains responsible for establishing and submitting the complete WDR for the loss or damage occurred during the use by that third-party RU.

The GCU Bureau provides a communication platform (GCU Broker) to the signatories for transmission of the WDR, the use of which is compulsory.

The user RU which submits the WDR is informed by the communication platform if the wagon number is not found in the GCU database and therefore, the WDR is not forwarded to the keeper. In this case this user RU shall transmit the WDR by other ways in order to comply with its obligations stemming from article 17.

“Wagon Damage Report” (WDR)**WAGON DAMAGE REPORT**

Ref. General Contract of Use (GCU) – article 18 & Appendix 4

1. General Information

User RU		Report ID	
Consignment n°		Train n°	
Place at which damage detected		Damage detected on	
Forwarding Station		Destination Station	
Date of Dispatch		Loaded State	☐ Loaded ☐ Empty

Wagon number

Keeper

Keeper's address or e-mail address

2. Description of damage

Damage code as per GCU App. 9	Description of Damage
Damage 1 ☐ New damage ☐ Old damage	
Damage 2 ☐ New damage ☐ Old damage	
Damage 3 ☐ New damage ☐ Old damage	
Additional Remarks An exact description of the damage will be produced during repairs and will be sent to the keeper.	

3. Labels found on wagon

Sample ☐ K ☐ M ☐ I ☐ R1 ☐ U Date

RU that created labels found on wagon

4. Sample of Labeling

Sample ☐ K ☐ M ☐ I ☐ R1 ☐ U ☐ Wagon Detached ☐ Dispatch to Workshop ☐ Before unloading ☐ After unloading

5. Damage detected upon acceptance

☐ GCU signatory RU ☐ Non-GCU signatory RU ☐ Connecting Railway

Company

6. Details of cause/perpetrator of damage

☐ Wear and Tear

☐ Impact damage in course of railway operations

☐ Third Party Involved

Name Third Party

Address Third Party

Third Party's Signatory

☐ Not ascertainable

Place/Date Contact

☐ Attachments

Version 20180502 – 2018_TH_eWDR_pilot

Wagon Damage Report (WDR) WDR guide**Description of elements in the Wagon Damage Report**

Designation	Status	Description
User RU	Mandatory	Four characters organisation code (RICS) or alternatively name of the User RU
Report ID	Mandatory	User RU's unique Wagon Damage Report number. The number shall not exceed a maximum length of 32 characters.
Consignment n°	Mandatory	Consignment number for the movement concerned (as per consignment/wagon note). If the consignment number is unknown, enter "unknown".
Train n°	Conditional	Number of the train containing the wagon on which the damage was detected. If the train number is unknown, enter "unknown".
Place at which damage detected	Mandatory	Station/location name at which damage was detected. If the damage was not detected at a station, indicate the name or code of the nearest station/place.
Damage detected on	Mandatory	Date at which damage was detected (not necessarily the date on which the WDR was drawn up).
Forwarding Station	Mandatory	Name of departure station (as per consignment/wagon note). If the departure station is unknown, enter "unknown". In XML enter the CountryCodeISO = "XX" and for LocationSubsidiaryIdentification the DIUM Code "99999" with the name "unknown".
Destination Station	Mandatory	Name of destination station (as per consignment/wagon note). If the name of the destination station is unknown, enter "unknown". For information in XML see forwarding station.
Date of Dispatch	Mandatory	Date the consignment departed (as per consignment/wagon note). If the date of dispatch is unknown, the date when the damage was detected shall be used.
Loaded State	Mandatory	Loading status of wagon when damage was detected (loaded/empty).
Wagon number	Mandatory	Full 12-position wagon number, including check digit.
Keeper	Optional	Four characters organisation code (RICS) or alternatively name or VKM of the wagon keeper as marked on the wagon. As the allocation to the holder is made by the GCU Broker by means of the wagon number, it is not necessary to provide this information when dispatching via the GCU Broker.
Keeper's address or e-mail address	Optional	Additional information to prove to whom the WDR was sent by the RU.
Damage code as per GCU App. 9	Mandatory	Complete damage code in accordance with GCU Appendix 9, Annex 1.
New damage/ Old damage	Optional	Indicate whether the damage is newly detected or whether it was already present on the wagon.
Description of Damage	Mandatory	Designation in accordance with GCU Appendix 9, Annex 1.
Additional Remarks	Optional	Additional description/details of damages. Cause of damage, if this can be ascertained. Scale of the damage (e.g. 2 broken floorboards).
Label found on wagon	Conditional	Type of GCU labels present on the wagon. All present labels must be selected.
Date	Conditional	Date of found labels. Shall be indicated if present.
RU that created labels found on wagon	Conditional	Four characters organisation code (RICS) or alternatively name of the User RU that created labels found on the wagon.

Sample of Labelling	Mandatory	Type of GCU labels which have been affixed to the wagon. One or more relevant labels or alternatively "Wagon Detached" must be selected.
Dispatch to Workshop	Conditional	If the wagon has been dispatched to a workshop by the User RU (before or after unloading), this is to be indicated in accordance with GCU Article 19.
Damage detected upon acceptance	Conditional	Indication if the damage was detected at the place of handover. It shall be marked whether the company handing over the wagon is a GCU RU, a non-GCU RU, or a connecting railway (non-RU).
Company	Conditional	Four characters organisation code (RICS) or alternatively name of the company handed over the wagon.
Details of cause/perpetrator of damage	Mandatory	Selection of one of the possible causes for the damage (wear and tear, impact damage in course of railway operation, third-party ¹ involved or not ascertainable). Only one cause may be given in all cases. If there is more than one cause, select "not possible to determine party responsible".
Place/Date	Mandatory	Location and date on which WDR was drawn up.
Contact	Mandatory	Contact details of User RU (name, telephone, email, etc.) for any queries concerning the WDR or damage.
Attachments	Conditional	Indication if any supporting documents are attached to the WDR (e.g. damage photos, documents, etc.).

¹ The party responsible (third-party) must confirm in a separate document that it assumes liability in order that the RU can claim relief in accordance with GCU Article 22. This document is to be appended to the Wagon Damage Report.

APPENDIX 5

TO THE GENERAL CONTRACT OF USE

CALCULATING COMPENSATION FOR A WAGON OR BOGIE IN THE EVENT OF LOSS OR DAMAGE

I. Compensation

Compensation for loss or damage to a wagon is paid in line with the residual value of the wagon. The keeper decides which of the two following principles shall be applied for calculating compensation:

- A. specific residual value, justified by documentary proof of the actual damage sustained,
or
- B. flat-rate residual value.

A. Calculation of specific residual value

The keeper shall indicate the specific residual value and provide documentary proof of that value.

B. Calculation of flat-rate residual value

1. Calculation of replacement value

The replacement value is the average value of a new, similar or comparable wagon at the time the loss or damage occurred. The keeper shall provide documentary proof of the replacement value.

2. Calculation of compensation

- 2.1 The amount to be paid as compensation as per articles 19.2 or 20.3 of the GCU is calculated in accordance with points 2.2 or 2.3 hereafter. In addition, a flat-rate sum shall be paid as per point 2.4.
- 2.2 First of all 4% per year of service (linear rate) shall be deducted from the replacement value determined in accordance with point B1, up to a maximum rate of 80% of the replacement value (compensation option 1).
When calculating the number of years of service, the year of construction and the year when the wagon was damaged or lost are counted as a single year.
- 2.3 Should the keeper decide to keep the wagon, 10% shall be deducted from the amount to be paid as compensation calculated in accordance with point 2.2 (compensation option 2).
When the wagon is sent back to the keeper, the keeper may invoice the liable RU for the actual transport costs thus incurred, providing documentary proof of these costs. The amount to be invoiced as transport costs may not exceed 10% of the compensation payable as per point 2.3 (option 2).
- 2.4 A flat-rate sum of € 2000 shall be added to the compensation payable as per points 2.2 or 2.3 (amount payable for calculation by the keeper of compensation for loss or damage).

II. Compensation procedure

1. Loss

The keeper shall send to the RU an invoice complying with the principles laid out in point I, along with documentary proof that the wagon has been struck off the national vehicle register.

2. Damage

The keeper shall send to the RU an invoice complying with the principles laid out in point I.

On the invoice the keeper shall expressly state whether it wishes to transfer the wagon to the RU for scrapping or whether it wishes to keep the wagon. The RU must comply with that decision.

When the keeper has decided to transfer the wagon to the RU for scrapping, alongside the invoice it shall provide the RU with a document empowering the RU to scrap the wagon and collect any revenue arising thereby.

The RU is obliged to provide suitable documentary proof that wagon has been scrapped at the earliest possible date in order to allow the keeper to call for the wagon to be struck off the national vehicle register.

3. Persons acting for the parties

In this procedure the RU and keeper are represented by the individuals named in Appendix 1 to the GCU.

4. Customs formalities

The RU is obliged to handle any necessary customs formalities.

III. General rules

1. The aforementioned rules also apply to bogies.

2. All other rights and duties remain unaffected.

APPENDIX 6

TO THE GENERAL CONTRACT OF USE FOR WAGONS

I. COMPENSATION FOR LOSS OF USE

The compensation payable on the basis of Articles 13.3 (loss of use due to delay) and 23.2 (loss of use due to damage) of the GCU is calculated either based on the actual damage sustained or as a flat rate, whichever the keeper decides.

1. Compensation based on actual damage sustained

The keeper shall claim compensation for loss of use from the responsible RU by means of supporting documents on the basis of the damage sustained.

2. Flat-rate compensation

2.1 Daily rate per wagon in euros

To calculate the daily rate (in euros):

Multiply the coefficient for the relevant wagon type by the wagon's length over buffers (in metres, unrounded).

Code letters of various wagon types	Coefficient
E – Open Wagon	1.1
F – Open Wagon	1.5
G – Covered Wagon	1.1
H – Covered Wagon	1.5
I – Temperature-controlled wagon	1.4
K – Two-axle flat wagon	1.1
L – Flat wagon	1.5
O – Mixed flat open wagon	1.4
R – Bogie flat wagon	1.1
S – Bogie flat wagon	1.5
T – Wagon with opening roof	1.5
U – Special wagon	1.8
Z – Tank wagon	1.8

2.2 Flat-rate compensation to be paid for loss of use arising from the period for carriage being exceeded for empty or loaded wagons

The RU responsible for a loaded or empty wagon exceeding the carriage period shall pay the keeper a flat rate of compensation in accordance with 2.1 for each indivisible day of delay (Sundays and public holidays* not included), upon presentation by the keeper of an invoice.

For loaded wagons, this payment shall be independent of any compensation payable as a result of the loaded goods exceeding the transit period.

* according to the country in which the vehicle is located

2.3 Flat-rate compensation to be paid for loss of use arising from repair work on the wagon

The RU responsible for damaging a wagon or its accessories as per GCU Article 22 shall pay the keeper a flat rate of compensation upon presentation of an invoice in accordance with 2.1 for each indivisible (calendar) day on which the wagon is unavailable for use.

This compensation shall be calculated starting from the day following that on which the damage was first recorded (in accordance with GCU Appendix 4, Wagon damage report, "Damage detected on...") and shall end on the day on which the wagon's fitness for service is restored.

The loss-of-use period shall be suspended in the following cases:

- if the wagon is given a K label in the sense of GCU Appendix 9 and then takes more than two days to be taken to the workshop (a flat rate then applies for the time taken to reach the workshop);
- from the day the damage was recorded up to the day the goods are unloaded if the wagon has been given a K label before being forwarded;
- for the time elapsing between the request of spare parts as per Forms H and H^R and the delivery of these parts (GCU Article 23.2);
- if the wagon is taken for further maintenance work at the keeper's behest;
- if the wagon is given a K label (GCU Appendix 9) and transferred between two workshops and this takes more than two days (a flat rate then applies for the time taken to reach the other workshop).

2.4 Miscellaneous

The compensation payments referred to under points 2.2 and 2.3 may not be aggregated.

II. COMPENSATION FOR REPROFILING OF WHEELSETS

The RU responsible for damaging a wheelset to be reprofiled shall pay the keeper upon presentation of an invoice with supporting documents a flat rate of 350 EUR for the loss of value arising as a result of reprofiling (reduction in the running-circle diameter).

APPENDIX 7

TO THE GENERAL CONTRACT OF USE FOR WAGONS

SPARE PARTS

1. General principles

1.1 The management of spare parts must be organised in a cost-effective and rational manner to cut down on the time damaged wagons spend out of service and keep transport of the parts themselves to a minimum. The request for spare parts is to be made by means of Form H/H^R and should include the related damage report reference number.

Restrictions on transport conditions (e.g., opening hours, means of transport) are to be stated in advance on Form H/H^R.

1.2 The keeper must ensure that the requested spare parts are delivered to the workshop carrying out the repairs as rapidly as possible, or within 20 calendar days at the latest after forwarding the spare part request to the keeper. If this deadline is exceeded, the corresponding track occupation costs due to this delay can be invoiced to the keeper. Any track occupation costs must be indicated on the request for spare parts (Form H/H^R).

1.3 The user RU and the keeper shall designate a logistics centre to coordinate and steer all aspects of the provision of spare parts. The addresses shall be indicated in the list of addresses in Appendix 1 to the GCU.

1.4 Conditions for returning parts removed from vehicles are to be indicated by the keeper on Form H/H^R.

1.5 Modern means of communication (e.g., fax or e-mail) shall be used to exchange information.

1.6 When transporting spare parts, the most cost-effective means of transport and service shall be selected in terms of price, service, quality, and transport time, taking account of specific delivery conditions.

1.7 Transport and customs related costs, regarding article 19 aren't included in the repair costs. These costs are to be charged to the responsible for the damage.

1.8 Spare parts shall be delivered ready for fitting and be compatible with the wagon to be repaired. If several wagons are damaged, it must be ensured that the spare parts supplied are assigned to the correct wagon number.

1.9 When sending spare parts, care must be paid to ensuring they can be clearly assigned to a given wagon on arrival. The consignee must use those parts on the designated wagons.

1.10 For transport beyond the borders of a customs area, the keeper must ensure customs clearance. This requirement is also applicable to the recovery (scrapping) or abandonment of parts outside of their own customs area.

Part A

Wheelsets

2. Principles

2.1 If wheelsets need to be repaired, the user RU must inform the wagon keeper without delay and at the latest within two working days (Saturdays excluded) of the damage being reported in the workshop, using Form H^R.

2.2 The user RU must offer the wagon keeper the procedure set out in point 3.1 and, where possible, the procedure set out in point 3.2.

2.3 The wagon keeper must accept one of both procedures on offer and send written agreement within two working days (Saturdays excluded). If the keeper does not answer within the period specified, the procedure in point 3.1 shall be applied.

3. Handling of wheelsets

3.1 Wheelsets replaced with wheelsets provided by the keeper

3.1.1 The user RU shall use Form H^R to notify the wagon keeper of the details of the wheelset (e.g., wheelset and housing type, diameter, wheelset position, wheelset number) and the delivery address for the wheelset to be supplied.

3.1.2 The keeper is to send the requested wheelset as swiftly as possible to the delivery address. He must provide the user RU with the return address and all references (e.g., delivery note number) relevant to the allocation of the return delivery for the damaged wheelset **using the form H^R**.

3.1.3 The wagon number must be indelibly marked on the damaged wheelset (inside of the wheel centre) once it has been removed.

3.1.4 The damaged wheelset must reach the keeper at the return address provided as per 3.1.2 in Form H^R within 6 weeks of being removed from the wagon, **stating the wagon number and if applicable** the references specified by the keeper **on the form H^R**. If the wheelset does not reach the keeper by this time, he shall send out a reminder to the user RU, extending the deadline by a further 2 weeks at least. If the wheelset still does not arrive by this extended deadline, the user RU shall pay the keeper the replacement value of the wheelset.

3.2 Repair of wheelsets with keeper's approval

3.2.1 The damaged wheelset shall be removed and sent to an approved workshop for repair in accordance with the provisions of the keeper. Once repaired, the wheelset shall be fitted back on the wagon.

3.2.2 If during the repair operation on the damaged wheelset a technical defect is observed that requires the replacement of the wheel centre, axle or axle-box, the wagon keeper shall be informed immediately. The procedure in point 3.1 shall be applied from point 3.1.2 onwards.

Part B

Other interchangeable spare parts

4. Usage of spare parts of the user RU's

4.1 When wagon parts have been damaged, the user RU shall preferably replace them using interchangeable spare parts from its own stock. In principle, the spare parts should be of the same type as the removed parts or, if this is no longer available, as the other parts of the wagon. Mixing different designs is not permitted (unless stated otherwise in Appendix 10, e.g., brake blocks in accordance with 3.8.3).

The following are considered as interchangeable spare parts:

- Safety straps
- Cast iron brake blocks, as well as K and/or LL brake blocks, if marked on the wagon
- Brake couplings
- Spark arrestor plates
- Earthing braids. The earthing braids must comply with UIC Leaflet 533
- Screw couplers, factoring in breaking strength. The screw coupler must comply with EN 15566 and/or UIC Leaflet 520/IRS 50520 respectively
- Screw coupler suspension hooks
- Guiding and locking elements
- Steps and handles. The newly built steps must be of the exact same model to ensure that they remain within the loading gauge. The step surface must comply with UIC Leaflet 535-2 and/or EN 16116-2.
- Label holders, inscription plate
- Ventilation flaps, control gear, shutter retaining bracket
- Stanchions in accordance with UIC Leaflet 578
- End boards, crossing gangways

4.2 The value of any such interchangeable spare parts shall be included in the cost of the repair operation.

4.3 When the user RU makes a cost estimation to the keeper, the keeper must indicate whether he wishes the damaged parts to be returned to him at his own expense. If the keeper does not specify the return of these parts, they shall remain with the user RU, together with the other spare parts removed from the wagon. There shall be no form of compensation for the value of these parts.

5. Exceptional order for interchangeable spare parts

5.1 Due to the lack of interchangeable spare parts of the same type in the workshop and if these parts cannot be obtained quickly, interchangeable spare parts may be ordered from the keeper using an equivalent procedure to that in Part C (Form H).

5.2 This operation is coordinated exclusively through the logistics centres.

Part C

Other non-interchangeable spare parts

6. Request for other non-interchangeable spare parts

6.1 The other spare parts that are needed to repair a wagon and are not stocked by the user RU shall be ordered from the keeper's logistics centre using Form H.

6.2 For each request for spare parts using Form H, confirmation of receipt shall be sent without delay to the logistics centre making the request. When confirming receipt, the estimated delivery time of the spare parts shall be indicated. If the damaged parts are to be returned, this should also be specified. If the spare parts cannot be dispatched immediately, the requesting logistics centre shall be informed without delay.

7. Return of other damaged non-interchangeable spare parts

7.1 Damaged parts with a low value (e.g., suspension rods and links, etc.) are not returned once removed. No compensation for their value shall take place.

7.2 Other damaged parts, once removed, shall only be returned at the keeper's request. The wagon keeper must provide the user RU with the **return** address and all references relevant to the allocation of the return delivery for the damaged parts **using the form H**.

7.3 The wagon number must be clearly assigned to the damaged spare part once it has been removed by means of suitable labelling.

7.4 The damaged spare part must reach the keeper at the return address provided as per 7.2 in form H within 6 weeks of being removed from the wagon **stating the wagon number and if applicable**, the references specified by the keeper **on the form H**. If the damaged part does not reach the keeper by this time, he shall send out a reminder to the user RU, extending the deadline by a further 2 weeks at least. If the damaged part still does not arrive by this extended deadline, the user RU shall pay the keeper the replacement value of the part.

Part D

Fitting of spare parts from vehicles belonging to the same keeper

8.1 To avoid delaying the forwarding of a wagon, spare parts may be taken from another wagon of the same keeper, subject to his approval.

8.2 If the keeper has given his agreement, the spare parts must then be ordered for the wagon from which they have been taken.

Part E

TRANSPORT AND STORAGE OF PARTS

9. Principle

9.1 When wagon parts are transported, transhipped, and stored before they are fitted to wagons, after their removal and in preparation for being sent back to the wagon keeper, particular care must be taken to ensure that their inner components remain undamaged and their surfaces and anti-corrosion coatings intact.

10. Wheelsets with axle boxes

10.1 Storage

- When stored side-by-side on the track, there must be no contact in the wheel profile area. Flange-to-flange contact is permissible.
- When stored in staggered formation (with double rail) there must be no contact between axle-box/flange or flange/axle shaft.
- When storing wheelsets in loading cradles, similar precautions must be taken.
- Storage on flat surfaces is permissible if the wheelsets are resting on suitable materials (wood, rubber, plastic) so that the surfaces in contact are not damaged.
- The wheelsets must be placed and moved in such a way that no damage can occur to the wheelset, its component parts as well as protection against corrosion.
- Wheelsets shall be secured against rolling away using wheel scotches, scotch blocks or hollow seats in the track.
- Stacking of wheelsets is permissible if the above-mentioned provisions are applied for storage. Any axle-to-axle contact is forbidden.

Permissible example of storage



Photo 1: Storing on track using safety scotches



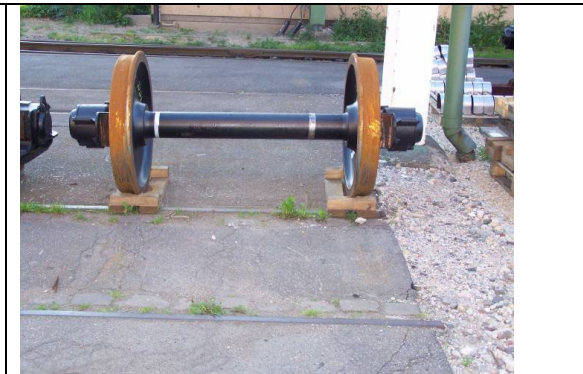
Photo 2: Storing in staggered formation on track using safety scotches



Photo 3: Storing in staggered formation (with double rail)



Photo 4: Storing in staggered formation on track with protections against contact

		
Photo 5: Stacking of wheelsets in loading cradles		Photo 6: individual storage using lockers storage for single axles
		
Photo 7: Storing in staggered formation (with double rail) with spacers		

10.2 Transport

- During transport by fork-lift truck, the tines of the fork and their ends must be fitted with protective padding. Damage resulting from wheelsets as well as protection against corrosion rolling off the forks should be prevented. Damage resulting from wheelsets rolling off the forks should be prevented.
- If load handling attachments are used, the wheelsets and protection against corrosion must not be damaged as a result.
- Wheelsets should be transported between workshops and spare parts centres in loading cradles wherever possible. The wheelsets must be loaded and secured in such a way that there is no possible damage to the wheelset with axle box, its component parts as well as protection against corrosion during transit. A tightening with straps passing on the axles shafts without protection is not permissible.

Permissible example of handling

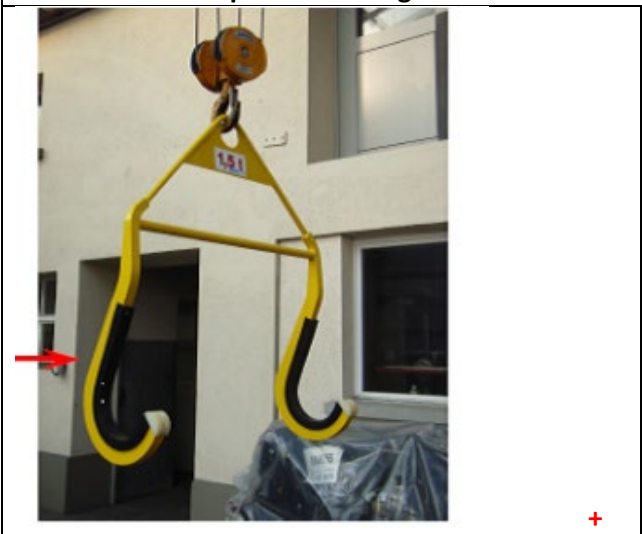
	
Photo 1: Lifting device of crane for wheelsets with axle boxes (axle shaft.)	Photo 2: Lifting device of crane for wheelsets with axle boxes, release protective



Photo 3: Lifting device of crane for wheelsets (wheel disc)



Photo 4: Wheelset holder for fork-lift truck



Photo 5: Wheelset holder for fork-lift truck



Photo 6: Wheelset holder for fork-lift truck



Photo 7: Wheelset holder for fork-lift truck (loaded)



Photo 8: Wheelset holder for fork-lift truck (several wheelsets)

11. Other parts

- Buffers shall be stored in such a way that no water is able to penetrate between the buffer casing and the plunger
- If leaf springs are transported directly by fork-lift truck, the tines of the fork and their ends must be fitted with protective padding (rubber inserts) to avoid damaging the anti-corrosion coating.

Issuing RU (LOGO)	Form H		No.																								
Wagon number:	-																										
Damage report reference number:																											
Keeper:		Fax no.:	E-mail:																								
Description of parts:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Pos</th> <th style="width: 10%;">Quantity</th> <th style="width: 55%;">Description</th> <th style="width: 10%;">*</th> </tr> </thead> <tbody> <tr><td>1</td><td> </td><td> </td><td> </td></tr> <tr><td>2</td><td> </td><td> </td><td> </td></tr> <tr><td>3</td><td> </td><td> </td><td> </td></tr> <tr><td>4</td><td> </td><td> </td><td> </td></tr> <tr><td>5</td><td> </td><td> </td><td> </td></tr> </tbody> </table> * Parts missing from the wagon			Pos	Quantity	Description	*	1				2				3				4				5			
Pos	Quantity	Description	*																								
1																											
2																											
3																											
4																											
5																											
Other:	Track occupation costs as per App. 7, point 1.2																										
Addresses:	Contact address: 	€ Delivery address: 	Delivery conditions, where appropriate 																								
	Tel: Fax: E-mail:																										
Date		Signature																									
To be filled in by the keeper																											
Answer:	Estimated date of delivery:																										
	Return of damaged parts?	☐ Yes ☐ No Pos.																									
Address:	Delivery address: 	Delivery restrictions, where appropriate and references: 																									
Date:		Signature:																									
		Company stamp:																									

Please use block letters throughout

Form H
Page

F-I to F-IV

A

B

C

D

E

Type of U buffer	1)
75	
105	
105-A	
105-B	
105-C	
150-L	
Other type 2)	

1) Put a cross in the corresponding box

2) Indicate buffer type

A	
B	
C	
D	
E	

F-I	flat	
F-II	convex r = 630	
F-III	semi-convex r = 1500	
F-IV	semi-convex r = 2750	

A

B

C

D

E

F

A	
B	
C	
D	

E	
F	
N Number of leaves	
P Without load	

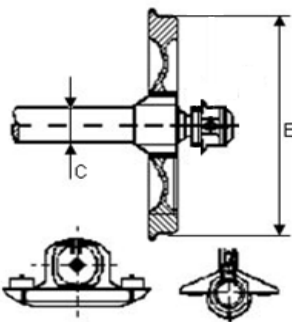
For wagons with rigid underframe

Yes ☐ No ☐

A

Space for any additional drawings:

Form HPage 2

Issuing RU (LOGO)		Form H^R						No. _____	
								Drawn up on: _____	
Wagon number:							-		
Damage report reference number:									
Keeper:								Fax no.: _____ email: _____	
Remarks:									
Condition of all the wheelsets of the wagon - for undamaged wheelset(s), complete only the fields "POS" and "B"									
Pos	T/M	B measured	C	Monobloc yes / no		Type of wheelset	Wheelset number(s) of damaged wheelset(s)		
Pos: position of axle (as per marking on wagon). If no marking present, count from either end of wagon.									
Number of damaged wheelsets:									
		Reason for withdrawal from service T/M: always indicate code opposite the axle number							
		1.2.2 Thermal overload 1.3.2 Wheel wear (tread) 1.3.3 Wheel flats 1.3.4 Metal inclusions 1.3.5 Cavities/shelling 1.5.1 Damage to wheel centre 1.6.1 Damage to axle 1.7.2 Out-of-round wheel				1.8.1.1 Axle box leaking 1.8.1.2 Loss of lubricant 1.8.3 Hot axle box 1.8.4 Wear plate displaced or missing 7.1.7 Overload (provide details) 8.1.1 Derailment Other:			
Addresses:		Contact address: 				Delivery address: Station code:			
		Tel.:				Delivery restrictions, where appropriate: 			
		Fax:							
		Email:							
Quotes:		see page 2							
Date:		Signature: _____ Company stamp: _____							
Please complete in block letters									

Form H^R Page

Issuing RU (LOGO)	Form H ^R
Wagon number:	-
Damage report reference number:	
Keeper:	Fax no.: Email:
Quotes:	☒ 3.1 Request for replacement wheelset(s) using form H^R ☒ 3.2 Repair one or more wheelset(s) Repair to be done by approved depot
Remarks:	1. Agreement of the keeper must be sought as per Article 19.1 of the GCU 2. Track occupancy costs as per Appendix 7 of the GCU, point 1.2 To be completed by the keeper
Reply:	We hereby accept your quote no. and will send you the requested wheelsets by (point 3.1 only)
Addresses:	The damaged wheelsets should be returned to the address indicated below: (point 3.1 only) Delivery address: Station code: Billing address: Delivery restrictions, where appropriate and references:
Date:	Signature: _____ Company stamp: _____

Please complete in block letters Form H^R Page 2

APPENDIX 8 TO THE GENERAL CONTRACT OF USE FOR WAGONS

INTERNAL REGULATION FOR THE APPLICATION AND FURTHER DEVELOPMENT OF THE GCU

Preamble

Part I of this Appendix contains provisions regarding the GCU Bureau.

Part II describes the organisational arrangements adopted by the associations involved in the establishment of the GCU for monitoring the application of the GCU and facilitating its further development.

I. The GCU Bureau

1. The tasks of the GCU Bureau as set out in Articles 2 to 4 of the GCU shall be transferred to a trustee (the "Trustee"). The Trustee may be a physical person or a legal entity. The GCU Bureau shall be located in Brussels.

The Trustee shall take equal account of the interests of wagon keepers and RUs and assume a neutral position in potential conflicts of interest between wagon keepers and RUs.

2. The Trustee shall be proposed by the Joint Committee (see Part II below) for a term of three years at least three months before the end of the term of the Trustee in office. The appointment of the proposed Trustee shall be considered confirmed unless it is opposed by more than half the signatories within one month after the proposal has been notified to the signatories. The term of the Trustee in office may be renewed.

If the Joint Committee fails to make a proposal at the latest three months before the end of the term of the Trustee in office, other proposals may be submitted by the signatories, providing they have the written support of at least 50 signatories. Proposals made in this way shall be accepted unless opposed by more than half the signatories within three months after the proposal has been sent out to the signatories. If several such proposals are submitted by signatories, the proposal that meets with the least number of objections shall be accepted. For this voting on the proposal the procedure set out in points 8 and 9 below shall be applied accordingly, except for the shorter voting period.

3. The Joint Committee or a group of more than half of the signatories may propose an early termination of the Trustee's term, if there are significant reasons to do so. This termination shall be effective unless it is opposed by more than half the signatories within one month after the proposal has been sent out to the signatories. The procedure shall be as set out in point 2, with the Co-chairmen of the Joint Committee acting in place of the Trustee whose term is provisionally terminated.

"Significant reasons" shall mean in particular a failure on the part of the Trustee to meet its duty of neutrality or a continuous failure to perform his administrative duties in accordance with the GCU and this Appendix.

4. The Trustee shall be responsible for running the GCU Bureau. He shall maintain and further develop the designated website (the "GCU Website") for the exchange of information and the communication between the GCU Bureau and the signatories.

5. The GCU Bureau shall

- provide for translating the GCU (and its appendices) into the three languages, together with any proposed amendments;
- shall publish the GCU and any amendments thereto on the GCU Website;
- shall also publish the list of signatories on the GCU Website.

The list of signatories shall be structured as follows, based on the information provided by the signatories:

- Group 1: (Rus): Signatories that are Rus but are not also wagon keepers, with the number of tonne-kilometres they recorded in the last published business year;
 - Group 2: (Keepers): Signatories that are wagon keepers but are not also RUs, with the number of wagons which they are the keeper of and that can be used by other signatories and are registered in the GCU Wagon Data Base (see point 6. below); this group also includes wagon keepers that are legally independent majority participations of RUs, if their main business objective is the marketing (e.g. by leasing) of the wagons to third parties;
 - Group 3: (Rus and Keepers): Signatories that are both Rus and wagon keepers, with the number of wagons which they are the keeper of and that can be used by other signatories and are registered in the GCU Wagon Data Base; this group also includes wagon keepers that are not RUs themselves but are legally independent majority participations of RUs, if their main business objective is the provision of wagons for these RUs.
6. The signatories shall submit to the GCU Bureau together with the application for admission and regularly update thereafter all information required for the administration of the contract and for the communication among signatories and between signatories and the GCU Bureau, including, but not limited to contact data such as postal addresses, phone and fax numbers, e-mail addresses and contact persons. These contact data shall be published on the GCU Website in the database referenced in Appendix 1 of the contract.
- The signatories shall further submit to the GCU Bureau together with the application for admission and regularly update thereafter the vehicle numbers of all wagons of which they are the keeper and that can be used by other signatories. The GCU Bureau shall make available an electronic data base (the "GCU Wagon Data Base") for this purpose on the GCU Website. The GCU Wagon Data Base shall allow to identify via the vehicle number of a wagon who is the keeper of the wagon, provided that the keeper of the wagon is a signatory of the GCU.
- Each signatory via the GCU Website shall have direct access to his own data for the purpose of uploading and changing contact data or vehicle numbers. The GCU Bureau must ensure that proper right of access protection is in place and that the data are securely stored and protected against any unauthorised use.
- It is the sole responsibility of each signatory to ensure the correctness of his contact data and vehicle numbers supplied to the GCU Bureau and the vehicle numbers contained in the GCU Wagon Database and to provide for any necessary updates thereafter.
7. Signatories may submit proposals for amendment to the GCU Bureau. Also the associations represented in the Joint Committee may make recommendations for amendments or additions to the GCU to the Joint Committee. These recommendations can then be adopted as proposals by unanimous consent of the Joint Committee and submitted to the GCU Bureau.

Any proposal requires either the support of at least 25 signatories or the unanimous consent of the Joint Committee. Proposals must be submitted in one of the three languages of the contract and must include the reasons for the proposed change, with an indication of the article or appendix concerned. The GCU Bureau shall check that proposals have all the required elements; incomplete proposals shall be rejected.

8. The GCU Bureau shall publish amendment proposals on the GCU Website and notify all signatories by e-mail in the three languages of the contract of the fact of the publication.
9. Signatories who do not agree with the proposed amendments must declare this by letter, fax or e-mail to the GCU Bureau within two months after the notification of the proposed amendments has been sent out by e-mail. Any signatory that has not declared disagreement by the end of this period shall be considered to be in agreement with the proposal.
10. Proposals shall be adopted if none of the signatories have opposed them within the prescribed time period or if, in each of the groups referred to in point 5, they obtain the support of at least three-quarters of the signatories in the corresponding group representing at the same time at least three-quarters of the total tonne-kilometres or wagons in the group in question.
11. Adopted amendments to the GCU shall be published on the GCU Website and the fact of the adoption shall be notified by e-mail to all signatories by the GCU Bureau within 1 week after adoption.

Amendments that are adopted shall enter into force on the date specified in the corresponding proposal; if no date is mentioned, they shall enter into force on the first of January of the following calendar year.

Amendments and additions shall also be binding on signatories that did not agree with them, unless the signatories in question decide to withdraw from the contract in accordance with Article 3 of the GCU.

When proposals are not carried, the GCU Bureau shall also announce the result on the GCU Website and notify the signatories by e-mail.

12. The running costs of the GCU Bureau shall be covered by the signatories.

The GCU Bureau shall draw up an annual budget at least four months before the end of each year and have it approved by the GCU Auditors (see point 13 below). In the beginning of each calendar year the GCU Bureau shall be entitled to call in advance contributions from the signatories in order to cover the cost of the GCU Bureau for the current year in accordance with the approved budget. The GCU Auditors may approve supplementary budgets during the year if the advance contributions do not cover the actual costs or if additional funds are required for extraordinary expenses which are in the interest of the GCU and the signatories and are previously approved by the Joint Committee.

Advance contributions that have not been used up shall be taken into account in the budget for the next year.

75 per cent of the costs referred to in paragraph 1 shall be divided equally among the signatories and 25 per cent shared out on a variable basis according to the number of wagons registered in the GCU Wagon Data Base.

13. The annual accounts of the GCU Bureau shall be checked by two auditors (the "GCU Auditors") within three months after the end of each calendar year. The result of the audit shall be published on the GCU Website.

The Joint Committee shall propose the GCU Auditors for a period of up to three years parallel to the term of the Trustee. The appointment of the proposed Auditors shall be

considered confirmed unless more than half the signatories opposes this proposal under the procedure set out in point 2, paragraph 1. The term of the GCU Auditors in office may be renewed.

Point 2 paragraph 2 and point 3 above shall be applied accordingly.

II. The Joint Committee

1. UIP, UIC and ERFA shall together take on the task of applying, promoting and further developing the GCU. To this end, they shall form a Joint Committee made up of representatives from the three associations. UIP and UIC shall each appoint five members to the Joint Committee and ERFA two members.
2. Two Co-Chairmen of the Joint Committee shall be chosen from among its members for a three-year term of office. One Co-Chairman shall be a representative of UIP, the other one a representative of UIC/ERFA.

The Joint Committee shall meet as and when required, though at least once a year.

3. The Joint Committee shall keep in touch with the GCU Bureau. Its decisions shall be taken unanimously. Members of the Joint Committee not being able to participate in a meeting shall give a voting proxy to another member of the Joint Committee representing the same association.

The Joint Committee shall:

- propose the Trustee to take on the tasks of the GCU Bureau and where necessary propose to terminate its term with immediate effect. The same shall apply to the Auditors;
 - make proposals for amendments and additions to the GCU;
 - review all questions of common interest in connection with the GCU and set up ad hoc working groups where necessary;
 - decide whether or not to accept the petitions of other associations representing RUs or wagon keepers to be admitted to the Joint Committee, as well as on changes of points 1 and 2 related thereto. Of such decisions the signatories shall be informed via the GCU Bureau.
4. The associations represented on the Joint Committee shall seek to ensure that when GCU signatories who are members of their associations make proposals for amendments, these are channelled first via their association to the Joint Committee, which can then discuss, finalise and decide on them and thereby encourage the achievement of a majority.

The associations shall also channel their own proposed amendments to the GCU via the Joint Committee.

APPENDIX 9

to the General Contract of Use (GCU) for wagons

Irregularities to freight wagons in operation and follow-up actions

Edition dated 1 January 2026

- reserved -

Introduction

This document replaces the previous version of Appendix 9 to the GCU "Technical conditions for wagon transfers between railway undertakings". This new version of Appendix 9 is the result of an update to railway legislation in 2024. As part of this update, all content relating to quality management (e.g. covered by the ATTI agreement) has been removed.

In the German version, the term "*Fehlerkatalog*" is also replaced by "*Katalog der Mängel und Schäden*".

A vertical line in the margin denotes amended provisions taking effect on the date shown at the foot of the page: 01/01/2026.

Contents

Introduction	3
1. PURPOSE AND SCOPE OF APPLICATION	5
2. CATALOGUE OF IRREGULARITIES.....	6
2.1 PRESENTATION.....	6
2.2 COMMENTS ON THE CATALOGUE OF IRREGULARITIES	6
 Annex 1 Catalogue of irregularities	
Annex 2 Irregularity classes	
Annex 3 - reserved -	
Annex 4 Verification using a combined gauge	
Annex 5 Catalogue of inspections in accordance with Annex 1	
Annex 6 - reserved -	
Annex 7 - reserved -	
Annex 8 Handling of wagons	
Annex 9 Checklists	
Annex 10 - reserved -	
Annex 11 I, K, M, R1 and U labels	
Annex 12 Traceability	

1. PURPOSE AND SCOPE OF APPLICATION

- 1.1** This appendix defines and codes standardised irregularities to loaded and empty freight wagons, as well as the follow-up action to be taken in order to promote efficient railway operations.
- 1.2** GCU RUs apply this appendix if they detect deviations from the technical target state (irregularities) on wagons.
- 1.3** The codes and follow-up actions apply to all technical checks carried out by RUs, i.e. train departure checks, checks following warning messages from infrastructure systems, or exceptional operational occurrences.
- 1.4** The GCU parties use the codes to exchange information on the technical condition of freight wagons or their loads. Specifically, this involves the exchange of information between RUs and wagon keepers and between the RUs involved in a transport chain.
- 1.5** The RUs themselves define the procedures for carrying out the checks within their safety management system, including the requirements for the staff performing the checks.
- 1.6** In this annex, the term "irregularities" refers to all types of deviations from the target technical state.
- The term "irregularities" includes:
- Wear and tear,
 - Damage caused during railway operation,
 - Other damage that represents a deviation from the wagon's target technical state.
- 1.7** The specifications on how a technical inspection is to be carried out are to be regulated by the RUs within their SMS.
- 1.8** The quality management system must be agreed separately by the RUs, e.g. within ATTI
- 1.9** Not included in the scope of this appendix:
- An RU's procedures for carrying out technical vehicle checks. The RUs define these procedures in their security management system.
 - The skills requirements for RU staff. These skills are regulated in their respective safety management systems.
 - The procedures for the quality management of trust-based transfers between RUs. These procedures are to be regulated by contracts between the RUs, e.g. within ATTI.

2. CATALOGUE OF IRREGULARITIES

2.1 PRESENTATION

The content of **Annex 1** is divided into five columns:

- (1) List of wagon components and aspects of the load to be examined
- (2) Irregularity code
- (3) Irregularities, where appropriate with criteria and indications to facilitate detection
Criteria are marked with a "-"
Remarks are marked with a "•"
If the criteria are met, the designated follow-up action must be taken
Possible means of recognising irregularities are marked "•" without this being a requirement to execute the measures
- (4) Follow-up action to be taken
- (5) Irregularity class

2.2 COMMENTS ON THE CATALOGUE OF IRREGULARITIES

- 2.2.1 All the dimensions (values) quoted should only be measured in cases of doubt. A component must be operated (operating test) or pulled or moved (actuation of the part in question) in the event of a suspected damage or defect.
- 2.2.2 For irregularity codes beginning with 7.x.x., column (3) of which contains cross-references in brackets to the relevant points of Volume 1 of the Loading Guidelines.
- 2.2.3 RU staff shall mark irregularities to the freight wagon in accordance with **Annex 11** of Appendix 9 and, if necessary, additionally with a grease pencil or chalk. RU staff shall enter the irregularity code(s) defined in column (2) of the catalogue of irregularities in **Annex 1** of Appendix 9 in the wagon damage report (Appendix 4 GCU).
- 2.2.4 This appendix is not an exhaustive catalogue of all the irregularities which might occur. Where there are other irregularities not listed in this document, but which might well compromise operating safety or the wagon's fitness for use, qualified RU staff shall take whatever action they deem necessary. Such irregularities are to be documented by means of the superordinate code applicable in context to the part/components/aspect in question and are to be assigned to at least the second grouping level.
- 2.2.5 The expression "Detach wagon" means that the wagon may not continue its onward conveyance if it presents an irregularity that could impact on the safety of operations. There are four categories of the "Detach wagon" action to be taken:
Detach wagon (A) Restore fitness to run in accordance with GCU Appendix 10
Detach wagon (B) Convey the wagon to correct the load
Detach wagon (C) Obtain instructions from the keeper on the action to be taken
Detach wagon (D) Proceed according to RID rules, have dangerous goods interventions carried out
- 2.2.6 Once detached, until its subsequent return to operation, the wagon remains in the custody of the user RU which recorded the irregularity whilst the irregularity is being rectified.
- 2.2.7 All of the irregularities and defects identified in service (based on dimensional deviations in length, depth or width) are to be measured in millimetres (mm). Values of more than 0 mm and less than 1 mm need to be detected, but not measured.
- 2.2.8 Empty/loaded wagon:
The irregularity codes given in **Annex 1** apply to both loaded and non-loaded wagons. The condition of the load or its securing may hamper a wagon's fitness to run. In these cases, the RU shall arrange for the load to be corrected, secured or the wagon to be unloaded.

APPENDIX 9, ANNEX 1

Catalogue of irregularities

Contents

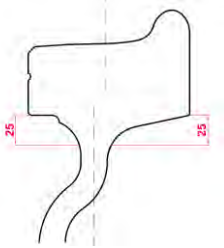
- 1 Running gear**
- 2 Suspension**
- 3 Brakes**
- 4 Wagon underframes and bogie frames**
- 5 Buffing and draw gear**
- 6 Wagon body**
 - 6.1 Wagon body in general
 - 6.2 Covered wagons
 - 6.3 Open wagons
 - 6.4 Flat wagons
 - 6.5 Tank wagons
 - 6.6 Wagons with special fittings
 - 6.7 Gear for securing load units (ILU) on carrier wagons
 - 6.8 Wagons equipped with various technical components
- 7 Loads and intermodal loading units (ILU)**
 - 7.1 Load in general
 - 7.2 Load securing equipment
 - 7.3 Loading and load securing methods
 - 7.4 Special types of consignment
 - 7.5 Specific components ILU
 - 7.6 ILU tank
 - 7.7 Loading of ILU
 - 7.8 Marking, coding
- 8 Particular incidents**
 - 8.1 Operating irregularities
 - 8.2 Other events

- reserved -

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Running gear	1			
Tyred wheel	1.1	Thickness less than:	Detach wagon ^(A)	4
	1.1.1	– 35 mm on wagons suitable for running at 120 km/h (SS wagons or wagons marked “***) – 30 mm on other wagons¹		
	1.1.2	Tyre – Broken – Cracked lengthways or crossways	Detach wagon ^(A)	5
	1.1.3	Tyre loose – Inspection marks inconsistent or – Dull ring or – Tyre clip loose or – Appearance of rust between the tyre and the rim over more than one third of the circumference	Detach wagon ^(A)	5
	1.1.4	Inspection marks – Missing – Not clearly recognisable	Detach wagon ^(A)	4
	1.1.5	Tyre shifted sideways – Tyre clip loose or visibly distorted	Detach wagon ^(A)	5
	1.1.6	Damage to tyre clip – Cracked – Broken – Missing	Detach wagon ^(A)	5

¹ Including wagons that can only be operated at 120 km/h when empty

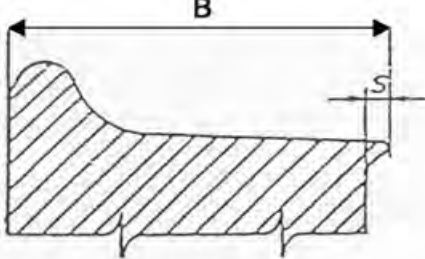
(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Solid wheel	1.2			
	1.2.1	Groove marking the minimum thickness is no longer fully visible in cross-section ²	Detach wagon ^(A)	4
	1.2.2	Thermal overload due to braking - Obvious paint burns of > 25 mm at connection between rim and wheel plate (cracks and shelling on paint or traces of rust)  - Fusion of brake blocks - Deterioration of wheel tread with build-up of metal (see also code 1.3.4) - Cracked or broken (see also code 1.3.6.5) - Uneven blueish appearance on rim due to the effect of thermal overload	Proceed in accordance with Annex 8 , point 4	
	1.2.2.1	– Without gauge widening of the inner faces for wheels NOT marked as able to withstand high thermal stresses	K + R1 (isolate brake)	4
	1.2.2.2	– With gauge widening of the inner faces for wheels NOT marked as able to withstand high thermal stresses	Detach wagon ^(A)	5
	1.2.2.3	– For wheels marked as able to withstand high thermal stresses	M	3
	1.2.3 ³	Confirmation of thermal overload stresses (applied brake alert - wagons fitted with brake blocks) by the RU during transport (see code 1.2.2)	Proceed in accordance with Annex 8 , point 4	

² The outer groove indicates the minimum thickness (wear groove) should a wheel – as an exception – have two grooves.

³ Thermal overload: Detected by measuring device (applied brake detection system) – Observed during a special inspection separate to the technical inspection.

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

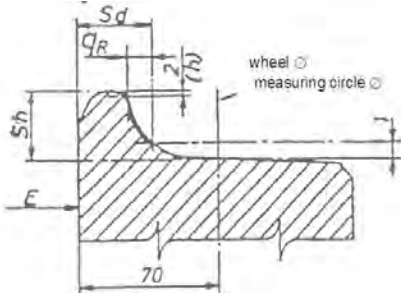
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Tyre or corresponding part of solid wheel	1.3			
	1.3.1	Width		
	1.3.1.1	Width B > 139 mm and ≤ 140 mm	M	3
	1.3.1.2	Width B > 140 mm < 133 mm presence of a projection ("S") 	Detach wagon ^(A)	4
	1.3.2	Tread crushed in places, uneven contact surfaces or irregular protrusions on the wheel rim	Detach wagon ^(A)	4
	1.3.3	Wheel flat		
	1.3.3.1	– Wheel Ø > 840 mm, wheel flat > 60 mm long	Detach wagon ^(A)	4
	1.3.3.2	– Wheel Ø: 630 mm < d ≤ 840 mm, wheel flat > 40 mm long	Detach wagon ^(A)	4
	1.3.3.3	– Wheel Ø ≤ 630 mm, wheel flat > 35 mm long	Detach wagon ^(A)	4
	1.3.4	Build-up of metal		
	1.3.4.1	– Wheel Ø > 840 mm, metal build-up over a length of > 60 mm or ≥ 1 mm thick	Detach wagon ^(A)	4
	1.3.4.2	– Wheel Ø > 840 mm and metal build-up over a length of > 10 mm ≤ 60 mm and < 1 mm thick	M + R1 (isolate brake)	3
	1.3.4.3	– Wheel Ø: 630 mm < d ≤ 840 mm and metal build-up over a length of > 40 mm or ≥ 1 mm thick	Detach wagon ^(A)	4
	1.3.4.4	– Wheel Ø: 630 mm < d ≤ 840 mm and metal build-up over a length of > 10 mm ≤ 40 mm and < 1 mm thick	M + R1 (isolate brake)	3
	1.3.4.5	– Wheel Ø ≤ 630 mm and metal build-up over a length of > 35 mm or ≥ 1 mm thick	Detach wagon ^(A)	4
	1.3.4.6	– Wheel Ø ≤ 630 mm and metal build-up over a length of > 10 mm ≤ 35 mm and < 1 mm thick	M + R1 (isolate brake)	3

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

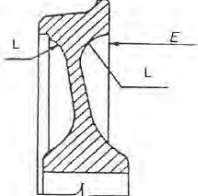
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Tyre or corresponding part of solid wheel (continued)	1.3.5	Cavity, shelling or flaking		
	1.3.5.1	– Wheel $\varnothing > 840$ mm, length > 60 mm	Detach wagon ^(A)	4
	1.3.5.2	– Wheel $\varnothing$: $630 \text{ mm} < d \leq 840 \text{ mm}$, length > 40 mm	Detach wagon ^(A)	4
	1.3.5.3	– Wheel $\varnothing \leq 630$ mm, length > 35 mm	Detach wagon ^(A)	4
Tyre or corresponding part of solid wheel (continued)	1.3.6	Cracks and notches		
	1.3.6.1	Cracks at the interface between the wheel tread and the front edge	Detach wagon ^(A)	5
	1.3.6.2	Sharp-angled notches on the front face (rim or inner tyre rim) caused by tools, track brakes or clamping equipment/jaws, except for: – markings applied by the manufacturer	K	4
	1.3.6.3	Cracks on the tread - Isolated cracks – without characteristics of thermal overload	K + R1 (isolate brake)	4
	1.3.6.4	– with characteristics of thermal overload	Detach wagon ^(A)	5
	1.3.6.5	Damage to the rim or web: – cracked – broken	Detach wagon ^(A)	5
	1.3.7	Deposits of paint, oil or lubricants on wheel tread edge except for: – control marks (4 paint marks positions 90° apart) – friction modifiers	Detach wagon ^(A)	5
	1.3.8	Formation of grooves, hollows/furrows, false flanges (hollows) ⁴ on the wheel tread		
	1.3.8.1	– Grooves with sharp edges < 1 mm deep	K + R1 (isolate brake)	4
	1.3.8.2	– Grooves with sharp edges ≥ 1 mm deep	Detach wagon ^(A)	5
	1.3.8.3	– Furrows and false flanges > 2 mm deep	Detach wagon ^(A)	5

⁴ **Grooves** appear on the entire circumference of the wheel and may affect the whole width of the wheel tread; they are characterised by transitions to sharp edges. **Hollows/furrows** appear on the entire circumference of the wheel and may affect the whole width of the wheel tread; they are characterised by a rounded contour, with no transition to sharp edges. **False flange**: there is a false flange when the outer part of the wheel tread is higher than the wheel tread at the level of the tread section

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Flange	1.4 1.4.1	Height of flange S_h greater than 36 mm - Hollow on wheel tread Wagon with LL brake blocks and permissible speed greater than 100 km/h Height of wheel flange S_h greater than 32 mm - Hollow on wheel tread	Detach wagon ^(A)	4
	1.4.2	Flange thickness S_d - Wheel $\varnothing > 840$ mm $S_d < 22$ mm - Wheel $\varnothing$: $760 \text{ mm} \leq d \leq 840$ mm $S_d < 25$ mm - Wheel $\varnothing < 760$ mm $S_d < 27.5$ mm Wagons with LL or K brake blocks - Wheel $\varnothing > 330$ mm $S_d > 33$ mm - Worn flange	Detach wagon ^(A)	5
	1.4.3	Wear of guide faces $q_R \leq 6.5$ mm (see Annex 4) - Sharp flange	Detach wagon ^(A)	5
	1.4.4	Burrs or sharp edges on guide face at a distance $h > 2$ mm from maximum height of flange (see also Annex 4) 	Detach wagon ^(A)	5
Wheel centre	1.5 1.5.1	Solid wheel Damage to wheel centre or wheel hub - Cracked - Defect repaired by welding	Detach wagon ^(A)	5

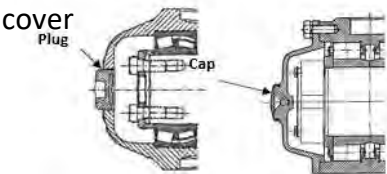
(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wheel centre (continued)	1.5.2	Tyred wheel Damage to wheel centre, tyre clip, tyre – Cracked – Broken – Defect repaired by welding	Detach wagon ^(A)	5
Axle	1.6 1.6.1	Damage to axle – Cracked – Deformed (see also code 1.7.1) – Defect repaired by welding – Sharp edge – Worn to a depth of more than 1 mm	Detach wagon ^(A)	5
	1.6.2	Worn to a depth of ≤ 1 mm, no sharp edges	K + R1 (isolate brake)	4
	1.6.3	Part rubbing against axle Also check codes 1.6.1 and 1.6.2	Tie up + K, if necessary R1 (isolate brake). If not possible, detach wagon ^(A)	4
Wheelset	1.7 1.7.1	Clearance E between internal faces non-compliant with the following limit values: – $\varnothing > 840$ mm 1357 mm $\leq E \leq$ 1363 mm – $\varnothing \leq 840$ mm 1359 mm $\leq E \leq$ 1363 mm If in all cases, $E_{\max} - E_{\min} > 2$ mm • Signs of derailment • Signs of movement of wheel on axle • Heating (solid wheel) in “L” fillet zone between web and rim/tyre 	Detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

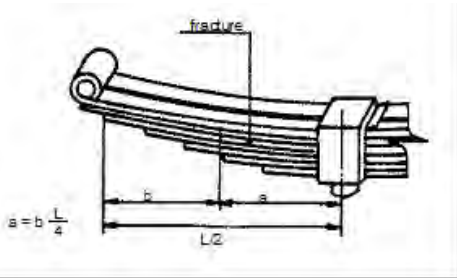
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Signs of out-of-round wheels	1.7.2	Brake triangle pin sheared off Brake safety stirrup broken (see also code 3.1.2) Shiny traces on the brake triangle end washer Shiny traces on the inner spring (load spring) (see also code 2.5) Lifting safety catch ("T") missing or loose (see also code 2.5.5) Y25 bogies: hard manganese wear plates on axle boxes or axle-box guides have fallen off or welded joints loose (see also codes 1.8.4 and 4.4.2) Tread crushed in places, uneven contact surfaces or irregular protrusions on the wheel rim (see also code 1.3.2)	If at least two of these signs are noted on or near a wheel: K + add comment "Suspected out-of-round wheel"	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

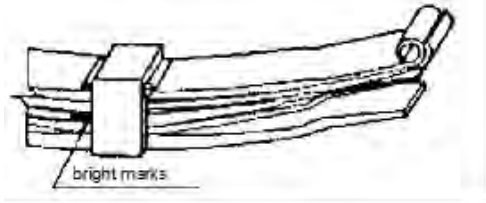
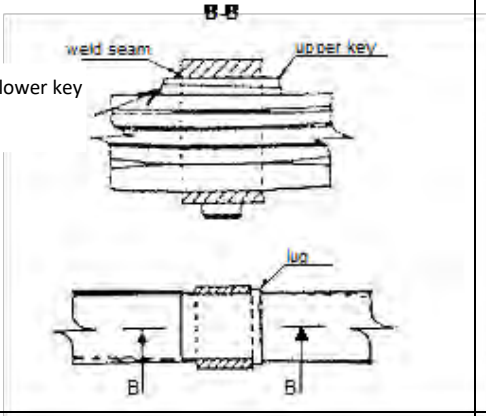
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Axle box	1.8 1.8.1 1.8.1.1	Housing Housing not watertight Defect allowing water or dust to enter – Cracked or broken housing – Missing plug (the loss of the protective cap of the centring cone is permissible) – Except housing types without cover 	Detach wagon ^(A)	4
	1.8.1.2	Loss of lubricant • Grease or oil discharge on the wheel centre not permissible 	Detach wagon ^(A)	4
	1.8.1.3	Loss of lubricant • Trace of grease or oil in the area of the housing cover	K	4
	1.8.1.4	Mechanical damage to axle box cover (axial generator), see also codes 1.8.1.1, 1.8.1.2 and 1.8.1.3	M	3
	1.8.2	Axle box guides no longer able to guide the axle • Guide broken • Axle box in abnormal position	Detach wagon ^(A)	5
	1.8.3 1.8.3.1	Hot box – Housing too hot to touch with back of hand • Traces of rust	Detach wagon ^(A)	5
	1.8.3.2 ⁵	– Confirmation by the RU of box overheating during transport	Detach wagon ^(A)	5
Hard manganese wear plate on axle box of Y bogie or derivative designs	1.8.4	Displaced or missing	Detach wagon ^(A)	4

⁵ Hot box: Observation by automatic detection – Observation outside the scope of TI by special inspection.

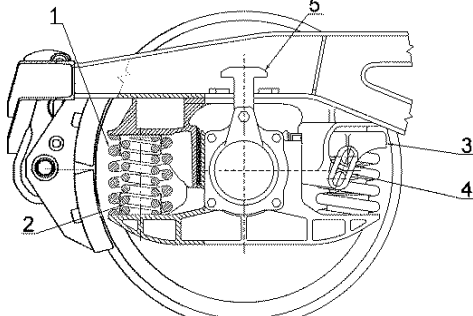
(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Suspension	2			
Leaf spring	2.1			
	2.1.1	Leaves displaced by more than 10 mm with respect to buckle Shiny marks near buckle	Detach wagon ^(A)	4
	2.1.2	Main leaf fractured or with visible crack	Detach wagon ^(A)	5
	2.1.3	Part of a fractured spring missing	Detach wagon ^(A)	4
	2.1.4	Fracture (but without any part missing) of intermediate leaf at a distance from the centre of the spring of:		
	2.1.4.1	– $< \frac{1}{4}$ of leaf length	Detach wagon ^(A)	4
	2.1.4.2	– $> \frac{1}{4}$ of leaf length 	M	3
	2.1.5	Insufficient spring clearance: Vertical distance between buckle and fixed parts of body, underframe or bogie frame less than 15 mm - Signs of recent contact between buckle and fixed parts of the underframe or bogie frame - Signs of recent contact between wheel and underframe or wagon floor/body	Detach wagon ^(B)	5
	2.1.6	Buckle loose - Fracture of crack in buckle - Key missing or ineffective - Signs of loosening of leaves	Detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Additional criteria for parabolic spring	2.2			
	2.2.1	Main or intermediate spring leaf		
	2.2.1.1	Visible crack or break	Detach wagon ^(A)	5
	2.2.1.2	Buckle broken Two leaves touching over 50 % of their length	Detach wagon ^(A)	5
	2.2.2	Leaf displaced lengthways		
	2.2.2.1	– By more than 10 mm	Detach wagon ^(A)	4
	2.2.2.2	– By 10 mm or less Shiny marks near buckle 	K	3
	2.2.3	Buckle damaged or loose - Buckle fractured, cracked - Lug of the lower key cracked - Weld seam of upper key fractured or cracked 	Detach wagon ^(A)	5
Helical spring	2.3			
	2.3.1	Broken	Detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Connection between suspension and axle box or between suspension and bogie frame	2.4			
	2.4.1	Boss of buckle out of position Abnormal position of axle box	Detach wagon ^(A)	5
	2.4.2	Shackle, links displaced, missing, broken, unhooked	Detach wagon ^(A)	5
	2.4.3	Link pin displaced, missing, not secured	Rectify. If not possible, detach wagon ^(A)	5
	2.4.4	Suspension links worn or too long Recent traces of contact on the solebar	K	4
Suspension system of Y 25 bogies or derived systems	2.5	 *Coils wound in opposite directions 1. Tare spring* 4. Damper ring 2. Load spring* 5. Lifting T 3. Spring cap		
	2.5.1	Main/tare spring cracked or broken	Detach wagon ^(A)	5
	2.5.2	Auxiliary/load spring displaced or broken		
	2.5.2.1	– On empty wagon	K	4
	2.5.2.2	– On loaded wagon Axle box no longer horizontal	Detach wagon ^(A)	5
	2.5.3	Damper ring(s) missing or broken Contact marks		
	2.5.3.1	– One ring per bogie	K	3
	2.5.3.2	– More than one ring per bogie	Detach wagon ^(A)	5

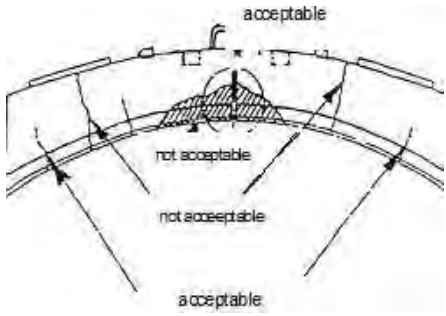
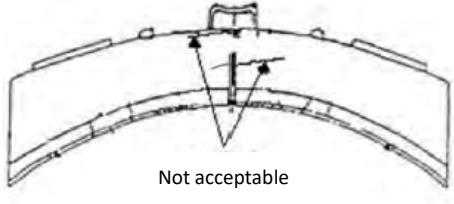
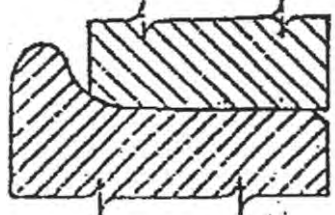
(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

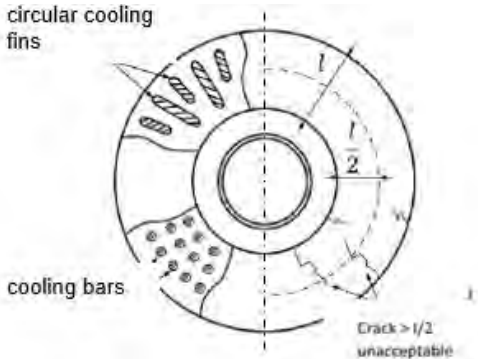
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Suspension system of Y 25 bogies or derived systems <i>(continued)</i>	2.5.4	Spring cap(s) in contact with bogie frame		
	2.5.4.1	– One spring cap in contact with bogie	K	3
	2.5.4.2	– More than one spring cap in contact per bogie	Detach wagon ^(A)	5
	2.5.5	Lifting T (safety catch) loose or missing	M	3
	2.5.6	Insufficient spring clearance: Vertical distance between axle-box housing and bogie frame less than 8 mm Recent signs of contact between axle-box housing and bogie frame	Detach wagon ^(B)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Brakes	3			
Mechanical part (rigging)	3.1			
	3.1.1	Parts of brake rigging hanging down or broken Check also codes 1.6.1, 1.6.2, 1.6.3	Temporary repair, K + R1 (isolate brake)	4
	3.1.2	Safety strap ineffective	Temporary repair, K	4
	3.1.3	Brake isolating cock		
	3.1.3.1	– Unusable	Detach wagon ^(A)	3
	3.1.3.2	– Position not clear	K + R1 (isolate brake), detach wagon ^(A) if necessary	3
	3.1.4	Empty/loaded or G/P changeover system unusable	K + R1 (isolate brake)	3
	3.1.5	Brake release pull broken or missing	K + R1 (isolate brake)	3
Brake block	3.2			
	3.2.1	Cast-iron brake block – missing – broken, cracked right through, even if still held together by its metal insert – worn so that thickness X near brake block is less than 10 mm 	Replace. If not possible, K + R1 (isolate brake)	3

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

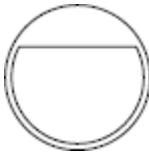
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Brake block (continued)	3.2.2	Composite brake block – missing – radial crack from friction surface through to plate edge (except at the designated expansion joint) Friction material: – visible shelling of the friction material over more than one quarter of the block length, or metal inclusions – detached from back plate by more than 25 mm  – cracked over more than 25 mm in direction of wheel circumference – lowest thickness X (see figure 3.2.1) less than 10 mm 	Replace. If not possible, K + R1 (isolate brake)	3
	3.2.3	Brake block protruding • a brake block is considered to be protruding once its outer surface reaches the outer edge of the wheel rim 	K + R1 (isolate brake)	4

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Disc brakes* * Observed during a special inspection separate to the technical inspection	3.2.4			
	3.2.4.1	The inspection groove on the brake discs is no longer completely visible (maximum wear)	K + R1 (isolate brake)	3
	3.2.4.2	Defective brake disc fixing on the axle pin	Detach wagon ^(A)	5
	3.2.4.3	Brake disc: unacceptable cracks > 1/2 as per diagram 	K + R1 (isolate brake)	3
	3.2.4.4	Crack in cross-section	Detach wagon ^(A)	5
	3.2.4.5	Missing or cracked cooling bars – more than 2 side by side – more than 6 in total	K + R1 (isolate brake)	3
	3.2.4.6	Cracked circular cooling fins – more than 4, with less than 3 cooling lines intact between the cracked fins	K + R1 (isolate brake)	3
	3.2.5	Brake linings – missing – cracked	K + R1 (isolate brake)	3
Brake indicator	3.2.6	Defective or brake indicator data not true to the status of the brake or display not synchronous with the indicator (other than indications relating to the handbrake)	K + R1 (isolate brake)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Pneumatic part	3.3			
	3.3.1	Main brake pipe		
	3.3.1.1	Main brake pipe inoperative	Detach wagon ^(A)	4
	3.3.1.2	- reserved -		
	3.3.2	Brake coupling		
	3.3.2.1	Damaged or missing (brake couplers must be available at all existing coupler connections on either end of a wagon)	Replace	3
	3.3.2.2	Unused brake coupler hanging loose (where two couplers are available, only one may be plugged in)	Secure, rectify as appropriate	3
	3.3.2.3	- reserved -		
	3.3.3	Brake coupler hold not fit for use	M	3
	3.3.4	Air brakes unfit for use but not labelled as such	Check and, if damaged, K + R1 (isolate brake)	3
	3.3.5	Stopcock		
	3.3.5.1	Unusable, leaking, warped or handle missing	Detach wagon ^(A)	5
	3.3.5.2	Stopping device missing or visibly damaged	Rectify + K. If not possible, detach wagon ^(A)	4
	3.3.6	DET (derailment detector)		
	3.3.6.1	Derailment detector tripped	Rectify + M, proceed according to point 5 of Annex 8	3
	3.3.6.2	Detector not airtight	Isolate detector + M, proceed according to point 5 of Annex 8	3
	3.3.6.3	Detector's connection hose not airtight	Rectify + M, if not possible, detach wagon ^(A)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

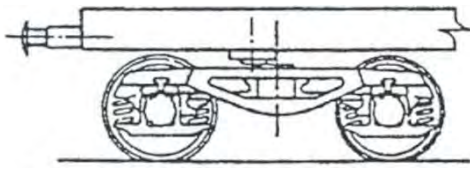
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Spark arrestor plate	3.4			
	3.4.1	Plate missing or rusted through	K + R1 (isolate brake)	4
	3.4.2	Plate hanging loose	Remove plate, K + R1 (isolate brake), if not possible, detach wagon ^(A)	4
	3.4.3	Consignments of dangerous goods for which spark arrestor plates are stipulated in the RID Non-bogie wagon – non-standard spark arrestor plate • non-bogie wagon not bearing the following marking 	R1 (isolate brake)	5
Hand brake	3.5			
	3.5.1	Visibly unfit for use	K + R1	3
Electrical part	3.6			
Automatic brake test	3.6.1 ⁶	Automatic brake test fault (observed and reported during performance of the brake test)	M	3

⁶ Automatic brake test fault – observed separately to the technical inspection during a special inspection.

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wagon under-frames and bogie frames	4			
Wagon underframes	4.1 4.1.1	Underframe warped vertically or horizontally • buffer height out of tolerance range (see code 5.1.2) • visible distortion	Detach wagon ^(A)	5
	4.1.2	Solebar, headstock stressed by coupler or intermediate crossbar exhibiting a fracture or crack – fracture – lateral crack starting from edge of flange and extending over more than half the width of flange – longitudinal crack > 100 mm near suspension brackets – longitudinal crack > 150 mm for other parts – cracking at visible welds of these component parts	Detach wagon ^(A)	4
Axle guard	4.2			
	4.2.1	Distorted, safety hazard	Detach wagon ^(A)	5
	4.2.2	Broken • abnormal position	Detach wagon ^(A)	5
	4.2.3	Fastening		
	4.2.3.1	– loose	Detach wagon ^(A)	5
	4.2.3.2	– some bolts or rivets loosened but axle guard still secure	M	3
	4.2.4	Crack		
	4.2.4.1	– running over more than ¼ of horizontal cross-section	Detach wagon ^(A)	4
	4.2.4.2	– running over ≤ ¼ of horizontal cross-section	K	3
	4.2.4.3	– close to or running towards a fastening point, regardless of length of crack	Detach wagon ^(A)	5

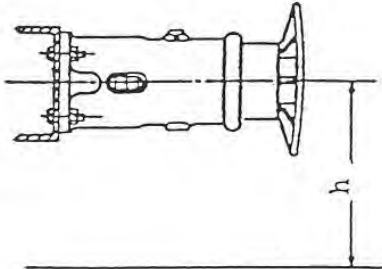
(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Axle guard tie bar	4.3			
	4.3.1	Missing, broken, visibly distorted, loose	Detach wagon ^(A)	4
Axle guard check plate	4.4			
	4.4.1	Check plate missing Bogie wagon		
	4.4.1.1	– one check plate missing per axle	K	3
	4.4.1.2	– more than one check plate missing	Detach wagon ^(A)	4
	4.4.1.3	Axle wagon – one check plate missing	Detach wagon ^(A)	5
Hard manganese wear plate on Y bogies or derivative designs	4.4.2	Plate displaced or missing	Detach wagon ^(A)	4
Suspension bracket (axle wagon)	4.5			
	4.5.1	Loose, cracked, broken, or distorted – space between bracket and sole-bar – half or more of the fastening elements missing or broken	Detach wagon ^(A)	5
Connection between bogie and underframe	4.6			
	4.6.1			
	4.6.1.1	Defective, connecting and fastening elements broken, missing or ineffective • bogie displaced 	Detach wagon ^(A)	5
	4.6.1.2	Locking device for the bogie pivot kingpin missing or ineffective or pin missing	Detach wagon ^(A)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Earthing strap	4.6.2			
	4.6.2.1	One or more earthing straps ineffective (missing, damaged or loose) Fastening points indicate that straps should be present	K	3
	4.6.2.2	All earthing straps are ineffective Fastening points indicate that straps should be present	Rectify. If not possible, detach wagon ^(A)	3
Bogie frame	4.7			
	4.7.1	Component cracked or visibly distorted	Detach wagon ^(A)	4
	4.7.2	Component broken	Detach wagon ^(A)	5
	4.7.3	Bogie frame assembly Screw fastening on bogie frame		
	4.7.3.1	1 screw missing/broken on a single axle	Replace. If not possible, K + R1 (isolate brake)	3
Side bearers and side bearer spring	4.7.3.2	2 screws missing/broken on a single axle	Detach wagon ^(A)	5
	4.8			
	4.8.1	Side bearer broken		
	4.8.1.1	– with no parts missing	K	4
	4.8.1.2	– with part(s) missing	Detach wagon ^(A)	5
Friction surfaces of the damper system	4.8.2	Side bearer spring broken	Detach wagon ^(A)	4
	4.8.3	Incomplete or loose side bearer fastening	K	3
	4.9			
Central articulated joint connection	4.9.1	Lubricated	Detach wagon ^(A)	4
	4.10			
	4.10.1	Connections with upper side bearer (joint side bearer)		
	4.10.1.1	– loose	K	3

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Central articulated joint connection <i>(continued)</i>	4.10.1.2	– missing	Detach wagon ^(A)	4
	4.10.2	Friction plate		
	4.10.2.1	– Friction plate broken, no missing parts	K	3
	4.10.2.2	– Friction plate broken, missing part • in contact with metal	Detach wagon ^(A)	4
Buffing and draw gear Buffers Buffer types	5 5.1 5.1.1	Visibly different buffer types at any wagon end • Note buffer head ⁷	K	4
Buffer height	5.1.2	Exceeding tolerance range – $h < 940$ mm (980 mm in the case of coaches) – $h > 1065$ mm • significant difference in buffer height at coupled wagon ends. 	Detach wagon ^(A)	5
Buffer head	5.2			
	5.2.1	Missing, broken, distorted such that it is no longer functional, rectangular plate twisted	Detach wagon ^(A)	5
	5.2.2	Fastening on plunger:		
	5.2.2.1	– one third or more rivets or bolts loose	Detach wagon ^(A)	4
	5.2.2.2	– fewer than one third of rivets or bolts loose	K	3

⁷ Two buffers are to be attached to each end of the wagon, each with the same spring system, buffer category, buffer head size, stroke, and housing type. Buffers that are different only with regard to the buffer head material or due to a replaced buffer head are regarded as identical. The total length of both buffers at each end of the vehicle must be equal.

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Buffer head (continued)	5.2.3	Surfaces in contact		
	5.2.3.1	– not lubricated, if both buffer heads are made of metal	Lubricate. If not possible, detach wagon ^(A)	5
	5.2.3.2	– more than 2 sharp-edged grooves measuring > 3 mm in depth and > 50 mm in length	Detach wagon ^(A)	5
	5.2.4	Buffer head insert or plastic plate		
	5.2.4.1	– broken, cracked right through, missing	Detach wagon ^(A)	5
	5.2.4.2	– Shelling/melding > 3 mm in depth and > 25 mm in length	K	4
	5.2.4.3	– Fastening: 2 or more loose/missing bolts	Detach wagon ^(A)	5
Plunger	5.3			
	5.3.1	Missing, broken	Detach wagon ^(A)	5
	5.3.2	Cracked at the transition to buffer head	Detach wagon ^(A)	5
	5.3.3	Function jeopardised		
	5.3.3.1	Cracked longitudinally and no longer capable of guiding buffer casing	Detach wagon ^(A)	5
	5.3.3.2	More than 2 grooves distributed over the circumference, each > 2 mm in depth, sharp-edged, and > 60 mm in length	Detach wagon ^(A)	5
	5.3.4	Plunger stopping or securing device		
	5.3.4.1	– Missing, ineffective	Detach wagon ^(A)	5
	5.3.4.2	– Displaced	K	4
Buffer casing	5.4			
	5.4.1	Missing, broken	Detach wagon ^(A)	5
	5.4.2	Cracked at transition to buffer base	Detach wagon ^(A)	5
	5.4.3	Function jeopardised		
	5.4.3.1	Cracked longitudinally and no longer capable of guiding plunger	Detach wagon ^(A)	5
	5.4.3.2	More than 2 grooves distributed over the circumference, each > 2 mm in depth, sharp-edged, and > 60 mm in length	Detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Buffer casing (continued)	5.4.4	Fastening of buffer casing defective:		
	5.4.4.1	– 2 or more bolts loose • play between buffer casing and headstock	Tighten bolts + M, if not possible, detach wagon ^(A)	5
	5.4.4.2	– 1 bolt missing	Replace + M, if not possible, detach wagon ^(A)	3
	5.4.4.3	– 1 bolt loose	Tighten + M, if not possible, K	3
Buffer spring and anti-crash components	5.5			
	5.5.1	Buffer so slack that it can be de-pressed by hand: – one buffer, by more than 15 mm – both buffers at the same end	Detach wagon ^(A)	4
	5.5.2	Anti-crash components triggered • buffer length visibly reduced • yellow marker arrow partly or completely absent ⁸ • plunger damaged or deformed ⁸ • indicator missing or distorted ⁸	Detach wagon ^(A)	5
	5.5.3	Anti-crash component warning mark missing or incomplete	Detach wagon ^(A)	4
Screw coupler	5.6			
	5.6.1	Inoperative		
	5.6.1.1	Damaged or part missing	Rectify or use a different screw coupling + K, if not possible, detach wagon ^(A)	3
	5.6.1.2	Lack of lubricant and jammed	Rectify, if not possible, K	3
	5.6.2	Hook for hanging coupler damaged, inoperative or missing	M	3
	5.6.3	Coupler unhooked	Hook into position and tie up if necessary	3

⁸ Depending on buffer type

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Draw hook	5.7			
	5.7.1	Inoperative or in poor condition		
	5.7.1.1	– broken, cracked (including tip)	If possible, use the other coupling, K. If not possible, detach wagon ^(A)	3
	5.7.1.2	– twisted	K	3
	5.7.2	- reserved -		
Other draw gear parts	5.8			
	5.8.1	Other draw gear parts damaged – length of coupler such that the buffer heads cannot be brought into contact with each other – drawbar broken, cracked or distorted – muffs, bolts, or keys broken, cracked, missing – spring inoperative • obvious abnormal projection of draw hook from draw hook guide	Detach wagon ^(A)	4
	5.8.2	Faulty coupling on the train	Adjust coupling	4
Long-stroke damper (e.g., on container wagons)	5.9			
	5.9.1	Sliding element not in mid-position with respect to wagon underframe • the two headstocks are at different distances from wagon body	Detach wagon ^(A)	5
	5.9.2	Danger marking (diagonal black bands on yellow background) missing on overlapping wagon surfaces on which the front part is liable to be displaced in relation to the underframe during impact (impact absorption devices, etc.)	Detach wagon ^(A)	4
Automatic coupling	5.10			
	5.10.1 ⁹	Automatic coupling fault (observed and reported during performance of coupling)	Rectify, if not possible, detach wagon ^(A)	4
	5.10.2	Coupler head damaged	M	3
	5.10.3	Uncoupling device damaged	M	3
	5.10.4	Support, draw bar damaged	M	3

⁹ Automatic coupling fault – observed separately to the technical inspection during a special inspection

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

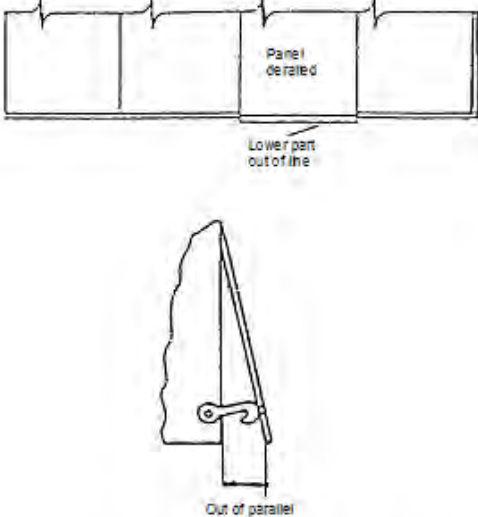
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wagon body	6			
Wagon body in general Markings on wagons	6.1			
	6.1.1	Missing, illegible or incomplete		
	6.1.1.1	– Wagon number ¹⁰	Detach wagon ^(A)	4
	6.1.1.2	– “RIV” sign, “TEN” + “GE” or acceptance marking (“TEN” + “G1”, country acronym in approval plate) ¹⁰ or	Detach wagon ^(A)	4
	6.1.1.3	– agreement plate (if showing exchange codes 41, 43, 45, 81, 83 or 85) ¹⁰ or acceptance marking (“TEN” + “CW”, country acronym in approval plate) ¹⁰	Detach wagon ^(A)	4
	6.1.1.4	– tare weight ¹⁰	Detach wagon ^(A)	4
	6.1.1.5	– holding force of parking brake ¹⁰	Detach wagon ^(A)	4
	6.1.1.6	– load limits ¹⁰	Detach wagon ^(A)	4
	6.1.1.7	– capacity of tank wagons ¹⁰	Detach wagon ^(A)	4
	6.1.1.8	– both the VKM and full address of wagon keeper ¹⁰	Detach wagon ^(A)	4
	6.1.1.9	– length-over-buffers of wagon ¹⁰	Detach wagon ^(A)	4
	6.1.1.10	– “High voltage” warning sign on wagons with step or ladder access up to a height > 2 m above rail level	Detach wagon ^(A)	4
	6.1.1.11	– indication of compatibility with ILUs on carrying wagon ¹⁰	Detach wagon ^(A)	4
	6.1.1.12	- reserved -		
	6.1.1.13	- reserved -		
Overhaul	6.1.2	Overhaul marking		
	6.1.2.1	Inscription on the maintenance plate missing, incomplete or illegible ¹⁰	Detach wagon ^(A)	4

¹⁰ If this irregularity is only found on one side of the wagon: affix K

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

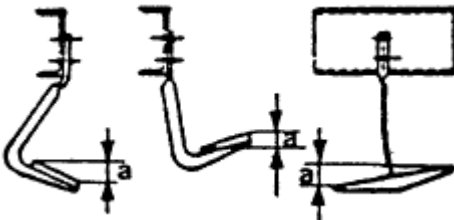
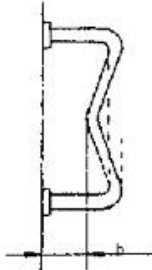
Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Overhaul <i>(continued)</i>		Maintenance plate (Possible extension of validity if wagons marked "+ 3M")		
	6.1.2.2	Validity expires in 15 days or less	K	3
	6.1.2.3	Validity has expired ≤ 6 months	Proceed in accordance with point 1 of Annex 8	4
	6.1.2.4	Validity has expired > 6 months	Proceed in accordance with point 1 of Annex 8	4
Framework	6.1.3	Part of framework damaged		
	6.1.3.1	– without fouling the loading gauge	K	3
	6.1.3.2	– with fouling the loading gauge	Detach wagon ^(A)	5
Walls	6.1.4			
	6.1.4.1	Side plank missing, broken, split or coming undone; wall panel holed, broken	K	3
	6.1.4.2	Risk of damage to load due to humidity; risk of loss of load	Rectify if necessary + K. If not possible, detach wagon ^(B)	4
Floors	6.1.5	Floor damaged		
	6.1.5.1	– with no risk of loss of load	K	3
	6.1.5.2	– with risk of loss of load	Rectify if necessary + K. If not possible, detach wagon ^(B)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Doors and sliding walls	6.1.6 6.1.6.1	Not fully closed or not fastened	Close and/or secure. If not possible, fasten + K. If fastening is not possible, detach wagon ^(A)	5
	6.1.6.2	Missing or derailed abnormal position in relation to its frame 	If putting back in position is possible, fasten + K. If not possible, detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Doors and sliding walls (continued)	6.1.6.3	Guiding or locking elements in poor condition – door frame, hinges, locks, latch hooks, handles missing, broken; dislocated, deformed	Temporary repair + K. If not possible, detach wagon ^(B) (A)	3
	6.1.6.4	– safety hazard or risk of loss of load		5
	6.1.6.5	Doors broken or warped – no risk of fouling the gauge or losing the load	Temporary repair + K. If not possible, detach wagon ^(B) (A)	3
	6.1.6.6	– risk of gauge being fouled or loss of load		5
Various parts (steps, handles, ladders, gangways, guard rails, inscription plates and others)	6.1.7			
	6.1.7.1	Ladders, gangways, guard rails in poor condition, unusable	K	4
	6.1.7.2	Steps: missing	K	4
	6.1.7.3	Steps: damage representing a safety hazard for staff, torn off or deformed beyond tolerated limit ($a > 80$ mm) 	Detach wagon ^(A)	4
	6.1.7.4	Handles: missing, damage representing a safety hazard for staff, torn off or deformed beyond tolerated limit ($b < 60$ mm) 	Temporary repair + M. If not possible, detach wagon ^(A)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Various parts (steps, handles, ladders, gangways, guard rails, inscription plates and others) <i>(continued)</i>	6.1.7.5	Inadequate securing of – inscription plates – folding plates – label holders	Temporary repair + M. If not possible, detach wagon ^(A)	4
	6.1.7.6	Missing – inscription plates – folding plates – label holders	Temporary labels + K. If not possible, detach wagon ^(A)	3
	6.1.7.7	Loose wagon accessories missing or incomplete	M	3
	6.1.7.8	Loose wagon accessories not secured	Fasten	4
	6.1.7.9	Signal brackets, rope eyes missing, unfit for use	M	3
Internal fittings¹¹	6.1.8	Defective internal fittings: – holding arm – guide rail – loading cradle – loops, hooks, eyelets – dividing walls	Temporary repair, rectify using additional fastenings +M. If not possible, detach wagon ^(B)	3
	6.1.8.2			5
Covered wagons Ventilation flaps	6.2			
	6.2.1	Missing, damaged		
	6.2.1.1	– without any risk of damage due to humidity or fouling of the loading gauge	Rectify + K. If not possible, detach wagon ^(B)	3
	6.2.1.2	– with risk of damage due to humidity or fouling of the gauge	Detach wagon ^(B)	5

¹¹ Defective internal fittings: Observed during a special inspection separate to the technical inspection

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Control gear, shutter retaining bracket	6.2.2	Unhooked, distorted, loose	Rectify + K. If not possible, detach wagon ^(B) (A)	3
	6.2.2.1	– without any risk of fouling the gauge		
	6.2.2.2	– with risk of fouling the gauge		5
Roof and weatherboard	6.2.3	Roof cover or weatherboard loose, compromising safety or water tightness	Detach wagon ^(A)	4
Opening roof	6.2.4			
	6.2.4.1	– not fully closed, not secured	Close and lock if necessary + K. If not possible, detach wagon ^(A)	5
	6.2.4.2	– derailed (opening roof)	Set back in rails and secure. If not possible, detach wagon ^(A)	5
	6.2.4.3	– control mechanism missing, distorted, ineffective	K	4
Open wagons Side walls or end flaps	6.3			
	6.3.1	Damaged		
	6.3.1.1	– with no risk of losing the load or fouling the gauge	M	3
	6.3.1.2	– with risk of losing load	Rectify + K. If not possible, detach wagon ^(B)	4
	6.3.1.3	– with risk of fouling the gauge	Rectify + K. If not possible, detach wagon ^(A)	5
Closing and operating gear of end flaps	6.3.2	Pins, camshafts, retaining hooks, shaft supports, etc. missing, broken, cracked, inoperative		
	6.3.2.1	– without compromising safety	Repair temporarily + K. If not possible, detach wagon ^(B) (A)	3
	6.3.2.2	– compromising safety		5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Cantrail	6.3.3	Broken or deformed	Rectify + K. If not possible, detach wagon ^(B) (A)	3
	6.3.3.1	– with no risk of fouling the gauge		
	6.3.3.2	– with risk of fouling the gauge		5
Flat wagons Drop sides	6.4	Folded down and not secured	Secure. If not possible, detach wagon ^(A)	5
	6.4.1			
	6.4.1.1	Folded down and not secured	Secure. If not possible, detach wagon ^(A)	5
	6.4.1.2	Folded but not authorised in Table 3 of the Loading Guidelines	Raise. If not possible, detach wagon ^(A)	5
	6.4.1.3	Distorted with no risk of losing load or fouling the gauge	M	3
	6.4.1.4	Holed or distorted with risk of losing load	Rectify + K. If not possible, detach wagon ^(B)	4
	6.4.1.5	Distorted with risk of fouling the gauge	Rectify + K. If not possible, detach wagon ^(A)	5
Hinges, pins, securing bolts	6.4.2	Missing, inoperative, broken	Repair temporarily + K. If not possible, detach wagon ^(B) (A)	3
	6.4.2.1	– but not compromising safety or involving risk of loss of load		
	6.4.2.2	– compromising safety or involving risk of loss of load		4
Stanchions - detachable - pivoting - retractable	6.4.3	Missing and necessary to secure load	If not possible to rectify, detach wagon ^(B) (A)	5
	6.4.3.1			
	6.4.3.2	Deformed and fouling the gauge		5
	6.4.3.3	Crack or break in stanchion or in its mounting or fixing device	If presence of stanchion is required: detach wagon ^(B) . If not possible, M	4
	6.4.3.4	Stanchion chains hanging loose	Rectify	4
	6.4.3.5	Stanchion fastening ineffective	Fasten, K. If not possible, detach wagon ^(B)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Bolsters	6.4.4			
	6.4.4.1	Broken, timber bearing surface or joint unfit for use	M	3
	6.4.4.2	Loose bolsters not secured by side stanchions or load	Rectify. If not possible, detach wagon ^(B)	4
Tank wagons Tank cradle	6.5			
	6.5.1			
	6.5.1.1	Crack extending > ¼ across the cross-section	If empty: K If loaded, detach wagon ^(A)	4
	6.5.1.2	Crack in the weld seams		4
	6.5.1.3	Up to 10% of the bolts or rivets securing tank body to cradle missing	K	4
	6.5.1.4	More than 10% of the bolts or rivets securing tank body to cradle missing	Detach wagon ^(A)	4
Tank	6.5.2			
	6.5.2.1	Not tight: leaks or risk of loss of load • Odours • Traces of recent or persistent leakage	Sealing + K, for RID: to have cleaned by competent staff. If not possible, detach wagon ^(D)	5
	6.5.2.2	Distorted with sharp edges but no risk of loss of load	K	4
		Test date expired, RID load Without "L" marking		
		Tank full:		
	6.5.2.3	– Deadline has expired ≤ 1 month	K	4
	6.5.2.4	– Deadline has expired > 1 month	Detach wagon ^(D)	5
	6.5.2.5	Tank empty, not cleaned: RID "CARRIAGE IN ACCORDANCE WITH 4.3.2.4.4" IS entered in the transport document	K	4
	6.5.2.6	- reserved -		
	6.5.2.7	- reserved -		
	6.5.2.8	RID "CARRIAGE IN ACCORDANCE WITH 4.3.2.4.4" IS NOT entered in the transport document	Detach wagon ^(D)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
		Test date expired, RID load With "L" marking		
		Tank full:		
	6.5.2.9	Deadline has expired ≤ 3 months	K	4
	6.5.2.10	Deadline has expired > 3 months	Detach wagon ^(D)	5
	6.5.2.11	Tank empty, not cleaned: RID "CARRIAGE IN ACCORDANCE WITH 4.3.2.4.4" IS entered in the transport document	K	4
	6.5.2.12	RID "CARRIAGE IN ACCORDANCE WITH 4.3.2.4.4" IS NOT entered in the transport document	Detach wagon ^(D)	5
Tank equipment	6.5.3	Tank cladding, sunroof, insulation		
	6.5.3.1	– damaged	K	4
	6.5.3.2	– loose	Detach wagon ^(A)	5
	6.5.4	- reserved -		
Reinforcement, filling and emptying equipment, underneath	6.5.5			
	6.5.5.1	Loss of load	Rectify. If not possible, detach wagon ^(D)	5
	6.5.5.2	- reserved -		
	6.5.5.3	Valves or spouts defective	Detach wagon ^(D)	4
	6.5.5.4	Screw caps must be tightly sealed and must not be missing (except for outside gas pipes) – RID load ¹²	Rectify. If not possible, detach wagon ^(D)	4
	6.5.5.5	– non-RID load	Rectify. If not possible, M	3
	6.5.5.6	Blind flange missing	Detach wagon ^(D)	4
	6.5.5.7	Securing bolt of the blind flange – RID load ¹² , one or more securing bolts missing or loose	Detach wagon ^(D)	4
	6.5.5.8	– non-RID load, one securing bolt missing or loose	Rectify. If not possible, K	3

¹² Clarification: pay attention to the hazard warning labels

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Reinforce-ment, filling and emptying equipment, underneath <i>(continued)</i>	6.5.5.9	– non-RID load, several securing bolts missing or loose bottom valve indicator device not in “closed” position on both sides	Rectify. If not possible, detach wagon ^(D)	4
	6.5.5.10	Bottom valve indicator device not showing “closed” on both sides – loaded wagons, and empty wagons that have not been cleaned (RID load ¹²)	Close bottom valve. If not possible, detach wagon ^(D)	5
	6.5.5.11	– empty wagons (non-RID load)	Close bottom valve. If not possible, K	3
	6.5.5.12	Bottom valve emergency control device screwed in (tank-mounted valve open)	Detach wagon ^(D)	5
	6.5.5.13	Filling and emptying equipment open	Rectify. If not possible, detach wagon ^(D)	5
	6.5.5.14	Visible locking devices ineffective	Rectify. If not possible, detach wagon ^(D)	4

¹² Clarification: pay attention to the hazard warning labels

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Reinforce- ment, filling equipment, above	6.5.6			
	6.5.6.1	Loss of load or gas near the upper reinforcements (does not concern ventilation devices) • Odours • Signs of recent or persistent leakage	Detach wagon ^(D)	5
	6.5.6.2	Dome cover open or missing	Close or have closed. If not possible, detach wagon ^(D)	5
	6.5.6.3	Other upper reinforcements not closed	Close or have closed. If not possible, detach wagon ^(D)	4
	6.5.7	- reserved -		

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wagons with special fittings Wagons with mechanical sheeting (e.g. Rils and Tams)	6.6			
	6.6.1			
	6.6.1.1	Mechanical sheeting not properly closed and locked, damaged - indicator visible → side closing system open - end hoops inclined → upper locking system not engaged - intermediate hoop bent → fouling the gauge - guide wheels → derailed, damaged, broken - seal → dislodged or missing	Rectify. If not possible, detach wagon ^(A)	5
	6.6.1.2	Tarpaulin – tarpaulin torn, holed ≤ 30 mm	Rectify	3
	6.6.1.3	Tarpaulin – tarpaulin torn, holed > 30 mm	Detach wagon ^(A)	5
	6.6.1.4	Tarpaulin – eyelet missing, torn off	Rectify + K. If not possible, detach wagon ^(A)	4
	6.6.1.5	Tarpaulin rope – slack or severed and visible from the outside	Secure + K, if not possible, detach wagon ^(A)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wagons with telescopic hood (e.g. Shimms)	6.6.2			
	6.6.2.1	Hood not locked 	Lock. If not possible, make secure+ K. If not possible, detach wagon ^(A)	5
	6.6.2.2	External hood off the rail	Detach wagon ^(A)	5
Flat bogie wagons for transport of road vehicles (e.g. Saad)	6.6.3			
	6.6.3.1	Moveable headstocks damaged	K	4
	6.6.3.2	Moveable headstocks not locked into place on both sides	Lock. If not possible, detach wagon ^(A)	5
	6.6.3.3	Seating device, seating device bolt, securing chains or chain eyelets not working	Rectify. If not possible, detach wagon ^(A)	4
	6.6.3.4	Wheel scotches damaged	M	3
ACTS ^{*)} carrier wagons with swivel frame ^{*)} Roll on/off container transport system	6.6.4			
	6.6.4.1	Swivel frame damaged	K	4
	6.6.4.2	Locking device preventing the frame from swiveling ineffective or unlocked – locking lever not secured or locked in position ¹³ – stanchions not in position and not secured ¹³ – snap lock (safety bolt) defective and handle in unlocked position ¹³	Secure and lock. If not possible, detach wagon ^(B)	5
	6.6.4.3	Pneumatic monitoring system on the swivel lock not in service and not labelled	Switch on	4

¹³ Rules for the use of the swivel frame system to be complied with

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
ACTS ^{*)} carrier wagons with swivel frame ^{*)} Roll on/off container transport system (continued)	6.6.4.4	Pneumatic monitoring system on the swivel lock triggered	Check swivel lock. If no fault found, disconnect monitoring system + K	3
	6.6.4.5	Device to prevent container lifting ineffective – locking lever not secured or locked in position ¹³	Secure. If not possible, detach wagon ^(B)	5
	6.6.4.6	Device to prevent containers moving ineffective ¹³	Detach wagon ^(B)	5
Car-carrying wagons	6.6.5			
	6.6.5.1	Damage to lifting and lowering equipment, crossing gangways and footplates	K	4
	6.6.5.2	Damage to wheel scotch, wheel guides or crank handle	M	3
	6.6.5.3	End boards and crossing gangways – where required – not raised and secured	Rectify. If not possible, detach wagon ^(A)	4
	6.6.5.4	Upper loading deck, indicator device not engaged	Secure	4
	6.6.5.5	Upper loading deck not secured	Secure. If not possible, detach wagon ^(A)	5
	6.6.5.6	Upper loading deck not resting on supporting bracket (suspended by cables)	Rectify. If not possible, detach wagon ^(B)	5
	6.6.5.7	Upper deck loaded but fouling the gauge	Detach wagon ^(B)	5

¹³ Rules for the use of the swivel frame system to be complied with

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Car-carrying wagons (continued)	6.6.5.8	Gangways above central axles not fully maneuverable on loaded wagons distance: ≤ 100 mm between wheel of vehicle and gangway	Rectify. If not possible, detach wagon ^(A)	5
		Mechanical damage to support and fastening of crossover plates on central axles distorted, breakage, cracking, missing parts		
	6.6.5.9	– empty wagon	K	4
	6.6.5.10	– loaded wagon	Detach wagon ^(B)	5
Self-discharging wagons (ex. Ucs, Uacs, Tads Fals, Tals, ...)	6.6.6	Discharge valve not closed and/or not locked		
	6.6.6.1	– empty wagon with axial flap	Close and lock. If not possible, K	3
	6.6.6.2	– loaded wagon with axial flap	Close and lock. If not possible, detach wagon ^(B)	4
	6.6.6.3	– empty wagon with lateral flap	Close and lock. If not possible, detach wagon ^(A)	4
	6.6.6.4	– loaded wagon with lateral flap	Close and lock. If not possible, detach wagon ^(B)	4
Wagons with securing equipment (e.g., Snps, Roos, Ealos)	6.6.7			
	6.6.7.1	Unused securing equipment not properly or adequately fixed, stowed or secured	Rectify. If not possible, make safe + K	4
Wagons with hydraulic equipment	6.6.8			
	6.6.8.1	Leak - Continuous dripping - Oil spillage	Rectify. If not possible, detach wagon ^(A)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Gear for securing load units (ILU) on carrier wagons	6.7			
	6.7.1	Seating device or spigot distorted or defective		
	6.7.1.1	– seating device not in use	K	3
	6.7.1.2	– seating device in use	Rectify +K. If not possible, detach wagon ^(B)	5
	6.7.1.3	– spigot not in use	K	3
	6.7.1.4	– spigot in use	Rectify +K. If not possible, detach wagon ^(B)	5
	6.7.2	Coupling pin of trailer not locked into trestle	Lock. If not possible, detach wagon ^(B)	5
	6.7.3	Seating device not in use and not locked	Place seating device in its end position and lock. If not possible, secure temporarily + K	3
	6.7.4	Seating adjustment device unlocked and potentially fouling the gauge	Push in and secure seating adjustment device. If not possible, detach wagon ^(A)	5
	6.7.5	Moving parts unlocked (e.g., retractable spigots not secured, handrails for shunters not secured, etc.)		
	6.7.5.1	– no risk of fouling the gauge	Rectify. If not possible, secure	3
	6.7.5.2	– risk of fouling the gauge	Rectify. If not possible, detach wagon ^(A)	5
	6.7.6	Anti-crash system of seating device triggered, damaged elements		
	6.7.6.1	– in use	Detach wagon ^(B)	5
	6.7.6.2	– not in use	K, close emergency stopcock	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Wagons equipped with various technical components Electrical components	6.8			
	6.8.1	General equipment for fastening components – mechanical damage or loose	Rectify + M	3
	6.8.2	Box wagon, aerial – mechanical damage	M	3
	6.8.3	Cable/plug – torn off or damaged	Rectify + M	3
Loads and intermodal loading units (ILU)	7			
Load in general Distribution of the load (wagon)	7.1			
	7.1.1	Load visibly displaced • lashing cords broken • load not positioned properly on blocks • not centrally positioned	Detach wagon ^(B)	5
	7.1.2	Load unevenly distributed (3.3), body not horizontal • different buffer heights (3.5) • unequal suspension spring play (3.5)	Detach wagon ^{(B)(A)} , proceed as per Annex 8 , point 3	5
Packing, load fastening	7.1.3	Packages, bundles, bales, stacks coming apart or not properly tied together (1.5)	Detach wagon ^(B)	4
	7.1.4	Inadequate binding of narrow, cylindrical objects (1.5)	Detach wagon ^(B)	4
Maximum permissible dimensions of load	7.1.5			
	7.1.5.1	Unauthorised fouling of the gauge (4.1)	Detach wagon ^(B)	5
	7.1.5.2	Fouling of the gauge not indicated • U label missing	Detach wagon ^(B)	5
Reserved spaces	7.1.6	Encroachment of reserved spaces • load projecting beyond the head-stock (4.2)	Detach wagon ^(B)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Reserved spaces	7.1.6	Encroachment of reserved spaces load projecting beyond the head-stock (4.2)	Detach wagon ^(B)	5
Load limits	7.1.7 7.1.7.1	Exceeding of load limits (3.2), visually detected: - different buffer heights - insufficient distance between spring buckle and solebar	Detach wagon ^{(B)(A)} , proceed as per point 2 of Annex 8	5
	7.1.7.2	Exceeding of load limits (3.2), detection by: - discrepancy between consignment data and load limit marked on wagon - measuring or diagnostic devices	Detach wagon ^{(B)(A)} , proceed as per point 2 of Annex 8	5
Buffer wagons	7.1.8	Vertical and horizontal clearances not respected between loads or between buffer wagon and load (4.3)	Detach wagon ^(B)	5
Sheeting, nets	7.1.9	Inadequate, defective or secured with non-compliant fastening equipment (6.1, 6.2)	Rectify. If not possible, detach wagon ^(B)	4
Loss of load	7.1.10	Loss of load (except tank wagons/tank containers), excluding other restrictions (see also codes 6.1.4.2, 6.1.5.2, 6.1.6.4, 6.1.6.6, 6.3.1.2, 6.4.1.4, 6.4.2.2 and 7.5.5.3)	Rectify. If not possible, detach wagon ^(B)	5
Load securing equipment Wagon walls or sides	7.2			
	7.2.1	Load projecting beyond the walls and sides and inadequately secured (5.4.1)	Detach wagon ^(B)	5
	7.2.2	Load clearly pressing against walls, sides or doors and thus hindering their functioning, with risk of damage or operating hazard (2.3)	Detach wagon ^(B)	4
Stanchions	7.2.3 7.2.3.1	Load inadequately secured by stanchions (2.5 and 5.4.1)	Detach wagon ^(B)	5
	7.2.3.2	Fastenings between opposite stanchions missing (2.5)	Detach wagon ^(B)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Stanchions (continued)	7.2.3.3	Load pressing up against and bending stanchions (2.5)	Detach wagon ^(B)	5
	7.2.3.4	Load which is heavy and/or which may damage side stanchions in the event of longitudinal displacement, pressing up against stanchions (2.5)	Detach wagon ^(B)	4
Scotches fastened with nails	7.2.4	Non-compliant (5.4.3) – insufficient – ineffective – incorrectly fastened on the floor	Detach wagon ^(B)	5
Direct or indirect fastenings (lashing)	7.2.5	Non-compliant (5.4.4, 5.5.4)		
	7.2.5.1	– unsuitable or unauthorised material	Detach wagon ^(B)	5
	7.2.5.2	– incorrectly or inadequately fastened	Rectify. If not possible, detach wagon ^(B)	5
	7.2.5.3	– slack	Rectify. If not possible, detach wagon ^(B)	4
Bolsters, timbers, stretchers, fastening gear	7.2.6			
	7.2.6.1	Non-compliant (5.5.5, 5.6.2, 5.8.1) – damaged – poorly chosen – inadequate – incorrectly arranged – loose	Detach wagon ^(B)	5
	7.2.6.2	Auxiliary loading equipment or fastening gear not removed	Rectify	3
Load residues	7.2.7	Load residues which may compromise safety not removed	Remove. If not possible, detach wagon ^(B)	5
Loading and load securing methods General	7.3			
	7.3.1	Load unstable and wrongly secured (5.1)	Detach wagon ^(B)	5
Goods subject to lifting by airflow (e.g., light scrap, thin boards, bulk goods)	7.3.2	Covering missing or inadequate (5.2.1, 5.3.2)	Detach wagon ^(B)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Goods which may fall off on account of vehicle vibrations and impacts (wire metal trelliswork, metal filings etc.)	7.3.3 7.3.3.1	Insufficient clearance between goods and top edge of walls of the wagon (5.2.2) load protruding beyond top edges of walls	Detach wagon ^(B)	5
	7.3.3.2	Dome-shaped load too high (5.3.1)	Detach wagon ^(B)	5
Stacked goods	7.3.4	Wrongly stacked (5.8) - uneven distribution over floor - too high - poorly stacked - inadequate bindings - insufficient clearance between a load liable to sway and loading gauge - cylindrical loads inadequately secured	Detach wagon ^(B)	5
Load with inadequate supporting area, liable to damage the wagon floor	7.3.5 7.3.5.1	Scotches missing or insufficient (2.2) floor damaged	K	3
Concentrated load on flat wagon	7.3.5.2	Excessive concentration of load (3.4) - scotches in place, unsuitable material used - scotches in place, dimensions insufficient - pronounced deflection of the wagon underframe	Detach wagon ^(B) , proceed as per Annex 8 , point 3	5
Load liable to tip	7.3.6	Not secured against overturning (5.7)	Detach wagon ^(B)	5
Tilted load	7.3.7	Insufficiently supported (5.7)	Detach wagon ^(B)	5
Load liable to roll	7.3.8	Inadequately secured against rolling (5.6.1, 5.6.2)	Detach wagon ^(B)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Load liable to slide length-ways	7.3.9			
	7.3.9.1	Laid on unsuitable (5.5.1) – timbers – guide blocks – skids	Detach wagon ^(B)	4
	7.3.9.2	Lateral guide-pieces missing or insufficient with risk of fouling the gauge or exceeding load limit (5.5)	Detach wagon ^(B)	5
	7.3.9.3	Necessary clearances missing (5.5.2)	Detach wagon ^(B)	4
	7.3.9.4	Necessary scope for sliding not limited (5.5.3)	Detach wagon ^(B)	4
Special types of consignment Vehicles and machinery on wheels or caterpillar tracks/chains	7.4			
	7.4.1	Unsuitable scotch blocks and/or fastenings (5.6.3)	Rectify. If not possible, detach wagon ^(B)	5
Moving parts of vehicles and machinery	7.4.2	Not properly immobilised		
	7.4.2.1	– no risk of fouling the gauge	Rectify. If not possible, detach wagon ^(B)	3
	7.4.2.2	– risk of fouling the gauge	Detach wagon ^(B)	5
Load supported on several wagons	7.4.3	Not loaded/secured according to requirements (5.9)	Detach wagon ^(B)	5
Specific components of ILU, in particular those used for horizontal or vertical transshipment	7.5			
	7.5.1	Device for locking the dollies inoperative, defective or missing	Bind using wire. If not possible, detach wagon ^(B)	4
	7.5.2	End doors on load units not securely closed or not properly locked		
	7.5.2.1	– door not closed	Close and lock. If not possible, detach wagon ^(B)	5
	7.5.2.2	– Door not properly locked (not applicable to doors facing another load unit) if: • upper cam not engaged or • lower cam not engaged or • horizontal locking lever not engaged	Rectify, if not possible, detach wagon ^(B)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Specific components of ILU, in particular those used for horizontal or vertical transshipment (continued)	7.5.2.3	- reserved -		
	7.5.3	Lower corner casting damaged	Detach wagon ^(B)	5
	7.5.4	Side wall, lining damaged, inadequately secured, unstable - hinges, securing bolts damaged, broken, missing - edge plank missing, broken, cracked or split; lining holed or broken	Detach wagon ^(B)	5
	7.5.5	Tarpaulin	Rectify	3
	7.5.5.1	– tarpaulin torn, holed ≤ 30 mm		
	7.5.5.2	– tarpaulin torn, holed > 30 mm	Detach wagon ^(B)	5
	7.5.5.3	Danger of damage from humidity to the load or loss of load	Rectify, if not possible, detach wagon ^(B)	4
	7.5.6	Tarpaulin, walls - locking, lashings inadequate - sheet; lack of tension/lock damages, inadequate	Detach wagon ^(B)	5
ILU tank Element connecting tank body and underframe	7.6			
	7.6.1			
	7.6.1.1	Crack > ¼ of the cross-section	Detach wagon ^(B)	4
	7.6.1.2	Cracks in the weld seams	Detach wagon ^(B)	4
Tank¹⁴	7.6.2			
	7.6.2.1	Not tight: leaks or risk of loss of load - odours - traces of recent or persistent leakage	Sealing, for RID: to have cleaned by competent staff. If not possible, detach wagon ^(B)	5
	7.6.2.2	Distorted with sharp edges but no risk of loss of load	Rectify	4

¹⁴ Clarification: moreover, verify 7.8

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Tank equipment	7.6.3	Tank cladding, sunroof, insulation	Rectify	
	7.6.3.1	– damaged		4
	7.6.3.2	– loose	Detach wagon ^(B)	5
Reinforcement, filling and emptying equipment, underneath	7.6.4			
	7.6.4.1	Loss of load	Rectify. If not possible, detach wagon ^(B)	5
	7.6.4.2	Valves or spouts defective	Detach wagon ^(B)	4
	7.6.4.3	Screw cap must be tightly sealed and not missing – RID load ¹⁵	Rectify. If not possible, detach wagon ^(B)	4
	7.6.4.4	– non-RID load	Rectify. If not possible, detach wagon ^(B)	3
	7.6.4.5	Blind flange missing	Detach wagon ^(B)	4
	7.6.4.6	Securing bolt of the blind flange – RID load ¹⁵ , one or more securing bolts missing or loose	Detach wagon ^(B)	4
	7.6.4.7	– non-RID load, one securing bolt missing or loose	Rectify. If not possible, detach wagon ^(B)	3
	7.6.4.8	– non-RID load, several securing bolts missing or loose	Rectify. If not possible, detach wagon ^(B)	4
	7.6.4.9	Bottom valve indicator device not in “closed” position on both sides – loaded load units, and empty wagons that have not been cleaned (RID load ¹⁵)	Close bottom valve. If not possible, detach wagon ^(B)	5
	7.6.4.10	– empty load unit (non-RID load)	Close bottom valve. If not possible, detach wagon ^(B)	3
	7.6.4.11	Bottom valve emergency control device screwed in (tank-mounted valve open)	Detach wagon ^(B)	5

¹⁵ Clarification: pay attention to the hazard warning labels

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Reinforcement, filling and emptying equipment, underneath <i>(continued)</i>	7.6.4.12	Filling and emptying equipment open	Rectify. If not possible, detach wagon ^(B)	5
	7.6.4.13	Non-efficient visible locking devices	Rectify. If not possible, detach wagon ^(B)	4
Reinforcement, filling and emptying equipment, above	7.6.5	Loss of load or of gas near the upper reinforcements (does not concern ventilation devices) • Odours • Signs of recent or persistent leakage	Detach wagon ^(B)	5
	7.6.5.1			
	7.6.5.2	Dome cover open or missing	Close or have closed. If not possible, detach wagon ^(B)	5
	7.6.5.3	Other upper reinforcements not closed	Close or have closed. If not possible, detach wagon ^(B)	4
Loading of ILU	7.7			
	7.7.1	ILU too heavy for wagon	Detach wagon ^(B)	5
	7.7.2	Corner castings not engaged on their respective spigots	Detach wagon ^(B)	5
	7.7.3	- reserved -		
	7.7.4	Air suspension system of semi-trailer not emptied	Empty. If not possible, detach wagon ^(B)	5
	7.7.5	Underrun bumpers of semi-trailer: not raised/pushed in, even in the absence of contact with carrier wagon – on recess wagons without compatibility codes – on recess wagons marked with one of the following compatibility codes: a, b, c or d	Rectify (raise/push in and lock)	3
	7.7.6	Semi-trailer with P coding: contact between semi-trailer and wagon (other than wheels and trestle)	Rectify. If not possible, detach wagon ^(B)	4

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

Component	Code	Irregularities/Criteria/Notes	Action to be taken	Irregularity class
Loading of ILU <i>(continued)</i>	7.7.7	Semi-trailer with N coding loaded on carrier wagon with wagon compatibility code N (Novatrans system): contact between parts of the semi-trailer and wagon (other than the wheels, skids and longitudinal members in the intended support areas)	Rectify. If not possible, detach wagon ^(B)	4
	7.7.8	Incorrect scotching of wheels of semi-trailer	Rectify. If not possible, detach wagon ^(B)	4
	7.7.9	Load displaced in the ILU deformation of sheeting	Detach wagon ^(B)	5
Marking, coding for intermodal transport	7.8			
	7.8.1	Codings missing or illegible on both sides	Detach wagon ^(B)	5
	7.8.2	ILU incompatible with carrying wagon	Detach wagon ^(B)	5
	7.8.3	Absence of CSC safety plate on ILUs with upper corner castings	Detach wagon ^(B)	4
	7.8.4	Missing warning sign “danger: high voltage” on ILUs with steps	Detach wagon ^(B)	4
Particular incidents	8			
Operating irregularities	8.1 8.1.1	Derailment	Detach ^(A) , proceed following Annex 9, I+K	5
	8.1.2	Abnormal buffering impact	Detach ^(A) , proceed following Annex 9, I+K	5
Other events	8.2 8.2.1	Flood and weather damage	Detach wagon ^(A)	5
	8.2.2	Damage from priming current wagon was in contact with catenary under high voltage	Detach wagon ^(A)	5
	8.2.3	Fire	Detach wagon ^(A)	5

(A) Restore fitness to run, (B) Rectify load, (C) Instructions from keeper, (D) RID procedure.

APPENDIX 9, ANNEX 2

Irregularity Classes

Class	Definition	Value
1	Insignificant irregularities having no effect on a wagon's fitness to run or on operating safety Not considered in the QMS system	0.002
2	Irregularities having small effect on a wagon's fitness to run Not considered in the QMS system	0.050
3	Minor irregularities Irregularities having a considerable effect on a wagon's fitness to run and irregularities having an impact on operations (missing or wrong markings)	0.125
4	Major irregularities Irregularities which render a wagon unfit to run or which jeopardise operations and irregularities which might result in injuries (freight train crews)	0.400
5	Critical irregularities Irregularities with serious consequences for operating safety and irregularities presenting an immediate risk to transport operations	1.000

APPENDIX 9, ANNEX 3

- reserved -

APPENDIX 9, ANNEX 4

Verification using a combined gauge*

The combined gauge may be used to verify q_R , S_d , Sh , including projection and false flanges

Fig. 1 – Permissible profile for outer part of flange

Verified using a combined gauge, the q_R of the wheel flange must always be greater than 6.5 mm, with no sharp edges or projection on the outer part of the flange over a distance of 2 mm from the top of the flange.

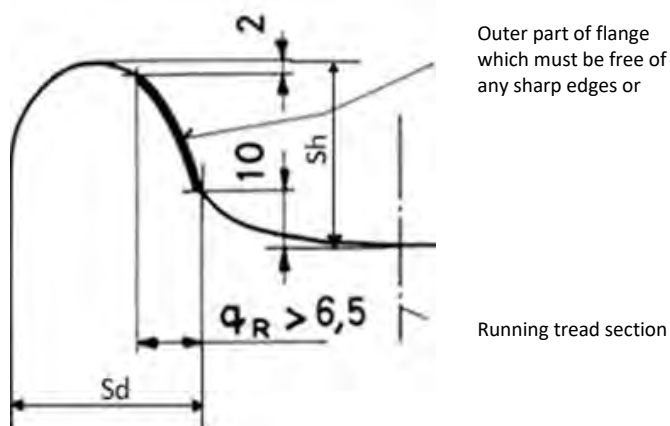


Fig. 2 –Dimensions of combined gauge for verifying q_R , S_d , Sh , including projections and false flanges

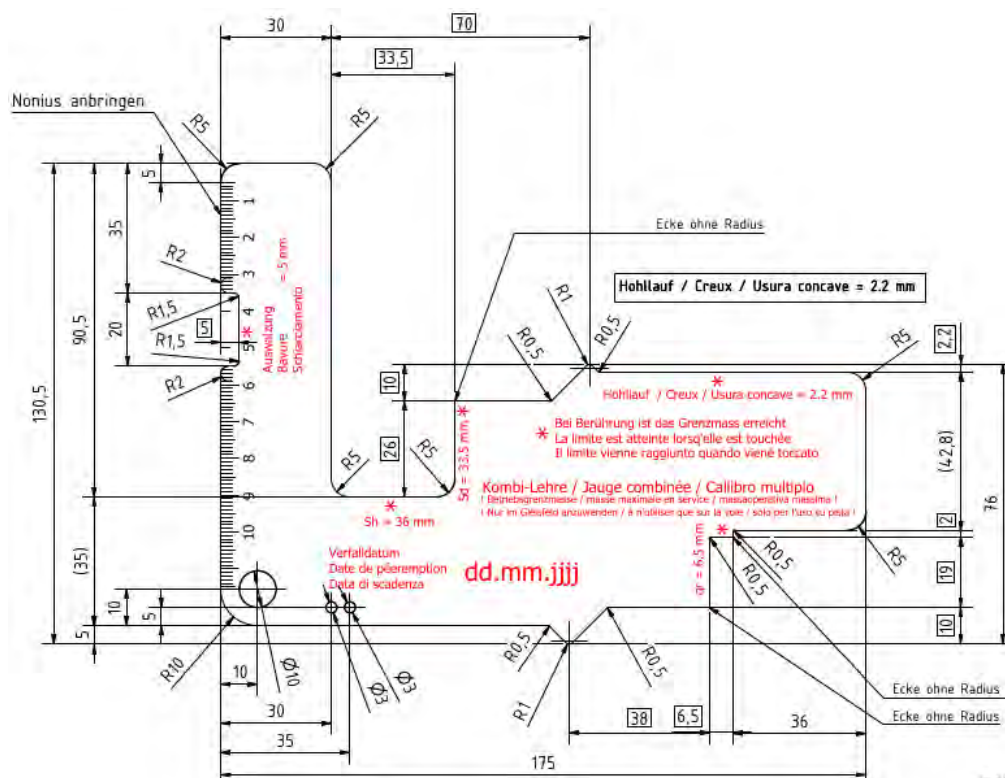


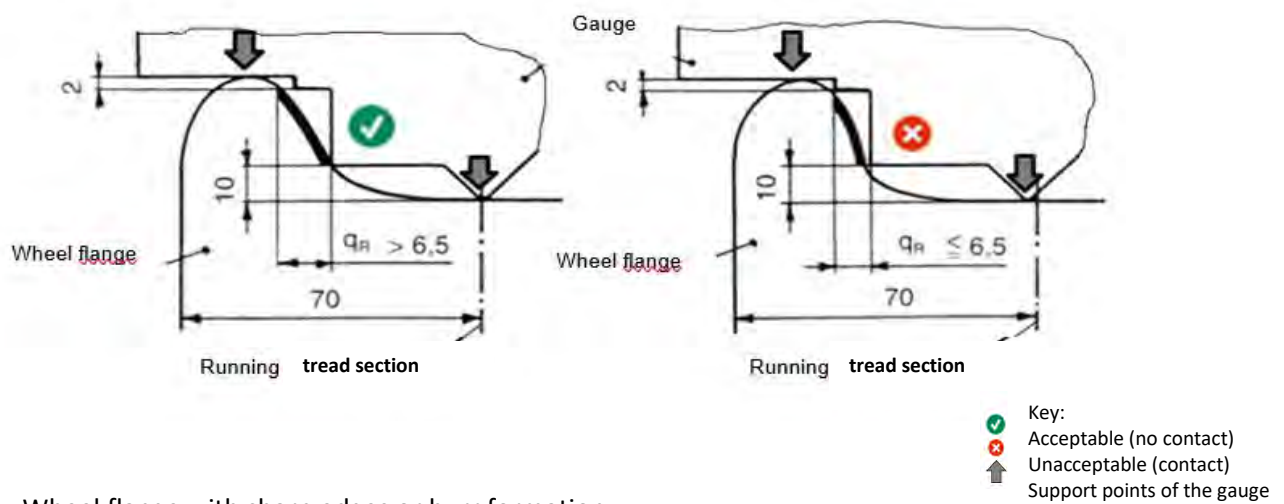
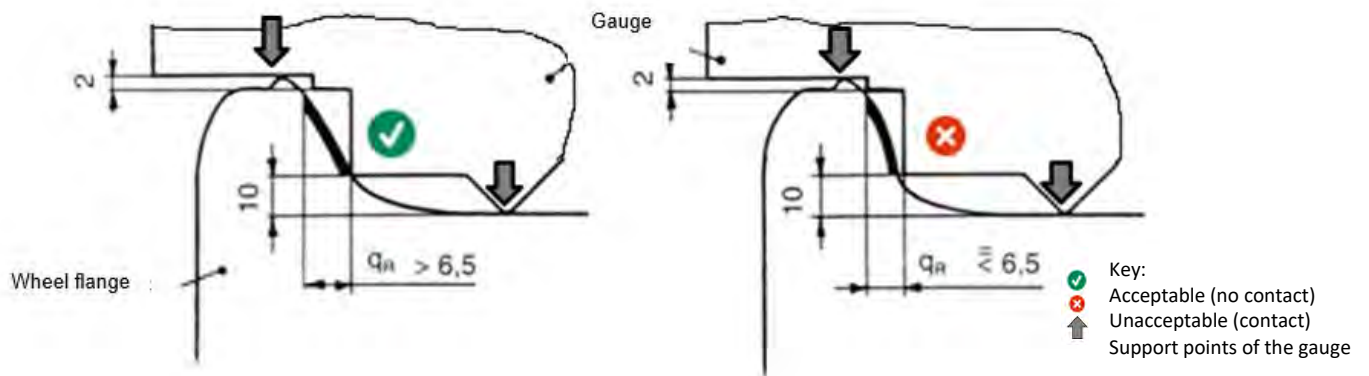
Fig. 3 – Wheel flange**Fig. 4 – Wheel flange with sharp edges or burr formation**

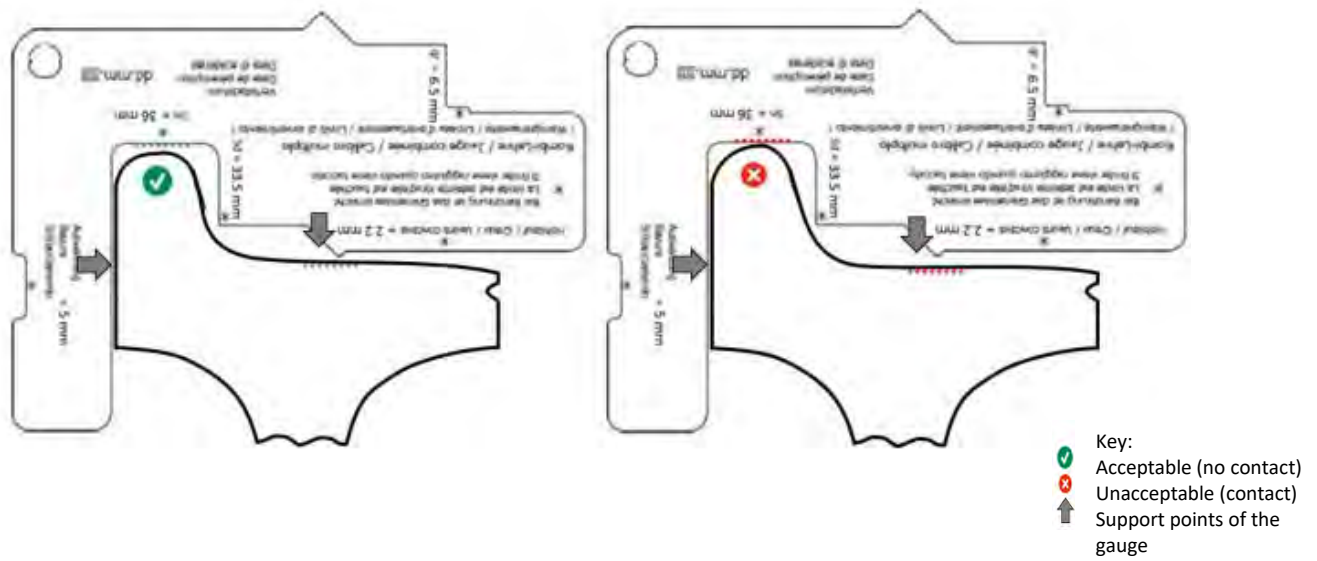
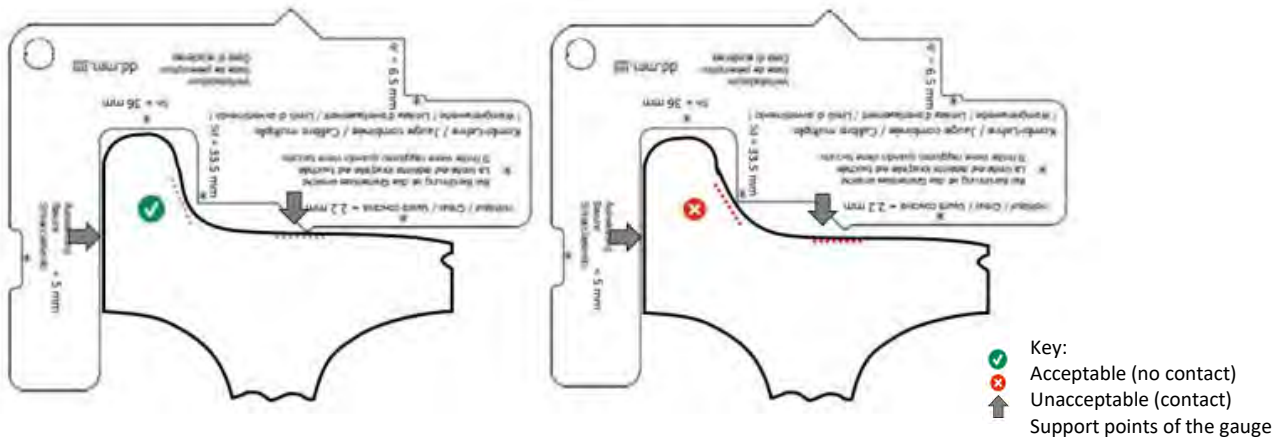
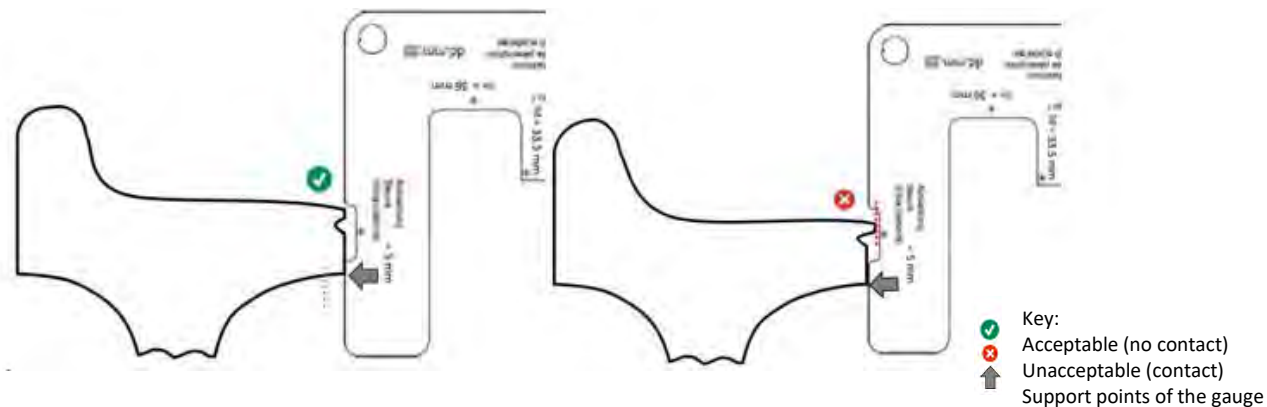
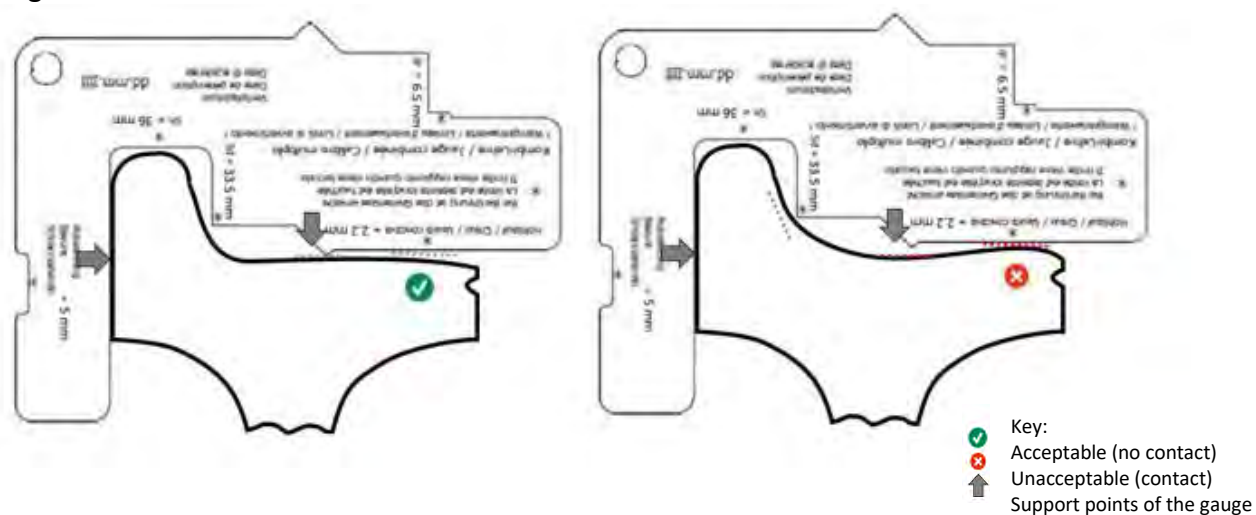
Fig. 5 – Wheel flange height (Sh)**Fig. 6 – Wheel flange thickness (Sh)**

Fig. 7 – Projection

The maximum permissible value for projection (S max) is 5 mm

**Fig. 8 – False flange**

A false flange deeper than 2 mm is not permitted and has been defined as 2.2 mm on the combined gauge



APPENDIX 9, ANNEX 5

Catalogue of inspections in accordance with Annex 1

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
1.1.1	All wagons	Thickness of tyre	Compliance with dimensions set	VC, M	4
1.1.2		Tyre	Neither broken nor cracked	VC, HT	5
1.1.3		Tyre	Tight, not turned, clean ring, rust $\leq 1/3$ of circumference	VC, HT	5
1.1.4		Tyred wheel	Control marks present	VC	4
1.1.5		Tyre	Tight, not displaced laterally	VC, HT	5
1.1.6		Tyre clip	Present, not cracked, not broken	VC	5
1.2.1	All wagons	Tyre (solid wheel)	Groove marking minimum thickness fully visible in cross- section	VC	4
1.2.2.1		Tyre (solid wheel), except wheels marked as able to withstand high thermal stresses	No thermal overload due to braking, tolerance range not exceeded	VC, M	4
1.2.2.2		Tyre (solid wheel), except wheels marked as able to withstand high thermal stresses	No thermal overload due to braking, tolerance range not exceeded	VC, M	5
1.2.2.3		Tyre (solid wheel), wheels marked as able to withstand high thermal stresses	No thermal overload due to braking	VC	3
1.3.1.1	All wagons	Tyre: width B > 139 mm and ≤ 140 mm	Compliance with stipulated tyre width	VC, M	3
1.3.1.2		Tyre: width B > 140 mm, < 133 mm Presence of a protrusion S	Compliance with stipulated tyre width	VC, M	4
1.3.2		Wheel tread	No crushing of wheel tread, no uneven contact surfaces or irregular burrs on the wheel rim	VC	4
1.3.3.1		Wheel tread	Wheel $\varnothing > 840$ mm, no wheel flat > 60 mm long	VC, M	4
1.3.3.2		Wheel tread	Wheel $\varnothing$: 630 mm < d ≤ 840 mm, no wheel flat > 40 mm long	VC, M	4
1.3.3.3		Wheel tread	Wheel $\varnothing \leq 630$ mm, no wheel flat > 35 mm long	VC, M	4
1.3.4.1		Wheel tread	Wheel $\varnothing > 840$ mm, no build-up of metal > 60 mm long or > 1mm thick	VC, M	4
1.3.4.2		Wheel tread	Wheel $\varnothing > 840$ mm, no build-up of metal > 10 mm ≤ 60 mm long and < 1mm thick	VC, M	3
1.3.4.3		Wheel tread	Wheel $\varnothing$: 630 mm < d ≤ 840 mm, no build-up of metal > 40 mm long or ≥ 1 mm thick	VC, M	4
1.3.4.4		Wheel tread	Wheel $\varnothing$: 630 mm < d ≤ 840 mm, no build-up of metal > 10 mm long and < 1mm thick	VC, M	3
1.3.4.5		Wheel tread	Wheel $\varnothing \leq 630$ mm, no build-up of metal > 35 mm long or ≥ 1 mm thick	VC, M	4
1.3.4.6		Wheel tread	Wheel $\varnothing \leq 630$ mm, no build-up of metal > 10 mm ≤ 35 mm long and < 1mm thick	VC, M	3

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
1.3.5.1		Wheel tread	Wheel $\varnothing > 840$ mm, no cavity, shelling or flaking > 60 mm long	VC, M	4
1.3.5.2		Wheel tread	Wheel $\varnothing$: $630 \text{ mm} < d \leq 840 \text{ mm}$, no cavity, shelling or flaking > 40 mm long	VC, M	4
1.3.5.3		Wheel tread	Wheel $\varnothing$: ≤ 630 mm, no cavity, shelling or flaking > 35 mm long	VC, M	4
1.3.6.1		Wheel tread	No cracks at the interface between the wheel tread and the front edge	VC	5
1.3.6.2		Wheelset front face, rim and inner tyre rim	No sharp-angled notches on the front face (rim or inner tyre rim) except for markings applied by the manufacturer	VC	4
1.3.6.3		Wheel tread	No damage, no notches	VC	4
1.3.6.4		Wheel tread	No damage, no notches	VC	5
1.3.6.5		Wheel tread	No breaks or cracks in the rim or the web	VC	5
1.3.7		Wheelset front faces	No lubricants or paint, except the 4 control marks	VC	5
1.3.8.1		Wheel tread	No damage	VC	4
1.3.8.2		Wheel tread	No damage, no grooves with sharp edges ≥ 1 mm deep	VC	5
1.3.8.3		Wheel tread	No damage, no furrows and false flanges > 2 mm deep	VC, M	5
1.4.1	All wagons	Flange	Compliance with height Sh	VC, M	4
1.4.2		Flange	Compliance with flange thickness, no worn flange	VC, M	5
1.4.3		Flange	Dimension qR adhered to, no sharp flange	VC, M	5
1.4.4		Flange	No burrs or sharp edges on guide face at a distance $h > 2$ mm from highest point of flange	VC, M	5
1.5.1	All wagons	Wheel centre (solid wheel)	Not cracked, no defects repaired by welding	VC	5
1.5.2		Wheel centre (tyred wheel)	No breaks or cracks in wheel centre, tyre clip, tyre, no defects repaired by welding	VC	5
1.6.1	All wagons	Axle	No damage; no grooving > 1 mm deep, no sharp edges	VC,	5
1.6.2	All wagons	Axle	No damage	VC	4
1.6.3	All wagons	Axle	No part rubbing against axle Check also 1.6.1 and 1.6.2	VC	4

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
1.7.1	All wagons	Wheel	No lateral displacement on axle; compliant value of "E"	VC, M	5
1.7.2		Wheel or immediate vicinity	No more than one of the following criteria on or near a wheel:	VC	4
			Brake triangle pin sheared off		
			Brake safety stirrup broken (see also 3.1.2)		
			Shiny traces on brake triangle end washer		
			Shiny traces on the inner spring (load spring) (see also 2.5)		
			Lifting safety catch (T) missing or loose (see also 2.5.5)		
			On Y25 bogies: hard manganese wear plate on axle boxes or guide missing or welded joints loose (see also 4.4.2)		
			See also 1.3.2		
1.8.1.1	All wagons	Axle box housing	Watertight housing	VC	4
1.8.1.2			No grease or all discharge on the wheel centre	VC	4
1.8.1.3			No trace of grease or all on the housing at the level of the cover	VC	4
1.8.1.4			Axle box cover undamaged	VC	3
1.8.2		Axle box housing	Not twisted, undamaged, guidance assured	VC	5
1.8.3.1		Axle box	No hot boxes	VC, check using the back of the hand	5
1.8.3.2		Axle box	No overheating during transport	VC	5
1.8.4	All wagons with Y bogie or derivative designs	Hard manganese wear plate	Secured, present	VC	4
2.1.1	All wagons	Spring leaves	Displacement < 10 mm with respect to the buckle	VC, M	4
2.1.2		Spring leaves	Main leaf not broken nor visibly cracked	VC	5
2.1.3		Spring leaves	No missing part	VC	4
2.1.4.1		Spring leaves	No crack on any other leaf < 1/4 of length of leaf from buckle centre	VC, M	4
2.1.4.2		Spring leaves	Intact	VC, M	3
2.1.5		Leaf spring	Sufficient spring clearance ≥ 15 mm; no recent traces of contact	VC, M	5
2.1.6		Buckle (leaf spring)	Intact, tight; key present and effective	VC	5

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
2.2.1.1	All wagons	Parabolic spring	No visible fracture or crack	VC	5
2.2.1.2		Parabolic spring	No breakage in buckle (no leaves touching for over 50% of their length)	VC	5
2.2.2.1		Parabolic spring	No longitudinal slippage of leaves in excess of 10 mm	VC, M	4
2.2.2.2		Parabolic spring	No longitudinal displacement of leaves	VC	3
2.2.3		Buckle (parabolic spring)	Intact, tight; key effective	VC	5
2.3.1	All wagons	Helical spring	Unbroken	VC	5
2.4.1	All wagons	Buckle boss	In position in its housing	VC	5
2.4.2		Shackle, link	Present and not displaced, damaged or out of position	VC	5
2.4.3		Link pin	Present and secured, not displaced	VC	5
2.4.4		Suspension links	Neither worn nor too long	VC	4
2.5.1	All wagons	Helical spring: main spring, tare spring	Not broken	VC	5
2.5.2.1	Empty wagons	Helical spring: auxiliary spring, load spring	Unbroken, in position	VC	4
2.5.2.2	Loaded wagons	Helical spring: auxiliary spring, load spring	Unbroken, in position	VC	5
2.5.3.1	All wagons	Damper rings per bogie	No rings missing, broken, damaged or unfit for use	VC	3
2.5.3.2		Damper rings per bogie	No more than one ring missing, broken, damaged or unfit for use	VC	5
2.5.4.1	All wagons	One spring cap per bogie	No cap exhibiting signs of contact or actually in contact with bogie frame	VC	3
2.5.4.2		Spring cap	Not more than one cap exhibiting signs of contact or actually in contact with bogie frame	VC	5
2.5.5	All wagons	Lifting T (safety catch)	Present and secured	VC	3
2.5.6		Suspension	No recent signs of bottoming	VC	5
3.1.1	All wagons	Brake rigging	No part hanging loose or damaged. Check also 1.6.1, 1.6.2 and 1.6.3	VC	4
3.1.2		Safety strap	Present, in proper condition	VC	4
3.1.3.1		Brake isolating cock	Operable	OP	3
3.1.3.2		Brake isolating cock	Position clear	VC, OP	3
3.1.4		Empty/loaded or G/P changeover device	Operable	OP	3
3.1.5		Brake release pull	Present and unbroken	VC	3

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
3.2.1	All wagons	Cast-iron brake block	Present, unbroken; thickness above the required minimum	VC, M	3
3.2.2		Composite brake block	Present, no radial crack from friction surface through to plate edge, no visible shelling of more than one quarter of the block length. Thickness above the required minimum. No detachment of friction material from the back plate in excess of 25 mm and no cracking in excess of 25 mm in the direction of the wheel circumference.	VC, M	3
3.2.3		Friction components	Not projecting laterally	VC	4
3.2.4.1	All wagons	Inspection groove on the brake discs	Inspection groove completely visible	VC	3
3.2.4.2		Brake disc fixing	Suitable brake disc fixing	VC	5
3.2.4.3		Brake disc	No cracks > 1/2 as per diagram	VC	3
3.2.4.4		Brake disc	No cracks in cross-section	VC	5
3.2.4.5		Cooling bars	Undamaged, no cracks	VC	3
3.2.4.6		Circular cooling fins	Undamaged, no cracks	VC	3
3.2.5		Brake linings	Present, not cracked	VC	3
3.2.6		Brake indicator	Suitable indication	VC	4
3.3.1.1	All wagons	Main brake pipe	Operable	VC	4
3.3.2.1	All wagons	Brake couplings	Present, intact	VC	3
3.3.2.2	All wagons	Brake couplings	Only one coupler plugged in, with the other secured in holder	VC	3
3.3.3	All wagons	Coupler holder	Present, operable	VC	3
3.3.4		Air brakes	Isolated brakes labelled accordingly	VC	3
3.3.5.1		Stopcock	Operable, airtight, not forced, handle present	VC, OP	5
3.3.5.2		Stopcock, stopping device	Present and obviously in good condition	VC	4
3.3.6.1		DET	Operational, switched on	VC	3
3.3.6.2		DET	Airtight	VC	3
3.3.6.3		DET	Detector's connection hose airtight	VC	4
3.4.1	All wagons	Spark arrestor plate	Present and not holed by rust	VC	4
3.4.2		Spark arrestor plate	Properly attached	VC	4

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
3.4.3	For the transport of dangerous goods in non-bogie wagons where RID regulations call for use of spark arrestor plates	Spark arrestor plate	Wagon must bear conventional symbol shown in Appendix 11 to the GCU, point 2.10 (spark arrestor plate authorised).	VC	5
3.5.1	All wagons fitted	Hand brake	Visibly operable	VC	3
3.6.1	All wagons fitted	Automatic brake test	Operable	VC	3
4.1.1	All wagons	Underframe	No visible distortion; not buckled	VC	5
4.1.2		Solebar, headstock and intermediate crossbar	Not broken, cracks < 1/2 width of flange, longitudinal cracks < 100 mm near the suspension brackets, elsewhere < 150 mm; no cracking at visible welds	VC, M	4
4.2.1	All wagons	Axle guard	No distortion constituting a safety hazard	VC	5
4.2.2		Axle guard	Not broken	VC	5
4.2.3.1		Axle guard	Fastening effective, not loose	VC	5
4.2.3.2		Axle guard	No loose rivets or bolts on fastening	VC	3
4.2.4.1		Axle guard	No cracks extending more than ¼ of horizontal section	VC, M	4
4.2.4.2		Axle guard	No cracks	VC	3
4.2.4.2		Axle guard	No cracks	VC	3
4.2.4.3		Axle guard	No cracks close to or running towards a fastening point	VC	5
4.3.1	All wagons	Axle guard tie bar	Present, neither broken nor visibly distorted	VC	4
4.4.1.1	All wagons	Check plate (bogie wagon)	No check plate missing per axle	VC	3
4.4.1.2		Check plate (bogie wagon)	Not more than one check plate missing per axle	VC	4
4.4.1.3		Check plate (non-bogie wagon)	Present	VC	5
4.4.2	All wagons with Y bogies	Hard manganese wear plates	Secured, present	VC	4
4.5.1	All wagons fitted	Suspension bracket	In good condition, correctly secured	VC	5

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
4.6.1.1	All wagons	Bogie/underframe connection	Intact, not displaced; connection and fastening components present and effective	VC	5
4.6.1.2	All wagons	Bogie/underframe connection (bogie pivot kingpin)	Complete and effective	VC	4
4.6.2.1		Earthing strap	All present, undamaged, tight	VC	3
4.6.2.2		Earthing strap	At least 1 present and effective	VC	3
4.7.1	All wagons	Bogie frame	Not cracked or visibly distorted	VC	4
4.7.2		Bogie frame	No broken components	VC	5
4.7.3.1	All wagons with Y bogies	Bogie/frame connection	No missing or broken screws on inner longitudinal beam fastenings	VC	3
4.7.3.2	All wagons with Y bogies	Bogie/frame connection	No more than one missing or broken screw on inner longitudinal beam fastenings on the same axle	VC	5
4.8.1.1	All wagons	Side bearer	Intact (no missing parts)	VC	4
4.8.1.2		Side bearer	Intact (missing part)	VC	5
4.8.2		Side bearer spring	Not broken	VC	4
4.8.3		Side bearer fastening	Complete and effective	VC, PM	3
4.9.1	All wagons	Friction surfaces of damper system	Not lubricated	VC	4
4.10.1.1	All wagons with central articulated joint connections	Upper side bearer	Effective	VC	3
4.10.1.2		Upper side bearer	Complete	VC	4
4.10.2.1		Friction plate	Intact (no missing parts)	VC	3
4.10.2.2		Friction plate	Intact (missing part)	VC	4
5.1.1	All wagons	Buffer types at each end of the wagon	Obviously of the same type	VC	4
5.1.2		Buffer height	Within tolerance range	VC, M	5
5.2.1	All wagons	Buffer head	Present, not broken, distorted but functional; rectangular buffer heads not twisted	VC	5
5.2.2.1		Buffer head	Fewer than 1/3 of bolts or rivets loose	VC	4
5.2.2.2		Buffer head	No loose bolts or rivets	VC	3

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
5.2.3.1		Buffer head contact surface	Lubricated if the two buffer heads which are in contact are made of metal	VC	5
5.2.3.2		Buffer head contact surface	No grooving	VC, M	5
5.2.4.1		Buffer head insert or plastic plate	Present, not broken, not cracked	VC	5
5.2.4.2		Buffer head insert or plastic plate	No shelling/melding	VC, M	4
5.2.4.3		Buffer head insert or plastic plate	Fastening complete	VC	5
5.3.1	All wagons	Plunger	Present, not broken	VC	5
5.3.2.		Plunger	Not cracked at the transition to buffer head	VC	5
5.3.3.1		Plunger	No longitudinal cracking; still capable of guiding buffer	VC	5
5.3.3.2		Plunger	Operation not jeopardised, no grooving	VC, M	5
5.3.4.1		Plunger stopping or securing device	Present, effective	VC	5
5.3.4.2		Plunger stopping or securing device	No displacement visible	VC	4
5.4.1	All wagons	Buffer guide	Present, not broken	VC	5
5.4.2		Buffer guide	Not cracked at transition to buffer base	VC	5
5.4.3.1		Buffer guide	No longitudinal cracking; still capable of guiding plunger	VC	5
5.4.3.2		Buffer guide	Operation not jeopardised, no grooving	VC, M	5
5.4.4.1		Buffer guide securing bolts	Tight (less than 2 bolts loose)	VC, PM	5
5.4.4.2		Buffer guide securing bolts	All bolts present	VC, PM	3
5.4.4.3		Buffer guide securing bolts	Tight (no bolts loose)	VC, PM	3
5.5.1	All wagons	Buffer spring	Functional, with compliant dimensions, unbroken. No buffers slack enough to be depressed by hand by more than 15 mm or neither of the two buffers able to be depressed.	VC, M	4
5.5.2	Marked wagons	Anti-crash components	Not triggered	VC	5
5.5.3	Marked wagons	Marking for anti-crash components	Present in its entirety, visible	VC	4
5.6.1.1	All wagons	Screw coupler	Present in its entirety and undamaged	VC	3
5.6.1.2	All wagons	Screw coupler	Fit for use and lubricated	VC	3
5.6.2		Hook for hanging coupler on when not in use	Present, fit for use, undamaged	VC	3
5.6.3		Looped coupling link	Hanging from hook	VC	3

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
5.7.1.1	All wagons	Draw hook	Serviceable, not broken or cracked	VC	3
5.7.1.2		Draw hook	Not twisted	VC	3
5.8.1	All wagons	Other draw gear parts	Present, not broken or cracked, no abnormal projection	VC	4
5.8.2		Coupling	Train correctly coupled	VC	4
5.9.1	All wagons	Long-stroke damper	Effective, sliding element in central position, undamaged	VC	4
5.9.2		Marking of danger points	Present	VC	4
5.10.1	All fitted wagons	Automatic coupling	Operable	VC	4
5.10.2		Coupler head	Undamaged	VC	3
5.10.3		Uncoupling device	Undamaged, operational	VC, OP	3
5.10.4		Support, draw bar	Undamaged	VC	3
6.1.1.1		Wagon number	Present, legible, complete	VC	4
6.1.1.2	Wagons with exchange codes beginning with a digit from 0 to 3	“RIV” sign, “TEN” + “GE” or acceptance marking (“TEN” + “G1”, country acronym in approval plate)	Present, legible	VC	4
6.1.1.3	Wagons with exchange codes 41, 43, 45, 81, 83 or 85	Agreement plate or an acceptance marking (“TEN- CW”, country code in approval plate)	Present, legible, complete	VC	4
6.1.1.4	All wagons	Tare	Present, legible, complete	VC	4
6.1.1.5		Holding force of parking brake	Present, legible, complete	VC	4
6.1.1.6		Load limits	Present, legible, complete	VC	4
6.1.1.7	Tank wagons	Capacity	Present, legible, complete	VC	4
6.1.1.8	All wagons	VKM or full address of the keeper	Present, legible, complete	VC	4
6.1.1.9	All wagons	Length-over-buffers	Present, legible, complete	VC	4
6.1.1.10	Wagons with ladders	High-voltage warning sign	Present, visible	VC	4
6.1.1.11	Container wagon	Specific marking	Present, visible	VC	4
6.1.2.1	All wagons	Inscription on the maintenance plate	Present, complete, visible	VC	4
6.1.2.2		Overhaul period (when appropriate+ “3 M” if marked)	Not expired, correctly labelled in accordance with Annex 8	VC	3
6.1.2.3		Overhaul period ≤ 6 months + “3 M”	Not expired, correctly labelled in accordance with Annex 8	VC	4
6.1.2.4		Overhaul period > 6 months + “3 M”	Not expired, correctly labelled in accordance with Annex 8	VC	4

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.1.3.1	All relevant wagons	Body framework	No damage	VC	3
6.1.3.2		Body framework	No damage which might compromise safety	VC, M	5
6.1.4.1	All relevant wagons	Walls	Secure, in good condition	VC	3
6.1.4.2		Walls	No damage which might cause goods to become damp or be lost	VC	4
6.1.5.1	All relevant wagons	Floor	Secure, watertight	VC	3
6.1.5.2		Floor	Secure, watertight, no risk of loss of load	VC	4
6.1.6.1	All relevant wagons	Doors and sliding walls	Fully closed and locked	VC	5
6.1.6.2		Doors and sliding walls	Present, not derailed, gauge not fouled	VC, M	5
6.1.6.3		Doors and sliding walls	Guiding and locking elements in good condition	VC	3
6.1.6.4		Doors and sliding walls	Guiding and locking elements in good condition and not compromising safety or causing a loss of load	VC	5
6.1.6.5	E, Ea	Doors	Undamaged	VC	3
6.1.6.6		Doors	No damage compromising operating safety	VC	5
6.1.7.1	All wagons	Ladders, gangways, guard rails	Operational	VC	4
6.1.7.2		Steps	Present (where clearly necessary)	VC	4
6.1.7.3		Steps	No damage representing a safety hazard for staff, not torn off, deformation within tolerated limits	VC, M	4
6.1.7.4		Handles	Present, no damage representing a safety hazard for staff, not torn off, deformation within tolerated limits	VC, M	4
6.1.7.5		Inscription plates, folding plates and label holders	Secured	VC	4
6.1.7.6		Inscription plates, folding plates and label holders	Present	VC	3
6.1.7.7		Loose wagon components	Present as marked on wagon	VC	3
6.1.7.8		Loose wagon components	Secured	VC	4
6.1.7.9		Signal brackets, rope eyes	Present, operable	VC	3
6.1.8.1	Covered wagons	Interior fittings	Undamaged, operable	VC	3
6.1.8.2	Covered wagons	Interior fittings	Undamaged, operable. If damaged unable to be repaired	VC	5
6.2.1.1	Covered wagons	Ventilation flaps	Present, undamaged	VC	3
6.2.1.2		Ventilation flaps	No damage compromising safety/load integrity or causing the gauge to be fouled	VC, M	5

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Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.2.2.1		Control gear, shutter retaining bracket	Securely hooked, not distorted, not loose	VC	3
6.2.2.2		Control gear, shutter retaining bracket	Not fouling the gauge	VC, M	5
6.2.3		Roof Weatherboard	Undamaged, watertight Present, undamaged, not loose	VC VC	4 4
6.2.4.1		Convertible roof	Secured and closed	VC	5
6.2.4.2		Convertible roof	Not derailed	VC	5
6.2.4.3		Visible operating parts	Present, undamaged, effective	VC	4
6.3.1.1	Open wagons	Side walls and end flaps	Undamaged, closed, watertight	VC	3
6.3.1.2		Side walls and end flaps	Undamaged, watertight and closed. If damaged: no risk of loss of load	VC	4
6.3.1.3		Side walls and end flaps	Undamaged, watertight and closed. If damaged: no risk of fouling gauge	VC	5
6.3.2.1	All wagons	Closing and operating gear of end flaps (pin, camshaft, retaining hook and shaft support)	Present, no fractures or cracks, effective	VC	3
6.3.2.2		Closing and operating gear of end flaps (pin, camshaft, retaining hook and shaft support)	Present, no fractures or cracks, effective If damaged/missing: not compromising safety	VC	5
6.3.3.1		Cantrail	Not damaged or distorted	VC	3
6.3.3.2		Cantrail	Not damaged or distorted. If broken or distorted: no risk of fouling gauge	VC	5
6.4.1.1	Flat wagons	Side and end drop walls, folded down	Secured	VC	5
6.4.1.2		Side and end drop walls, folded down (not permitted under Table 3 of the Loading Guidelines)	Raised	VC	5
6.4.1.3		Side and end drop walls	Not distorted	VC, M	3
6.4.1.4		Side and end drop walls	Not damaged or distorted. If damaged or distorted: no risk of loss of load	VC	4
6.4.1.5		Side and end drop walls	Not distorted. If distorted: no risk of fouling gauge	VC	5
6.4.2.1		Hinges, pins, securing bolts	Present, undamaged, operative	VC	3
6.4.2.2		Hinges, pins, securing bolts	Present, undamaged, operative. If missing or damaged: without compromising safety or risking any loss of load	VC	4
6.4.3.1		Stanchions (pivoting, retractable, detachable), stanchion sockets, holders and supports	Provided as necessary	VC	5

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Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.4.3.2		Stanchion (pivoting, retractable, detachable), stanchion sockets, holders and supports	Not fouling the gauge	VC	5
6.4.3.3		Stanchion (pivoting, retractable, detachable), stanchion sockets, holders and supports	Intact	VC	4
6.4.3.4		Stanchion chain	Hooked up	VC	4
6.4.3.5		Stanchion fasteners	Effective	VC	4
6.4.4.1		Bolsters	Intact	VC	3
6.4.4.2		Bolsters	Secured by stanchions or load	VC	4
6.5.1.1	Tank wagons	Tank cradle	No crack extending > 1/4 across the cross-section	VC, M	4
6.5.1.2		Tank cradle	No cracks in weld seams	VC	4
6.5.1.3		Tank cradle	All bolts or rivets securing the tank body to cradle present	VC	4
6.5.1.4		Tank cradle	90% of bolts or rivets securing the tank body to cradle present	VC	4
6.5.2.1		Tank body	Intact, no leaks or loss of load	VC	5
6.5.2.2		Tank body	No sharp-edged distortion (without loss of load)	VC	4
6.5.2.3		Tank full, without "L" marking, RID load	Tank test deadline not expired	VC	4
6.5.2.4		Tank full, without "L" marking, RID load	Tank test deadline not expired	VC	5
6.5.2.5		Tank empty, not cleaned, without "L" marking, RID load	Entry of RID carriage in the transport document	VC	4
6.5.2.8		Tank empty, not cleaned, without "L" marking, RID load	Entry of RID carriage in the transport document	VC	5
6.5.2.9		Tank full, with "L" marking, RID load	Tank test deadline not expired	VC	4
6.5.2.10		Tank full, with "L" marking, RID load	Tank test deadline not expired	VC	5
6.5.2.11		Tank empty, not cleaned, with "L" marking, RID load	Entry of RID carriage in the transport document	VC	4
6.5.2.12		Tank empty, not cleaned, with "L" marking, RID load	Entry of RID carriage in the transport document	VC	5
6.5.3.1		Tank equipment	Tank cladding, sunroof and insulation undamaged	VC	4
6.5.3.2		Tank equipment	Tank cladding, sunroof and insulation securely fastened	VC	5
6.5.5.1	Tank wagons	Reinforcement, filling and emptying equipment (underside)	No leakage of load	VC	5
6.5.5.3		Valves or spouts (underside)	Undamaged	VC	4

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Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.5.5.4		Lower screw cap (except outside gas pipes), RID load	Present and in use, tightly closed	VC	4
6.5.5.5		Lower screw cap (except outside gas pipes), non-RID load	Present and in use, tightly closed	VC	3
6.5.5.6		Lower blind flange	Present	VC	4
6.5.5.7		Lower blind flange, RID load	No securing bolt missing or loose	VC, PM	4
6.5.5.8		Lower blind flange, non-RID load	No securing bolt missing or loose	VC, PM	3
6.5.5.9		Lower blind flange	Not more than one securing bolt missing or loose	VC, PM	4
6.5.5.10		Bottom valve indicator device, loaded wagon, and empty wagons that have not been cleaned (RID load)	In closed position	VC	5
6.5.5.11		Bottom valve indicator device, empty wagon (non- RID load)	In closed position	VC	3
6.5.5.12		Emergency control bolt for the bottom valve	Not screwed in the valve body	VC	5
6.5.5.13		Lower filling and emptying equipment	In closed position	VC	5
6.5.5.14		Lower filling and emptying equipment	Visible locking devices effective	VC	4
6.5.6.1	Tank wagons	Reinforcement, filling and emptying equipment (topside)	No loss of load or gas leakage (except ventilation device)	VC	5
6.5.6.2		Dome cover	Present, closed, visibly locked	VC	5
6.5.6.3		Other upper closing devices	Properly locked	VC	4
6.6.1.1	e.g. Rils, Tams	Sheeting	Closed, locked	VC	5
6.6.1.2		torn, holed sheeting ≤ 30 mm	Undamaged	VC, M	3
6.6.1.3		torn, holed sheeting > 30 mm	Undamaged	VC, M	5
6.6.1.4		Eyelet	Present, undamaged	VC	4
6.6.1.5	All fitted wagons	Tarpaulin rope	invisible from the outside	VC	4
6.6.2.1	e.g. S(a)hi	Hood	Closed, locked	VC	5
6.6.2.2	e.g. S(a)hi	Hood	Not derailed	VC, PM	5
6.6.3.1	e.g. Saad	End gangway	Undamaged	VC	4
6.6.3.2	e.g. Saad	End gangway	Locked at both ends	VC	5

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Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.6.3.3		Fastening devices	Effective	VC	4
6.6.3.4		Wheel scotches	Undamaged	VC	3
6.6.4.1	ACTS wagons	Swivel frame	Undamaged	VC	4
6.6.4.2		Locking device to prevent frame from swiveling	Effective, locked	VC	5
6.6.4.3		Pneumatic monitoring system on the swivel lock	In service (unless labelled otherwise)	VC	4
6.6.4.4		Pneumatic monitoring system on the swivel lock has triggered	Swivel lock effective and locked	VC	3
6.6.4.5		Device to prevent container lifting	Effective and secured	VC	5
6.6.4.6		Device to prevent container displacement	Effective	VC	5
6.6.5.1	Car-carrying wagons	Lifting equipment, crossover gangways	Undamaged	VC	4
6.6.5.2		Wheel scotch, wheel guides, crank handle	Undamaged	VC	3
6.6.5.3		End boards, crossing gangways	Raised and secured – if necessary	VC	4
6.6.5.4		Upper loading deck	Indicating device folded away	VC	4
6.6.5.5		Upper loading deck	Secured	VC	5
6.6.5.6		Upper loading deck	Lying on supporting brackets	VC	5
6.6.5.7	Loaded car-carrying wagons	Upper loading deck	No fouling of the gauge	VC	5
6.6.5.8		Gangways above central axles	Fully maneuverable, distance between wheel and gangway > 100 mm	VC, M	5
6.6.5.9	Empty car-carrying wagons	Crossover plates on central axles	Neither distorted, broken, nor cracked. No missing parts	VC	4
6.6.5.10	Loaded car-carrying wagons	Crossover plates on central axles	Neither distorted, broken, nor cracked. No missing parts	VC	5

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Code	Wagon	Component	Quality requirement	Control criteria ¹	Irregularity class
6.6.6.1	Empty self-discharging wagons	Axial flap	Closed and locked	VC	3
6.6.6.2	Loaded self-discharging wagons	Axial flap	Closed and locked	VC	4
6.6.6.3	Empty self-discharging wagons	Lateral flap	Closed and locked	VC	4
6.6.6.4	Loaded self-discharging wagons	Lateral flap	Closed and locked	VC	4
6.6.7.1	E.g. Snps, Roos, Ealos	Securing equipment not in use	Suitably and adequately fixed and secured	VC, OP	4
6.6.8.1	All fitted wagons	Hydraulic equipment	Tight, no oil spillage	VC	4
6.7.1.1	Carrier wagons	Seating device not in use	Locked, intact	VC	3
6.7.1.2		Seating device in use	Locked, intact	VC	5
6.7.1.3		Spigot not in use	Intact	VC	3
6.7.1.4		Spigot in use	Triggered, intact	VC	5
6.7.2		Pivot of trailer coupling in the trestle	Locked	VC	5
6.7.3		Seating device not used	Locked	VC	3
6.7.4		Seating device wheel	Locked, with no risk of fouling the gauge	VC	5
6.7.5.1		Moving parts	Locked	VC	3
6.7.5.2		Moving parts	Fixed, with no risk of fouling the gauge	VC	5
6.7.6.1		Anti-crash system of seating device in use	Non-deformed	VC	5
6.7.6.2		Anti-crash system of seating device not in use	Non-deformed	VC	4
6.8.1	All fitted wagons	General equipment for fastening components	Complete and fixed	VC, PM	3
6.8.2		Box wagon, aerial	Undamaged	VC	3
6.8.3		Cable/plug	Undamaged	VC	3

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Code	Component	Quality requirement	Control criteria ¹	Irregularity class
7.1.1	Load	Not displaced	VC	5
7.1.2	Distribution of load (3.3)	Body horizontal, showing no signs of poor distribution	VC	5
7.1.3	Packages, bales, bundles, stacks (1.5)	Correctly stowed and tied together	VC	4
7.1.4	Narrow cylindrical objects (1.5)	Adequately tied	VC	4
7.1.5.1	Loading gauge (4.1)	Not fouled	VC, M	5
7.1.5.2	Loading gauge	Permissible fouling of gauge marked	VC	5
7.1.6	Load projecting beyond headstock (4.2)	No encroachment on reserved spaces	VC, M	5
7.1.7.1	Load limits (3.2), visual observation	Body showing no sign of overloading, buffers level, sufficient clearance between spring buckle and solebar	VC, M	5
7.1.7.2	Load limits (3.2), otherwise recorded	No discrepancy between consignment data and load limits. Measurement and diagnostics data are within tolerances	VC, M	5
7.1.8	Buffer wagon (4.3)	Sufficient clearances between loads or between buffer wagon and load	VC, M	5
7.1.9	Sheeting, net (6.1, 6.2)	Conditions of use adhered to	VC	4
7.1.10	Loss of load	Conditions of use adhered to. If damaged: without risk of loss of load	VC	5
7.2.1	Load projecting beyond walls or sides of wagon (5.4.1)	Adequately retained	VC	5
7.2.2	Leaning load (2.3)	Not causing damage to structural elements of wagon, or obstructing their functioning	VC	4
7.2.3.1	Load secured by stanchions (2.5 and 5.4.1)	Adequately retained	VC, M	5
7.2.3.2	Transverse lashing ropes between stanchions (2.5)	Present where required	VC	5
7.2.3.3	Load pressing against stanchions (2.5)	No distortion of stanchions	VC	5
7.2.3.4	Heavy load or one which may damage the side stanchions should it move lengthways (2.5)	Securely wedged, not touching stanchions	VC	4
7.2.4	Scotches fastened with nails (5.4.3)	Suitable, effective and correctly fixed to the floor	VC	5
7.2.5.1	Direct or indirect fastenings (5.4.4, 5.5.4)	Made from suitable and approved materials	VC	5
7.2.5.2		Sufficient and correctly fastened	VC	5
7.2.5.3		Not slack	VC	4

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Code	Component	Quality requirement	Control criteria ¹	Irregularity class
7.2.6.1	Bolsters, timbers, stretchers stowing material (5.5.5, 5.6.2, 5.8.1)	Adapted to load and visibly well positioned and secure	VC	5
7.2.6.2	Loading tackle and stowing material	Tidied away	VC	3
7.2.7	Potentially hazardous residues	Residues removed	VC	5
7.3.1	Load stability (5.1)	Ensured	VC	5
7.3.2	Goods which may be lifted by air flow, e.g., light scrap and light boards (5.2.1, 5.3.2)	Sufficiently well covered	VC	5
7.3.3.1	Goods which may fall off (vibrations, impacts) (5.2.2)	Sufficient clearance between the goods and the top of the wagon sides	VC	5
7.3.3.2	Height of dome-shaped load	Compliant with dimensions	VC	5
7.3.4	Stacked goods (5.8)	Correctly stacked, adequately bound and secured, not too high, correctly dovetailed, evenly distributed, clearances adhered to	VC	5
7.3.5.1	Load with small bearing surface (2.2)	Base provided in order to distribute weight over a greater area without damaging floor	VC	3
7.3.5.2	Concentrated loads	Suitable scotching materials of the correct dimensions	VC, M	5
7.3.6	Load liable to tip over (5.7)	Secured to avoid overturning	VC	5
7.3.7	Inclined load (5.7)	Adequately propped up	VC	5
7.3.8	Load liable to roll (5.6.1, 5.6.2)	Secured to prevent rolling	VC	5
7.3.9.1	Load able to slide lengthways (5.5.1)	Resting on suitable devices (skid, longitudinal slide arresters, lateral guide-pieces, etc.)	VC	4
7.3.9.2	Lateral guidance	In place, sufficient and with no risk of fouling the gauge or exceeding the load limit	VC, M	5
7.3.9.3	Necessary clearances	Provided	VC, M	4
7.3.9.4	Necessary room to slide	Limited in accordance with requirements	VC, M	4
7.4.1	Vehicle or machinery on wheels or caterpillar tracks (5.6.3)	Properly scotched and fastened	VC	5
7.4.2.1	Moving parts on load	Secured	VC	3
7.4.2.2	Moving parts on load	Secured. If not secured, no risk of the gauge being fouled	VC	5
7.4.3	Load supported on several wagons (5.9)	Loaded and secured in accordance with requirements	VC	5

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Code	Component	Quality requirement	Control criteria ¹	Irregularity class
7.5.1	Locking device for dollies	Auxiliary equipment, present and effective	VC	4
7.5.2.1	ILU end doors not closed	Closed (unless load unit doors back-to-back)	VC	5
7.5.2.2	ILU end doors not properly closed	Door completely closed (unless load unit doors back-to-back)	VC	4
7.5.3	Inferior wedge parts	Intact	VC	5
7.5.4	Side wall, damaged cover	Intact, locked	VC	5
7.5.5.1	Cracked sheet, holed ≤ 30 mm	Intact	VC, M	3
7.5.5.2	Cracked sheet, holed > 30 mm	Intact	VC, M	5
7.5.5.3	Load	No damage from humidity to the load or loss of load	VC	4
7.5.6	Lock for sheets, side wall	Effective	VC	5
7.5.7	Frame/load-bearing parts	Not cracked or broken	VC	5
7.6.1.1	Tank cradle	No crack > crack > 1/4 of the section	VC, M	4
7.6.1.2	Tank cradle	No crack in the weld seams	VC	4
7.6.2.1	Tank body	Tight: no leak or loss of load	VC	5
7.6.2.2	Tank body	No distortion with sharp edges and risk of loss of load	VC	4
7.6.3.1	Tank equipment	Tank cladding, sunroof, insulation not damaged	VC	4
7.6.3.2	Tank equipment	Tank cladding, sunroof, insulation not loose	VC	5
7.6.4.1	Reinforcement, filling and emptying equipment, underneath	No loss of load	VC	5
7.6.4.2	Valves or spouts, underneath	Not damaged	VC	4
7.6.4.3	Screw cap, underneath, RID load	Tightly sealed	VC	4
7.6.4.4	Screw cap, underneath, non-RID load	Tightly sealed	VC	3
7.6.4.5	Blind flange, underneath	Present	VC	4
7.6.4.6	Blind flange, underneath, RID load	No securing bolt missing or loose	VC, PM	4
7.6.4.7	Blind flange, underneath, non-RID load	No securing bolt missing or loose	VC, PM	3
7.6.4.8	Blind flange, underneath, non-RID load	Not more than one securing bolt missing or loose	VC, PM	4

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Code	Component	Quality requirement	Control criteria ¹	Irregularity class
7.6.4.9	Bottom valve indicator device, LU, and empty wagons that have not been cleaned (RID load)	In “closed” position	CV	5
7.6.4.10	Bottom valve indicator device, LU, empty (non-RID load)	In “closed” position	CV	3
7.6.4.11	Bottom valve emergency control device	Not screwed in	CV	5
7.6.4.12	Filling and emptying equipment, underneath	“Closed” body	CV	5
7.6.4.13	Filling and emptying equipment, underneath	Efficient visible locking devices	CV	4
7.6.5.1	Reinforcement, filling and emptying equipment, above	No loss of load or of gas (does not concern ventilation devices)	CV	5
7.6.5.2	Dome cover	Present, closed, visibly locked	CV	5
7.6.5.3	Other upper reinforcements	Properly locked	CV	4
7.7.1	Load unit on carrier wagon	Within load requirements for wagon	VC	5
7.7.2	Load unit on carrier wagon	All corner castings engaged on their respective spigots	VC	5
7.7.3	- reserved -			
7.7.4	Semi-trailer	Air suspension emptied	VC	5
7.7.5	Semi-trailer	Raiseable underrun bumpers in correct position according to compatibility code of the recess wagon and with no contact with the carrier wagon	VC	3
7.7.6	Semi-trailer	On semi-trailers with P coding: no contact between semi-trailer and wagon other than through wheels and trestle	VC	4
7.7.7	Semi-trailer	On semi-trailers with N coding: no contact between semi-trailer and wagon other than through wheels, skids and longitudinal members in the intended support areas	VC	4
7.7.8	Scotching of semi-trailer	Correct scotching	VC	4
7.7.9	Loading into load unit	No visible signs of distortion	VC	5
7.8.1	Markings, coding for combined traffic	At least one present and legible	VC	5
7.8.2	Wagon coding indicating permissible load units	Marking present on wagon	VC	5
7.8.3	Load unit (ILU) with upper corner castings	CSC safety plate present	VC	4
7.8.4	“High voltage” warning sign on ILU with ladder access	Present	VC	4

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Code	Component	Quality requirement	Control criteria ¹	Irregularity class
8.1.1	All wagons	No trace following derailment	VC	5
8.1.2	All wagons	No trace following abnormal shunting impact	VC	5
8.2.1	All wagons	No trace following flooding or damage due to poor weather	VC	5
8.2.2	All wagons	No trace of damage due to current start-up	VC	5
8.2.3	All wagons	No trace left by fire	VC	5

¹ VC = visual check; M = measurement; HT = hammer test; OP = operate; PM = pull or move the components

APPENDIX 9, ANNEX 6

- reserved -

-

APPENDIX 9, ANNEX 7

- reserved -

APPENDIX 9, ANNEX 8

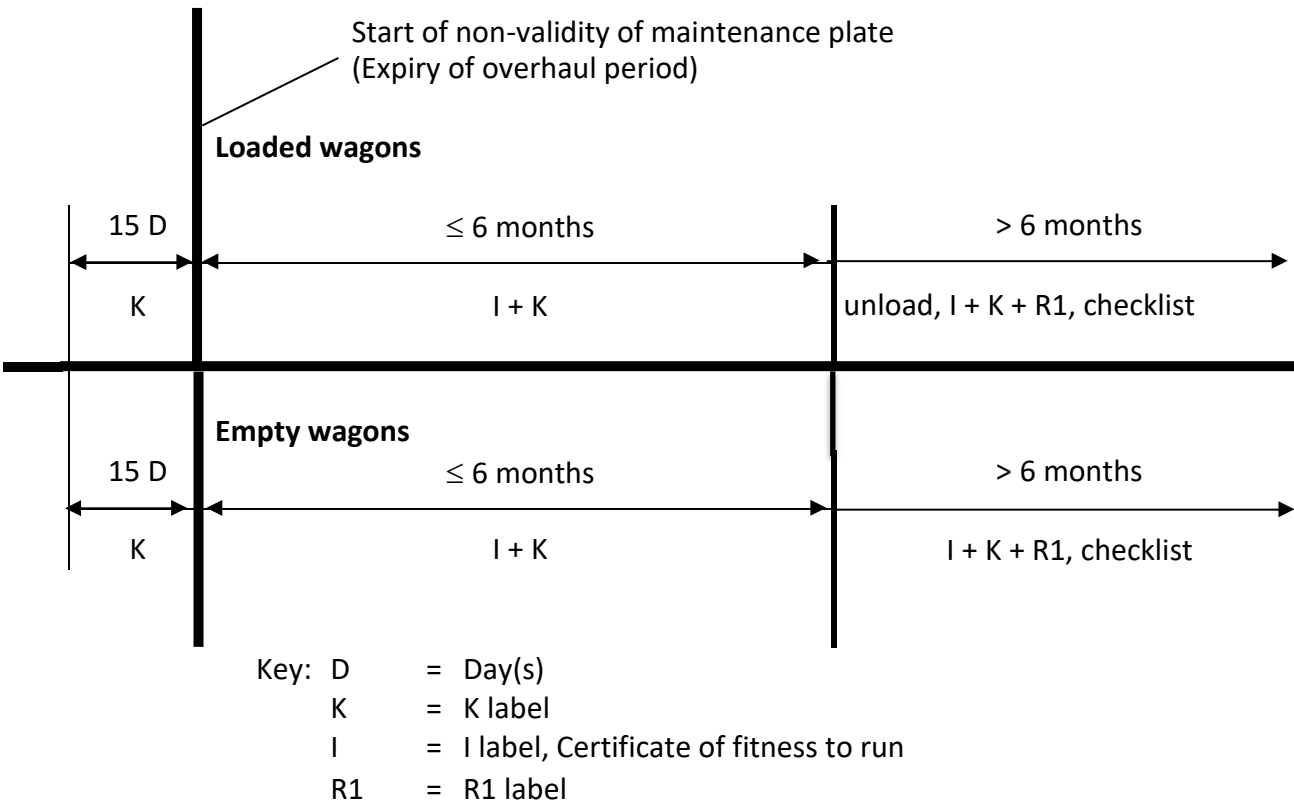
Handling of wagons

1. With an expired maintenance plate (or expired overhaul period)

Empty and loaded wagons with an expired maintenance plate (overhaul period exceeded) must be accepted.

Since wagons whose overhaul period is expired are no longer formally authorised to run, special measures must be taken at the time of expiry of the overhaul period to record and certify their fitness to run.

- 1.1
- Until the expiry of the overhaul period, empty wagons and loaded wagons shall be treated in the same way. After expiry of this period, extended as appropriate by 3 months if the vehicle carries the “+3M” marking, a distinction shall be made between empty and loaded wagons. The details are given in the following diagram:



- 1.2
- The issuing of an I label (certificate of fitness to run) is always based on an examination of fitness to run. For wagons whose overhaul period is exceeded up to six months, this examination shall consist of a Technical Transfer Inspection as defined in section 2 (Appendix 9 to the GCU). If no damage or irregularity preventing the continued conveyance of the wagon without a speed limit is noted, the wagon should be labelled with K and I labels. These wagons, which are fit to run without restriction, shall be handled like damaged vehicles carrying labels and can therefore be included in or remain part of any scheduled train service.

Note concerning the procedure:

The initial examination by the qualified staff is crucial. This shall be carried out according to when the overall period expired (see diagram) and remains valid until the wagon arrives at the destination station or the workshop where the overhaul is to take place. In this case, qualified staff shall act in accordance with their own practical experience.

- 1.3 The wagons shall be removed from the train after reporting of damage or irregularities which have led to a speed restriction. Onward conveyance of these wagons is only authorised after repair or as exceptional consignments (EC).
- 1.4 Empty and loaded wagons with an overhaul period that has been exceeded by over 6 months and under 5 years must be removed; loaded wagons must also be unloaded. Onward conveyance is only authorised once the examination of fitness to run has been conducted in accordance with the specific checklist (**Annex 9**).
- 1.5 The costs incurred are to be invoiced to the keeper in accordance with the GCU, article 22.4, first bullet point. The formal damage report described in Appendix 4 to the GCU is to be attached to the invoice as evidence. The costs shall include the cost of conducting the examination of fitness to run, the filling out and affixing of the I label and the cost of operation. If the overhaul period is exceeded, the invoice shall include all the resulting costs.

2. With an exceeded max. load limit

Instructions on the procedure to follow for onward conveyance following identification of overloading and for taking the necessary corrective measures

In the event that the maximum load per wheel, wheelset or wagon has been identified as exceeded by means of technical measuring devices (train inspection devices) or on the evidence of visible signs on the wagon, or if other irregularities have been noted, the following procedure must be applied.

Once the wagon has been removed, the weight of the wagon, wheelset or wheel must be checked by means of scales should no data from the dynamic measurement systems in the infrastructure be available.

Wheelset overloading percentage:

On detection, a value “C” must be measured for the load, taking into account the accuracy of the means of measurement “p”. The overload percentage is calculated using the following formula:

$$\% \text{ overload} = 100 \times ((C(1-p^*)/\text{nominal load}) - 1)$$

* If the accuracy of the means of measurement is unknown, “p” = 0 is applied.

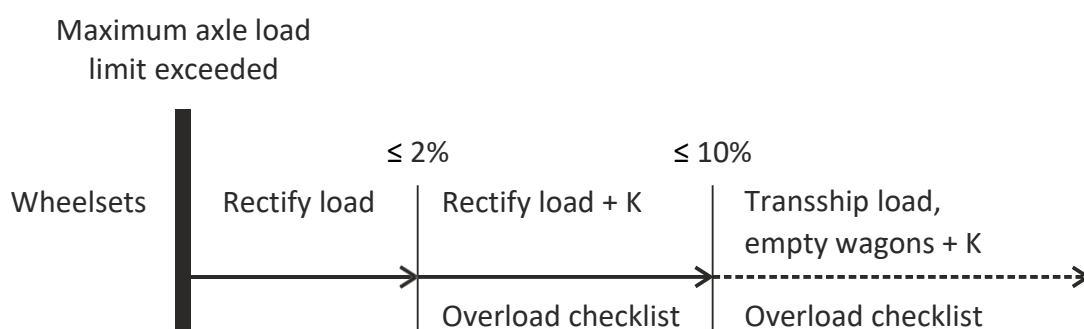
- If wheelset overload exceeds 2% and is less than or equal to 10%, the load must be rectified. A visual check shall be performed in accordance with the “overloading” checklist (**Annex 9**). The wagon shall be marked with the K label.
- If wheelset overload exceeds 10%, transshipment is required. Following a technical assessment, the wagon shall be marked with the K label in accordance with the “overloading” checklist (**Annex 9**) and conveyed empty to a workshop located nearby.

If the permissible wheelset load cannot be identified on the wheelset, the wagon must be conveyed to a workshop located nearby.

Wheelset markings

If wheelset overload is greater than 2%, the wheelset must be marked with a white cross on the axle.

Summary:



3. With an exceeded concentrated load

Instructions on the procedure to follow for onward conveyance following identification of exceeded concentrated load and for taking the necessary corrective measures

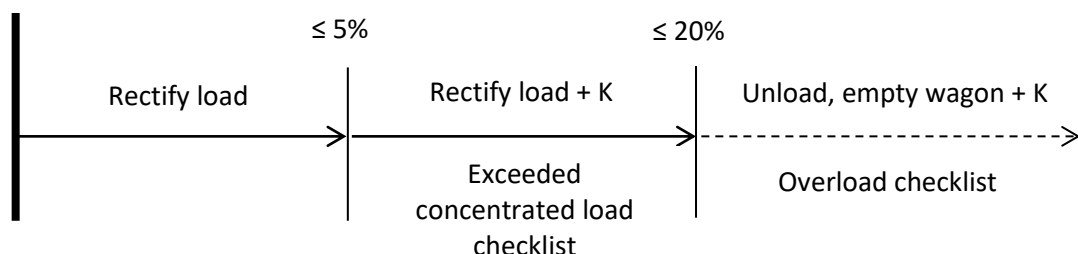
- Visual assessment of wagon with exceeded concentrated load
- Calculation of load weight by means of scales or from information on the consignment note
- Calculation of exceeded concentrated load percentage compared to the inscriptions on the wagon in accordance with number 3.4 of the UIC Loading Guidelines, Volume 1

Exceeded concentrated load and procedure:

- If less than or equal to 5%, the overload is simply rectified.
- If greater than 5% and less than or equal to 20%, the overload must be rectified. A visual check shall be performed in accordance with the “exceeded concentrated load” checklist (**Annex 9**). The wagon shall be marked with the K label.
- If wheelset overload exceeds 20%, transshipment is required. Following a technical assessment, the wagon shall be marked with the K label in accordance with the “overloading” checklist (**Annex 9**) and conveyed empty to a workshop located nearby.

Summary:

Exceeded concentrated load



4. With wheels displaying the criteria for thermal overload as per code 1.2.2

For wheels displaying indications of thermal overload as per code 1.2.2 and **NOT** being marked as being able to withstand high thermal stresses:

- measure the widening of the inner faces (E value) at the running surface of the rail at 3 points, at distances of 120°, and verify code 1.7.1
- inspect the tread for isolated cracks in the cross-section (see code 1.3.6.4)
- inspect the rim and web for cracks/breaks (see code 1.3.6.5)
- complete **Annex 12** (Traceability)

For wheels being marked as being able to withstand high thermal stresses:

- inspect the tread for isolated cracks in the cross-section (see code 1.3.6.4)
- inspect the rim and web for cracks/breaks (see code 1.3.6.5)

5. Equipped with a DET (derailment detector)

- Tracing a tripped detector:

When a tripped detector is detected, the wagon (all axles) must be examined in accordance with the checklist (**Annex 9**) in order to determine the cause. If it has proved impossible to identify the cause, reset the display unit of the detector by pressing on the red flap of the trip indicator.

- DET not airtight (air leakage):

Isolate the detector using the handle and replace it as soon as possible.

- Yellow lever handle in a vertical position: detector tripped
- Yellow lever handle in a horizontal position: detector not tripped

Resetting:

The DET only resets itself automatically once the main brake pipe is fully drained; only then can the main brake pipe be refilled.

The trip indicator (red flap) remains visible at all times and must be reset manually once the pressure in the main brake pipe is zero.

After inspection of the wagon, the trip indicator may be reset.

APPENDIX 9, ANNEX 9

Checklists

These checklists must be followed in their entirety in addition to the criteria in Annex 1. Where applicable, reasons for unfitness to run must be indicated. The measured values must be documented for the purpose of traceability (Annex 12).

1. INSPECTION OF FITNESS TO RUN FOR WAGONS WITH AN EXPIRED MAINTENANCE PLATE

- **Reference: Annex 8**, point 1.4: empty wagon with a maintenance plate (overhaul period) that has been expired for at least 6 months and for a maximum of 5 years.
- **The measured values of the wheelsets must be documented for the purpose of traceability (Annex 12).**

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
Provisions common to vehicles with individual axles and bogies				
1	Is the wagon marked with an interoperability sign conform to point 6.1.1.2 and 6.1.1.3 of Annex 1 ?	Yes No	2 12.2	
2	Is the loading gauge of the participating RUs respected?	Yes No	3 2.1	
2.1	Have the participating RUs agreed for the wagon to be handed over?	Yes No	3 12.2	
3	Do the wheelsets have an identification mark?	Yes No	3.1 12.2	Ask the keeper and wait for his written confirmation.
3.1	Does the keeper confirm that the overhaul date has not been exceeded?	Yes No	4/4.1 12.2	If not possible, 12.2
4	Does the wheel tyre thickness conform to the criteria of point 1.1.1 of Annex 1 ?	Yes No	5 12.2	Measure
4.1	Or Does the groove marking the minimum thickness for one-piece wheels conform to the criteria of point 1.2.1 of Annex 1 ?	Yes No	5 12.2	

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
5	Are there signs of damage due to an incident, derailment, violent shunting impacts or thermal overload (with the exception of wheelsets marked as being able to withstand high thermal stresses)?	Yes No	5.1 5.2	
5.1	Do the values S_d , S_h , qR and E lie within the permissible limits and is there no sign that the wheels are misaligned with the axle?	Yes No	6 12.2	Measure (for the E value measure at 3 points)
5.2	Do the values S_d , S_h , qR and E lie within the permissible limits and is there no sign that the wheels are misaligned with the axle?	Yes No	6 12.2	Measure (for the E value measure at 1 point)
6	Does the distance between active surfaces (S_R) satisfy the following criteria: – no more than 1426 mm? – at least 1410 mm for a wheel diameter > 840 mm? – at least 1415 mm for a wheel diameter ≤ 840 mm?	Yes No	7 12.2	
7	Is the wagon visibly fitted with a uniform type of suspension springs?	Yes No	8 12.2	
8	Does the buffer height lie within the permissible tolerances?	Yes No	9 12.2	Measure
9	Does the wagon have superstructures liable to rotate, be displaced or otherwise move during the journey?	Yes No	10 11	
10	Are there sufficient devices outwardly visible for securing moving superstructures and are they present and effective?	Yes No	11 12.2	
11	Is the wagon otherwise free of safety-critical damage or defects?	Yes No	12.1 12.2	
	Results of the examination of fitness to run	Measures		
12.1	The wagon may continue to run empty at the marked speed (with the brake isolated).	Fill out the Label I, indicate wagon as fit to run.		
12.2	The wagon may not be included in trains in its present condition.	Do not fill out the Label I, indicate wagon as unfit to run, giving reasons.		

2. INSPECTION OF FITNESS TO RUN FOR AN OVERLOADED WAGON (EXCEEDED LOAD LIMIT) OR EXCEEDED CONCENTRATED LOADS

- **Reference: Annex 8, point 2:** procedure for onward conveyance following identification of overloading and for taking the necessary corrective measures.
Annex 8, point 3: procedure for onward conveyance following identification of exceeded concentrated loads and for taking the necessary corrective measures.
- **The measured values of the wheelsets must be documented for the purpose of traceability (Annex 12).**

Wagon checklist for overloading and exceeded concentrated loads

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
Inspection of wagon overloading or exceeded concentrated loads				
Inspection of wagon overloading				
1.1	Wheelset: > 2% and ≤ 10% overload	Yes No	2.1 1.2	
Inspection of wagon overloading or exceeded concentrated loads				
1.2	Wheelset: > 10% overload or > 20% exceeded concentrated loads	Yes No	2.2 1.3	
Exceeded concentrated loads				
1.3	Has the registered concentrated load been exceeded by more than 5% or less than/equal to 20%?	Yes No	5 8	
Axles/running gear				
2.1	Axle free of visible damage that would necessitate detachment of the wagon?	Yes No	2.3 9.2	Visual check
2.2	Axle free of visible damage that would necessitate detachment of the wagon and E value within permissible tolerance range?	Yes No	2.3 9.2	Visual check; for the E value, measure at 3 points
2.3	Bogie frame free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	3 9.2	Visual check
Springs				
3	Suspension springs and set of suspension free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	4 9.2	Visual check
Brake				
4	Brake rigging free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	5 9.2	Visual check

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
	Draw/pushing device			
5	Draw/pushing device free of damage, deformation and cracks that would necessitate detachment of the wagon and buffer height within permissible tolerance range?	Yes No	6 9.2	Visual check and measurement
	Underframe			
6	Underframe free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	7 9.2	Visual check
	Wagon body			
7	Vehicle superstructure free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	9.1 9.2	Visual check
	Other irregularities			
8	Is the wagon otherwise free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	9.3 9.2	Visual check
	Results of the examination of fitness to run	Measures		
9.1	a) The wagon is fit to run in the event of overloading exceedance >2% and ≤ 10% exceeded concentrated loads >5 % and ≤ 20% b)The wagon is fit to run in the event of: overloading exceedance >10% or exceeded concentrated loads > %	a) Loading adjustment, affix K label and report the wagon as being fit to run b) Unload the wagon, affix K label, transport the wagon to a workshop in close geographical proximity		
9.2	The wagon is not fit to run and, in its present state, cannot be added to a train.	Report the wagon as being unfitted to run and provide the reasons		
9.3	No significant overload or exceedance of the concentrated load to justify application of the checklist	Indicate that there is no relevant overload as per the checklist		

3. - RESERVED -

4. INSPECTION OF FITNESS TO RUN IN THE EVENT OF IRREGULARITIES IN OPERATIONS

- **Reference: Annex 1**, code 8.1: additional handling of the wagon following irregularities in operations
- **The measured values of the wheelsets must be documented for the purpose of traceability (Annex 12).**

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
Provisions common to vehicles with individual axles and bogies				
1	Is the wagon marked with an interoperability sign conform to points 6.1.1.2 and 6.1.1.3 of Annex 1 ?	Yes No	2 15.2	
2	Is the loading gauge of the participating RUs respected?	Yes No	3 2.1	
2.1	Have the participating RUs agreed for the wagon to be handed over?	Yes No	3 15.2	
3	Has the wagon derailed?	Yes No	5 4	
4	Has the wagon sustained an abnormal buffering shock or an impermissible operating shock?	Yes No	6 15.1	
5	Is the derailment speed known?	Yes No	7/7.1 7/7.1	To document in km/h
6	Is the buffering speed known?	Yes No	10 10	To document in km/h
7	Does the wheel tyre thickness conform to the criteria of point 1.1.1 of Annex 1 or Does the groove marking the minimum thickness for one-piece wheels conform to the criteria of point 1.2.1 of Annex 1 ?	Yes No Yes No	8 15.2 8 15.2	To measure
8	Do the values S_d , S_h , qR and E lie within the permissible limits?	Yes No	9 15.2	For value E , measure at three points.
9	Does the distance between active surfaces (S_R) satisfy the following criteria: – no more than 1426 mm? – at least 1410 mm for a wheel diameter > 840 mm? – at least 1415 mm for a wheel diameter ≤ 840 mm?	Yes No	10 15.2	
10	Is the wagon visibly fitted with a uniform type of suspension springs?	Yes No	11 15.2	

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
Provisions common to vehicles with individual axles and bogies				
11	Does the buffer height lie within the permissible tolerances?	Yes No	12 15.2	To measure
12	Does the wagon (or its load) have superstructures liable to rotate, be displaced or otherwise move during the journey?	Yes No	13 14	
13	Are there sufficient outwardly visible devices for securing moving superstructures (or their loads) and are they present and effective?	Yes No	14 15.2	
14	Is the wagon otherwise free of safety-critical damage or defects?	Yes No	15.1 15.2	
Results of the examination of fitness to run		Measures		
15.1	The wagon may continue to run at the marked speed as an exceptional consignment.	Fill out the Label I, indicate wagon as fit to run.		
15.2	The wagon may not be included in trains in its present condition.	Do not fill out the Label I, indicate wagon as unfit to run, giving reasons.		

5. EXAMINATION OF THE ABILITY TO RUN OF WAGONS EQUIPPED WITH DET (DERAILMENT DETECTOR)

- **Reference:** Appendix 8, point 5, procedure for onward carriage following the tripping of a DET

Checklist of wagon with DET

1	2	3	4	5
Number	Question	Answer	Go to number	Comments
Checklist of wagon with tripped DET				
Wheel centre				
1	Running surface and flange free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	2 5.2	Visual check
Axles/running gear				
2	Axles and axle boxes free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	3 5.2	Visual check
Bogie				
3	Bogie free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	4 5.2	Visual check
Connection between bogie and underframe				
4	Bogie suspension free of damage, deformation and cracks that would necessitate detachment of the wagon?	Yes No	5.1 5.2	Visual check
Results of the examination of fitness to run		Measures		
5.1	The wagon is fit to run.	Indicate that the wagon is fit to run and reset the DET		
5.2	The wagon is not fit to run and, in its present state, should not be added to a train.	Indicate that the wagon is not fit to run, providing the reasons		

APPENDIX 9, ANNEX 10

- reserved -

- reserved -

APPENDIX 9, ANNEX 11

I, K, M, R1 and U labels – General

The labels mentioned in **Annexes 1** and **8** (I, K, M, R1 and U) must be printed in either German, French or English. Translations into other languages can be attached. When used, they must always be filled out completely.

As a complement to the traceability provided by the labels, visible damage must be marked in crayon.

LABEL I

RU's symbol	Certificate of fitness to run		Label I
The wagon with the number			
			Wagon type _____
Keeper (VKM or full address)			
was inspected with regards to its fitness to run. It makes one further journey empty/loadeds*), running on its own wheels and without restriction to the speed marked on the wagon			
from	to		
Departure station	Country code	Destination station**	
Issuing office,	on		
Date	Technical staff Name in capitals		
		Signature	

*) delete as appropriate
**) If known

yellow, size roughly 148 x 210 mm

Label I is used to indicate a vehicle's fitness to run following examination of fitness after the examination of fitness to run as set out in **Annex 9**.

Label I is to be affixed to both sides of the wagon, next to the K label.

LABEL K

(RU's symbol)	Wagon Number -	Label K	
As per catalogue of irregularities, GCU Appendix 9, Annex 1	Do not reload / To be repaired following		
1 Running Gear 5 Buffing and draw gear	2 Suspension 6 Wagon body	3 Brake 7 Loads and load units	4 Wagon under-frame and bogie 8 Miscellaneous
Other details _____			
Stamp of issuing office	Date of stamping	Signature	
For issuing RU 's			

blue, size roughly 148 x 210 mm

K labels serve to indicate that there is a problem with the wagon or load unit, but that these can – for the time being – continue to be operated. However, the problems must be resolved prior to reloading; any reloading of the wagon will lead to its withdrawal.

The defect code must be filled out completely in accordance with GCU Appendix 9, **Annex 1**:

1. Circle or tick the number of the defect group/category
2. Enter the exact defect number in the empty boxes

K labels are to be affixed to both sides of the wagon in a clearly visible position, close to the label-holder or on the inscription plates. The printed version of the K label must contain the data provided for by this annex.

LABEL M

(RU's symbol) As per catalogue of irregularities, GCU Appendix 9, Annex 1	Wagon number To be inspected	Label M
1 Running gear 2 Suspension 3 Brake 4 Wagon under-frame and bogie 5 Buffing and draw gear 6 Wagon 7 Loads and load units		
Other details		
Stamp of issuing office	Date of stamping	Signature
For issuing RU 's use		

White, size roughly 148 x 210 mm

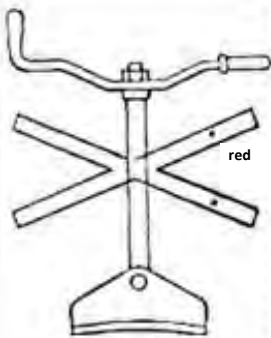
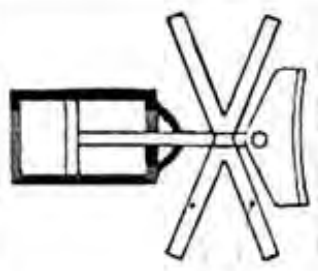
Label M is used to record wagon damage and defects that do not prevent the vehicle from continuing to run or being reloaded, but which require particular examination by the user RUs.

The defect code must be filled out completely in accordance with GCU Appendix 9, **Annex 1**:

1. Circle or tick the number of the defect group/category
2. Enter the exact defect number in the empty boxes

M labels are to be affixed to both sides of the wagon in a clearly visible position close to the label-holder or on the inscription plates. The printed version of the M label must contain the data provided for by this annex.

LABEL R1

	(RU's symbol) Label R1 Brake defective Observations _____ _____ _____ (Date of sampling) _____ (Signature) _____	
---	---	---

white, size roughly 105 x 210

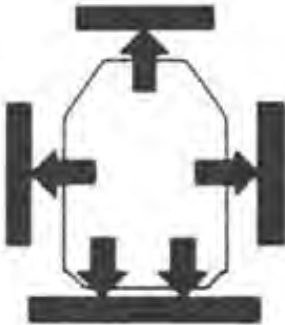
Label R1 is used to mark wagons with defective brakes or brakes that must not be used for specific reasons. If the brake in question is the handbrake (operated from the wagon platform or from the ground) then the inapplicable right-hand part of the label should be removed, while if the air brake is defective, the left-hand part of the label R1 does not apply and should be removed accordingly.

Label R1 is to be affixed to both sides of the wagon close to the brake stopcock or near the braked weight marking.

LABEL U

Label for Exceptional Consignments

(RU's symbol)

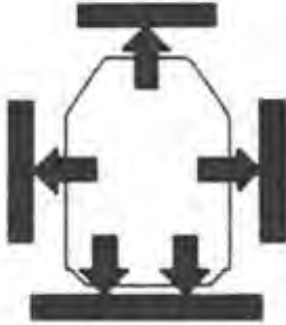


For label-holder

Total load	Load per metre	Maximum axle load
7+8 t	9 t/m	10 t

(RU's symbol)..... / (no.)

Label U (RU's symbol)



For label-holder

Total load	Load per metre	Maximum axle load
7+8 t	9 t/m	10 t

(RU's symbol)..... / (no.)

Part	Lateral distance from wagon centre-line on		Height above rail level	Longitudinal distance from end wheelset / bogie centre	
	one side	other side		14 0j mm	15 0j mm
	12a mm	12b mm	13 mm		
A					
B					
C					
D					

Part	Lateral distance from wagon centre-line on		Height above rail level	Longitudinal distance from end wheelset / bogie centre	
	one side	other side		14 0j mm	15 0j mm
	12a mm	12b mm	13 mm		
A					
B					
C					
D					

(RU's symbol)



(RU's symbol)..... (no.)

Separate and attach to consignment note

White or blue, size roughly 210 x 210/50 mm

Label U is used to indicate Exceptional Consignments (EC) in accordance with number 7, Volume 1, of the Loading Guidelines. The provisions of UIC IRS 50502 apply to consignments of this kind. A further application is specified in **Annex 8**.

Label U is to be inserted in the label holder on both sides of the wagon.

VERSION: 1ST OF JANUARY 2026

107

- reserved -

APPENDIX 9, ANNEX 12

Traceability

The results of measurements by the user RU must be available in electronic format or on paper for a period of at least 2 years. The documentation remains as evidence of activity for the user RU.

Erfassung Radsatzdaten von Wagen im Betrieb Saisie de données d'essieu de wagon en exploitation Registration of axle data for operating wagon

Wagennummer: Numéro du wagon: Wagon number:				Gattung: Type: Type:			
Halter: Détenteur: Keeper:				E-Mail / Fax:			
Grund der Vermessung / Cause de la mesure / Reason for measurement:							
Entgleisung Deraillement Derailment		Thermische Überbeanspruchung Surcharge thermique Thermal overload		Lauffähigkeitsuntersuchung Examen d'aptitude à la circulation Fit-to-run inspection			
8L 7L		6L 5L		4L 3L		2L 1L	
2		6		4		2	
8R 7R		6R 5R		4R 3R		2R 1R	
1L		2L		3L		4L	
5L		6L		7L		8L	
1R		2R		3R		4R	
5R		6R		7R		8R	
Sh							
Sd							
qR							
E1							
E2							
E3							
S _R							
Vermessen von / Mesuré par / Measurements taken by:							
Name:				Vorname:			
Nom:				Prénom:			
Surname:				First name:			
Tel. Nr.:				Ort:			
N° de tél.:				Lieu:			
Tel. no.:				Location:			
Spurkranzlehre-Nummer:							
Numéro de jauge:							
Gauge no. (wheel flange):							
Spurmesslehre-Nummer:							
Numéro de calibre de mesure:							
Gauge no. (back-to-back distance):							
Werte eingehalten?		Ja		* Nein		Schadensprotokollnummer:	
Valeurs respectées?		Oui		* Non		Numéro du procès verbal:	
Values compliant?		Yes		* No		Damage report no.:	
Massnahmen erforderlich?		Ja		Nein		Bemerkungen:	
Suite à donner?		Oui		Non		Remarques:	
Follow-up action required?		Yes		No		Remarks:	
Wenn Ja, welche?							
Si oui, laquelle?							
If so, what?							
Datum:				Unterschrift:			
Date:				Signature:			
Date:				Signature:			

APPENDIX 10

**TO THE GENERAL CONTRACT OF USE
FOR WAGONS (GCU)**

**MINIMUM CONDITION AND MEASURES TO RESTORE
FITNESS TO RUN OF WAGONS**

TABLE OF CONTENT

A. CORRECTIVE MAINTENANCE

- 0. Principle
- 1. Running gear
- 2. Suspension
- 3. Brake
- 4. Wagon underframe and bogies
- 5. Buffing and draw gear
- 6. Vehicle body and accessories

B. HANDLING OF WAGONS AFTER AN INCIDENT

- 0. Principle
- 1. Derailment
- 2. Exceptional impacts
- 3. Overloading and exceeded concentrated loads
- 4. Flooding
- 5. Contact with energised catenary

Annex 1 – Signs indicating out-of-roundness on wheels

Annex 2 – Diagram of the Y25 bogie suspension

Annex 3 – European Visual Inspection Catalogue (EVIC) for axles

Annex 4 – Composite brake blocks: when to replace and not to replace

Annex 5 – Verification and handling of grease/oil deposits on wheels and axle boxes

Annex 6 – Coding of repair work

Annex 7 – Damage codes – Modules assignment

INTRODUCTION

Appendix 10 is intended for use by staff in workshops¹⁾ and collates in a single text all the provisions governing the minimum condition for parts (in accordance with the criteria set at international level) on leaving the workshop.

It comprises two chapters.

Chapter A (Corrective Maintenance) is structured in the same way as Annex 1 to Appendix 9 (Catalogue of Irregularities). This structure is as follows:

- Modules with measures to restore the fitness to run
- Minimum condition and limit values for dimensions
- Indications – Accepted and prohibited practices

From 1 January 2024, the text passages on the minimum condition and limit values in Chapter A will gradually be replaced by so-called modules. Modules describe a package of works (measures) to be carried out. Until all modules are fully included, both the modules and the previous text passages are listed side by side in Chapter A. Modules and text passages do not contradict each other. The implementation of the modules is mandatory and must be carried out in accordance with the table in Annex 7 GCU.

The measures to restore the fitness to run are composed of:

- Technical requirements: special conditions that need to be in place in the workshop, in order to carry out maintenance operations (for example, pits, measuring tracks, torque wrenches).
- Organisational preparations: organisational measures e.g.: procuring materials, communicating with the keeper beforehand, etc. in order to carry out the maintenance operations.
- Work task: Describing the technical maintenance operations to be carried out on the vehicle or component.
- Technical target state: written descriptions of the individual steps, criteria to be met/limit values.
- Additional notes: references to other parts of the GCU esp. Appendix 10, information regarding the carrying out of individual steps, and safety-related information, where necessary.
- Documentation: special requirements for documenting the maintenance operations carried out; The documentation of the performed maintenance operations shall be done by naming the number of the measure to restore the fitness to run.

The measures to restore fitness to run with a title containing "remove/install" or "detach/attach" are authorised both for the replacement of damaged parts or components and for the removal/installation or detaching/attaching of parts or components essential for the technical performance of the maintenance (e.g. detaching/attaching of a wheelset to gain access to the damaged bogie component).

For the replacement of parts or components the provisions described in the module concerned, as well as Appendix 7, must be complied with.

Chapter B sets out provisions for dealing with wagons after specific incidents which have caused, or potentially caused, damage.

The markings and signs that wagons must carry are given in GCU Appendix 11. Appendix 10 only covers those markings that can lead to a wagon being withdrawn from service under the terms of GCU Appendix 9.

¹⁾ A workshop is a body comprising the management, staff, installations and tools necessary for the execution of corrective and preventive maintenance on wagons and/or their component parts. Mobile units are considered to be workshops if they operate independently and meet the aforementioned conditions.

A. CORRECTIVE MAINTENANCE

0. Principle

- 0.1. The keeper must ensure that wagons are restored to a condition making them fit for normal service in terms of load safety and conservation. To do so, he has recourse to the services of an Entity in Charge of Maintenance, one of whose responsibilities (as set out in EU Regulation 2019/779 and the corresponding COTIF rules) is to define a preventive maintenance plan and instructions, which the keeper must apply.
- 0.2. Wagon keepers, customers of repair work and workshops must all ensure that wagons are free from defects that are liable to lead to the vehicle being removed from service again, based on the provisions of Appendix 9 on the instructions issued for repairs to be carried out and Appendix 10, Chapter A (and where appropriate also Chapter B) on the actual execution of repair work.
- 0.3. If a RU has marked damages on a freight wagon to be repaired in accordance with Appendix 9, Annex 11 of the GCU before the wagon is brought into a workshop, these markings must be removed by the workshop before the wagon is handed over to an RU. Any marking on the wagon and/or its parts regarding non-repaired damages must remain.
- 0.4. Chapter A of Appendix 10 contains criteria and guidance to be applied by workshops to remove irregularities as understood by Appendix 9. The measures carried out and documented under Appendix 9 (e.g., Annex 12) do not need to be repeated under Appendix 10. For measurements carried out under Appendix 10, suitable and calibrated measuring instruments should be used, following the provisions set out in EN ISO 10012 on processes and measuring instruments.
- 0.5. It is not necessary to apply the whole of Chapter A of Appendix 10 each time a wagon is sent to a workshop, only those provisions relating to the damage that is to be repaired. Irrespective of the reason for a wagon's withdrawal from service, compliance with those provisions of module M00.002* is required systematically whenever a wagon is sent to the workshop
- 0.6. For any repair works the workshop must ensure that no other parts or components of the wagon and their coating/painting are damaged by these operations. Appropriate measures (e.g. by protecting parts) must be taken.
- 0.7. Loading residues in the wagon, which hinder repair works, can be removed by the workshop.
- 0.8. If the workshop is not in a position to restore the wagon to the minimum specified condition, the vehicle must be handled in accordance with the keeper's instructions (procedure as per Appendix 9).
- 0.9. One-sided lifting of the wagon is only permitted with the appropriate marking (according to Appendix 11, 7.1, 7.2 and 7.3). When lifting wagons, the permissible ramp angles must be observed (marking according to Appendix 11, 2.12). Lifting at the buffer is not permitted. Lifting with mounted bogies is permitted, if the bogie and underframe are locked together in a suitable manner, in order to unburden the load of the fastening of the centre casting kingpin. Hydraulic and pneumatic hoses, as well as electrical lines must not be damaged, kinked or disconnected without keeper instruction (1.36).
- 0.10. If repair welding and heat straightening has not been explicitly allowed, prior authorisation from the keeper is required according to M00.001.
- 0.11. In the work modules, special action requirements are indicated by symbols; the symbols mean:
 -  Workshop and wagon keeper establish contact (usually by e-mail)
 -  Reference must be taken into account
 -  Information, which has to be transmitted in addition to Annex 6 of Appendix 10 GCU to the wagon keeper

Modules with measures to restore the fitness to run

M00.001 Keeper instructions to be obtained

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Compile information on damage
2.	☒ Contact the keeper regarding further action and, if necessary, request replacement parts with →Form H in accordance with Appendix 7

M00.002*: Additional inspections by the workshop

Technical requirements:	None
Organisational preparations:	☒ None
No.	Work tasks, technical target state and additional notes
1.	Wheelsets of wagons: - not fitted with LL blocks (only for an EVIC test according to No. 3) - fitted with LL blocks are to be inspected as follows: - Inspect running surfaces of wheelsets →1.6.1 - Inspect the wheels visually in accordance with the criteria for thermal overload →1.18 <i>Additional notes: for non-permissible deviations, possibly carry out brake test to determine cause of damage →M03.002 and replace the damaged wheelsets →M01.001</i>
2.	Wagons with tyred wheels must be inspected and dealt with as follows: - Check that the tyre is firmly in place on the wheel body. - The date, as well as that of the previous inspection, are recorded in the plate along with the initials of the RU and the workshop that performed the inspection →Appendix 11, 7.5 <i>Additional notes: for non-permissible deviations, possibly carry out a brake test to determine the cause of the damage →M03.002 and replace the damaged wheelsets →M01.001</i>
3.	Inspection of the wheelsets: Inspection against EVIC →M01.002
4.	Inspection of the buffing gear according to the following points: →5.3.2 (<i>Additional notes: for non-permissible deviations, the affected buffers and/or missing fixing bolts are to be replaced according to →M05.003</i>) →5.7 (<i>Additional notes: for non-permissible deviations, the affected buffers are to be replaced according to →M05.003 and/or missing rivets or fixing bolts on the buffer heads are to be replaced according to →M00.001</i>) →5.8 (<i>Note: if necessary, lubricate buffer according to →M05.001</i>) →5.9.1 and →5.9.2 (<i>Additional notes: for non-permissible deviations, the affected buffers are to be replaced according to →M05.003 and/or the buffer heads are to be grinded in consultation with the keeper →M00.001</i>)
5.	Inspection of RID tank wagons according to followings points: →6.28, →6.29, →6.30, →6.31, →6.32, →6.34, →6.35 and →6.37 <i>Additional notes: for non-permissible deviations, the keeper shall implement further measures →M00.001</i>

1. Running gear

Modules with measures to restore the fitness to run

M01.001 Wheelset removal/installation

Technical requirements:		Wheelset lowering and/or lifting equipment
Organisational preparations:		☒ If necessary, request wheelset from the keeper with →Form H ^R in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes	
1.	Prepare wheelset removal, taking into account →1.36: • remove axle-guard tie and/or lifting guard • increase brake block clearance for unhindered removal of the wheelset • remove parts obstructing wheelset removal <i>Additional notes: secure the suspension springs against tipping when lifting the wagon or lowering the wheelset. For the removal of the axle-guard tie →M04.001</i>	
2.	Remove wheelset <i>Additional notes: observe → 0.9 when lifting the wagon</i>	
3.	Examine brake blocks in accordance with →3.7 or →3.8, where appropriate, replace →M03.003	
4.	If there is abrasion on the axle, rectify cause →M03.004	
5.	Install wheelset →1.21	
6.	Remount disassembled parts with suitable locking screws and nuts according to the previously attached connections <i>Additional notes: →M04.001 when attaching the axle-guard tie →M04.001</i>	
7.	If at least one wheelset has been replaced: measure buffer height →M05.002	
8.	Carry out a brake function test →M03.001	

M01.002: EVIC Inspection for axles

Technical requirements:		Working pit and/or lifting device; requirements in accordance with →Annex 3 point 3.1 met
Organisational preparations:		-
No.	Work tasks, technical target state and additional notes	
1.	Inspection in accordance with →Annex 3	
2.	If case A in accordance with EVIC catalogue, replace wheelset →M01.001	

M01.003: Handling of wagons after signs of thermal overload of wheelsets

Technical requirements:		-
Organisational preparations:		-
No.	Work tasks, technical target state and additional notes	
1.	Check the brake to determine the cause of the damage →M03.002	
2.	If the brake is defective: ☒ inform keeper and switch off the brake	
3.	Replace wheelset →M01.001	
4.	Check the brake blocks in accordance with →3.7 or 3.8 <i>Additional notes: where appropriate, replace the brake blocks →M03.003</i>	
5.	Check the operability of the brake if the brake is not switched off →M03.001	

M01.004: Examination and handling of wheelsets with grease leak

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Inspect the axle box: - Cracks, breakages or damages on the axle box which could provoke loss of grease - No loose or missing screws (Ask the keeper for instructions →M00.001) <i>Additional notes: If the wheelset is replaced →M01.001, the further process steps do not have to be executed</i>
2.	Assessment of the areas subject to loss of grease: Quality requirements and actions to be taken in accordance with →Annex 5
3.	☒ Keeper to be informed: Wagon number, wheelset number, position of the wheelset in the vehicle, lubricant area <i>Additional notes: The decision on whether to replace the wheelset lies with the wagon keeper. Where appropriate, replace wheelset →M01.001; If the wheelset is replaced, the further process steps do not have to be executed.</i>
4.	Wipe away grease: - Clean surface without use of chemicals (wipe away). - If necessary, marking in accordance with keeper's instructions

M01.005: Clean the faces of the tyres or rims

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Clean the faces of the tyres or rims: - No damage to the wheel centre - No damage to the coating of the wheel centre

Minimum condition and limit values for dimensions**Wheelsets**

- 1.1 The following four conditions concern the distance between the wheels, measured close to rail level, with the wagon empty or loaded, and the thickness of the flanges. They must all be met concurrently:
- 1.1.1 Distance between the active faces of the wheels, measured 10 mm down from the measuring circles:
- maximum 1426 mm,
 - for wheels with a diameter of greater than 840 mm¹⁾ at least:
 - 1418 mm for the wheelsets of 2-axle wagons with double-link suspension, suitable for running at 100 km/h with a 22.5 t axle-load and a wheelbase of 8 m or more,
 - 1410 mm for the wheelsets of other wagons,
 - at least 1415 mm for wheels with a diameter of less than or equal 840 mm.
- 1.1.2 Distance between the inner faces of tyres or rims of monobloc wheels:
- maximum 1363 mm¹⁾,
 - minimum 1357 mm for wheels with a diameter of greater than 840 mm¹⁾,
 - minimum 1359 mm for wheels with a diameter of less than or equal 840 mm¹⁾.
- The difference between the distances measured for the relevant axles must be ≤ 2 mm ($E_{\max} - E_{\min} \leq 2$ mm). Measurements must be taken in accordance with 1.17.
- 1.1.3 Wheels must show no signs of displacement along the axle.

¹⁾ These rules also apply to the intermediate axles of wagons with a 3-axle articulated underframe, but not to the intermediate axles of vehicles other than bogie wagons, nor to the intermediate axles of the bogies themselves

- 1.1.4 Thickness of the flange of one wheel, measured 10 mm below the running circle:
- minimum 22 mm for wheels of diameter greater than 840 mm,
 - minimum 25 mm for wheels of diameter less than or equal to 840 mm but greater than 760 mm,
 - minimum 27.5 mm for wheels of diameter less than or equal 760 mm.
- Flange thickness must not exceed 33 mm, irrespective of the diameter of the wheel.
These values do not apply to wheelsets with tapered flanges (e.g. certain bogies with three or more axles).
- 1.2 The diameter of the wheel running circle must not be less than:
- 840 mm for a nominal diameter of 920 to 1000 mm,
 - 760 mm for a nominal diameter of 840 mm,
 - 680 mm for a nominal diameter of 760 mm,
 - 630 mm for a nominal diameter of 680 mm.
- 1.3 The width of the tyre or rim of monobloc wheels must be:
- maximum 140 mm²⁾,
 - minimum 133 mm.

²⁾ Including the projection formed by the outer edge of the running tread

- 1.4 The height of the wheel flanges must be:
- minimum 27.5 mm for wheels of a diameter greater than 760 mm,
 - minimum 29.5 mm for wheels of a diameter greater than 630 mm, but less than or equal to 760 mm and
 - minimum 31.5 mm for wheels of a diameter less than or equal to 630 mm.
- The height of the wheel flanges must be no more than 36 mm.
- When using LL soles in wagons with a maximum speed greater than 100 km / h and a wheel diameter **greater than 760 mm**, the limit value for the height of the flange from 27.5 to 32.0 mm must be respected.
- These values do not apply to wheelsets with tapered flanges (e.g., certain bogies with three or more axles).
- 1.5 The wheel flange, measured with a gauge, must have a qR value that is always greater than 6.5 mm, with no sharp edges or burrs on the outside profile of the flange, at a distance of more than 2 mm from the upper edge (Appendix 9, Annex 4).
- 1.6.1 The wheel tread must not:
- be partly crushed,
 - display wheel flats, shelling, exfoliation or metal build-up:
 - over 60 mm in length for wheels of diameter > 840 mm and axle load ≤ 22.5 t (maximum load limit D or less);
 - over 50 mm in length (maximum load limit E) for wheels of diameter > 840 mm and axle load > 22.5 t,
 - over 40 mm in length for wheels of diameter ≤ 840 mm and > 630 mm,
 - over 30 mm in length for wheels of diameter ≤ 630 mm.
 - have cracks at the transition between the tread and the outer face or on the flange top,
 - display any hollowing or “false flange” deeper than 2 mm or any sharp-edged grooves.
 - show isolated transverse cracks on the tread of wheels with tread brakes (superficial thermal lattice-type cracking – “toad skin” cracking – is permitted).
- 1.6.2 Reserved
- 1.7 The lateral face of the wheel and the inner part of the rim or tyre (active face) must not be gouged or marked with sharp-angled notches.
- 1.8 For monobloc wheels, the wear limit of the tyres must be indicated by the bottom of a circular groove concentric with the wheel and traced on the outside surface¹⁾. This groove must always remain fully visible. It may however be partially obscured by dirt providing this does not detract from the possibility of assessing the wear state of the wheel.
- 1.9 The thickness of the wheel tyre measured in the plane of the running circle – defined as the circle where a vertical plane 70 mm from the inner surface of the tyre intersects the wheel tread – must be at least:
- for wagons authorised to run at 120 km/h
(wagons marked “SS” or “**”) 35 mm
 - for other wagons²⁾ 30 mm
- 1.10 On a wheel with tyre:
- 1.10.1 The tyre must not be loose,
A tyre is considered loose if at least one of the following conditions is met:
- the tyre has been displaced by rotation on the rim in the plane of the running circle (visible from the fact that the check marks on the tyre and those on the wheel rim are no longer aligned),
 - dull sound when struck,
 - loose tyre clip,
 - presence of rust between the tyre and the rim over more than $\frac{1}{3}$ of the circumference.

¹⁾ If exceptionally there are two grooves on a wheel, the outer groove shall indicate the minimum thickness.

²⁾ Including wagons suitable for 120 km/h only when empty.

- 1.10.2 The tyre must show no signs of sideways movement (a tyre can only move sideways if the tyre clip is missing or has become loose, broken or clearly deformed),
- 1.10.3 The tyre clip must not be cracked. When the tyre clip is held in place with a wedge, the wedge must not be missing,
- 1.10.4 Tyres must not be cracked or fissured in the transverse or longitudinal directions.
- 1.11 The wheel hub must not be cracked.
- 1.12 The rim of a spoked wheel must not be broken across.
- 1.13 None of the spokes of a wheel may be broken or cracked.
- 1.14 A solid or monobloc wheel must not show:
- any defects repaired by welding and
 - any cracks (e.g. cracked wheel rim or wheel web).
- Minor defects in the wheel body resulting from the casting process are acceptable.
- 1.15.1 Axles must not:
- show any cracks or any defects repaired by welding,
 - be warped,
 - have any part worn by friction showing sharp edges (sharp-edged notches),
 - show any kind of wear by friction exceeding 1 mm in depth.
- Brake rods or other parts must not rub on the axles.
- 1.15.2 Reserved
- 1.16 Reserved
- 1.17 If a check is required on the distance between the inner faces of the tyres or rims of monobloc wheels, then this distance shall be measured at rail level, with an appropriate measuring device, in at least three points on the wheel, at 120° intervals.
- 1.18 Monobloc wheels may not display marks of thermal overload caused by the brake:
- clearly burnt paint at the connection between rim and wheel plate (paint cracked/peeled),
 - traces of rust at connection between rim and wheel plate,
 - fusion of brake blocks,
 - deterioration of wheel tread with build-up of metal (see number 1.6.1 too),
 - rim bluish coloured (not uniform) due to overheating,
 - protruding (flanging) brake blocks.
- If thermal overload is suspected, a brake test must be performed in accordance with UIC Leaflet 543-1 and the keeper must be consulted in order to obtain instructions. If the keeper does not provide instructions, the wheelsets concerned must be replaced using Form H^R.
- Wheels that are able to withstand high thermal stresses and which are marked on the cover of the axle-box casing with an interrupted vertical white line (Appendix 11, point 6.1) are exempt from the measures listed above.
- The burnt paint must not be painted over unless agreement for the keeper is guaranteed.
- 1.19 Wheels shall be tested for out-of-roundness when
- at least two signs of out-of-roundness and wheel tread defects as defined in Appendix 10, annex 1 are detected on a wagon wheel or its immediate environment,

- on the wheels of the axle in question, if there are no signs on the second axle,
- on the wheels of both axles, if there is at least one sign on the second axle,
- they are indicated “Substantial irregular crushing on the edge of the tyre”, as defined in Appendix 10, annex 1, picture 9 (indication of a particular flat point), irrespective of the presence of any other indication.

In this respect a bogie is to be considered as an axle wagon. The degree of wheel out-of-roundness must not exceed 0.6 mm.

Axle-boxes

- 1.20 Axle-boxes must not be damaged to the point of no longer being able to hold their lubricant or of allowing dust and water infiltration.
- 1.21 The sides of the axle-box must cover the guiding surface of the axle guard or of the corresponding bogie parts in all positions of the box, with an overlap of at least 5 mm.

Indications – Accepted and prohibited practices

- 1.22 Axles must not be repaired by welding.
- 1.23 The side faces of the tyres and/or rims of monobloc wheels must not be painted or covered over with oily or greasy substances, with the exception of the four painted control markings at 90° intervals used to identify tyred wheels (Appendix 11, point 6.2).
- 1.24 Brake rods and other parts must not rub against the axles. If this fault cannot be corrected, the parts in question must be removed or suspended so as to prevent contact. The brake must then be isolated and fitted with labels R1 and K (as per Appendix 9).
- 1.25 Sharp edges on a flange may be removed on the lathe or by grinding.
- Any flats or build-up of metal on the running tread may be removed on the lathe with the keeper's agreement.
- 1.26 When an axle is replaced, a wheelset or wheelsets with tyred wheels may not be fitted to a wagon equipped with monobloc wheels.
- Tank wagons and wagons loaded with tank containers for the carriage of Class 2 RID products must be fitted with monobloc wheels.
- 1.27 To position the wheelsets on a lathe, the workshop of the user RU may only remove the axle-box covers if they are not fitted with centering holes. All other work on axle-boxes is reserved for the keeper alone.
- 1.28 When reprofiling monobloc wheels with the authorisation¹⁾ of the keeper:
- identify any cracks along the edge of the wheel tread and any sharp-edged dents on the flange and remove by reprofiling,
 - remove any severe radial marks left by the lathe clamping jaws.
- Wheels with an out-of-roundness of ≥ 0.6 mm (see point 1.19) may not be reprofiled. They must be removed and returned to the keeper, suitably marked.
- 1.29 Existing wheelsets fitted with monobloc wheels of steel grades R2, R3, R8 and R9 must be tested by the keeper to check for the absence of cracking and lathe clamp jaw marks. After the test a triangular metal plate embossed with the steel grade is fixed to one of the bolts of the axle-box cover.

¹⁾ This authorisation may be permanent or issued on a case-by-case basis.

- 1.30 Wagons with load-proportional tread brakes for running under SS conditions may not be fitted with monobloc wheels of steel grades R2, R3, R8 or R9.
- If thermal overloading is suspected, the provisions of point 1.18 shall apply.
- 1.31 Oil seepage between the axle and wheel hub does not constitute absolute proof of loosening. Displacement must be shown to have occurred.
- 1.32 If there is any sign or suspicion of a hot axle-box, the axle must be replaced.
- 1.33 Bearings shall only be lubricated by the keeper.
- 1.34 No repairs may be carried out on axle-boxes.
- 1.35 If a replacement axle is requested using Form H^R (see Appendix 7), the diameters of the running circles of all the axles on the wagon must be measured and shown on the Form H^R (column B) so that the keeper can supply an axle with a running circle whose diameter is within the difference range permitted by the applicable regulations.
- If an axle is replaced without making use of the Form H^R procedure and with no specific indication from the keeper, the difference in the diameters of the running circles must not be greater than:
- 10 mm between the two axles of a bogie and/or
 - 20 mm for axle wagons.
- 1.36 If the workshop identifies connections between the wheelset and the underframe and/or the bogie (electrical, hydraulic, pneumatic, etc..., other than grounding cables), it cannot disconnect them without having received instructions for dismantling or assembly from the keeper.
- 1.37 The following checks must be performed after replacing wheelsets:
- Check brake-rigging adjustment,
 - Check that the slack adjuster is working,
 - Finally, perform a functional check by applying and disengaging the brake.

2. Suspension

Modules with measures to restore the fitness to run

M02.001: Leaf-spring suspension removal/installation

Technical requirements:		Wheelset lowering and lifting equipment
Organisational preparations:		☒ If necessary, request suspension spring from the keeper with →Form H in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes	
1.	Prepare suspension spring removal <i>Additional notes: observe →0.9 when lifting the wagon</i>	
2.	Remove suspension spring: Remove suspension spring shafts	
3.	Install suspension spring: - Fit a securely seated buckle boss/axle-box housing - Suspension spring shaft lubricated - Pay attention to installation of the suspension bearings - Fold down split pin properly (split pin half 30° open) <i>Additional notes: For vehicles with a rigid underframe (XX) the suspension spring are to be exchanged on both sides of the wheelset</i>	
4.	Minimum leaf clearance in accordance with→2.5.1	

M02.002: Insert buckle boss

Technical requirements:		Lifting equipment
Organisational preparations:		-
No.	Work tasks, technical target state and additional notes	
1.	Prepare buckle boss <i>Additional notes: observe →0.9 when lifting the wagon</i>	
2.	Insert buckle boss: Fit a securely seated buckle boss/axle-box housing	
3.	Minimum leaf clearance in accordance with→2.5.1	

M02.003 Suspension links removal/installation

Technical requirements:		Wheelset lowering and lifting equipment
Organisational preparations:		☒ If necessary, request suspension links from the keeper with →Form H in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes	
1.	Remove suspension links: Suspension spring shaft removed	
2.	Install suspension links: - Clean suspension spring bore hole - Suspension spring shaft lubricated - Installation of the suspension bearings observed - Suspension link free to move after installation	

M02.004: Helical springs removal/installation

Technical requirements:		Lifting equipment and/or wheelset lowering
Organisational preparations:		☒ If necessary, request the helical springs from the keeper with →Form H in accordance with Appendix 7
No.	Work task, technical target state and additional notes	
1.	Remove wheelset →M01.001	
2.	Remove springs: Take the inner and outer helical springs out of the guides	
3.	Install springs: - Use helical springs - The coil direction between inner and outer spring must be in the opposite direction. - Only springs of the same type may be fitted in a bogie.	
4.	Install wheelset → M01.001 <i>Additional notes: when replacing spring, measure the buffer height →M05.002. When dismantling brake components, carry out a functional check of the brake →M03.001</i>	
5.	Remove signs of contact, if necessary	

M02.005 Damper ring removal/installation

Technical requirements:		Lifting equipment for bogies
Organisational preparations:		☒ If necessary, request the damper ring from the keeper with →Form H in accordance with Appendix 7
No.	Work task, technical target state and additional notes	
1.	Detach damper rings: - Unload damper rings (e.g., lift bogie frame) - Remove damper rings	
2.	Attach damper rings: - Install damper rings - Load damper rings	
3.	Check the position of the springs and spring caps: - The springs are sitting correctly in the spring guide - The spring caps are not in contact with the bogie frame	
4.	Measure the vertical distance between the axle-box housing and bogie frame (→2.5.2): > 8 mm	

Minimum condition and limit values for dimensions

- 2.1 The leaves of a suspension spring must not become longitudinally displaced by more than 10 mm in relation to the buckle.
- 2.2 None of the leaves must be missing, broken and/or cracked. This provision applies both to parabolic springs and trapezoidal springs.
- 2.3 No helical spring must be broken.
- 2.4 None of the parts necessary for fastening the springs must be missing or broken. None of the spring buckles must be loose.
- 2.5.1 On wagons fitted with leaf spring suspensions, the distance between the buckle of the suspension spring and any parts of the vehicle body, underframe or bogie frame which may be liable to come into contact with it must be at least 15 mm.
- 2.5.2 In respect of the suspension of bogie Y25 and its by-products, the distance between the axle-box housing and the bogie frame must be at least 8 mm.

- 2.6 There must be no recent traces of contact between:
- the spring buckle or other parts of the suspension and the wagon underframe or bogie,
 - the wheels and the body or underframe.

Once the causes have been remedied, the traces of contact shall be painted over.

- 2.7 The boss of the leaf spring buckle must be properly engaged in its housing (axle-box case or plug). The axle-box case must not be in an abnormal position (twist) as a result.
- 2.8 The component parts of the elastic suspension (rings, rods, intermediate bearings, suspension pins) must not be displaced, missing or broken. The suspension pins must be properly secured.

Indications – Accepted and prohibited practices

- 2.9 The minimum distance between the buckle of the suspension spring and any parts of the vehicle body, underframe or bogie frame which may be liable to come into contact with it may not be restored by:
- placing sheet metal shims between the suspension brackets or bearings and the links, even if these sheets are welded,
 - building up the suspension brackets or bearings by welding.
- 2.10 In the event of damage to the suspension spring of a wagon with a rigid underframe (marked as shown in Appendix 11, point 7.4), both springs of the same axle must be replaced by two others with equivalent deflections. The request for spare parts using Form H (see Appendix 7) must therefore specify that the springs are to be used on a wagon with a rigid underframe.
- For springs with progressive stiffness, it is not necessary to replace both springs. When requesting springs of this kind, the type of spring must be mentioned specifically on Form H.
- 2.11 Repairing suspension springs by welding is prohibited.
- 2.12 Standard parabolic suspension springs for 22 and/or 22.5 tonne axle-loads can be freely inter- changed in the event of damage.

3. Brake

Modules with measures to restore the fitness to run

M03.001 Brake function test

Technical requirements:		Air available for carrying out the function test
Organisational preparations:		-
No.	Work tasks, technical target state and additional notes	
1.	Check adjustment of the brake rigging: Take wheel diameter and brake block thickness into account	
2.	Carry out a function test by applying and disengaging the brake multiple times: Slack adjuster must be able to readjust	

M03.002: Carry out brake test to determine cause of damage

Technical requirements:		Suitable brake testing equipment
Organisational preparations:		Compliance with UIC Leaflet 543-1; carrying out the brake test before carrying out the work tasks
No.	Work tasks, technical target state and additional notes	
1.	Check the brake inscriptions (target values) on wagon: - Piston stroke - C-pressure and, if necessary, T-pressures <i>Additional notes: If the inscriptions are not existing, the values are to be requested from the keeper → M00.001</i>	
2.	Carry out brake test according to UIC Leaflet 543-1, observing the target value on the wagon. Document with brake test protocol and send the results to the contracting body ☒ .	
3.	If the brake test is unsuccessful, turn the brake off and document the restriction of use	

M03.003: Replace brake blocks on wagons without compact brakes

Technical requirements:		-
Organisational preparations:		For wagons with compact brakes, obtain keeper instructions → M00.001
No.	Work tasks, technical target state and additional notes	
1.	Check brake blocks → 3.7.1 or → 3.8.1, → 3.8.2, → Annex 4	
2.	Remove brake blocks: Loosen brake rigging by widening the slack adjuster	
3.	Wheelsets must be inspected and dealt with as follows: - Inspect running surfaces of wheelsets → 1.6.1 - Inspect the wheels visually in accordance with the criteria for thermal overload → 1.18 <i>Additional notes: for non-permissible deviations, possibly carry out a brake test to determine cause of damage → M03.002 and replace the damaged wheelsets → M01.001</i>	
4.	Install brake blocks <i>Additional notes: Only brake blocks written on the freight wagon may be used → 3.7.2 or → 3.8.3, → 3.8.4</i>	
5.	Adjust the brake rigging	
6.	Carry out a brake function test → M03.001	

M03.004: Reattach, remove loosen parts of brake rigging

Technical requirements:	Put the wagon on a pit and/or lifting device recommended
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	Check defective brake rigging regarding the cause: • Missing, broken parts of the brake rigging, continue with point 2 • Missing bolts, continue with point 3
2.	Reattach or remove loosen and hanging parts of the brake rigging, turn the brake off and document restriction of use. The working steps 3 and 4 have are not to be carried out.
3.	Restore connection points of the brake: • Replace missing fastening devices • Lubricate, if necessary
4.	Carry out a brake function test →M03.001

M03.005: Brake hoses removal/installation

Technical requirements:	-
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	Dismantle of the brake hose • Dismantle the brake hose using suitable tool
2.	Assembly of the brake hose • Clean the screw threads of the brake hose and the stopcock • Prepare the screw connection with a suitable sealant (sealing hemp, sealing tape or similar) • Mount the brake hose using suitable tools • Check that no part of the brake coupling system (whether connected or disconnected) hangs down within 140 mm of the top of the rails.
3.	Check the tightness of the brake system →M03.007

M03.006: stopcock removal/installation

Technical requirements:	-
Organisational preparations:	☒ Request stopcock with locking device from keeper with →Form H according to Appendix 7
No.	Work task, technical target state and additional notes
1.	Dismantle of the brake hose and stopcock • Dismantle the brake hose → M03.005 • Dismantle the anti-twist device (locking plate) • Dismantle the defect stopcock using suitable tool
2.	Assembly of the brake hose and stopcock • Clean the screw threads of the main pipe and the stopcock. • Prepare the screw connection with a suitable sealant (sealing hemp, sealing tape or similar) • Mount the stopcock using suitable tools • Mount the anti-twist device (locking plate) • Assembly of the brake hose →M03.005
3.	Check the tightness of the brake →M03.007

M03.007: Check brake for leaks

Technical requirements:		Appropriate devices and materials for checking the tightness of the brake system
Organisational preparations:		-
No.	Work task, technical target state and additional notes	
1.	Check the tightness of the brake system • Attach testing equipment on one end of the wagon • On the other side of the wagon close brake coupling with air-tight plug • Set the stopcock on the air-tight plug side into the “closed” position. • Charge the brake system with compressed air to 5 bar • Set the stopcock on the air-tight plug side into the “open” position. • Check the brake for audible leaks. • Check that the pressure drop does not exceed 0.3 bar in 5 min.	
2.	If leaks are detected, seal and obtain keeper instructions, if necessary →M00.001, repeat point 1	

M03.008 Restore usability of brake isolating cock

Technical requirements:		-
Organisational preparations:		-
No.	Work task, technical target state and additional notes	
1.	Check the brake isolating cock component for deformation and contamination: • Both sides of the bearing block • Housing plate and operating lever. • Rigging • Forked lever	
2.	If necessary, straighten rigging and restore bolt connections	
3.	Lubricate, if necessary	

Minimum condition and limit values for dimensions

Compressed air brakes

- 3.1 On wagons with compressed-air brakes, the handle of the brake isolating valve must be turned vertically downwards when the brake is operational. It must be possible to isolate the brake by a 90° turn on the handle at the most. This handle must satisfy the conditions set out in Appendix 9, annex 10.
- 3.2 The function of the brake position changeover controls must be easily identifiable in accordance with the stipulations of Appendix 11, point 4.3.
- 3.3 The main brake pipe must be in proper working order, to ensure a continuous air supply along the train.

Brake blocks, shoes, disc brakes and brake rigging

- 3.4 The disc brake indicator device must clearly display the “brake on” and “brake released” positions.
- 3.5 None of the brake rigging safety stirrups must be broken, loose or missing.
- 3.6 If wagons have protruding (flanging) brake blocks, it is necessary to eliminate the cause of the protrusion after consultation with the keeper and after he has given instructions. If it is not possible to remedy the cause the wagon must be dealt with in accordance with Appendix 9. A brake block shall be considered protruding if, when it is applied, its external face reaches the external face of the rim. In the event of protruding brake blocks, the wheels must be checked for signs of thermal overload as per point 1.18, Appendix 10.
- 3.7 Cast-iron brake blocks
 - 3.7.1 Cast-iron brake blocks that are worn, broken or missing must be replaced.

The minimum thickness of brake blocks, measured at the thinnest point as seen from the outside, must be 10 mm.

Brake blocks

 - with an incipient crack shall not be considered as broken,
 - shall be considered broken if they are only held in place by their metal reinforcement layer.- 3.7.2 On double brake block holders (Bgu), when one of the cast-iron blocks is replaced, the other block must also be replaced in all cases.
- 3.8 Composite brake blocks
 - 3.8.1 Composite brake blocks **are to be replaced** when the following defects/damage are observed:
 - blocks are missing,
 - blocks are broken radially from the friction surface to the plate/edge of the plate (Annex 4, picture 7),
 - friction material shows visible signs of shelling over more than ¼ of the length of the block,
 - blocks display metal inclusions in the friction surface (Annex 4, picture 1),
 - friction material has become detached from plate over a length of > 25 mm (Annex 4, picture 2),
 - friction material has cracked parallel to the wheel circumference over a length of > 25 mm (Annex 4, picture 4),
 - minimum thickness of the brake blocks, measured at the thinnest point as seen from the outside, is less than 10 mm.
 - 3.8.2 Composite brake blocks **are not to be replaced if:**
 - they are partially cracked or cracked straight across at the designated breaking-point (Annex 4, picture 3),
 - there is incipient radial cracking in the block material (Annex 4, picture 6),
 - there are indications of heavy thermal stress such as “white film” on the surface of the contact area and down to a depth of around 10 mm (Annex 4, picture 8),
 - there is a branched thermal crack pattern, mainly axial, and a carbonised layer (Annex 4, picture 9).
 - 3.8.3 Where several types of brake block are approved and marked as suitable for use on a wagon, all the brake blocks around a single wheelset must be of the same type.
 - 3.8.4 On double brake block holders (Bgu), when one of the composite brake blocks is replaced, the other block must also be replaced in all cases.

Brake hose couplings

- 3.9 All wagons must be fitted with brake hose semi-couplings. Wagons with two brake coupling connections at each end for the same main brake pipe must also have two brake semi-couplings at each end.
- 3.10 Brake semi-couplings must not be defective (not airtight).
- 3.11 No part of the brake coupling system (whether connected or disconnected) must hang down within 140 mm of the top of the rails.
- 3.12 The stopcocks must be operable and function correctly. Each air stopcock must be fitted with a stop device in its extreme position that functions correctly.

Indications – Accepted and prohibited practices

- 3.13 Damaged or loose brake parts that could constitute a safety hazard or cause other damage must be removed or securely fastened. Damage of this kind should be examined in conjunction with point 1.19. In this case, the compressed air brake must be isolated, and the wagon fitted with labels R1 and K.
- 3.14 Work on the pneumatic parts of the brake system (distributors, relay valves, load-weigh valves, brake cylinders) and their replacement by workshops shall not be authorised without the agreement of the wagon keeper.
- 3.15 Wagons with platform-operated or ground-operated hand brakes / parking brakes that are inoperable must be repaired. Otherwise, they must be dealt with in accordance with Appendix 9.
- 3.16 Disc brake pads may be replaced exclusively by the keeper, who shall ensure that the brake is in correct working order without needing to be monitored by the userRU.
- 3.17 Missing and/or damaged brake semi-couplings must be replaced.
- 3.18 Safety stirrups may not be repaired by welding.
- 3.19 All brake tests in application of Appendix 12 of the GCU shall be carried out in accordance with UIC Leaflet 543-1 prior to any action being taken and the brake test sheet including the values measured communicated to the keeper and to the userRU.
- 3.20 Broken or missing brake release pulls are to be replaced.
- 3.21 The following checks must be performed after replacing brake blocks:
- Check brake-rigging adjustment,
 - Check that the slack adjuster is working,
 - Finally, perform a functional check by applying and disengaging the brake.

4. Wagon underframe and bogies

Modules with measures to restore the fitness to run

M04.001: Axle-guard tie removal/installation

Technical requirements:		Torque wrench
Organisational preparations:		☒ If necessary, request axle-guard tie from the keeper with →Form H in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes	
1.	Remove axle-guard tie	
2.	Test the bore holes of the axle guard and axle guard tie: • Not deformed, worn out, knocked out • Properly fit of the bore hole and fitting screw	
3.	Install axle-guard tie: • Fitting screws not worn • Threads not damaged • Tightening torque 180 Nm with screw connections M20 class 8.8 <i>Additional notes:</i> ☒ ask the keeper for the torque for other type of screw connection.	

M04.002 Restore connecting elements bogie/underframe

Technical requirements:		If necessary, lifting equipment
Organisational preparations:		☒ If necessary, request the centre casting kingpin and locking device from the keeper with →Form H in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes	
1.	Inspect the connection components in terms of integrity, damage and secure positioning • Locking device for the centre casting kingpin (locking tappet, safety cotter pin and/or castle nut) • Centre casting kingpin • Bolt connections of the upper centre casting	
2.	If needed, lift wagon: <i>Additional notes: when lifting the wagon, observe →0.9</i>	
3.	Replace missing parts, if necessary and restore bolt connections	
4.	When dismantling brake components, carry out a brake function test →M03.001	

M04.003 Replace earthing straps

Technical requirements:		-
Organisational preparations:		-
No.	Work tasks, technical target state and additional notes	
1.	Identify and replace missing or damaged earthing straps: • Contact surfaces must be corrosion-free and cleaned • Bolt connections must be complete	

M04.004 Clean friction surfaces of damper system (Y25 bogie)

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Remove the wheelset →M01.001
2.	Clean the friction surfaces on the bogie and wheelset mechanically or with a suitable solvent
3	Install wheelset →M01.001

M04.005 Repair side bearers

Technical requirements:	Lifting equipment
Organisational preparations:	☒ If necessary, ask for the wear liners, springs, side bearer parts or whole side bearers from the keeper with →Form H in accordance with Appendix 7.
No.	Work tasks, technical target state and additional notes
1.	Inspection of the side bearers and securing elements in terms of integrity, damage and secure positioning: • Upper side bearer part with wear liners on the underframe • Lower side bearer part with wear liners on the bogie
2.	If needed, lift underframe <i>Additional notes: when lifting the wagon observe →0.9</i>
3.	If needed, replace worn, broken, or missing side bearers and restore screw fastenings
4.	Lower underframe

M04.006: Remove damaged spark arrestor plate

Technical requirements:	-
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	If necessary, lift the wagon: <i>Additional notes: when lifting the wagon, observe →0.9</i>
2.	Remove the spark arrestor plate
3.	Turn the brake off and document restrictions of use

Minimum condition and limit values for dimensions

Underframe

- 4.1 The underframe must not be visibly deformed or warped.
- 4.2 The flanges of solebars, headstocks and intermediate cross-bars subject to stress from the coupler must not have cracks (transverse cracks) starting at the edge of the flange and extending over more than half the flange width. Longitudinal cracks up to 150 mm are acceptable, except at the points where the suspension brackets are fixed to the solebars. At these points, longitudinal cracks between the flange and the web of the solebar must not exceed 100 mm in length.
- 4.3 Welded joints on underframe crossbars and solebars, and on axle guards and solebars, must not have cracks, nor must any cracks in these parts originate in the joints.
- 4.4 Reserved
- 4.5 Reserved
- 4.6 Wagons with inflammable floors, even if lined with a metal sheet underneath, must be fitted with spark arrestors above the braked wheels. Spark arrestor plates mounted directly beneath the floor are not acceptable.

This stipulation also applies to flat wagons that have no floor or with a skeletal floor, intended for carrying containers or semi-trailers.

The spark arrestor plates must not be dislodged or pierced through by rust.
- 4.7 Axle wagons carrying the sign specified in Appendix 11, point 2.10 must be fitted with special spark arrestors.
- 4.8 Axle guards must not be dislodged or broken. They may not have cracks over more than ¼ of their cross-section or that are extending towards or close to a fastening point.
- 4.9 No guide-pieces (wear liners) must be missing from the axle guards.
- 4.10 Axle-guard ties must not be missing or broken.
- 4.11 Suspension spring brackets must not be loose, broken, cracked or visibly deformed.

Bogies of all types

- 4.12 Welded joints on bogie frame crossbars and solebars must not be cracked, nor must any cracks in these parts originate in the welded joints. Solebars, crossbars and bolster swing-links must not have any cracks.
- 4.13 The friction surfaces of damping systems acting on the axle-box or bolster guides must not be lubricated.
- 4.14 No side bearers, side bearer parts or springs must be missing or broken.
- 4.15 The bogie must not be lying in an abnormal position in relation to the frame.
- 4.16 The centre casting must not be broken or loose.
- 4.17 The centre casting kingpin and its locking devices must not be missing, broken or loose.
- 4.18 No guide pieces (wear liners) may be missing.

The total length of cracks in the weld beads of the wear liners may not exceed 50% of the total length of the welds.
- 4.19 The earth connections' connecting parts must be checked and fastened if necessary. Missing or damaged earth connections (straps or cables) and connecting parts must be replaced. Connection points indicate that earth connections must be present.

Y 25 bogies and their derivatives (see Annex 2)

- 4.20 No tare springs must be cracked or broken. Damage of this kind should be examined in conjunction with point 1.19.
- 4.21 No load springs must be displaced or broken. Damage of this kind should be examined in conjunction with point 1.19.
- 4.22 All the tare springs of the bogie must coil in the same direction.
- 4.23 All the pairs of helical springs on a bogie (tare spring/load spring) must coil in opposite directions.
- 4.24 No outer or inner damper ring may be missing, broken or loose. No tappet must be missing (e.g., following a derailment).
- 4.25 No damper cover may come into contact with the bogie frame (faulty damper).
- 4.26 No lifting T must be missing or loose. Damage of this kind should be examined in conjunction with point 1.19.

Indications – Accepted and prohibited practices

- 4.27 Cracked steps must be replaced by the workshop of the user RU. Repairs involving welding are prohibited.
- 4.28 When the spark arrestor plates of a wagon are missing or damaged without the possibility of proper repairs being carried out, the brake must be isolated and the wagon dealt with in accordance with Appendix 9 (labelling).
- 4.29 Breakages, damage and cracks on solebars, intermediate crossbars, underframe headstocks (wagon or bogie) and welded joints must only be repaired by welding at a workshop selected by the keeper. However, the workshop of the user RU may, exceptionally, be authorised to carry out welding work for the sole purpose of repairing cracks or breakages on underframe profiles, to make it possible for an empty wagon to be returned home.
- 4.30 Wagons whose underframe is warped and/or deformed and which are not fit to run must be specially treated, in agreement with their keeper.
- 4.31 Damaged axle guards and suspension spring brackets riveted to the underframe can be straightened or replaced by the workshops.
- 4.32 If the rivets or bolts used to fix the axle guards in place are loose or missing, they shall be replaced by the workshops with self-locking screw bolts or bolts locked by split pins.
- 4.33 The friction surfaces of damping systems acting on the guides of the axle-boxes or swivelling bolster must not be lubricated. Any grease must be removed insofar as possible without demounting. In this case the wagon must be fitted with a Label M.
- 4.34 Welding of wear liners on bogies is only authorised after the axles have been demounted and following instructions from the keeper. Rewelding of cracks on wear liners is not allowed.
- 4.35 Welding and oxygen-cutting are strictly prohibited during the mounting of screw assemblies using high-resistance screws (class 8.8 or above) or bolts (class 8 or above) to attach steps, handles and centre castings.

Screw assemblies are to be executed in compliance with the rules (e.g., sufficient projection of screw, tightening torque, self-locking screws etc.).

Welding and oxygen-cutting are prohibited on self-locking screws, irrespective of the type of locking (synthetic or metallic).
- 4.36 During the mounting of screw assemblies with normal-resistance screws (below class 8.8) or bolts (below class 8) to attach steps, handles and centre castings, welding and oxygen-cutting are only permitted if authorised by the keeper. Screw assemblies are to be executed in compliance with the rules (e.g., sufficient projection of screw, tightening torque, self-locking screws etc.).

Welding and oxygen-cutting are prohibited on self-locking screws, irrespective of the type of locking (synthetic or metallic).

5. Buffing and draw gear

Modules with measures to restore the fitness to run

M05.001: Lubricate buffer

Technical requirements:	Suitable lubricant
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	Remove left-over lubricant from the contact surface between the buffer casing and plunger as well as from the buffer plates: No layers of dirt or encrustations <i>Additional notes: treating dirt and lubricant with flames is prohibited</i>
2.	Check the contact surfaces between the buffer casing and plunger as well as the buffer plates →5.7, →5.9.1, →5.9.2
3.	Lubricate the buffer plates (and/or guide faces) between the plunger and buffer casing with a suitable lubricant

M05.002: Measure buffer height

Technical requirements:	Suitable measuring equipment, the wagon must be on a horizontal level track
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	Measure buffer height: - Check the wagon has to be on a horizontal level track - maximum 1065 mm - minimum 940 mm
2.	Document results of the measurements

M05.003 Buffer removal/assembly

Technical requirements:	Torque wrench
Organisational preparations:	☒ If necessary, request buffer from the keeper with →Form H in accordance with Appendix 7
No.	Work task, technical target state and additional notes
1.	Remove buffer Loosen bolt connections <i>Additional notes: →5.28, →5.29</i>
2.	Attach buffer: - Use bolts and nuts with a clamping element with the same strength class - Bolt protrusion at least 3 threads - Use correct tightening torque (generally 690 Nm for bolts with the strength class 8.8 and nut with the strength class 8) <i>Additional notes: ask the keeper regarding buffer guide securing bolts with a different strength class or buffers in combination with ride-up protection, bolt quality and torques →M00.001; →5.28, →5.29</i>
3.	Lubricate buffer, if necessary →M05.001

M05.004: Renew danger marking

Technical requirements:	-
Organisational preparations:	-
No.	Work task, technical target state and additional notes
1.	Prepare surface: • Dry • Clean • Free of lubricant • No corrosions
2.	Renew and/or restore danger marking: • Black and yellow diagonal stripes (→Appendix 11 Chap. 5.7-5.9, if necessary, orientate to the other side of the wagon)

M05.005 Screw coupler removal/assembly

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Remove the screw coupler
2.	Assembly the screw coupler: • Observe the breaking load • Fasten locking elements (bolt, disc, split pin)
3	Lubricate and turn the screw coupler along the entire length

M05.006: Replace the parts of the draw gear

Technical requirements:	-
Organisational preparations:	☒ If necessary, request missing parts of the draw gear from the keeper with →Form H in accordance with Appendix 7
No.	Work task, technical target state and additional notes
1.	If needed, lift wagon <i>Additional notes: when lifting the wagon observe →0.9</i>
2.	For non-continuous draw gear: • Check pulling apparatus, draw-hook guide and draw hook in terms of integrity and damage • Replace, if necessary • Lubricate and secure draw-hook pin
3.	For continuous draw gear: check the parts of draw gear in terms of integrity and damage, replace if necessary. • Draw hook including guide • Draw bar • Sleeves, bolts, cotter pins • Spring components
4.	Fit screw couplers, replace missing screw coupler, if necessary →M05.005
5.	Lubricate draw-hook guides with steel sliding plates

Minimum condition and limit values for dimensions**Buffing gear**

- 5.1 The height of the centre of the buffing gear, measured vertically from rail level and at rest, must be:
- for empty wagons maximum 1 065 mm
 - under maximum load minimum 940 mm
- 5.2 Reserved.
- 5.3.1 Buffers at the end of the wagon and buffer fixing bolts must not be missing. All fixing bolts must be tight.
- 5.3.2 For permanently coupled wagon units, neither buffers nor buffer fixing bolts must be missing at the fixed coupling point. All fixing bolts must be tight.
- 5.4 The locking and/or fastening devices holding the buffer plungers in place must not be missing or damaged.
- 5.5 The buffer spring and the other parts of the buffer must not have cracks or damage liable to impede the proper working of the buffer. It is acceptable for one buffer at each end of the wagon to be compressible by hand by a maximum of 15 mm.
- 5.6.1 Buffer casings must not be damaged to the extent that their fastenings are no longer sufficiently robust or that buffer plunger guidance is no longer sufficiently guaranteed. The buffer casings and plungers must not be cracked.
- The buffer's visible guide surface must present no more than 2 sharp-edged grooves, each more than 2 mm deep and 60 mm long. This examination shall be performed as a visual inspection, and as a measurement in case of doubt only.
- 5.6.2 For buffers which are to be lubricated, the visible guide surface must be adequately lubricated. Should lubrication be needed, any grease residue must first be removed. Lubrication must then take place by applying a thin layer of grease across the periphery of the guide surfaces.
- 5.7 There must be no missing or loose rivets or fixing bolts on the buffer heads. This also applies to permanent couplings.
- 5.8 The contact surfaces of the buffer heads must be sufficiently lubricated. This also applies to permanent couplings.
- 5.9.1 The contact surfaces of buffer plates must not have more than 2 sharp-edged grooves measuring > 3 mm in depth and > 50 mm in length. This also applies to permanently coupled wagon units.
- 5.9.2 The buffer plates with wear pads or plastic plates must not
- be broken, cracked right through, missing,
 - have shelling and/or melding > 3 mm in depth and > 25 mm in length,
 - have loose or missing fastening bolts.

- 5.10 On wagons fitted with anti-crash devices, these devices must not show signs of having been triggered, nor any trace of deformation.

The anti-crash devices have been triggered if

- the arrow marker is not fully visible,
- the deformation marker is missing or deformed,
- the length of the buffer is visibly shortened,
- the buffer casing is deformed or destroyed.

Draw gear

- 5.11 No part of the screw coupling gear (coupled or uncoupled) must hang down within 140 mm of the top of the rails.
- 5.12 The length of the screw coupler must be such that the buffers can at least be brought into contact.
- 5.13 The screw couplers and draw hooks must not be missing. Any clearance between the chain link and the screw must be less than 10 mm. All of the screw coupler's component parts must be in place.
- 5.14.1 The screw coupler must be easy to operate and the coupling screw must be sufficiently lubricated and/or greased.
- 5.14.2 The screw couplers and draw hooks must not be cracked. Nor must they have sustained any damage liable to prevent the vehicle from being coupled to another vehicle or to stop them performing properly.
- 5.15 Draw bars must not be broken or cracked. Sleeves, bolts or cotter pins must not be broken or missing.
- 5.16 Draw hook rods and guides must not be worn to such an extent that the draw hook is able to rotate on its axis within the guides.
- 5.17 If non-continuous draw gear is used, none of the following types of damage may occur:
- fracture or defect on a volute or ring spring,
 - deterioration of a rubber or elastomer spring.
- 5.18 If continuous draw gear is used, none of the springs must not be fractured or damaged. The draw gear guides must not have cracks that are liable to prevent the draw gear from functioning properly.
- 5.19 The draw hook pin on the screw coupler must be at least 50 mm in diameter.
- 5.20 When the suspension device on the screw coupler is inoperable or missing, it must be repaired and/or replaced.

Indications – Accepted and prohibited practices

- 5.21 Use of welding to repair draw gear is prohibited. However, electric welding may be used for temporary repairs to broken or cracked draw bars. The wagons concerned must be handled in accordance with Appendix 9 and transported at the rear of the train.
- 5.22 Wagons fitted with long-stroke shock absorbers whose sliding part is visibly not in the middle position must be dealt with in accordance with Appendix 9.
- 5.23 When a buffer at one end of the wagon is damaged, both buffers must be replaced. The replacement buffers must be identical. In the case of buffers with a stroke of 105 mm, 130 mm or 150 mm, the replacement buffers must however belong to the same category as the buffers removed. Also, for buffers with a stroke of 130 or 150 mm, the replacement parts must have the same design characteristics as the buffers removed. Buffers with wear inserts in the buffer heads must only be replaced in accordance with the keeper's instructions.

- 5.24 Missing buffer head fastening rivets may be replaced using appropriate screw fasteners. Any sharp edges on the buffer head contact surfaces shall be removed by grinding.
- 5.25 It is forbidden to carry out welding or blowtorch work on or near buffers marked on the casing with a yellow dot (see Appendix 11, point 7.9.4).
- 5.26 Damaged or deformed anti-crash devices shall be dealt with in accordance with the keeper's instructions. Buffers fitted with anti-crash devices must, in principle, be replaced by identical buffers. If anti-crash devices are not available, standard buffers may, exception- ally, be fitted to enable the wagon to continue its journey to be unloaded and/or sent to the workshop for repairs. In this case, a K Label as shown in Appendix 9, annex 11 shall be affixed, together with the sign shown in Appendix 11, points 5.4 and/or 5.5.
- 5.27 Permanently coupled wagons must be coupled and uncoupled in line with the keeper's instructions.
- 5.28 Welding and oxygen-cutting are strictly prohibited during the mounting of screw assemblies using high-resistance screws (class 8.8 or above) or bolts (class 8 or above) to attach buffers and draw gear. Screw assemblies are to be executed in compliance with the rules (e.g., sufficient projection of screw, tightening torque, self-locking screws etc.).
- Welding and oxygen-cutting are prohibited on self-locking screws, irrespective of the type of locking (synthetic or metallic).
- 5.29 During the mounting of screw assemblies with normal-resistance screws (below class 8.8) or bolts (below class 8) to attach buffers and draw gear, welding and oxygen-cutting are only permitted if authorised by the keeper. Screw assemblies are to be executed in compliance with the rules (e.g., sufficient projection of screw, tightening torque, self-locking screws etc.). Welding and oxygen-cutting are prohibited on self-locking screws, irrespective of the type of locking (synthetic or metallic).

6. Vehicle body and accessories

Modules with measures to restore the fitness to run

M06.001 Check and correct markings

Technical requirements:	None
Organisational preparations:	If needed, ask for the missing information from the keeper →M00.001 If needed, ask for the data for the revised marking from the keeper →M00.001
No.	Work task, technical target state and additional notes
1.	Identify missing or illegible markings and restore them, the following markings must be present: • Wagon number and marking in accordance with Appendix 11, 2.1 and 2.2 • Tare weight in accordance with Appendix 11, 4.2 • Holding force of the handbrake in accordance with Appendix 11, 4.2, Figure 4 • Load limits in accordance with Appendix 11, 2.4 • Length over buffers in accordance with Appendix 11, 4.1 • Maintenance plate in accordance with Appendix 11, 2.3 • High voltage warning sign on wagons with ladders over 2m in accordance with Appendix 11, 8.2 • Capacity for tank wagons in accordance with Appendix 11, 2.7 • Authorised goods for tank wagons in accordance with Appendix 11, 2.7 (if required) • Marking for CT carrier wagons for authorised ILUs in accordance with Appendix 11, 3.2 <i>Additional notes: positioning, size and appearance of the markings are to be taken from GCU Appendix 11 if there is no information from the keeper. However, details to be entered must always be provided by the keeper. Old markings that are difficult to read may no longer contain current details</i>

M06.002: Restore/replace steps and handles

Technical requirements:	-
Organisational preparations:	☒ If necessary, request steps and handles from the keeper with →Form H in accordance with Appendix 7
No.	Work tasks, technical target state and additional notes
1.	Resetting damaged steps and handles: • Heat them • Reset in compliance with the tolerances specified in →6.11 and/or →6.12 • Visually check the reset point for cracks and notches <i>Additional notes: cold resetting of steps and handles is not permitted</i>
2.	Replace missing or non-permitted damaged steps and handles: • Remove damaged step/handle • Attach step/handle with the same design <i>Additional notes: the newly built steps must be of the exact same model to ensure that they remain within the loading gauge. The step surface must comply with UIC Leaflet 535-2 and/or EN 16116-2.</i>

M06.003: Repair inscription plates, label holders, and folding plates

Technical requirements:	-
Organisational preparations:	-
No.	Work tasks, technical target state and additional notes
1.	Check both sides of the part to ensure it is adequately secured: • Integrity of all fastening elements • Check that the position is correct • Securely mounted to the wagon
2.	Restore missing/insufficient fastening elements
3.	If necessary, replace missing inscription plates, label holders, and folding plates Restore inscriptions →M06.001, obtain keeper instructions if necessary →M00.001

Minimum condition and limit values for dimensions**Provisions applicable to all wagons:**

- 6.1.1 The wagon body, superstructures and all additional devices must not be damaged in a way that could lead to deterioration or loss of the load or constitute a safety hazard for railway operations and/or a risk for persons or the environment.
- 6.1.2 The hydraulic systems must not leak. Without further instructions from the keeper, sealing must only be carried out by tightening the hydraulic connections.
- 6.2 The wagon body and its parts must not foul the loading gauge.
- 6.3 No part of the heating coupling and other coupling devices (coupled or uncoupled) must hang down within 140 mm of the top of the rails.
- 6.4 Moving parts of the wagon and the devices used to control them must not have visible damage that prevents them from functioning normally.
- 6.5 None of the wall or floor boards must be missing, broken, split or damaged to the point where the load might be lost or damaged as a result of damp.
- 6.6 The sliding doors must be mounted in such a way that they cannot come off their runners. Drop sides must be secured so they cannot part from their hinges or fastenings.
- 6.7 It must be possible to close and lock all doors and sliding walls completely and securely. They must not be missing or have come out of their runners.
- 6.8 The doors must have no deformation or holes that could lead to loss of the load.
- 6.9 No guiding or locking systems (door frames, hinges, bolts, latch hooks or handles) must be missing or be dislodged, broken or deformed.
- 6.10 Two handrails for use by shunting staff (during coupling) must be fitted below each head- stock. All steps, handrails, ladders and walkways must be safe to use and free from cracks. This provision also applies to their fastenings and/or supporting structures.
- 6.11 Steps may be twisted, deformed or tilted to a maximum of 20 mm.
- 6.12 The clearance between handrails and the nearest part of the wagon must be at least 60 mm.
- 6.13 Plates carrying markings, folding panels and label-holders must not be missing and must be properly secured.

- 6.14 The following markings as specified in Appendix 11 must be fully present and legible:
- wagon number and signs as depicted in Appendix 11, 2.1 and 2.2,
 - tare,
 - holding force of the hand brake,
 - load limits,
 - capacity of tank wagons,
 - goods for which tank wagons are used,
 - length over buffers of wagon,
 - the high voltage warning sign "Caution – Electrical hazard" on wagons fitted with steps or ladders placed at a height of more than 2 m,
 - maintenance (overhaul) plate,
 - signs indicating the presence of anti-crash devices,
 - diagonal stripes for wagons with long-stroke shock absorbers.

Additional provisions for covered wagons:

- 6.15 Ventilation flaps must not be missing or damaged.
- 6.16 Control gear, shutters and retaining brackets must not be unhooked, dislodged or de- formed.
- 6.17 The roof cover and weatherboard must not be loose or deformed.
- 6.18 It must be possible to close and lock opening roofs to prevent them from coming open unexpectedly. None of the controls must be missing, deformed or inoperable. The roofs must lie in their runners.
- 6.19 It must be possible to use roof hatches correctly.

Additional provisions for open wagons:

- 6.20 It must be possible to close and lock the side walls to prevent them from opening unexpectedly.
- 6.21 It must be possible to close and lock the end flaps to prevent them from opening unexpectedly.
- 6.22 The locking systems for the end flaps (pins, camshafts, rings, shafts) must not be missing, broken or cracked. They must be fit for use.
- 6.23 The cantrails must not be deformed, broken or cracked so as to foul the gauge.

Additional provisions for flat wagons:

- 6.24 It must be possible to lift and secure the drop sides.
- 6.25 The hinges, pins and securing devices of the drop sides must not be missing or broken. They must be fit for use.
- 6.26 Detachable, swivelling and retractable stanchions must not be missing, broken or cracked.
- They must not be deformed, broken or torn to the extent of fouling the loading gauge. This provision also applies to the stanchion mountings and securing devices.
- The stanchion fastenings must be effective.
- 6.27 Folding bolsters must not be loose.

Additional provisions for tank wagons:^{1),2),3)}

- 6.28 Tanks must not have sharp-edged deformations (even if there is no loss of the goods carried).
- 6.29 Cracks in tank cradles are not accepted. If the tank is fastened to the underframe using bolts or rivets, none of these must be missing.
- 6.30 The welded joints on the tank and the underframe must not be cracked.
- 6.31 Ladders, platforms and guard rails must be safe to use and must not be loose.
- 6.32 Tank cladding, sunroofs and insulation must not have come loose.
- 6.33 The tanks and their filling and emptying devices must not leak. It must be possible to seal them hermetically, with the exception of the automatic ventilation devices (Appendix 11, point 6.3).
- 6.34 Screw caps must not be missing.
- 6.35 The blind flanges must not be missing or loose. All the fastening screws must be in place.
- 6.36 The emergency control screw for the emptying valve must be unscrewed.
- 6.37 The indicator on the emptying valve must be in good condition and legible.
- 6.38 The dome hatch must be present. It must be possible to close it hermetically.

Additional provisions for mechanically sheeted wagons:

- 6.39.1 It must be possible to close and lock the mechanical sheeting correctly (indicator visible). This requirement also applies to the end hoops' top locking system.
- 6.39.2 Provided that no repair instructions have been provided by the keeper, repairs are carried out using a repair kit on the basis of cold bonding in accordance with the instructions provided by the repair kit manufacturer.
- 6.39.3 Elements to hold and fasten sheeting shall be kept in a good condition for operation. Relaxed (loose) ropes shall be re-tensioned and severed ropes shall be repaired or replaced.

Additional provisions for wagons with telescopic hood:

- 6.40 It must be possible to close and lock the hoods correctly, keeping them in the guide rails provided.

Additional provisions for flat bogie wagons for carrying road and rail vehicles:

- 6.41 The moving headstocks at each end must not be damaged. It must be possible to lock them from both sides.
- 6.42 The seating device, seating device bolts, securing chains and chain eyes must be fit for use.

¹⁾ The points indicated by a * are mandatory only for RID tank wagons (visual inspections).

²⁾ Tank wagons are wagons used for transporting liquids, gases, powdered or granular goods (visual inspections)

³⁾ The corrective maintenance operations covered under points 6.28 - 6.30 and 6.33 - 6.38 may only be performed on RID tank wagons with the keeper's consent (e.g., Form H)

Additional provisions for ACTS carrier wagons:

- 6.43 The swivel frames must not be damaged to the extent that they cannot be properly fastened and locked.
- 6.44 The snap locks must function properly.
- 6.45 The central lock must function and clearly show the "locked" position.
- 6.46 It must be possible to erect the stanchions correctly.

Additional provisions for car-carrying wagons:

- 6.47 It must be possible to raise and secure the end boards and crossing gangways.
- 6.48 The upper loading deck must rest on the supporting brackets and be properly secured. The indicator device must function.
- 6.49 None of the accessories must be loose (scotches, wheel scotch guide-pieces, crank handles, lifting or lowering device, end boards, crossing gangways).

Additional provisions for self-discharging wagons:

- 6.50 It must be possible to close and lock all valves and hatches.
- 6.51 No part of the locking and discharging system must be loose.

Indications – Accepted and prohibited practices

- 6.52 When deformation has occurred and the vehicle gauge profile must be verified, the provisions of point 4, volume 1 of the Loading Guidelines shall be applied.

Exception: for wagons built in accordance with UIC Leaflet 505/IRS 50505 and whose width exceeds that obtained by application of point 4, volume 1 of the Loading Guidelines (these wagons are not specially marked), the wagon keeper should be contacted to find out the permitted width of the wagon.

Failing a reply from the keeper, point 4 of volume 1 of the Loading Guidelines shall be applied for safety reasons.

- 6.53 Parts made from plastic or plywood (e.g., roof covers and side wall panels) must not be repaired with nails. These wagons carry the sign specified in Appendix 11, point 2.14.
- 6.54 Rivets used for fastening the tanks of tank wagons may be replaced by bolts when missing.
- 6.55 Welding work on tanks may only be carried out by approved workshops with the keeper's agreement.

B. HANDLING OF WAGONS AFTER SPECIFIC INCIDENTS

0. Principle

After specific incidents, the user RU must ensure that any damage or presumed damage that the wagon has suffered will not give rise to consequential damage. To this end, this chapter sets out a number of provisions to be complied with when returning the wagon to running order. The decision on whether the wagon is fit for use rests with the keeper.

The user RU shall perform additional tests to ensure that no wagon damage, which may affect the wagon's fitness for use, has not occurred. In the case of tank wagons, wagons with specific superstructures, which are not described in point 6 of chapter A, and if the workshop is not certain that the points defined are sufficient, the RU contacts the keeper to request specific instructions to restore the wagon's ability to run. If workshops are unable to restore the wagon to the minimum condition specified, the wagon shall be referred to the keeper for a decision on what action to take (in accordance with Appendix 9).

The specific incident and the wagon associated with the number(s) of the wheelset(s) concerned must be indicated to the keeper.

1. Derailment

The inspection must be adapted according to the information available.

If a wagon derails, the following checks must be performed at a minimum:

- wheelsets, in accordance with Chapter A, 1.1.2, 1.1.3, 1.6.1, 1.6.2, 1.8, 1.10 to 1.17, 1.20 and 1.21 as well as notches in the wheel flange which are due to the derailment.
- springs, in accordance with Chapter A, points 2.1 to 2.8. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M02.001, ->M02.002, ->M02.003, ->M02.004,
- underframe, running gear and bogies in accordance with Chapter A, points 4.1 to 4.6, 4.8 to 4.12, 4.14 to 4.18, 4.20, 4.21, 4.24, 4.25, 4.26. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.001, ->M04.002, ->M04.005,
- traction and buffing gear: Chapter A, points 5.1 to 5.6.1, 5.7, 5.9, 5.10, 5.13, 5.14.2, 5.15, 5.17, 5.18, 5.20. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M05.002, ->M05.003, ->M05.005, ->M05.006,
- Vehicle body and accessories according to point 6 of chapter A, if applicable. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M06.002, ->M06.003,
- for tank wagons, inspection of the tank in accordance with the keeper's instructions ->M00.001,
- inspection of damages at grounding cables ->M04.003.

In the case of wagons derailed at a speed of >10 km/h, or if the speed cannot be established, the wheelsets concerned must be removed without prior inspection ->M01.001.

Before being sent, the wheelsets that have derailed must be clearly marked so that the keeper or the keeper's workshop can recognise that the wheelset has derailed (Form H^R).

2. Exceptional impacts

When a wagon has suffered an exceptional impact, it is assumed that the speed of impact was greater than 12 km/h.

In this case, the following tests shall be carried out:

- wheelsets in accordance with Chapter A, 1.1.2, 1.1.3, 1.6.1, 1.6.2, 1.8, 1.10 to 1.17, 1.20 and 1.21. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M01.001,
- springs in accordance with Chapter A, points 2.1 to 2.8. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M02.001, ->M02.002, ->M02.003, ->M02.004,
- underframe, running gear and bogies in accordance with Chapter A, points 4.1 to 4.6, 4.8 to 4.12, 4.14 to 4.18, 4.20, 4.21, 4.24, 4.25, 4.26. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.001, ->M04.002, ->M04.005,
- traction and buffing gear: Chapter A, points 5.1 to 5.6.1, 5.7, 5.9, 5.10, 5.13, 5.14.2, 5.15, 5.17, 5.18, 5.20. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M05.002, ->M05.003, ->M05.005, ->M05.006,
- Vehicle body and accessories according to point 6 of chapter A, if applicable. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.003, ->M06.002, ->M06.003,

- tank wagons: inspection of the tank in accordance with the keeper's instructions ->M00.001.

If the speed of impact is found to have exceeded 25 km/h, the wheelsets must be removed ->M00.001.

Before being sent back, the dismantled wheelsets must be marked so that the keeper or the workshop can identify them as having been subject to an exceptional impact (Form H^R).

3. Overloading and exceeded concentrated loads

When a wagon is brought in because it has been overloaded (whole wagon, bogie or wheelset) and/or the concentrated loads are exceeded, the following inspections and measurements should be carried out according to the overload percentage in relation to the maximum load for the wheelset concerned:

	Overload %	Maintenance operations
1	0% to 2% (inclusive)	– No operation
2	> 2% to 10% (inclusive)	– inspection of axle and wheels in accordance with Chapter A, 1.1.2, 1.1.3, 1.6, 1.8, 1.10 to 1.18, 1.20 and 1.21. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M01.001 – visual inspection of suspension springs for ruptures, cracks and deformation. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M02.001, ->M02.002, ->M02.003, ->M02.004 – visual check for traces of contact on the springs and parts of the under-frame or bogie – inspection of the underframe, running gear and bogies in accordance with Chapter A, points 4.1 to 4.6, 4.8 to 4.12, 4.14 to 4.18, 4.20, 4.21, 4.24, 4.25. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.001, ->M04.002, ->M04.005 – transmission of information on overloading and inspection results to the keeper
3	> 10%	– removal of the wheelset and transmission of information on overloading to the keeper by means of Form H^R ->M01.001 – visual inspection of suspension springs for ruptures, cracks and deformation. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M02.001, ->M02.002, ->M02.003, ->M02.004 – visual check for traces of contact on the springs and parts of the under-frame or bogie – inspection of the underframe, running gear and bogies in accordance with Chapter A, points 4.1 to 4.6, 4.8 to 4.12, 4.14 to 4.18, 4.20, 4.21, 4.24, 4.25. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.001, ->M04.002, ->M04.005 – transmission of inspection results to the keeper
4	Exceeded concentrated loads	– visual inspection of suspension springs for ruptures, cracks and deformation. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M02.001, ->M02.002, ->M02.003, ->M02.004 – visual check for traces of contact on the springs and parts of the underframe or bogie – inspection of the underframe, running gear and bogies in accordance with Chapter A, points 4.1 to 4.6, 4.8 to 4.12, 4.14 to 4.18, 4.20, 4.21, 4.24, 4.25. In the event of non-compliance with the minimum condition or if the limit dimensions are not respected ->M04.001, ->M04.002, ->M04.005 – transmission of inspection results to the keeper

All of the information provided to the keeper must relate to the maximum permissible load per wheelset or the maximum permissible concentrated loads. If this value is not indicated on the wheelset, the maximum permissible line classification marked on the wagon must be taken into account.

If the overloaded wheelsets are marked with a white cross on the axle, the maintenance operations described in the table above shall be limited to the marked axles only.

In case of doubt, the wheelset(s) should be replaced without prior inspection and marked as having been subject to overloading (Form H^R) before being sent back to the wagon keeper.

4. Flooding

The following inspections and measures shall be performed on wagons that have stood with all or part of their underframe under water in order to return them to running order, where appropriate after cleaning:

- replacement of all wheelsets ->M04.001,
- before they are sent back, all the wheelsets that have been subject to flooding must be clearly marked so they are recognisable to the wagon keeper or his workshop as having suffered potential damage from water (Form H^R),
- visual inspection of suspension springs to check for corrosion that could lead to a rupture of the spring. If necessary ->M02.001, ->M02.004,
- replacement of any buffers that were below the waterline ->M05.003,
- draining of water from the main brake pipe. The wagon should be handled with the brake isolated in accordance with Appendix 9.

5. Contact with energized catenary

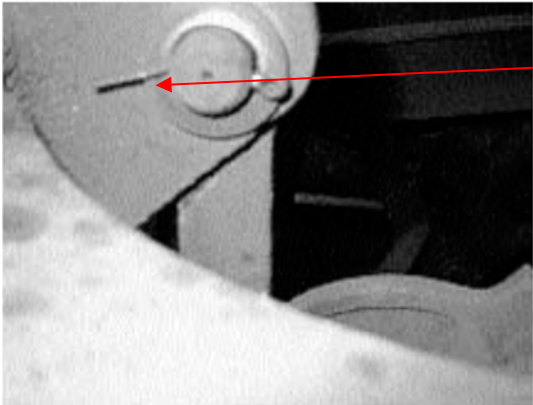
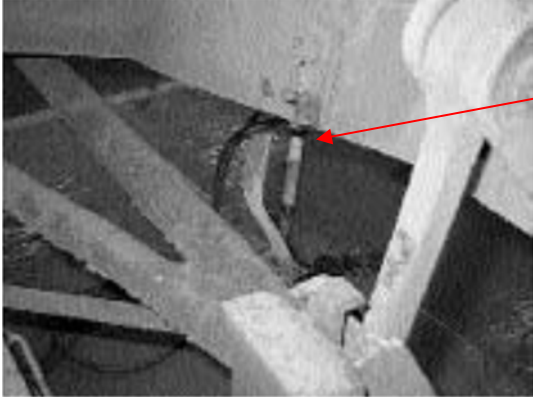
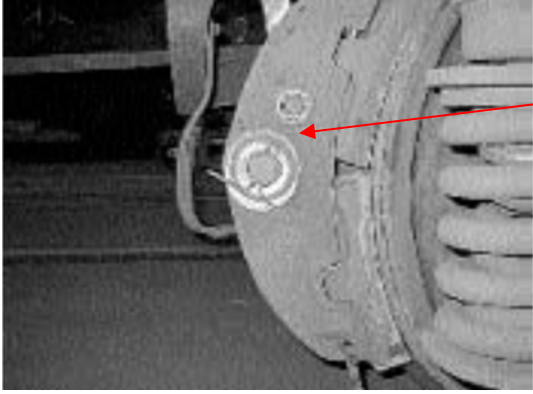
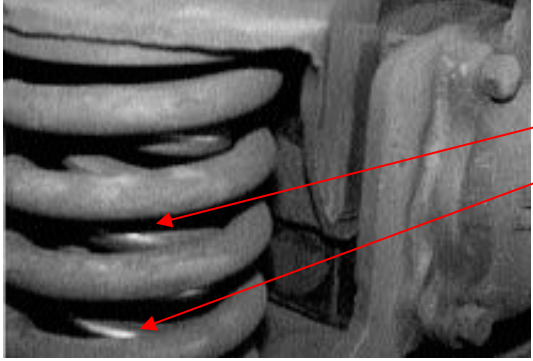
When parts of the wagon body have come into contact with energised catenary wires, the axle-boxes are likely to have sustained damage from the passage of electric current.

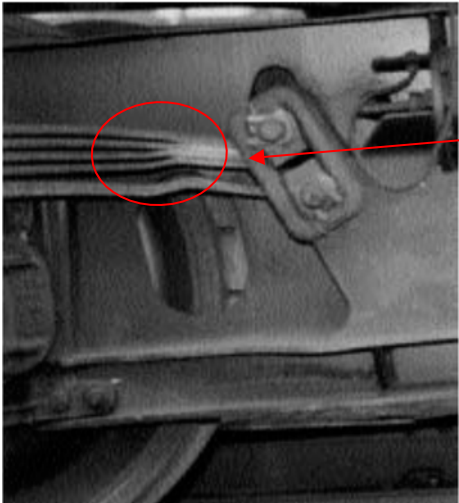
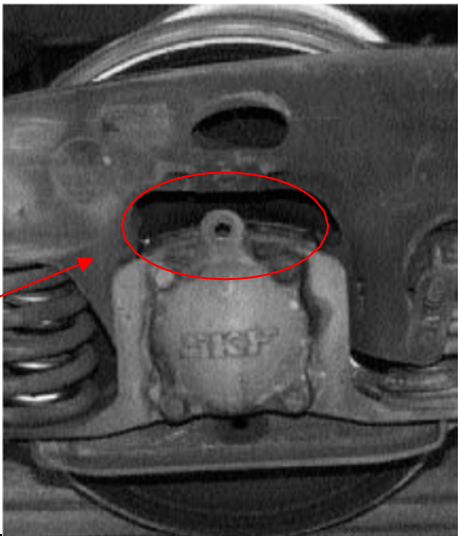
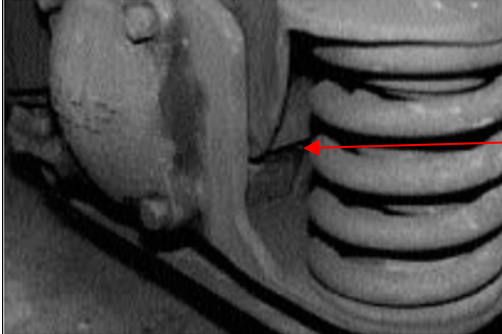
In cases such as these, the following measures shall be taken:

- replacement of all wheelsets on the wagon ->M01.001,
- before they are sent back, all the wheelsets that have been affected by the electric current must be clearly marked so they are recognisable to the wagon keeper or his workshop as having suffered potential damage from electric current (Form H^R),
- inspection of the vehicle body to check for other damage with potential consequences for the wagon's fitness to run,
- also check for burn marks or evidence of fusion, particularly on grounding cables, springs, suspension and other spring connectors. If necessary, ->M02.001, -> M02.004, -> M02.003, -> M04.003,
- for tank wagons, inspect the tank in accordance with the keeper's instructions -> M01.001.

Appendix 10 – Annex 1

SIGNS INDICATING OUT-OF-ROUNDNESS OF WHEELS

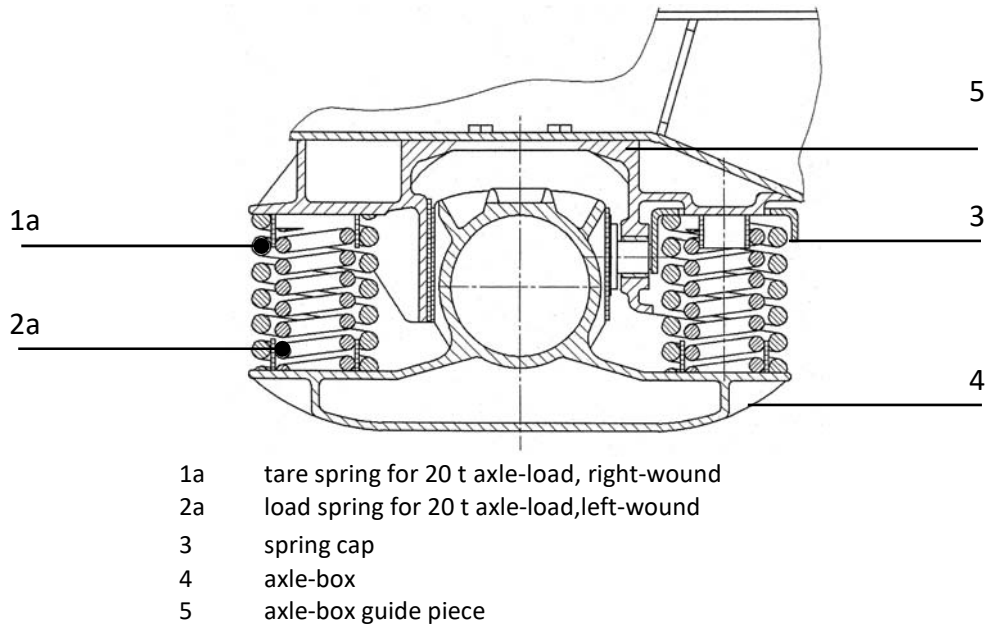
	Picture 1: Sheared-off pin
	Picture 2: Broken safety stirrup
	Picture 3: Shiny traces on the brake triangle end washer
	Picture 4: Shiny traces on the load spring

	Picture 5: Areas shiny with wear, visible from the outside, on the friction points of the spring leaves of parabolic spring suspensions
Picture 6: Lifting safety catch missing or loose	
	Picture 7: Manganese wear plates on bogies and axle-boxes detached
	Picture 8: Irregular contact surface on the edge of tyred wheel rim
	Picture 9: Major irregular crushing of the edge of the tyred wheel rim

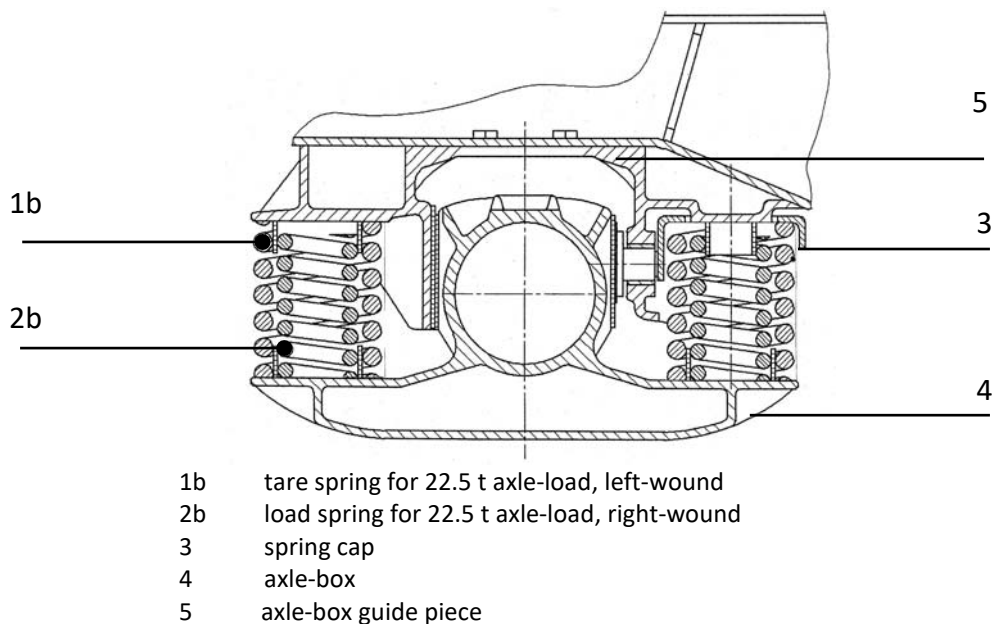
Appendix 10 – Annex 2

DIAGRAM OF THE Y25 BOGIE SUSPENSION

Picture 1 – Bogie with springs for axle-load of 20 tonnes



Picture 2 – Bogie with springs for axle-load of 22.5 tonnes



Appendix 10 – Annex 3

EUROPEAN VISUAL INSPECTION CATALOGUE (EVIC) FOR WHEELSETS

Preamble

1. The documents contained in this annex describe procedures for the visual inspection of wagon axles.

Chapter A:

European visual inspection catalogue (EVIC) for wagon axles.

Chapter B:

Implementation guide for the European visual inspection catalogue (EVIC) for wagon axles.

2. Axles requiring removal following EVIC must be marked in a clearly visible and indelible manner with “EVIC”, the defect code and the number of the corresponding wheelset. This data must also be noted on Form H^R (Appendix 7 of the GCU) when placing an order for replacement wheelsets from the wagon keeper.
3. If a wagon is sent to the workshop because of axle damage according to Appendix 9 of the GCU, the axles of the wheelsets concerned shall not be subjected to visual inspection. Only the provisions of Appendix 10 of the GCU on corrective and preventive maintenance shall be applicable to these wheelsets.

A. European visual inspection catalogue (EVIC)

The following pages represent the complete defect catalogue.

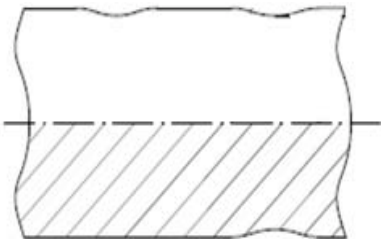
**EUROPEAN VISUAL
INSPECTION CATALOGUE
(EVIC)
FOR WAGON AXLES**

DAMAGE CATEGORY

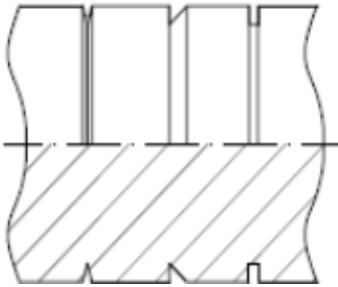
Painted axles		
30	No defects or admissible defects (pitting)	OK
31	Mechanical damage – sharp edged circumferential fluting	X (not ok)
32	Mechanical damage – smooth edged circumferential groove	X (not ok)
33	Mechanical damage – sharp edged notching	X (not ok)
34	Mechanical damage – cracks	X (not ok)
35	Surface damage – large and heavily corroded areas	X (not ok)
36	Surface damage – single, deeply pitted corrosion scars	X (not ok)
37	Coating damage – with or without corrosion	C
Unpainted axles		
40	No defects – admissible surface appearance	OK
41	Mechanical damage – sharp edged circumferential fluting	X (not ok)
42	Mechanical damage – smooth edged circumferential groove	X (not ok)
43	Mechanical damage – sharp edged notching	X (not ok)
44	Mechanical damage – cracks	X (not ok)
45	Surface damage – very heavy, deep and large corrosion	X (not ok)
46	Surface damage – single, deeply pitted corrosion scars	X (not ok)
All axles		
50	Abutment area	X (not ok)

CRITERIA FOR PAINTED AXLES

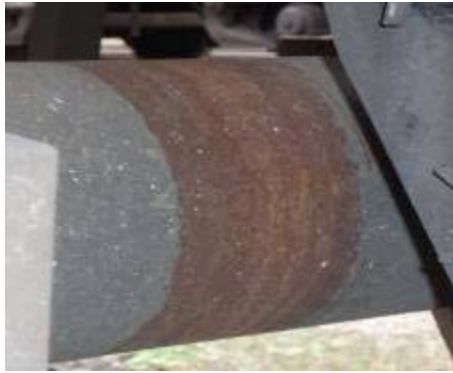
30 No or admissible defects found on the axle surface - smooth pitting		Painted axles
Salient information:		
	Pitting may occur either round the entire perimeter or intermittently and is characterised by smoothly rounded contours with no sharp transitions. This type of pitting may arise in the course of maintenance work. The anti-corrosion coating is undamaged.	
Decision:		
	Pitted axles whose coating is nevertheless undamaged may remain on the vehicle.	
		OK

Pictorial representation:			
			

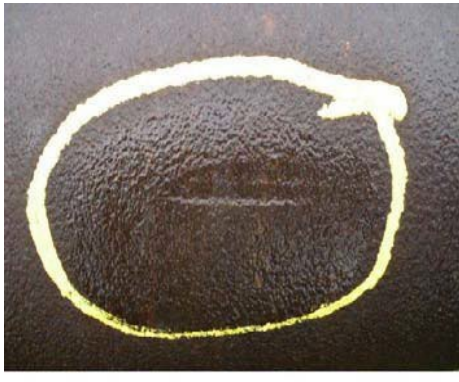
31 Mechanical damage – sharp edged circumferential fluting		Painted axles
Salient information:		
	Flutes are characterised by sharp edged circumferential sharp-edged transitions.	
	Mechanical damage to the base material in the form of fluting is inadmissible.	
Decision:		
	Check on the wagon why this damage could have occurred and repair accordingly.	
	Remove from service according	Case A
		X

Pictorial representation:			
			

32 Mechanical damage – smooth edged circumferential grooves		Painted axles
Salient information:		
	Characterised by smooth transitions in the edges (GCU Appendix 9, 1.6.2). Pitting that arises during operation (caused e.g., by brake lever connectors dragging) involves damaged anti-corrosion coating	
Decision:		
	Check on the wagon why this damage could have occurred and repair accordingly.	
	Remove from service	Case B
	if there is damage to the base material > 1mm: (acc. GCU)	Case A
		X

Pictorial representation:			
			

33 Mechanical damage – sharp edged notching		Painted axles
Salient information:		
	Sharp edged notches occur locally and are characterised by sharp-edged transitions.	
	Mechanical damage to the base material in the form of notching is inadmissible.	
Decision:		
	Remove from service (according to GCU criteria)	Case A
		X

Pictorial representation:			
			

34 Mechanical damage – cracks		Painted axles
Salient information:		
	Cracks occur locally on the shaft material (not on the painting) and are characterised and visible by fine lines.	
	Mechanical damage to the base material in the form of cracks is inadmissible.	
Decision:		
	Remove from service	Case A
		X

Pictorial representation:			
			

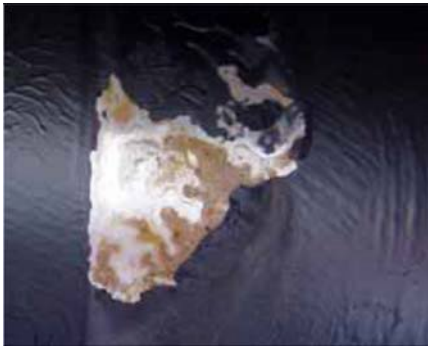
35 Surface damage – large and heavily corroded areas		Painted axles
Salient information:		
	Surface damage to base material in form of large and heavily corroded areas (old corrosion protection) is inadmissible.	
Decision:		
	Remove from service.	
		Case B
		X

Pictorial representation:			
			

36 Surface damage – single, deeply pitted corrosion scars		Painted axles
Salient information:		
	Surface damage to the base material in the form of marked, local corrosion scars (resulting e.g. from chemical effects) is inadmissible.	
Decision:		
	Remove from service.	Case B
		X

Pictorial representation:			
			

37 Coating damage – with or without corrosion		Painted axles
Salient information:		
	Minor lack of an anti-corrosion coating, whether corrosion is involved or not.	
Decision:		
	Leave in service acc. case C and/or repair the damage in situ on the wheelset.	
		Case C
		C

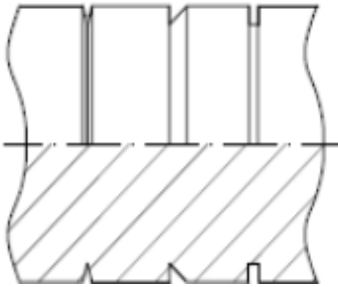
Pictorial representation:				
				
				

CRITERIA FOR UNPAINTED AXLES

40 No defect - admissible surface appearance		Unpainted axles
Salient information:		
	There exist maintenance rules that do not require any anti-corrosion protection. Axles and wheels stay unpainted in such cases and show a thin and uniform layer of rust on their surfaces in service.	
Decision:		
	Deep corrosion is not accepted.	
	Leave in service wheelset “as new”, “very good”, “good” and “acceptable”.	
		OK

Pictorial representation:			
As new	Very Good	Good	Acceptable
			

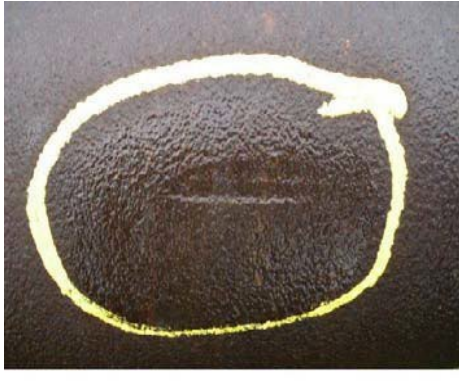
41 Mechanical damage – sharp edged circumferential fluting		Unpainted axles
Salient information:		
	Flutes are characterised by sharp edged circumferential sharp-edged transitions.	
	Mechanical damage to the base material in the form of fluting is inadmissible.	
Decision:		
	Check on the wagon why this damage could have occurred and repair accordingly.	
	Remove from service according	Case A
		X

Pictorial representation:			
			

42 Mechanical damage – smooth edged circumferential grooves		Unpainted axles
Salient information:		
	Characterised by smooth transitions in the edges (GCU Appendix 9, 1.6.2). Pitting that arises during operation (caused e.g., by brake lever connectors dragging) involves damaged anti-corrosion coating	
Decision:		
	Check on the wagon why this damage could have occurred and repair accordingly.	
	Remove from service.	Case B
	if there is damage to the base material > 1mm: (acc. GCU)	Case A
		X

Pictorial representation:

43 Mechanical damage – sharp edged notching		Unpainted axles
Salient information:		
	Sharp edged notches occur locally and are characterised by sharp-edged transitions	
	Mechanical damage to the base material in the form of notching is inadmissible.	
Decision:		
	Remove from service (according to GCU criteria).	Case A
		X

Pictorial representation:			
			

44 Mechanical damage – cracks		Unpainted axles
Salient information:		
	Cracks occur locally and are characterised and visible by fine lines.	
	Mechanical damage to the base material in the form of cracks is inadmissible.	
Decision:		
	Remove from service.	Case A
		X

Pictorial representation:			
			

45 Surface damage – large and heavily corroded areas		Unpainted axles
Salient information:		
	Surface damage to base material in form of large and heavily corroded areas (old corrosion protection) is inadmissible.	
Decision:		
	Remove from service.	Case B
		X

Pictorial representation:			
			

46 Surface damage – single, deeply pitted corrosion scars		Unpainted axles
Salient information:		
	Surface damage to the base material in the form of marked, local corrosion scars (resulting e.g., from chemical effects) is inadmissible.	
Decision:		
	Remove from service.	Case B
		X

Pictorial representation:			
			

ABUTMENT AREA

50 Abutment area		All axles
Situation:		
	Normally, the abutment area cannot be inspected sufficiently for wheelsets mounted in the wagon.	
Recommendation:		
Only if there is a clear indication on mechanical or corrosion damages		
	Take wheelset out.	Case A
		X
If not judgeable		
	Leave wheelset in service	
		OK

Pictorial representation:			
Not acceptable	Not judgeable		
			

B. Implementation Guide

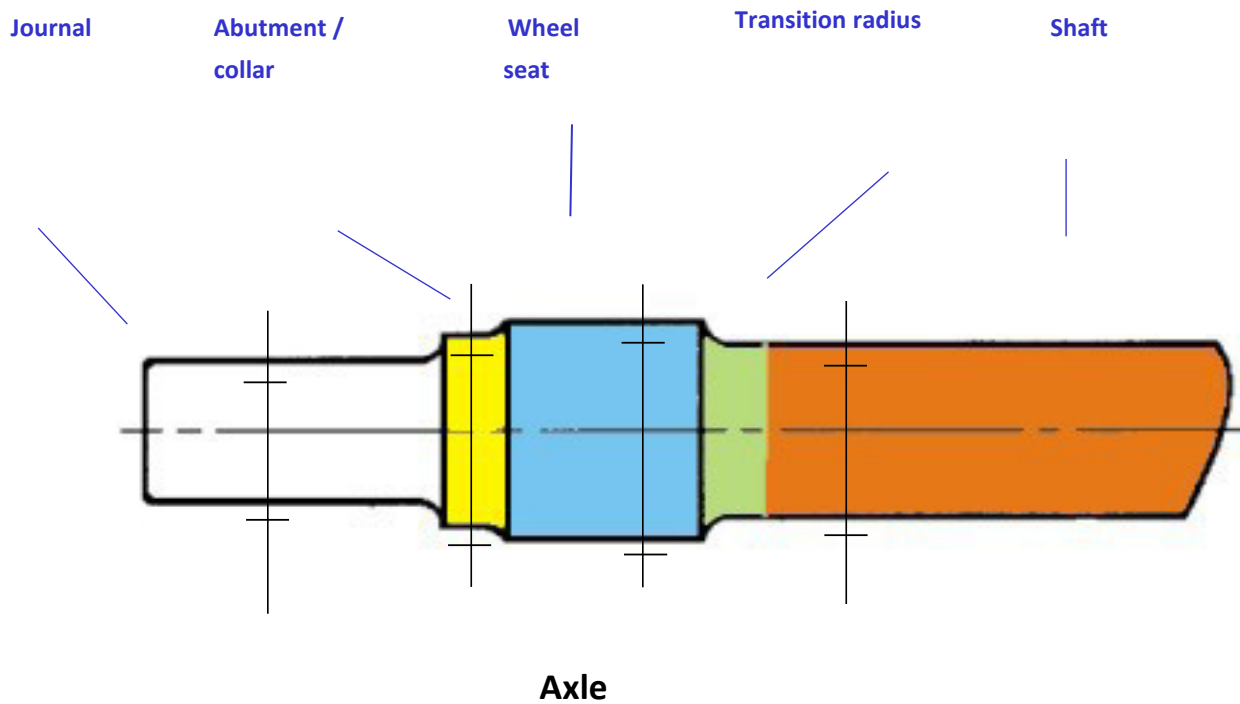
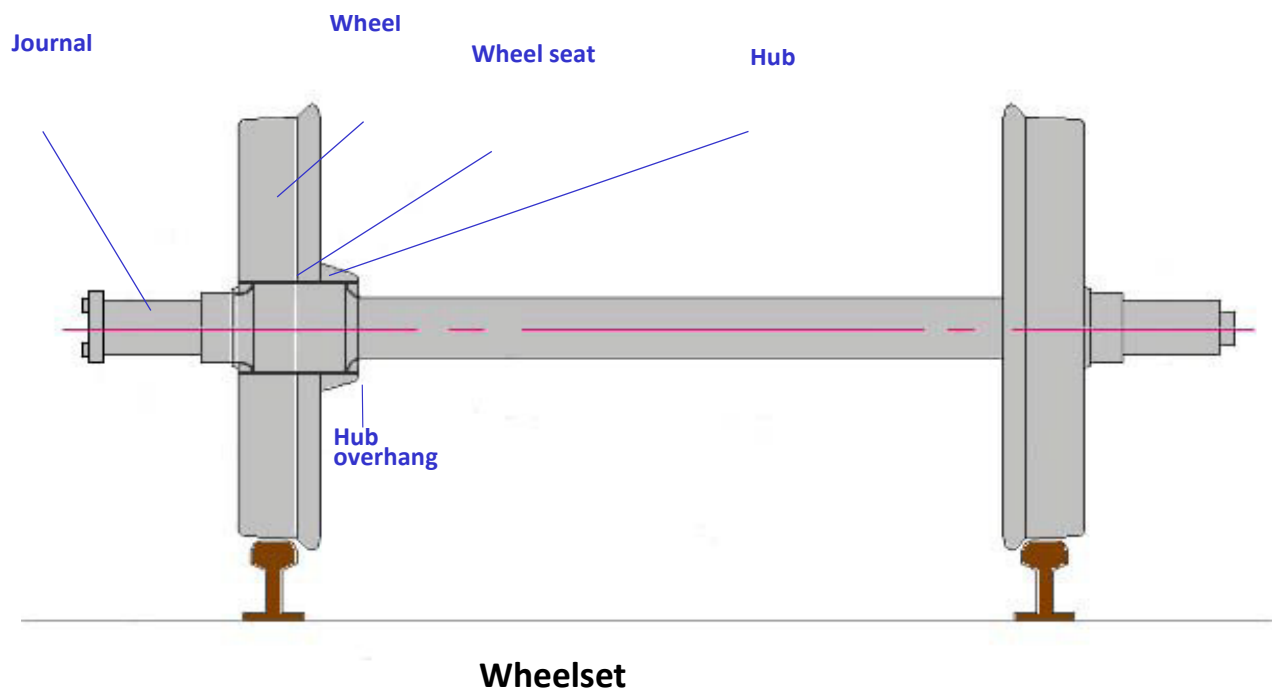
The following pages represent the complete implementation guide.

**Implementation Guide for the
EUROPEAN VISUAL
INSPECTION CATALOGUE (EVIC)
FOR FREIGHT WAGON AXLES**

Table of contents

1. Definitions
2. Basics and preparing inspections
3. Conducting the visual inspections

1. Definitions



In the EVIC procedure instructions, the meaning of several expressions is as follows:

Replace = take the wheelset out of the wagon (and repair it in a suitably competent workshop, if possible).

Repair = repair the damage in situ (wheelset mounted) according to the relevant rules

Remove from service = replace or repair (in situ if possible) according to the criteria

2. Basics and preparing inspections

2.1 Mandating and invoicing the EVIC inspection

The RU or its auxiliary must send the keeper the EVIC code for the operation performed on the wagon (as per Appendix 10, Annex 6) within one month of the wagon exiting the workshop.

In case of a replacement of “EVIC failed” wheelset, workshop and keeper need to communicate according to appendix 7 (Form H^R).

2.2 Staff qualifications

The inspections have to be conducted by staff qualified in application of this Visual Inspection Catalogue.

It is not necessary for the operatives conducting such visual inspections to be qualified as NDT visual inspectors on the basis of a standard.

The staff involved in this inspection should be trained one day for the correct use of this procedure.

It is under the responsibility of the workshop to update a list of trained workers for the use of the present procedure.

3 Conducting the visual inspection

3.1 Execution of the visual Inspection

The Visual Inspection of the freight wagon’s axle shafts for damage to material and coating (if existing) is mandatory

- during light maintenance
- each time the wagon is in a workshop (not mobile team)

and if one of the following conditions is fulfilled:

- the wagon is on a pit or
- the wagon is lifted

In case of non-judgeable defects (not sufficiently detailed by the descriptions in the EVIC), the executor of the EVIC inspection must contact the keeper for further instructions.

A replacing wheelset for a sorted-out axle must be in an “EVIC ok” status.

The EVIC doesn't replace existing maintenance rules. First, existing maintenance rules must be applied, then the EVIC check. If an axle is sorted out with current maintenance rules, it is not necessary to apply the EVIC.

The visual inspection covers the complete area of the axle-shaft surface between the wheels. See special instructions for the abutment area in the EVIC.

The inspection area is to be examined for

- mechanical damage (fluting, pitting and notching, cracks),
- surface damage (areas eaten away, corrosion scars),
- coating damage (with and without corrosion) if coating system existing.

Reference images in EVIC (typical damage features) are used for identifying inadmissible forms of damage.

It is not foreseen to clean the axle. In case of doubt, clean axle (locally) to allow examination.

If natural light intensity is too poor, a supplementary white light source must be used in order to obtain an adequate visibility on the axle.

Axle shafts with inadmissible forms of damage are to be repaired according to the prescriptions, if possible. Otherwise, the axles must be replaced.

An example for an adequate position for the staff conducting the visual inspection is given in the figure below.

If the wheelset cannot rotate (if the wagon is not lifted up), the visibility of the full surface of the axle must be assured in a different way.

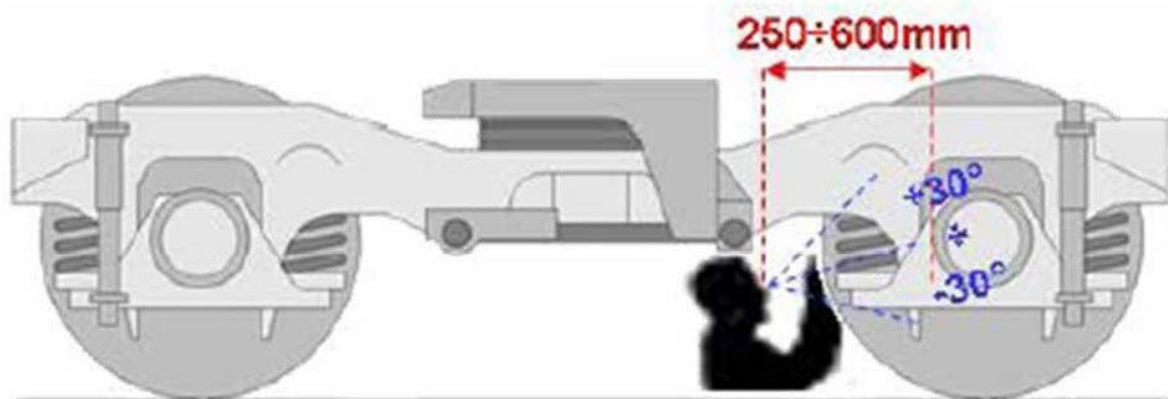


Figure 2 – Inspection angle and distance

3.2 Actions to be taken after inspection (cases)

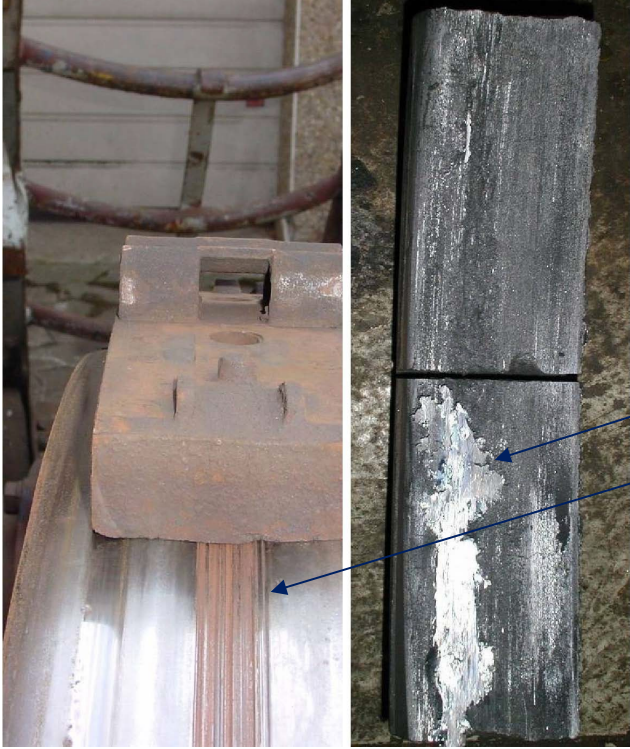
The following cases describe the actions to be taken after a visual inspection of the axle:

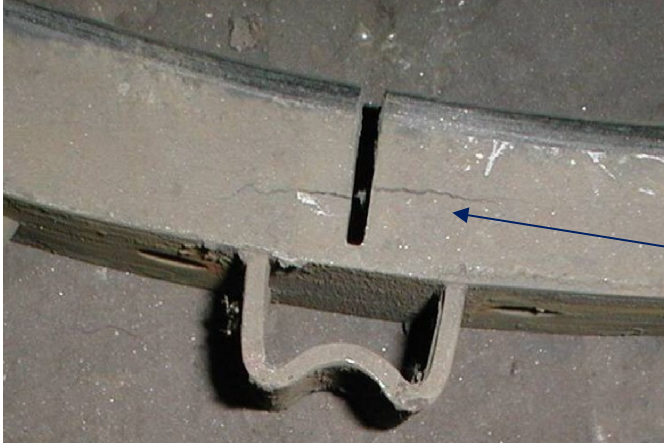
- A Remove the wheelset from service without delay,
- B Remove the wheelset from service after unloading the wagon and/or sending back to home workshop,
- C Leave wheelset in service until the next revision/overhaul of the wagon or repair the damage in situ on the wheelset.
In the next revision/overhaul, the remove from service is mandatory.

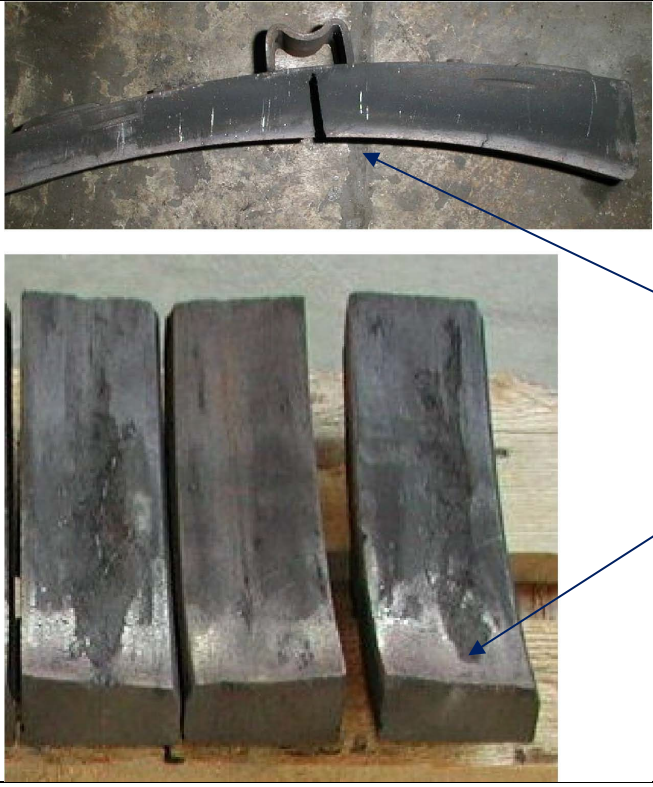
Remove from service = replace or repair (in situ if possible) according to the criteria.

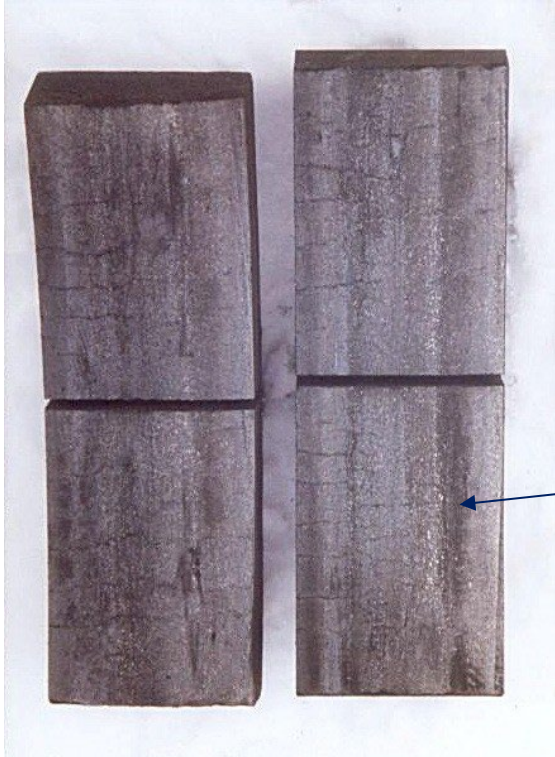
Appendix 10 – Annex 4

COMPOSITE BRAKE BLOCKS – WHEN TO REPLACE AND NOT TO REPLACE

Picture	Description, limit value	Action to be taken
	Picture 1: Most of tread displays hollowing (e.g. grooves) and/or shiny metallic marks	Replace <u>Note:</u> Check wheel tread in accordance with Chapter A 1.6.1
	Picture 2: Friction material has become detached from plate over a length of > 25 mm	Replace

Picture	Description, limit value	Action to be taken
	Picture 3: Crack on the expansion joint (designated breaking-point) Incipient cracking or crack on brake block	Do not replace
	Picture 4: Incipient cracking of > 25 mm parallel to the wheel circumference	Replace
	Picture 5: Smallest thickness is below 10 mm	Replace

Picture	Description, limit value	Action to be taken
	Picture 6: Incipient radial cracking in friction material	Do not replace
	Picture 7: Radial crack in the brake block from the friction surface to the plate: the brake block displays a radial crack from the friction surface to the plate/edge of the plate, not located on the expansion joint (designated breaking- point).	Replace
	Picture 8: “White film” on surface of contact area and to a depth of 10 mm or significant shelling on the contact surface and heavy carbonisation	Do not replace <u>Note:</u> Check wheelset in accordance with Chapter A 1.18

Picture	Description, limit value	Action to be taken
	Picture 9: Branched thermal crack pattern, mainly axial (not thermal cracks, cf. vitrification) and carbonisation	Do not replace
	Picture 10: Shelling of the friction material along more than $\frac{1}{4}$ of the length of the block (corresponds to a total length of > 63 mm for a 250 mm brake block and/or a total length of > 80 mm for a 320 mm brake block)	Replace
	Picture 11: Damage to brake block due to metal build-up on the wheelset or wheel flat	Replace <u>Note:</u> Check wheel tread in accordance with Chapter A 1.6.1

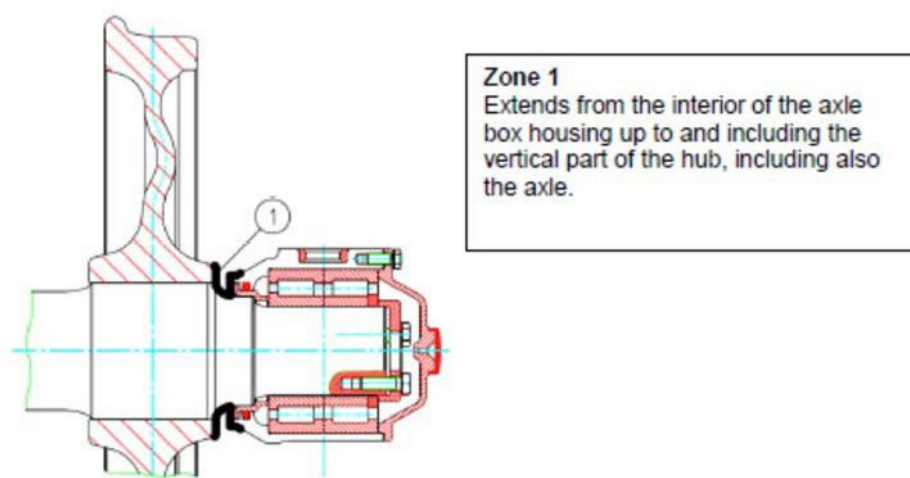
Appendix 10 – Annex 5

VERIFICATION AND HANDLING OF GREASE/OIL DEPOSITS ON WHEELS AND AXLE BOXES

Concerns wagons withdrawn from service due to loss of lubricant and/or on which a lubricant leak is recorded in the context of an axle/running gear inspection (e.g., EVIC).

General remark:

The procedure described hereafter must only be applied if no “hot box” or “temperature” notification has been issued by the hot box detection system!

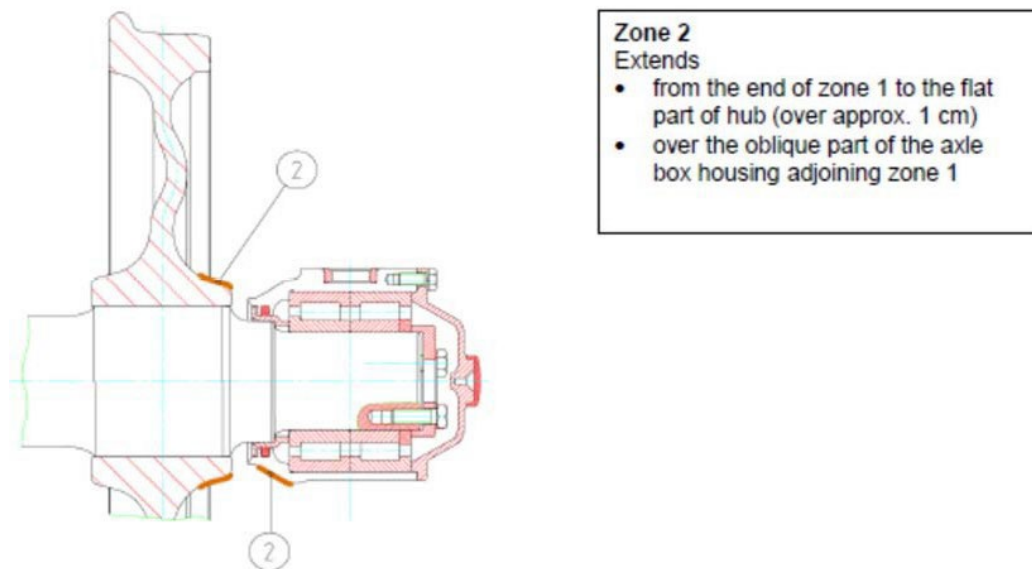


Lubricant on the axle box housing – zone 1

Axles with grease and/or oil in “zone 1” may remain under the wagon subject to the following measures being taken in the locations concerned:

Measures to be taken:

- The wagon’s keeper must be informed. It is the keeper’s job to provide instructions to apply a marking to the axle or to enter it in the axle database, and to decide whether the axle may remain under the wagon and/or whether it should be replaced.
- If the keeper says the axle can remain under the wagon, the excess grease and/or oil is to be wiped away.

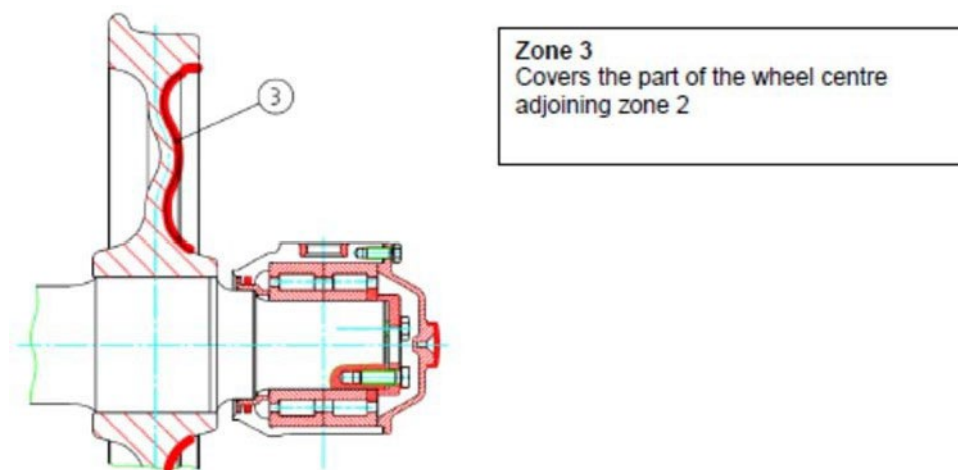


Lubricant on the axle box housing – zone 2

Axles with grease and/or oil in “zone 2” may remain under the wagon subject to the following measures being taken in the locations concerned:

Measures to be taken:

- The wagon’s keeper must be informed. It is the keeper’s job to provide instructions to apply a marking to the axle or to enter it in the axle database, and to decide whether the axle may remain under the wagon and/or whether it should be replaced.
- If the keeper says the axle can remain under the wagon, the excess grease and/or oil is to be wiped away.



Projections of oil/grease on the axle box housing – zone 3

For axles with lubricant projections on the wheel centre in “zone 3”, **if these projections DO NOT EMANATE from the hub and/or the axle box** but **begin beyond the axle box housing**,

or

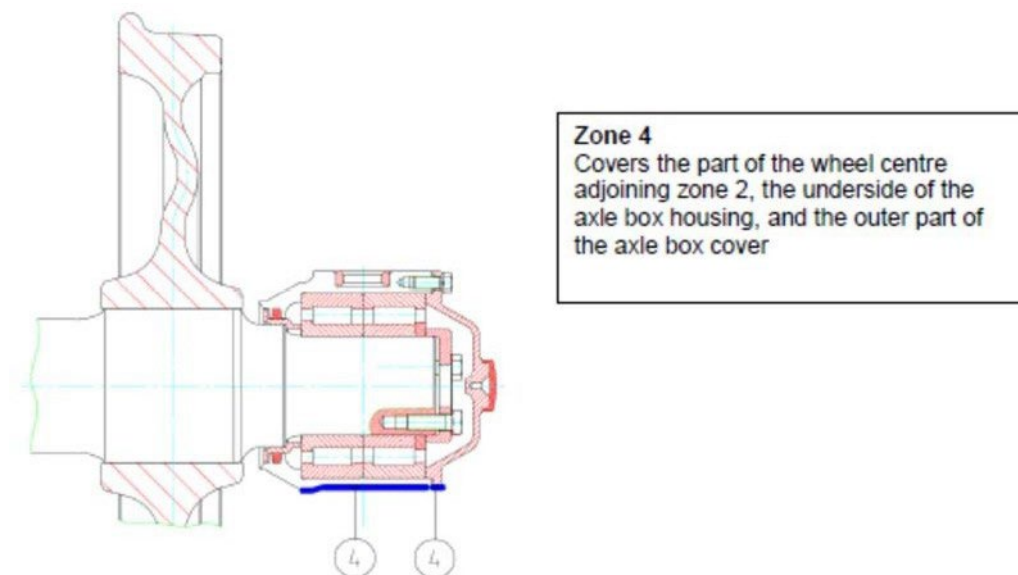
if traces of lubricant, emanating radially from the axle box housing, are observed scattered irregularly across “zone 3”, the axles may remain under the wagon subject to the following measures being taken in the locations concerned:

Measures to be taken:

- The wagon’s keeper must be informed. It is the keeper’s job to provide instructions to apply a marking to the axle or to enter it in the axle database, and to decide whether the axle may remain under the wagon and/or whether it should be replaced.
- If the keeper says the axle can remain under the wagon, the excess grease and/or oil is to be wiped away.

Oil/grease leakage distributed regularly across the whole wheel centre circumference – zone 3

If the lubricant emanates radially from the axle box housing and spreads in a uniform manner across the wheel body, wheel centre and/or intersection between the wheel body and tyred rim, the axle must be removed and replaced, applying Label H^R.



Grease/oil leakage on the bottom of the axle box housing – zone 4

If grease and oil is observed in “zone 4”, the location from where the grease/oil is leaking is to be identified. The procedure to be applied varies depending on the origin of the problem:

- the grease/oil emanates from zones 1 and 2, within the axle box housing, and is leaking underneath the axle box housing,
- there are traces of grease and/or oil on the axle box cover, running under the axle box housing,
- the axle box housing is cracked and/or broken.

Measures to be taken if points a or b apply:

- The wagon’s keeper must be informed. It is the keeper’s job to provide instructions to apply a marking to the axle or to enter it in the axle database, and to decide whether the axle may remain under the wagon and/or whether it should be replaced.
- If the keeper says the axle can remain under the wagon, the excess grease and oil is to be wiped away.

Measure to be taken if point c applies:

- Remove the axle from the wagon concerned and replace it, applying Label H^R.

Appendix 10 – Annex 6

CODING OF REPAIR WORK

The repair work carried out must be documented by the workshop for traceability purposes. The following coding is used to this end:

- The module number for measures to restore fitness to run and
- The CU codes according to column 1 of the table below for additional repair work authorised by the keeper

The documentation stating the coding is provided by the RU or its auxiliary and must be sent without delay to the keeper. CU codes may only be additionally specified if they are not part of the modules for measures to restore fitness to run.

The module numbers and CU codes can be indicated on the invoice and/or sent separately to the keeper. At least the wagon number, workshop name and date of entry to/exit from the workshop must be indicated as basic data.

Any additional information necessary and measurement values (especially from column 3) must, at the latest and without prompting, be communicated at the same time as the coding

Structure of the list:

Column 1, GCU intervention code: the intervention codes shall be sent to the keeper.

Meaning of codes beginning with CU (e.g. CU12345):

CU:	Indicates that the code belongs to the GCU, Appendix 10		
1:	Number of the subsection in Chapter A of Appendix 10		
234:	Sequence number		
5:	Substance of intervention	0:	inspection
		1:	repair, reset (without welding)
		2:	exchange
		3:	weld

Column 2, action: description of action. May, if so desired, be sent with intervention code.

Column 3, other vital information: the measurement values indicated, position-related data, and any reports shall be communicated to the keeper.

Column 4, inspection as per Appendix 9: intervention corresponds to damage as described in Appendix 9 to the GCU.

Column 5, provision as per Appendix 10: intervention corresponds to the provisions of GCU Appendix 10.

If the workshop has intervened in accordance with one or more modules, the workshop shall inform the wagon keeper by sending the module number(s).

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU10010	Measure wheelset in accordance with points in section A1	axle number, value, measuring point	1.1.1, 1.3.1, 1.4, 1.7.1	1.1-1.6, 1.9, 1.18, 1.19
CU10012	Replace wheelset if values measured not within tolerances	axle number, form H ^R , value, measuring points		1.1-1.6, 1.9, 1.18, 1.19
CU10020	Visually inspect wheelset	axle number,	1.2.1, 1.3.2, 1.6.1, 1.6.3, 1.8.2	1.6-1.8, 1.10-1.15.1
CU10022	Replace wheelset following visual inspection	axle number, form H ^R	1.5	1.6-1.8, 1.10-1.15.1
CU10150	Check against EVIC			1.15.2
CU10152	Replace wheelset following EVIC inspection	Axle number, Form H ^R		1.15.2
CU10160	Check that tyre is not loose		1.1.2-1.1.6	1.16
CU10162	Replace wheelset following check that tyre has not come loose	axle number, form H ^R		1.16
CU10170	Measure wheelset in accordance with 1.17 (three-point measurement)	axle number, values		1.17
CU10172	Replace wheelset if values measured fall outside 1.17 tolerances	axle number, form H ^R		1.17
CU10180	Test for overheating			1.18
CU10181	Thermally overloaded thermostable wheelsets without wheelset replacement	axle number		1.18
CU10200	Check there is no loss of grease/oil	axle number, position of axle box	1.8.1	1.20
CU10201	Wipe clean any lubricant loss as per Annex 5	axle number, position of axle box		1.20
CU10281	Reprofile monobloc wheel	axle number, value, measurement report		1.28
CU10322	Replace wheelset following hot box	axle number, form H ^R	1.2.2.2, 1.8.3	1.32
CU20010	Visually inspect leaf-spring suspension	position of axle box,	2.1.1-2.1.4, 2.1.6	2.1, 2.2, 2.4, 2.7
CU20012	Replace leaf-spring suspension spring	position of axle box, form H, indicate reason for change	2.1.1-2.1.4, 2.1.6	2.1, 2.2, 2.4, 2.7
CU20030	Check helical springs	position of axle box,	2.5.1, 2.5.2.x	2.3, 4.20-4.23
CU20032	Replace helical spring	position of axle box, form H, indicate reason for change		2.3, 4.20-4.23
CU20050	Check distance between spring buckle and fixed part of bogie frame or wagon	position of axle box,	2.1.5, 2.5.6	2.5
CU20051	Rectify distance between spring buckle and fixed part of bogie frame or wagon	position of axle box,	2.1.5, 2.5.6	2.5
CU20060	Check for contact marks between spring buckle and fixed part of bogie frame or wagon	position of axle box,	2.4.4, 2.5.6	2.6
CU20061	Rectify causes and paint any contact marks between spring buckle and fixed part of bogie frame or wagon	position of axle box, detail activities	2.4.4, 2.5.6	2.6
CU20080	Check elements composing the elastic suspension	position of axle box,	2.4.2- 2.4.4	2.8
CU20082	Replace elements composing the elastic suspension	position of axle box, indicate reason for change	2.4.2- 2.4.4	2.8
CU20092	Replace suspension spring shaft	position of axle box, indicate reason for change	2.4.3	2.8
CU30030	Check main brake pipe			3.3
CU30040	Check disc brake indicator			3.4
CU30050	Check brake rigging and mechanical parts		3.1.1	3.1-3.2, 3.6, 3.13
CU30060	Check safety stirrups		3.1.2	3.5
CU30061	Right/straighten safety stirrup		3.1.2	3.5

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU30062	Replace safety stirrup		3.1.2	3.5
CU30070	Check brake blocks		3.2	3.6-3.8
CU30072	Replace brake blocks		3.2	3.6-3.8
CU30100	Check brake hoses		3.3.2	3.9-3.10
CU30102	Replace brake hoses		3.3.2	3.9-3.10, 3.17
CU30110	Check height of brake hoses relative to rail			3.11
CU30111	Rectify height of brake hoses relative to rail			3.11
CU30120	Check stopcock		3.3.5	3.12
CU30121	Replace stopcock		3.3.5	3.12
CU30131	Remove or secure damaged or detached brake parts	indicate which parts have been removed or secured		3.13
CU30150	Check handbrake		3.5	3.15
CU30151	Repair handbrake		3.5.1	3.15
CU30190	Perform brake test as per UIC 543-1	brake test report		3.19
CU30200	Inspect brake release pull		3.1.5	3.20
CU30202	Replace brake release pull		3.1.5	3.20
CU30210	Check brake performance after replacing brake blocks and/or wheelsets			1.37, 3.21
CU40010	Check wagon underframe		4.1.1, 4.1.2	4.1
CU40020	Check flanges of solebars, headstocks and intermediate cross-bars subject to stress from the coupler		4.1.1, 4.1.2	4.2
CU40030	Check welding on wagon underframe		4.1.1, 4.1.2	4.3
CU40033	Repair wagon underframe by welding	indication as per EN 15085- 2	4.1.1, 4.1.2	4.3
CU40060	Check spark arrestor plates		3.4	4.6, 4.7
CU40061	Repair spark arrestor plate	position of axle box	3.4	4.6, 4.7
CU40062	Replace spark arrestor plate	position of axle box	3.4	4.6, 4.7
CU40080	Check axle guard and tie		4.2.x, 4.3.1, 4.4.x	4.8-4.10
CU40081	Repair axle guard		4.2.x, 4.3.1	4.8-4.10
CU40082	Replace axle guard		4.2.x, 4.3.1	4.8-4.10
CU40102	Replace axle guard tie	position of axle box	4.2.x, 4.3.1	4.8-4.10
CU40110	Check suspension spring brackets		4.5.1	4.11
CU40111	Repair suspension spring brackets		4.5.1	4.11
CU40112	Replace suspension spring brackets	position of axle box	4.5.1	4.11
CU40120	Check bogies		4.7.x	4.12-4.15
CU40130	Check welds on bogie frames	bogie number and/or position of axle box	4.7.x	4.12-4.15
CU40133	Repair bogie frame by welding	bogie number and/or position of axle box	4.7.x	4.12-4.15
CU40140	Check side bearer fastenings		4.8.3	4.14
CU40141	Restore side bearer fastenings to working or- der		4.8.3	4.14
CU40142	Replace side bearer parts		4.8.3	4.14
CU40160	Check bogie centre casting	bogie number and/or position of axle box	4.6.1	4.16
CU40162	Replace bogie centre casting	bogie number and/or position of axle box	4.6.1	4.16
CU40170	Check kingpin	bogie number and/or position of axle box	4.6.1	4.17

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU40172	Replace kingpin	bogie number and/or position of axle box	4.6.1	4.17
CU40180	Check axle guard guiding surface		4.4.x	4.18
CU40183	Weld axle guard guiding surface	position of axle box	4.4.x	4.18
CU40190	Check earthing braid		4.6.2.x	4.19
CU40191	Attach earthing braid	bogie number and/or axle box position	4.6.2.x	4.19
CU40192	Replace earthing braid	bogie number and/or position of axle box	4.6.2.x	4.19
CU40322	Replace any rivets, screws or bolts which are loose or missing from the axle guard securing	position of axle box		4.32
CU40331	Clean contact surface of the suspension shock absorber	position of axle box		4.33
CU40343	Weld wear plate onto bogie	bogie number and/or position of axle box		4.34
CU50010	Measure buffing height	height per buffer	5.1.2	5.1
CU50030	Check buffers, "starred points"		5.1.1, 5.2.x, 5.3.x, 5.4.x, 5.5.x	5.3, 5.7, 5.8, 5.9
CU50032	Replace buffer fastening bolt		5.4.4.x	5.3
CU50040	Check buffers: fastening, spring, casing		5.1.1, 5.2.x, 5.3.x, 5.4.x, 5.5.x	5.4, 5.5, 5.6
CU50042	Replace buffers at one end			5.23
CU50081	Lubricate buffer plates		5.2.3.1	5.8
CU50091	Grind buffer plates following detection of grooving		5.2.3.2	5.9.1, 5.9.2
CU50110	Check draw hook and screw coupler		5.6.x	5.11, 5.12, 5.13, 5.14, 5.19
CU50111	Rectify height of screw coupler relative to rail		5.6.3	5.11
CU50132	Replace screw coupler			5.13
CU50141	Lubricate screw coupling			5.14.1
CU50142	Replace draw hook		5.7.1.x	5.13
CU50150	Check draw bar		5.8.1	5.15
CU50170	Check traction		5.6.2	5.17, 5.18
CU50172	Replace traction		5.6.2	5.17, 5.18
CU50200	Check screw coupler dummy hook		5.6.2	5.20
CU50201	Right/straighten screw coupler dummy hook		5.6.2	5.20
CU50202	Replace screw coupler dummy hook		5.6.2	5.20
CU50213	Repair draw bar temporarily by welding			5.21
CU50220	Check shock absorber		5.9.1	5.22
CU50221	Repair shock absorber		5.9.1	5.22
CU50252	Replace damaged or distorted anti-crash device		5.5.2	5.26
CU50262	Replace buffer fitted with damaged or distorted anti-crash device with standard buffer		5.5.2	5.26
CU60020	Check wagon body		6.1.3.x, 6.1.4.x, 6.1.7.9	6.1, 6.2
CU60021	Repair wagon body		6.1.3.x, 6.1.4.x	6.2
CU60022	Repair wagon body following gauge-fouling		6.1.3.x, 6.1.4.x	6.2
CU60030	Check heating pipes and other connections			6.3
CU60031	Rectify minimum height relative to the rail of the heating pipes and other connections			6.3

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU60040	Check moving parts and the devices used to control them			6.4
CU60041	Restore moving parts and the devices used to control them to working order			6.4
CU60050	Check floor		6.1.5.x	6.5
CU60051	Repair floor		6.1.5.x	6.5
CU60060	Check sliding doors and collapsible side walls		6.1.6.x	6.6
CU60061	Restore sliding doors and collapsible side walls to working order		6.1.6.x	6.6
CU60070	Check door locking		6.1.6.x	6.7
CU60071	Restore door locking to working order		6.1.6.x	6.7
CU60080	Check door leak-tightness		6.1.6.x	6.8
CU60081	Restore door leak-tightness to working order		6.1.6.x	6.8
CU60090	Check guiding and locking systems		6.1.6.x	6.9
CU60091	Restore guiding and locking systems to working order		6.1.6.x	6.9
CU60092	Replace guiding and locking systems		6.1.6.x	6.9
CU60100	Check steps and handrails		6.1.7.1-6.1.7.4	6.10, 6.11, 6.12
CU60101	Right/straighten steps and handrails		6.1.7.1-6.1.7.4	6.10, 6.11, 6.12
CU60102	Replace steps and handrails	indicate parts replaced	6.1.7.1-6.1.7.4	6.10, 6.11, 6.12
CU60130	Check label-holder, marking plate, etc.		6.1.7.5,6.1.7.6	6.13
CU60131	Repair label-holder, marking plate, folding board		6.1.7.5,6.1.7.6	6.13
CU60132	Replace label-holder, marking plate, folding board	indicate parts replaced	6.1.7.5,6.1.7.6	6.13
CU60140	Check markings as per Appendix 11		6.1.x, 6.2.x	6.14
CU60141	Render markings compliant		6.1.x, 6.2.x	6.14
CU60150	Check ventilation flaps		6.2.1.x	6.15
CU60151	Repair ventilation flaps		6.2.1.x	6.15
CU60152	Replace ventilation flaps		6.2.1.x	6.15
CU60160	Check control gear and shutter retaining brackets		6.2.2.x	6.16
CU60161	Repair control gear and shutter retaining brackets		6.2.2.x	6.16
CU60162	Replace control gear and shutter retaining brackets		6.2.2.x	6.16
CU60170	Check roof cover and guttering		6.2.3	6.17
CU60171	Repair roof cover and guttering		6.2.3	6.17
CU60180	Check opening roof		6.2.4.x	6.18
CU60181	Repair opening roof		6.2.4.x	6.18
CU60190	Check roof hatches		6.2.4.x	6.19
CU60191	Restore roof hatches to working order			6.19
CU60200	Check side door locking		6.3.1.x	6.20
CU60201	Repair side door locking		6.3.1.x	6.20
CU60210	Check end flap/board locking		6.3.1.x, 6.3.2.x	6.21
CU60211	Repair end flap/board locking		6.3.1.x, 6.3.2.x	6.21
CU60222	Replace closing end parts			6.22
CU60230	Check cantrail		6.3.3.x	6.23
CU60231	Repair cantrail		6.3.3.x	6.23
CU60240	Check drop sides		6.4.1.x	6.24
CU60241	Restore drop side to working order		6.4.1.x	6.24
CU60250	Check hinges, pins and securing devices of drop sides		6.4.2.x	
CU60251	Repair hinges, pins and securing device of drop sides		6.4.2.x	6.25
CU60260	Check stanchions		6.4.3.x	6.26, 6.46

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU60261	Restore stanchions to working order		6.4.3.x	6.26, 6.46
CU60262	Replace stanchions		6.4.3.x	6.26, 6.46
CU60270	Check folding bolsters		6.4.4.x	6.27
CU60271	Repair folding bolsters		6.4.4.x	6.27
CU60280	Check deformation on tank		6.5.1.x, 6.5.2.x	6.28
CU60285	Check tank, "starred points"		6.5.1.x, 6.5.2.x, 6.5.3.x, 6.5.5.3, 6.5.5.6, 6.5.5.7, 6.5.5.8, 6.5.5.9, 6.5.5.10	6.28-6.32, 6.34, 6.35, 6.37
CU60310	Check ladders, platforms and guard rails			6.31
CU60311	Repair ladders, platforms and guard rails			6.31
CU60320	Check tank cladding, sun-roofs and insulation		6.5.3.x	6.32
CU60321	Repair tank cladding, sun-roofs and insulation		6.5.3.x	6.32
CU60330	Check that tank and their filling and emptying devices do not leak		6.5.5.x	6.33
CU60331	Repair any leaks from tanks and their filling and emptying devices		6.5.5.1	6.33
CU60342	Replace screw cap		6.5.5.3	6.34
CU60350	Check blind flange		6.5.5.6, 6.5.5.7, 6.5.5.8, 6.5.5.9	6.35
CU60351	Tighten blind flange		6.5.5.6, 6.5.5.7, 6.5.5.8, 6.5.5.9	6.35
CU60352	Replace blind flange		6.5.5.6, 6.5.5.7, 6.5.5.8, 6.5.5.9	6.35
CU60360	Check emergency control screw		6.5.5.12	6.36
CU60370	Check indicator on emptying valve		6.5.5.10	6.37
CU60380	Check dome hatch		6.5.6.2	6.38
CU60390	Check mechanical sheeting and locking mechanism		6.6.1	6.39
CU60391	Restore mechanical sheeting and locking mechanism to working order		6.6.1	6.39
CU60400	Check hood locking system		6.6.2.x	6.40
CU60401	Restore hood locking system to working order		6.6.2.x	6.40
CU60410	Check moving headstock		6.6.3.1, 6.6.3.2	6.41
CU60411	Restore moving headstock to working order		6.6.3.1, 6.6.3.2	6.41
CU60420	Check seating device, seating device bolts, securing chains and chain eyes		6.6.3.3 6.7.1.1 6.7.1.2 6.7.2	6.42
CU60421	Restore seating device, seating device bolts, securing chains and chain eyes to working order		6.6.3.3 6.7.1.1 6.7.1.2 6.7.2	6.42
CU60430	Check swivel frame (ACTS)		6.6.4.1, 6.6.4.5, 6.6.4.6	6.43
CU60431	Restore swivel frame (ACTS) to working order		6.6.4.1, 6.6.4.5, 6.6.4.6	6.43
CU60440	Check snap locks (ACTS)		6.6.4.2	6.44
CU60441	Restore snap locks (ACTS) to working order		6.6.4.2	6.44
CU60450	Check central lock (ACTS)		6.6.4.4	6.45
CU60451	Restore central lock (ACTS) to working order		6.6.4.4	6.45
CU60470	Check end boards and crossing gangways		6.6.5.3	6.47

GCU intervention code	Intervention(s)	Any additional information necessary	Technical Inspection as per Appendix 9	Rules as per Appendix 10
CU60471	Repair end boards and crossing gangways		6.6.5.3	6.47
CU60472	Replace end boards and crossing gangways		6.6.5.3	6.47
CU60480	Check upper loading deck and indicator de- vice		6.6.5.4, 6.6.5.5, 6.6.5.6, 6.6.5.7	6.48
CU60500	Check valves and hatches		6.6.6.1, 6.6.6.2	6.50
CU60501	Repair valves and hatches		6.6.6.1, 6.6.6.2	6.50
CU60510	Check locking and discharging system			6.51
CU60511	Repair locking and discharging system			6.51
CU61010	Check locking of container spigots			
CU61011	Repair container spigot locking system			
CU61012	Replace container spigot locking system			
CU61020	Check dividing wall			
CU61021	Repair dividing wall			
CU61030	Check securing systems (e.g., hoops)			
CU61031	Repair securing systems (e.g., hoops)			
CU61040	Check detachable accessories		6.1.7.7, 6.1.7.8	
CU61041	Replace detachable accessory with a part from company stocks		6.1.7.7, 6.1.7.8	
CU63900	Mechanical sheeting inspection		6.6.1.2, 6.6.1.3	6.39.1
CU63901	Repair mechanical sheeting		6.6.1.2, 6.6.1.3	6.39.2
CU63930	Inspect elements to hold and fasten sheeting		6.6.1.5	6.39.3
CU63931	Repair elements to hold and fasten sheeting		6.6.1.5	6.39.3
CU77271	Removal and disposal of loading residues	photo of loading residues	7.2.7	0 Principle

Definition of terms:

Check	Act of assessing, verifying or measuring, and of judging and defining corrective measures.
Position of axle box	Position of the axle as indicated by the marking on the wagon. If there is no such marking, count from one end (choose which) of the wagon.

Appendix 10 – Annex 7

DAMAGE CODES – MODULES ASSIGNMENT

The following table defines the link between the modules with measures to restore the fitness to run and the damage codes in accordance with Appendix 9. If damages are not listed in the table, module M00.001 shall be used.

Damage code Appendix 9:	Measures to restore the fitness to run
0.Measures with other modules to execute	
At every workshop stay	M00.002*: Additional inspections by the workshop
1. running gear	
1.1.1 Thickness of tyred wheel less than 35 mm on wagons suitable for running at 120 km/h or 30 mm on other wagons	M01.001: Wheelset removal/installation
1.1.2 Tyred wheel broken, cracked lengthways or crossways	M01.001: Wheelset removal/installation
1.1.3 Tyred wheel loose, inspection marks inconsistent or unclear ring or tyre clip loose or appearance of rust between the tyre and the rim over more than one third of the circumference	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.1.4 Inspection marks on tyred wheel missing, not clearly discernible	M01.001: Wheelset removal/installation
1.1.5 Tyred wheel shifted sideways, tyre clip loose or visibly distorted	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.1.6 Damage to tyred wheel clip (cracked, broken, missing)	M01.001: Wheelset removal/installation
1.2.1 Groove marking the minimum thickness is no longer fully visible in cross-section	M01.001: Wheelset removal/installation
1.2.2.2 Thermal overload due to braking with gauge widening of the inner faces	M01.003: Handling of wagons after signs of thermal overload of wheelsets
1.3.1.2 Width of tyre or corresponding part of solid wheel > 140 mm < 133 mm, presence of a projection	M01.001: Wheelset removal/installation
1.3.2 Tread of tyre or corresponding part of solid wheel crushed in places, uneven contact surfaces or irregular protrusions on the wheel rim	M01.001: Wheelset removal/installation
1.3.3.1 Wheel flat longer than 60 mm (wheel $\varnothing > 840$ mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.3.2 Wheel flat longer than 40 mm (wheel $\varnothing 630$ mm < d ≤ 840 mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.3.3 Wheel flat longer than 35 mm (wheel $\varnothing \leq 630$ mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.4.1 Metal build-up over a length of > 60 mm or ≥ 1 mm thick (wheel $\varnothing > 840$ mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.4.3 Metal build up over a length of > 40 mm or ≥ 1 mm thick (wheel $\varnothing$: 630 mm < d ≤ 840 mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.4.5 Metal build up over a length of >35 mm and ≥ 1 mm thick (wheel $\varnothing \leq 630$ mm)	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage

Damage code Appendix 9:	Measures to restore the fitness to run
1.3.5.1 Cavity, shelling or flaking (wheel $\varnothing > 840$ mm, length > 60 mm)	M01.001: Wheelset removal/installation
1.3.5.2 Cavity, shelling or flaking (wheel $\varnothing$: $630 \text{ mm} < d \leq 840 \text{ mm}$, length > 40 mm)	M01.001: Wheelset removal/installation
1.3.5.3 Cavity, shelling or flaking (wheel $\varnothing \leq 630$ mm, length > 35 mm)	M01.001: Wheelset removal/installation
1.3.6.1 Cracks at the interface between the wheel tread and the front edge	M01.001: Wheelset removal/installation
1.3.6.4 Cracks on the tread - isolated cracks: with characteristics of thermal overload	M01.001: Wheelset removal/installation M03.002: Carry out brake test to determine cause of damage
1.3.7 Deposits of paint, oil or lubricants on wheel tread edge, except for control marks (4 paint marks positioned 90° apart)	M01.005: Cleaning the faces of the tyres or rims
1.3.8.2 Grooves with sharp edges ≥ 1 mm deep	M01.001: Wheelset removal/installation
1.3.8.3 Furrows and false flanges > 2 mm deep	M01.001: Wheelset removal/installation
1.4.1 Height of flange Sh greater than 36 mm (wagon with LL brake blocks and permissible speed greater than 100 km/h) and height of wheel flange Sh greater than 32 mm: hollow on wheel tread	M01.001: Wheelset removal/installation
1.4.2 Flange thickness $Sd < 22$ mm on wheel $\varnothing > 840$ mm or $Sd < 25$ mm on wheel $\varnothing$: $760 \text{ mm} \leq d \leq 840 \text{ mm}$ or $Sd < 27.5$ mm on wheel $\varnothing < 760$ mm. For wagons with LL or K brake blocks, $Sd > 33$ mm on wheel $\varnothing > 330$ mm; worn flange	M01.001: Wheelset removal/installation
1.4.3 Wear of flange guide faces $qR \leq 6.5$ mm or sharp flange	M01.001: Wheelset removal/installation
1.4.4 Burrs and/or sharp edges on guide face at a distance $h > 2$ mm from maximum height of flange	M01.001: Wheelset removal/installation
1.5.1 Damage to solid wheel centre or wheel hub (cracked, defect repaired by welding)	M01.001: Wheelset removal/installation
1.5.2 Damage to tyred wheel centre, tyre clip, tyre (cracked, broken or defect repaired by welding)	M01.001: Wheelset removal/installation
1.6.1 Damage to axle (cracked, deformed), defect repaired by welding, sharp edge, worn to a depth of more than 1 mm)	M01.001: Wheelset removal/installation
1.6.3 Part rubbing against axle	M03.004: Reattach, remove loosen parts of brake rigging
1.7.1 Clearance between internal faces of wheelset non-compliant with limit values, signs of derailment, signs of movement of wheel on axle, heating (solid wheel) in fillet zone between web and rim/tyre	M01.001: Wheelset removal/installation
1.8.1.1 Housing axle box not watertight, defect allowing water or dust to enter: cracked or broken housing or missing plug (the loss of the protective cap of the centring cone is permissible), except housing types without cover	M01.001: Wheelset removal/installation
1.8.1.2 Loss of lubricant grease or oil discharge on the wheel centre	M01.004: Examination and handling of wheelsets with grease leak
1.8.2 Axle box guides no longer able to guide the axle (guide broken or axle box in abnormal position)	M01.001: Wheelset removal/installation
1.8.3.1 Hot box housing too hot to touch with back of hand, traces of rust	M01.001: Wheelset removal/installation
1.8.3.2 Confirmation by the RU of box over-heating during transport	M01.001: Wheelset removal/installation
1.8.4 Hard manganese wear plate on axle box of Y bogie or derivative designs displaced or missing	M01.001: Wheelset removal/installation

Damage code Appendix 9	Measures to restore the fitness to run
2. Suspension	
2.1.1 Spring leaves displaced by more than 10 mm with respect to buckle, shiny marks near buckle	M02.001: Leaf-spring suspension removal/installation
2.1.2 Main leaf fractured or with visible crack	M02.001: Leaf-spring suspension removal/installation
2.1.3 Part of a fractured suspension spring leaf missing	M02.001: Leaf-spring suspension removal/installation
2.1.4.1 Fracture (but without any part missing) of intermediate suspension spring leaf at a distance from the centre of the spring of less than $\frac{1}{4}$ of leaf length	M02.001: Leaf-spring suspension removal/installation
2.1.6 Buckle loose (fracture or crack in buckle, key missing or ineffective) or signs of loosening of leaves	M02.001: Leaf-spring suspension removal/installation
2.2.1.1 Main or intermediate spring leaf visible crack or break	M02.001: Leaf-spring suspension removal/installation
2.2.1.2 Main or intermediate spring leaf buckle broken, two leaves touching over 50% of their length	M02.001: Leaf-spring suspension removal/installation
2.2.2.1 Leaf parabolic spring displaced lengthways > 10 mm	M02.001: Leaf-spring suspension removal/installation
2.2.3 Buckle damaged or loose (buckle fractured, cracked or lug of the lower key cracked or weld seam of upper key fractured or cracked)	M02.001: Leaf-spring suspension removal/installation
2.4.1 Boss of buckle out of position, abnormal position of axle box	M02.002: Insert buckle boss
2.4.3 Link pin displaced, missing, not secured	M02.003: Suspension links removal/installation
2.5.1 Main/tare spring cracked or broken	M02.004 Helical springs removal/installation
2.5.2.2 Auxiliary/load spring displaced or broken – on loaded wagon (axle box no longer horizontal)	M02.004 Helical springs removal/installation
2.5.3.2 More than one damper ring missing or broken	M02.005: Damper ring removal/installation
2.5.4.2 More than one spring cap in contact per bogie	M02.005: Damper ring removal/installation
2.5.6 Insufficient spring clearance: Recent signs of contact between axle-box: housing and bogie frame (distance less than 8 mm) in combination with Appendix 9, Annex 9, Checklist 2, point 9.3 (no overloading detected)	M02.004 Helical springs removal/installation
3. Brake	
3.1. 3.1 Brake isolating cock unusable	M03.008 Restore usability of brake isolating cock
3.1.3.2 Brake isolating cock – position unclear	M03.008 Restore usability of brake isolating cock
3.2.4.2 Defective brake disc fixing on the axle pin	M01.001: Wheelset removal/installation
3.2.4.4 Crack in cross section on brake disc	M01.001: Wheelset removal/installation
3.3.1.1 Main brake pipe inoperative	M03.007 Check brake for leaks
3.3.2.1 Pneumatic part, brake coupling, damaged or missing (brake couplers must be available at all existing coupler connections on either end of a wagon)	M03.005: brake hoses removal/installation
3.3.5.1 Pneumatic part, stopcock unusable, leaking, warped or handle missing.	M03.006: stopcock removal/installation
3.3.5.2 Pneumatic part, stopcock, stopping device missing or visibly damaged	M03.006: stopcock removal/installation
3.3.6.3 DET's (derailment detector) connection hose not air- tight	M03.007 Check brake for leaks
3.4.2 Plate hanging loose	M04.006: Remove damaged spark arrestor plate

Damage code Appendix 9	Measures to restore the fitness to run
4. Wagon underframe and bogies	
4.1.1 Wagon underframe warped vertically or horizontally (buffer height out of tolerance range, visible distortion)	M00.001: Keeper instructions to be obtained
4.1.2 Solebar, headstock stressed by coupler or intermediate crossbar exhibiting a fracture or crack	M00.001: Keeper instructions to be obtained
4.2.1 Axle guard distorted, safety hazard	M00.001: Keeper instructions to be obtained
4.2.2 Axle guard broken, abnormal position	M00.001: Keeper instructions to be obtained
4.2.3.1 Axle guard, fastening loose	M00.001: Keeper instructions to be obtained
4.2.4.1 Axle guard crack running over more than $\frac{1}{4}$ of horizontal cross-section	M00.001: Keeper instructions to be obtained
4.2.4.3 Axle guard crack close to or running towards a fastening point, regardless of length of crack	M00.001: Keeper instructions to be obtained
4.3.1 Axle guard tie bar missing, broken, visibly distorted, loose	M04.001: Axle-guard tie removal/assembly
4.4.1.2 More than one axle guard check plate missing per axle (bogie wagon)	M00.001: Keeper instructions to be obtained
4.4.1.3 One axle guard check plate missing (axle wagon)	M00.001: Keeper instructions to be obtained
4.4.2 Hard manganese wear plate on Y bogies or derivative designs displaced or missing	M00.001: Keeper instructions to be obtained
4.5.1 Suspension bracket (axle wagon) loose, cracked, broken or distorted (space between bracket and solebar; half or more of the fastening elements missing or broken)	M00.001: Keeper instructions to be obtained
4.6.1 Connection between bogie and underframe defective	M00.001: Keeper instructions to be obtained
4.6.1.1 Connection between bogie and underframe defective, connecting and fastening elements broken, missing or ineffective	M04.002: Restore connecting elements bogie/underframe
4.6.1.2 Locking device for the bogie pivot kingpin missing or ineffective or pin missing	M04.002: Restore connecting elements bogie/underframe
4.6.2.2 All earthing straps ineffective, fastening points indicate that straps should be present	M04.003 Replace earthing strap
4.7.1 Bogie frame component cracked or visibly distorted	M00.001: Keeper instructions to be obtained
4.7.2 Bogie frame component broken	M00.001: Keeper instructions to be obtained
4.8.1.2 Side bearer broken with part(s) missing	M04.005 Repair side bearers
4.8.2 Side bearer spring broken	M04.005 Repair side bearers
4.9.1 Friction surfaces of damper system lubricated	M04.004 Clean friction surfaces of damper system (Y25 bogie)
5. Buffing and draw gear	
5.1.2 Buffer height exceeding tolerance range $h < 940$ mm (980 mm in the case of coaches), $h > 1065$ mm or significant difference in buffer height at coupled wagon ends	M00.001: Keeper instructions to be obtained
5.2.1 Buffer head missing, broken, distorted such that it is no longer functional, rectangular plate twisted	M05.003: Buffer removal/assembly
5.2.2.1 Fastening on plunger $\geq \frac{1}{3}$ of rivets or bolts loose	M05.003: Buffer removal/assembly
5.2.3.1 Buffer head surfaces not lubricated if both buffer heads are made of metal	M05.001 Lubricate buffer
5.2.3.2 Buffer head surfaces more than 2 sharp-edged grooves measuring > 3 mm in depth and > 50 mm in length	M05.003: Buffer removal/assembly
5.2.4.1 Buffer head insert or plastic plate broken, cracked right through, missing	M05.003: Buffer removal/assembly

Damage code Appendix 9	Measures to restore the fitness to run
5.2.4.3 Buffer head insert or plastic plate 2 or more fastenings loose/missing	M05.003: Buffer removal/assembly
5.3.1 Plunger missing, broken	M05.003: Buffer removal/assembly
5.3.2 Plunger cracked at the transition to buffer head	M05.003: Buffer removal/assembly
5.3.3.1 Cracked longitudinally and no longer capable of guiding buffer casing	M05.003: Buffer removal/assembly
5.3.3.2 More than 2 grooves distributed over the circumference, each > 2 mm in depth, sharp-edged, and > 60 mm in length	M05.003: Buffer removal/assembly
5.4.1 Buffer casing missing, broken	M05.003: Buffer removal/assembly
5.4.2 Buffer casing cracked at transition to buffer base	M05.003: Buffer removal/assembly
5.4.3.1 Cracked longitudinally and no longer capable of guiding plunge	M05.003: Buffer removal/assembly
5.4.3.2 More than 2 grooves distributed over the circumference, each > 2 mm in depth, sharp-edged, and > 60 mm in length	M05.003: Buffer removal/assembly
5.4.4.1 Fastening of buffer casing defective, 2 or more bolts loose (play between buffer casing and headstock)	M05.003: Buffer removal/assembly
5.4.4.2 Fastening of buffer casing defective, 1 bolt missing	M05.003: Buffer removal/assembly
5.5.1 Buffer so slack that it can be depressed by hand (one buffer, by more than 15 mm both buffers at the same end)	M05.003: Buffer removal/assembly
5.5.2 Anti crash components triggered	M05.003: Buffer removal/assembly
5.5.3 Anti crash component warning mark missing or incomplete	M05.004: Renew danger marking
5.6.1 Screw coupler inoperative, damage or part missing	M05.005 Screw coupler removal/assembly
5.7.1.1 Draw hook broken, cracked (including tip)	M05.006: Replace the parts of the draw gear
5.8.1 Other draw gear parts damaged (length of coupler, drawbar broken, cracked or distorted, etc.), clearly abnormal projection of draw hook from guideline	M05.006: Replace the parts of the draw gear
5.9.1 Sliding element (long-stroke damper) not in mid-position with respect to wagon underframe, the two headstocks are at different distances from wagon body	M00.001: Keeper instructions to be obtained
5.9.2 Danger marking (diagonal black bands on yellow background) missing on overlapping wagon surfaces on which the front part is liable to be displaced in relation to the underframe during impact (impact absorption devices, etc.)	M05.004: Renew danger marking
6. Vehicle body and accessories	
6.1.1.1 Markings on wagons missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.2 "RIV" sign, "TEN" + "GE" or acceptance marking ("TEN" + "G1", country acronym in approval plate) missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.3 agreement plate (if showing exchange codes 41, 43, 45, 81, 83 or 85) or acceptance marking ("TEN" + "CW", country acronym in approval plate) missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.4 Tare weight missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.5 Holding force of parking brake missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.6 Load limits missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.7 Capacity of tank wagons missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.8 Both the VKM and full address of wagon keeper missing, illegible or incomplete	M06.001 Check and correct markings

Damage code Appendix 9	Measures to restore the fitness to run
6.1.1.9 Length-over-buffers of wagon	M06.001 Check and correct markings
6.1.1.10 "High voltage" warning sign on wagons with step or ladder access up to a height > 2 m above rail level missing, illegible or incomplete	M06.001 Check and correct markings
6.1.1.11 Indication of compatibility with ILUs on carrying wagon missing, illegible or incomplete	M06.001 Check and correct markings
6.1.2.1 Inscription on the maintenance plate missing, incomplete or illegible	M06.001 Check and correct markings
6.1.7.3 Steps: damage representing a safety hazard for staff, torn off or deformed beyond tolerated limit (a > 80 mm)	M06.002 Restore/replace steps and handles
6.1.7.4 Handles: missing, damage representing a safety hazard for staff, torn off or deformed beyond tolerated limit (b < 60 mm)	M06.002 Restore/replace steps and handles
6.1.7.5 Inadequate securing of inscription plates, folding plates, label holders	M06.003 Repair inscription plates, label holders, and folding plates
6.1.7.6 Missing inscription plates, folding plates, label holders	M06.003 Repair inscription plates, label holders, and folding plates

APPENDIX 11

TO THE GENERAL CONTRACT OF USE FOR WAGONS

Inscriptions and signs on wagons

Contents

Point	Subject	Page
1	Introduction – General provisions	4
2.1	Wagon number, country of registration, keeper, type	5
2.2	Derogation plate	7
2.3	Maintenance plate	9
2.4	Signs indicating load limits	10
2.5	Sign indicating carrying capacity	12
2.6	Signs indicating concentrated loads distributed over supporting surfaces of different lengths	13
2.7	Sign indicating the capacity of tank wagons and cask wagons	17
2.8	Signs indicating the length of load and floor space	18
2.9	Sign indicating the distance between end axles and bogie centres	19
2.10	Sign indicating spark arrestor plates	19
2.11	Additional signs for wagons accepted for running in Great Britain	20
2.12	Sign for ferry ramp angle	21
2.13	Sign for removable wagon accessories	22
2.14	Sign for the inside of wagons: "Do not use nails or wire staples"	24
2.15	Markings for wagons with special fittings (wagons with automatic discharge facility, opening roof, etc.)	24
2.16	Signs for wagons built for running between countries with different track gauges	25
2.17	Sign for bogies fitted with gauge-adjustable axles, nominal gauge 1435 mm (automatic gauge changeover facility according to the UIC leaflet 510-4)	25
2.18	Sign for bogies fitted with gauge-adjustable axles, nominal gauge 1520 mm (automatic gauge changeover facility according to the UIC leaflet 510-4)	26
2.19	Additional signs for wagons accepted for running in Spain and Portugal	27
2.20	Approval plate	28
2.21	Marking of vehicle gauge on wagon	28
3.1	Sign for height of the loading plane for container wagons in unladen state	29
3.2	Signs for combined transport wagons in accordance with IRS 50596-6	30
4.1	Sign for length over buffers	38
4.2	Signs for tare and braked weight	39
4.3	Signs to indicate the changeover device for air brakes - Marking of the braked weight on wagons. Brake type abbreviations	41
4.4	Signs for wagons fitted with composite brake blocks	48
4.5	Sign for wagons fitted with disc brakes	49
5.1	Sign for wagons not authorised to negotiate all shunting humps	50
5.2	Sign for bogie wagons with a distance of over 14.0 m between inner axles and accepted on shunting humps	50
5.3	Sign for wagons that are not authorised to pass through retarders or other shunting and stopping devices in active mode	51
5.4	Sign for wagons not to be loose-shunted	51
5.5	Sign for wagons that must not be fly- or gravity-shunted	52
5.6	Sign for fly and hump shunting not permitted for containers or loaded pocket wagons	52
5.7	Marking for wagons fitted with anti-crash components	53

Point	Subject	Page
5.8	Marking for wagons fitted with long-stroke shock absorbers (shock absorber fitting)	53
5.9	Marking for wagons fitted with projecting tow hooks	54
5.10	Sign for permanently coupled wagon units	54
5.11	Sign for bogie wagons only able to negotiate curves with a radius greater than 35 m	55
5.12	Signs indicating wagons fitted with a train line	55
5.13	Sign for wagons fitted with the automatic coupler	56
5.14	Sign for derailment detectors	56
5.15	Sign for strengthened screw coupling	57
6.1	Sign for wheels able to withstand high thermal stresses	59
6.2	Marking of tyred wheels	59
6.3	Sign for ventilation pipes	60
6.4	Sign for tank wagon tests, coding of tanks and special regulations	60
7.1	Sign indicating points for lifting the wagon body in the workshop	61
7.2	Sign for lifting at 4 points with or without running gear	61
7.3	Sign for lifting or re-railing with or without running gear at one end only or close to the end	62
7.4	Sign for the replacement of springs	62
7.5	Sign Wheel tyre inspection	63
7.6	Sign for inspection periods for temperature-controlled units	64
7.7	Sign for the protection of the inner lining of tank wagons	64
7.8	Signs for privately-owned wagons, unified wagons, standard wagons	65
7.9	Sign for the spare parts	66
8.1	Sign for high voltage warning sign (lightning flash)	67
8.2	Signs for high voltage warning sign (Stop!)	68

1 Introduction – General provisions

- 1.1 This appendix describes the inscriptions and signs to be affixed to freight wagons (referred to hereafter as wagons) and indicates where they should be positioned. The inscriptions and signs have been grouped together according to certain processes or operations: the loading and provision of wagons, combined transport (CT), train preparation, shunting, technical inspections, workshops and key warning signs – but are not exclusively assigned to a specific process, specialist department or user.
- 1.2 Wagons must carry inscriptions and signs in specific places. They should be affixed in the language of the wagon keeper, using Latin characters and Arabic numerals.
- The inscriptions and signs must always be clearly visible. They should be placed on the side walls, if possible 1600 mm above rail level (height of the middle of the sign). For wagons without side walls, the inscriptions shall be carried on special boards. For the provisions regarding the mark plates on the tank wagons see **UIC leaflet 573**.
- No other meanings may be assigned to the inscriptions and signs.
- 1.2 Wagons on which the markings and signs are missing or illegible shall be dealt with in accordance with **Appendices 9** and **10**.
- 1.4 Inscriptions and signs other than those listed in this Appendix must be placed on parts of the wagon not occupied by these inscriptions.
- The lower left-hand corner of the side walls is reserved for affixing labels, with the exception of K and M labels.

2.1 Wagon number, country of registration, keeper, type

The markings shall be made on the side of the wagon as follows (examples):

31 RIV 80 <u>D</u> -DB 0691 235-2 Tanoos	32 RIV 80 <u>D</u> -BASF 7369 553-4 Zcs	33 RIV 84 <u>NL</u> -ACTS 4796 100-8 Slpss	43 87 <u>E</u> 4273 361-3 Laeks
---	--	---	--

or

33 TEN 84 <u>NL</u> -ACTS 4796 100-8 Slpss	87 TEN 82 <u>D</u> -CFLCA 4978 006-4 Sdmrs
G1	CW

or

37 TEN 82 <u>L</u> -CFLCA 4992 009-1 Sdggmrss	81 TEN 82 <u>L</u> -CFLCA 3513 156-7 Rbnpss
GE	Derogation plate

When the wagon body does not provide sufficient surface area for this layout (flat wagons in particular) the markings shall be made as follows (example):

01 87 3320 644-7
RIV <u>E</u> -SNCF Ks

Position: on the left of each side wall, or the left of each solebar in the case of high-sided open wagons or on special boards in the case of wagons without side walls (e.g. tank wagons).

Meaning (based on the first example):

31	Fitness for interoperability (2 digits)
80	Country in which the wagon is registered (2 digits)
0691	Principal technical characteristics (4 digits)
235	Number of the wagon in its production series (3 digits)
-2	Self-check digit (1 digit)
RIV	The RIV marking on wagons means that the vehicle, in addition to having been approved against the rules in force, also meets the regulations of railway Technical Unity (TU) and the provisions of leaflets in the UIC Code and, as a result, satisfies all regulations applicable for its respective type in international rail traffic. These wagons are fully interoperable
TEN	New wagons which have obtained approval against the TSIs (Technical Specifications for Interoperability). The letters "TEN" (for Trans-European Network) may appear alongside or additional markings indicating the vehicle gauge
<u>D</u>	Country in which the wagon is registered, in this case Germany
DB	Wagon keeper (abbreviation); this information is compulsory if the full name of the company complete with address is not given

- Tanoos Reference to principal technical characteristics of the vehicle:
- T: Letter indicating wagon type (capital letter)
 - anoos: identification letters; lower-case letters describing the principal features for the use of the wagon

Note:

1. Further details are given in the Uniform Technical Prescription applicable to Vehicle Numbers and linked alphabetical marking on the bodywork: The Railway Vehicle Marking (UTP Marking), issued by the OTIF.
2. Wagons with more than 8 axles can still carry the RIV sign without satisfying the regulations on maximum load (see point 2.4) provided they meet all the other conditions of this appendix and of GCU **Appendix 9** and have no parts that are liable to encroach the vehicle gauge under any operating circumstances. Exceptions are authorised for these wagons in respect of the position of the markings.
3. For wagons meeting all the requirements of the Wagons TSI WAG, the pictogram is used in conjunction with characters 2 or 3 of the wagon number and the "TEN" marking.



4. For wagons which are basically TSI WAG-compliant, but which deviate in terms of their wheelbase or vehicle gauge, or which are subject to other operating restrictions when used in wagonload traffic, the pictogram is used in conjunction with characters 4 or 8 of the wagon number and the "TEN" marking.



In terms of their initial approval for placing in service, these wagons are subject to the conditions in force in all member states; however, under the OPE TSI specific agreements are to be concluded governing their use on individual member-state infrastructure.

2.2 Derogation plate

Figure 1

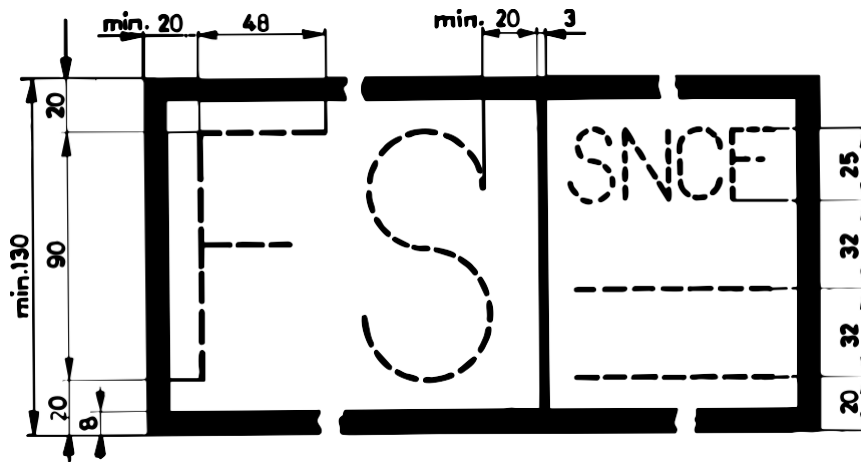


Figure 2

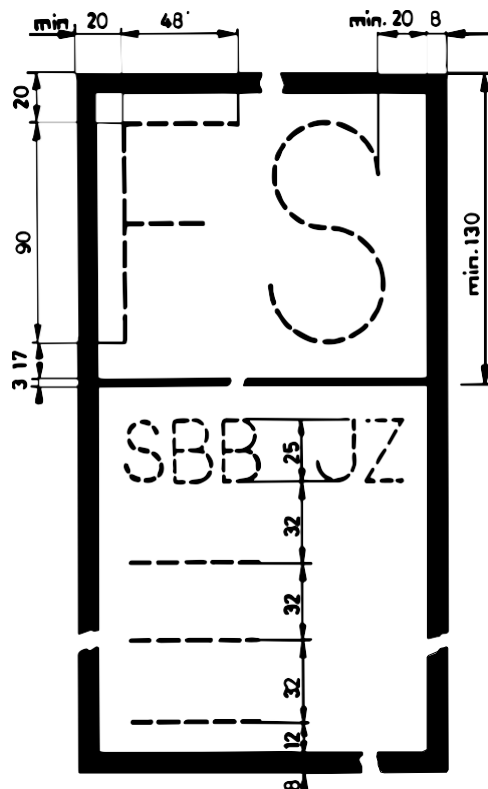


Figure 3

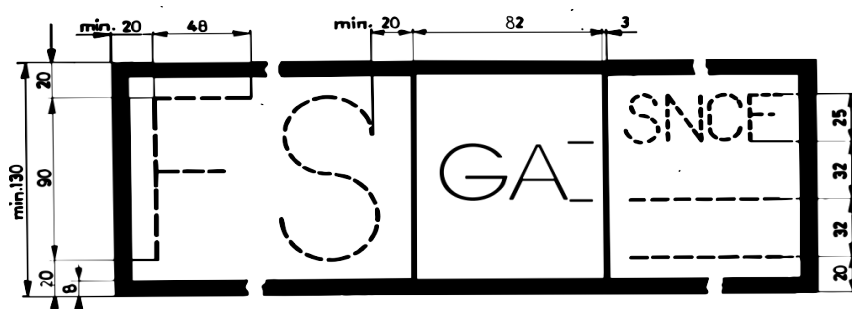
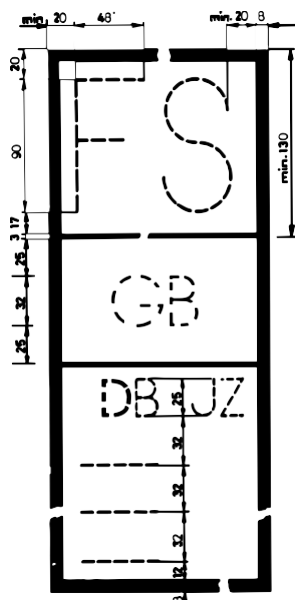


Figure 4



Position: On the right of each side wall.

Meaning: Because they do not comply fully with the UIC Code, these wagons are not marked with the “RIV” sign. Their use is therefore subject to bi- or multilateral agreements between RUs. The initials of the parties to these agreements are entered in this box and these wagons may only be used by the RUs indicated. As such, they are not fully interoperable.

The letters GA or GB indicate the gauge to which the wagons were built, as described in **UIC leaflet 506**.

2.3 Maintenance plate

Figure 1

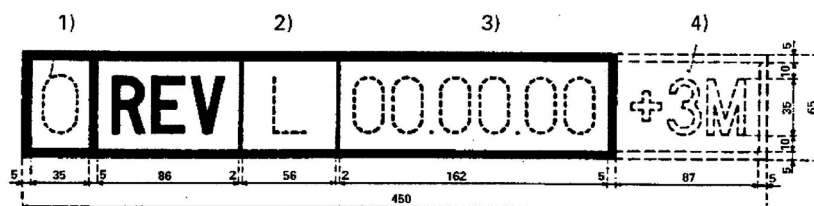


Figure 2

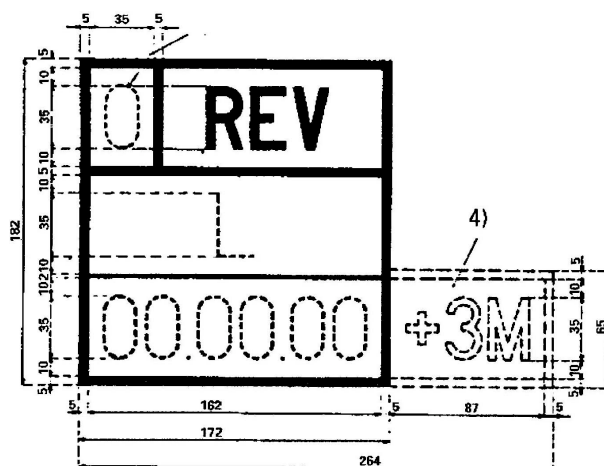


Figure 3

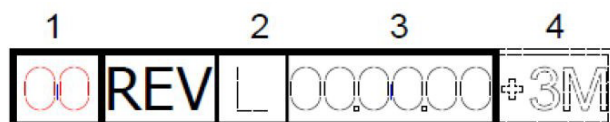


Figure 4

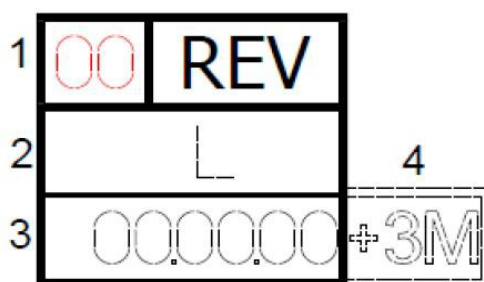
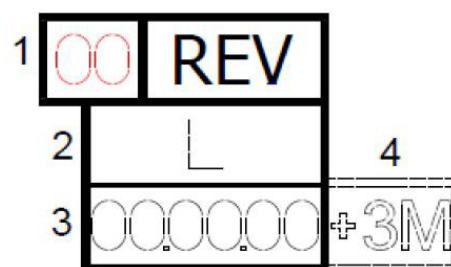


Figure 5



- 1) Maintenance plate validity period in years.
- 2) Identification mark of the workshop that carried out the maintenance work.
- 3) Date of the last overhaul (day, month, year).
- 4) Additional marking to be applied only on the instructions of the keeper.

Position: To the right of each solebar, or on the parts covering the solebar or on special boards fixed at the same height.

Meaning: From this day, plus the extended validity period of 3 months if duly indicated, the wagon formally loses its authorisation to run in normal service.

2.4 Signs indicating load limits

Figure 1

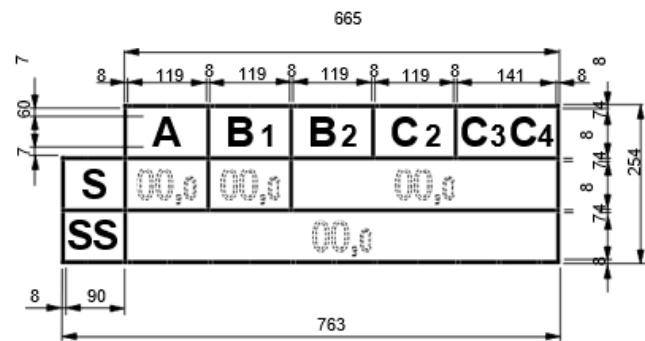


Figure 2

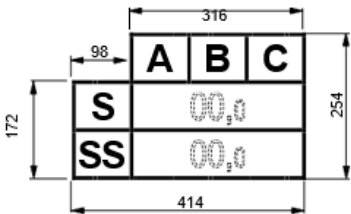


Figure 3

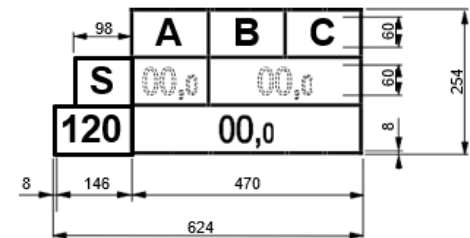


Figure 4

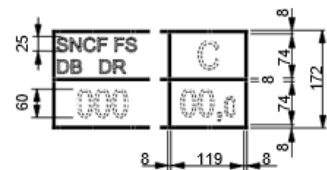


Figure 5

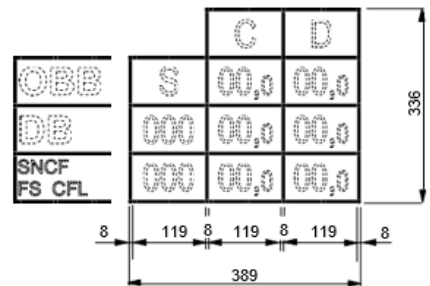


Figure 6

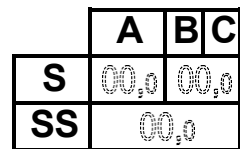


Figure 7

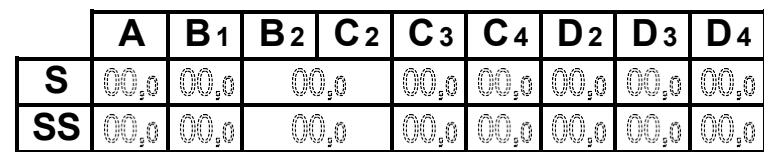


Figure 8

	A	B ₁	B ₂	C ₂	C ₃	C ₄
SS	00,0	00,0	00,0	00,0	00,0	00,0

Figure 9*

	A	B	C	D	
S	00,0	00,0	00,0	00,0	★ ★ ★ ★ ★
120	00,0				

Figure 10*

	A	B	C	
S	00,0	00,0	00,0	★ ★
SS	00,0			

Figure 11*

	A	B	C	
S	00,0	00,0	00,0	★ ★

*As an exception to this rule, the stars may also be positioned to the left of the load limit panel.

Position: On the left of each side wall.

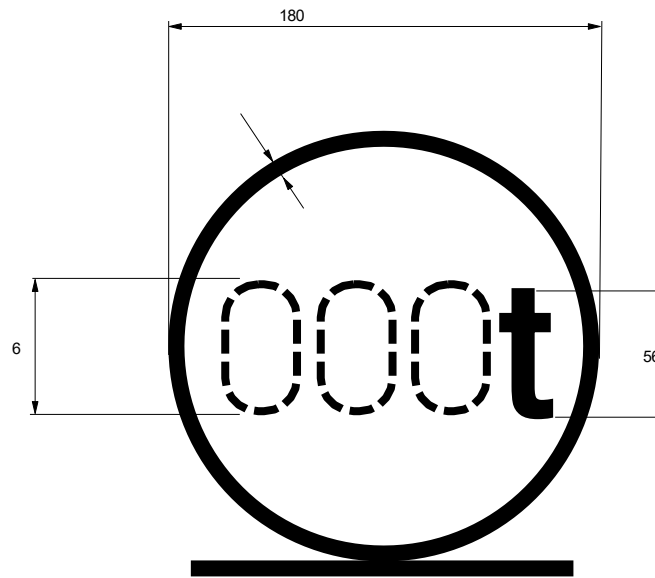
Meaning:	S	Maximum load in t (tonnes) for wagons running in trains operated under S conditions (maximum speed 100 km/h) with no particular operating restrictions.
	SS	Maximum load in t (tonnes) for wagons running in trains operated under SS conditions (maximum speed 120 km/h) with no particular operating restrictions.
	120/00,0	Wagons only authorised to run in trains up to 120 km/h when empty (00.0 t) (figures 3 and 9).
	Fig. 4, 5	Maximum load in t (tonnes) and maximum speed (in km/h) agreed between RUs and exceeding the load limit set out in the UIC Code.
	★ ★	Maximum load in t (tonnes) for wagons authorised to run in trains up to 120 km/h with a brake that does not meet all the requirements for SS conditions.
	★ ★ ★*)	Maximum load in t (tonnes) for wagons authorised to run in trains up to 120 km/h with a brake that does not meet all the requirements for SS conditions. The wagons must be fitted with an automatic load-proportional braking system.

Note 1: Wagons should only carry the markings for line category D if, for that category of line, they can accommodate a higher maximum axle-load than for category C. Wagons should only carry the markings for line category E if, for that category of line, they can accommodate a higher maximum axle-load than for category D.

Note 2: For wagons carrying the “★ ★” and “★ ★ ★” signs, RUs shall define the necessary rules for the correct formation of the train (achieving the right brake percentage, timetable changes where appropriate, etc.).

*) Marking “★ ★ ★” for all new wagons meeting the corresponding conditions entering service from 1.1.2007.

2.5 Sign indicating the carrying capacity

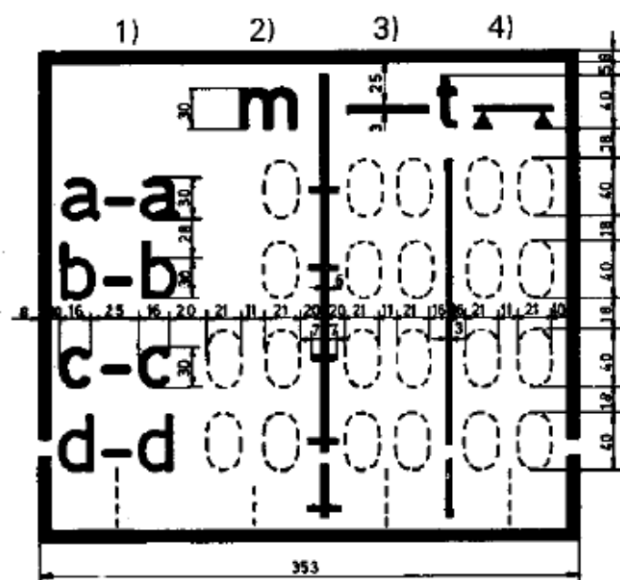
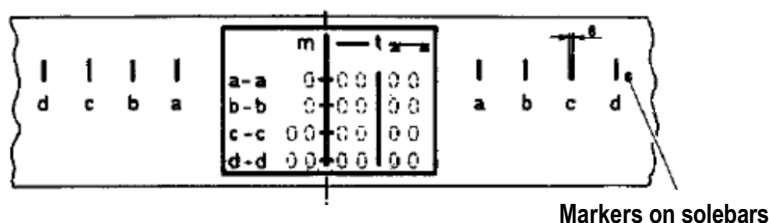


Position: On the right of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Sign for wagons with a carrying capacity that is greater than the maximum load marked, and for wagons with no maximum load marking [t].

2.6 Signs indicating concentrated loads distributed over supporting surfaces of different lengths

2.6.1 Example of concentrated loads spread over supporting surfaces of different lengths and loads resting on two separate points (width of bearing surface ≥ 2 m)



Maximum value for different lengths:

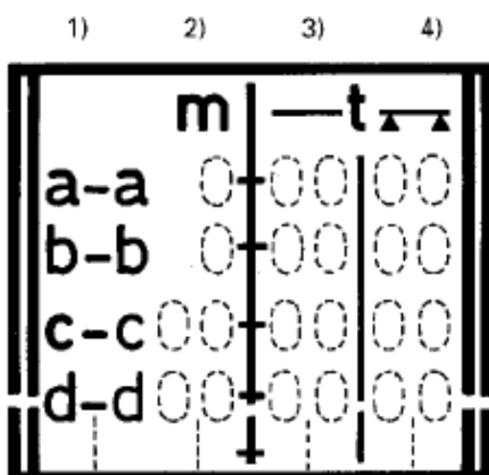
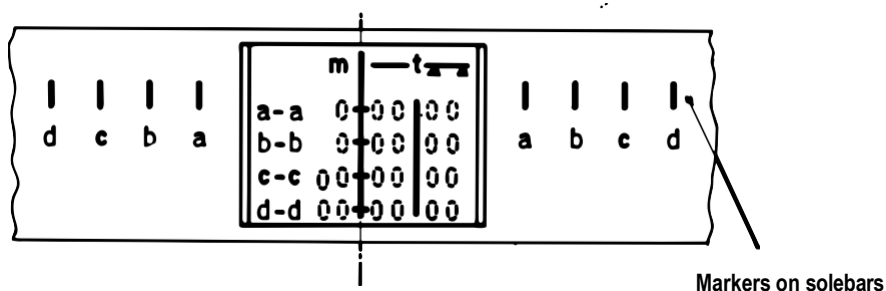
- of concentrated loads spread over the lengths of the supporting surface ———
- of loads resting on two supporting points ▲▲

- 1) Indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points.
- 2) Distance, in metres, between the length markers.
- 3) Maximum value, in tonnes, of the concentrated loads.
- 4) Maximum value, in tonnes, of loads resting on two supporting points.

Position: In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: See point 2.6.2

2.6.2 Example of concentrated loads distributed over supporting surfaces of different length and loads resting on two separate points (width of bearing surface ≥ 1.20 m)



Maximum value for different lengths:

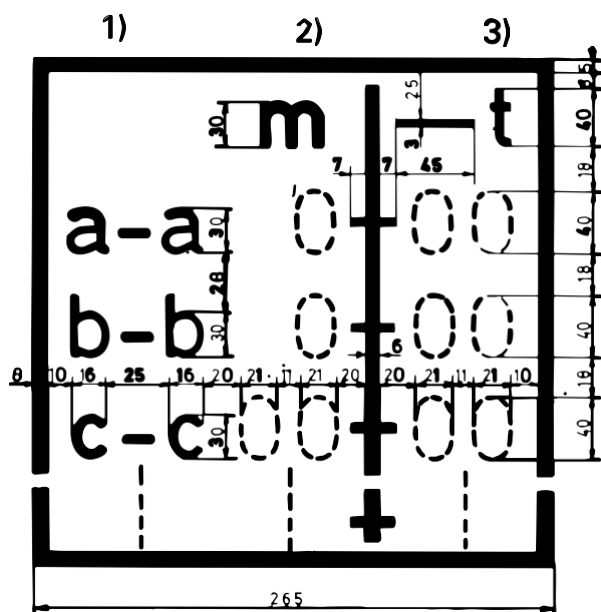
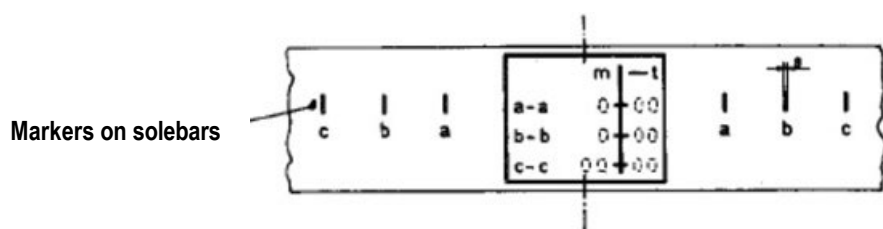
- of concentrated loads spread over the lengths of the supporting surface ———
- of loads resting on two supporting points

- 1) Indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points.
- 2) Distance, in metres, between the length markers.
- 3) Maximum value, in tonnes, of the concentrated loads.
- 4) Maximum value, in tonnes, of loads resting on two supporting points

Position: In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning of the figures shown in points 2.6.1 and 2.6.2: On unified flat wagons, this sign indicates the maximum values for concentrated loads and loads resting on 2 supporting points according to the stated values for the length of supporting surfaces and distances in the UIC Code. This sign is optional for other wagons which may, if required, carry the sign specified in points 2.6.1 or 2.6.2 or 2.6.3 or 2.6.4.

2.6.3 Example of concentrated loads distributed over supporting surfaces of different length (width of bearing surface ≥ 2 m)



Maximum value for different lengths:

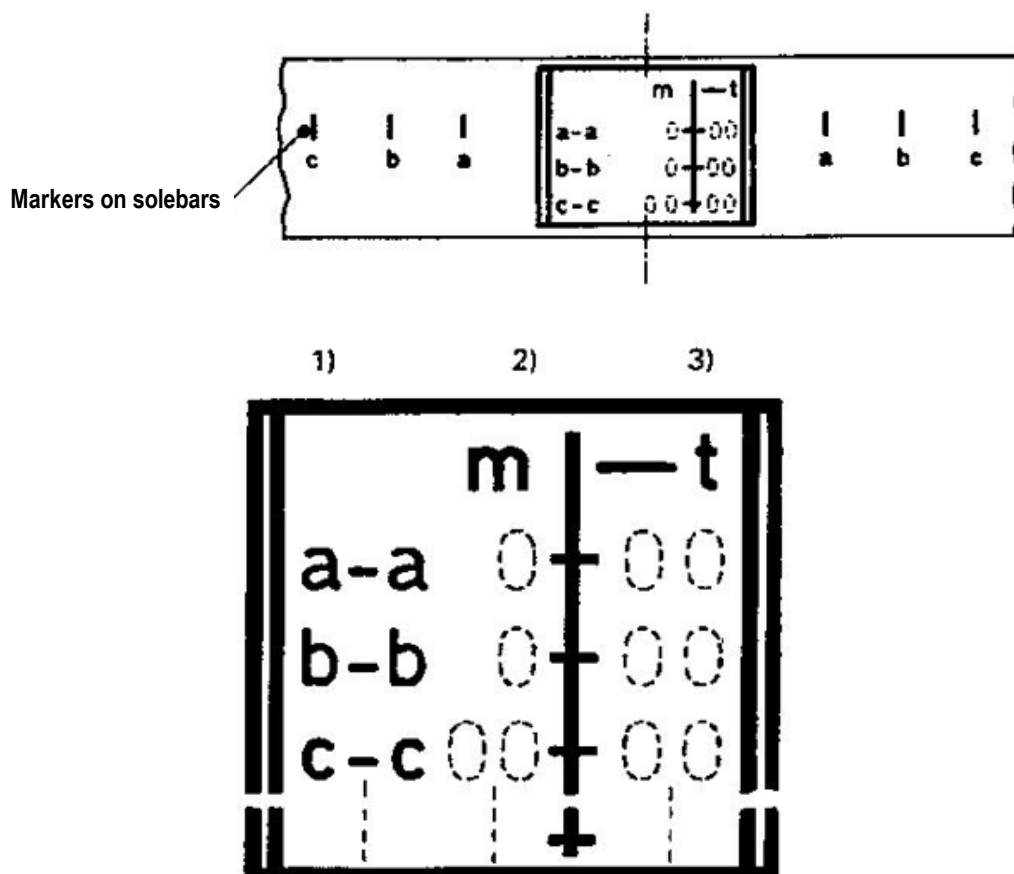
- of concentrated loads spread over the lengths of the supporting surface ———

- 1) Indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points.
- 2) Distance, in metres, between the length markers.
- 3) Maximum value, in tonnes, of the concentrated loads.

Position: In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: See point 2.6.4.

2.6.4 Example of concentrated loads distributed over supporting surfaces of different length (width of bearing surface ≥ 1.20 m)



Maximum value for different lengths:

- of concentrated loads spread over the lengths of the supporting surface ———

- 1) Indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points.
- 2) Distance, in metres, between the length markers.
- 3) Maximum value, in tonnes, of the concentrated loads.

Position:

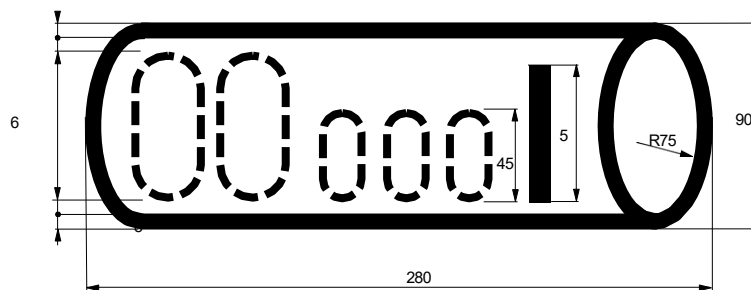
In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning of the figures shown in points 2.6.3 and 2.6.4:

For flat wagons not covered by points 2.6.1 and 2.6.2, with a loading plane more than 10 m long, and high-sided open wagons built after 1 January 1968, this sign indicates the maximum value for concentrated loads spread over supporting surfaces for at least three different lengths. This sign is optional for other wagons.

2.7 Signs indicating the volumetric capacity of wagons and the type of goods permitted for transport

Figure 1: Tank and cask wagons

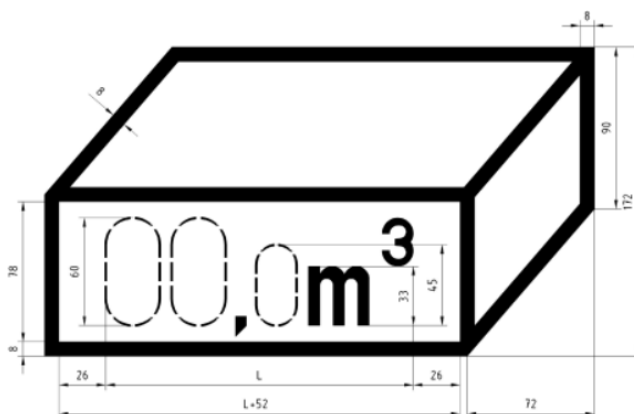


Position: On the left of each side wall (for tank and cask wagons, on the tank itself or on special boards).

Meaning: Capacity in l

For tank wagons, this sign should also specify the commodities that the vehicle is authorised to carry, if required by the RID for the carriage of dangerous goods.

Figure 2: Hopper and box wagons



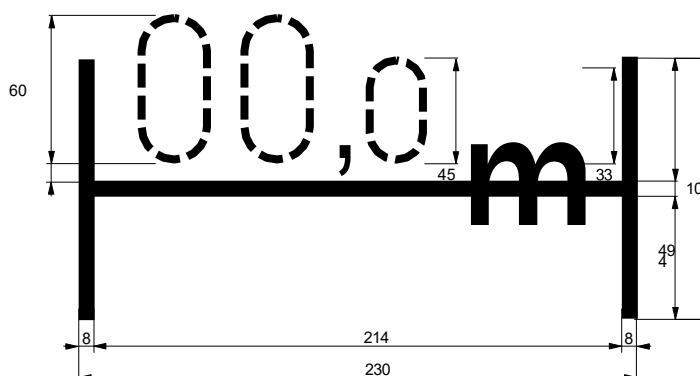
Position: On the left of each side wall (for hopper and box wagons, on the tank itself or on special boards).

Meaning: Capacity in m³ according to the type of wagon.

Note: If 99.9 m³ are exceeded, add an additional first digit.

2.8 Signs indicating the length of load and floor space

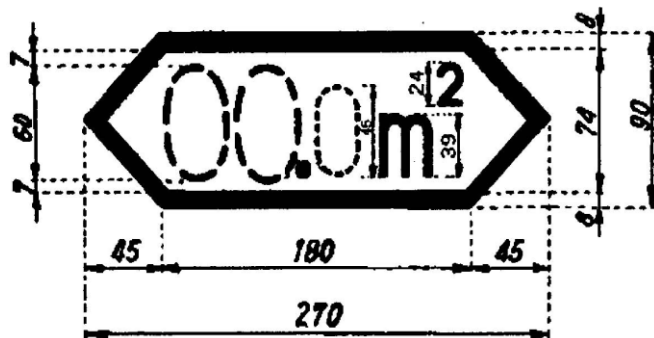
Figure 1: Length of load



Position: On the left of each side wall.

Meaning: Loading length in [m] for flat wagons and covered wagons with a flat floor, minus the thickness of any intermediate partitions (useful length).

Figure 2: Floor space



Position: On the left of each side wall.

Meaning: Surface area [m²] of the floor of covered wagons and wagons with an opening roof and flat floor.

2.9 Sign indicating the distance between end axles and bogie centres

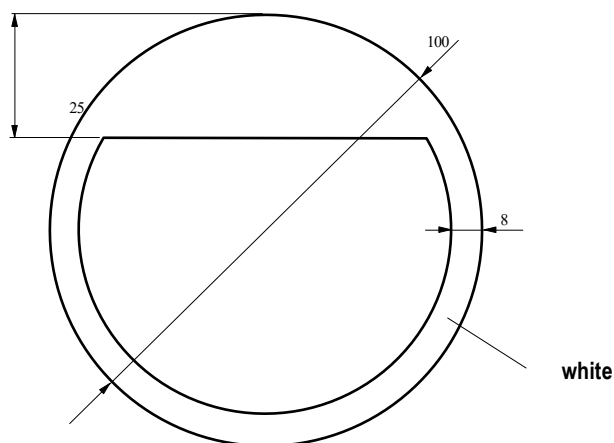


Position: On the right of each solebar, or on the bogie frame (it is sufficient for the sign to feature on the left-hand side of the bogie, on each side of the wagon) or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Indicates the distance:

- between the end axles of bogies and of wagons other than bogie wagons,
- between the bogie centres of bogie wagons.

2.10 Sign indicating spark arrestor plates



Position: In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars. This sign may also be affixed on the right of each side wall.

Meaning: Wagon fitted with spark-arrestor plates in accordance with Appendix A to **UIC leaflet 543**; these plates are required for axle wagons suitable for carrying class 1 commodities, sub-classes 1.1, 1.2, 1.3, 1.5 and 1.6, as well as certain commodities in classes 4.1 and 5.1 (RID, Part 7, points 7.2.4 and W 8).

2.11 Additional signs for wagons accepted for running in Great Britain

(NETWORK RAIL infrastructure except HS 1 high-speed line from Dollands Moor to London St Pancras International) for wagons accepted on ferries or authorised to use the Cross-Channel Fixed Link (CCFL)

Figure 1: For wagons accepted on ferries and authorised to run in Great Britain (NETWORK RAIL infrastructure)

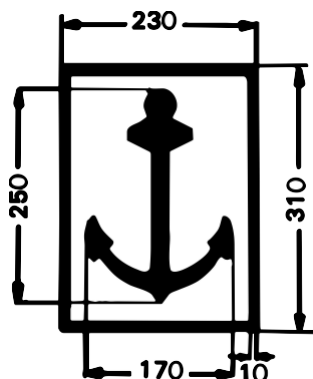
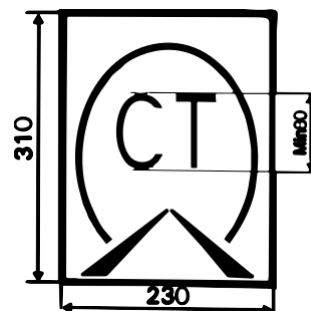


Figure 2: For wagons authorised to use the Cross-Channel Fixed Link (CCFL) and run in Great Britain (NETWORK RAIL infrastructure)



Figures 3a, 3b, 3c: For wagons accepted on ferries and authorised to use the Cross-Channel Fixed Link (CCFL) and run in Great Britain (NETWORK RAIL infrastructure)

Figure 3a

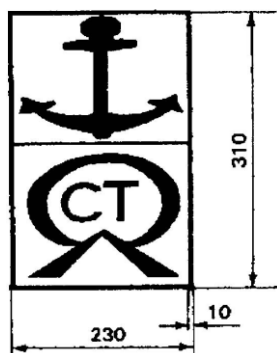


Figure 3b

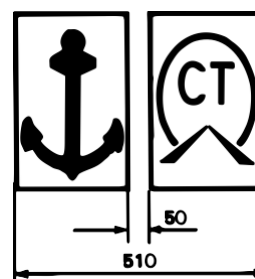
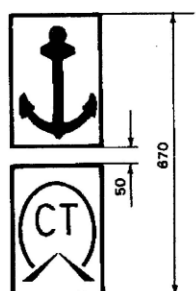


Figure 3c

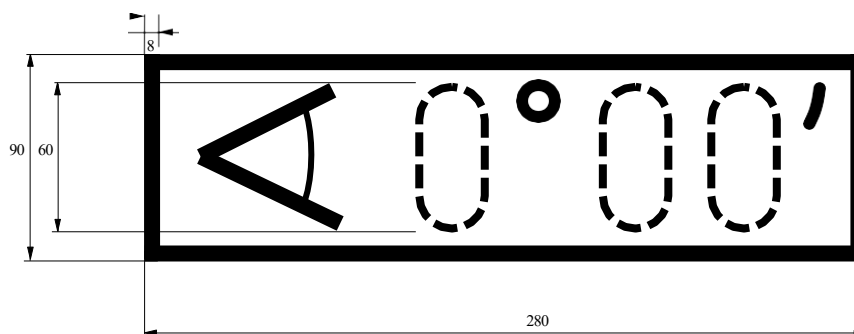


Position: On the left of each side wall.

Meaning: These signs are only to be used on wagons that are authorised to run on the British rail network, based on either Figure 1 or Figure 2, or a combination of both (Figures 3a, 3b or 3c).

Note: Neither of these signs is necessary to use the Cross-Channel Fixed Link (Frethun to Dollands Moor) or the HS 1 high speed line from Dollands Moor to London St Pancras International.

2.12 Sign for ferry ramp angle



Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

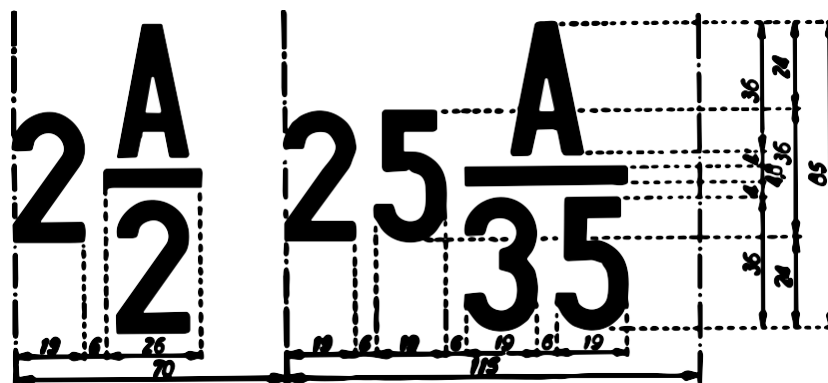
Meaning: Indicates bogie wagons that can only negotiate a ramp angle of less than $2^{\circ}30'$ when running onto ferries.

This sign must be carried by bogie wagons which, when entering a ferry, can only negotiate a ramp angle of less than $2^{\circ}30'$. The marking should specify the maximum ramp angle.

Note: Regulations governing wagons that run on ferries are contained in GCU **Appendix 14**.

2.13 Sign for removable wagon accessories

Removable wagon accessories



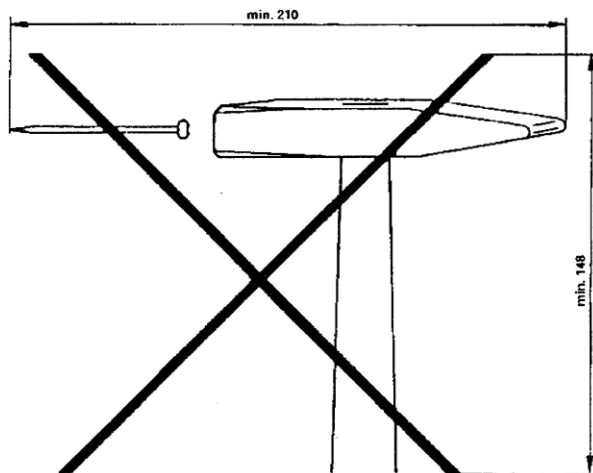
Position: On the right of each side wall.

Meaning: The number and type of removable accessories are to be indicated. In the case of carboy wagons and wagons with removable recipients, the number of such recipients should be indicated. The figure placed before the fraction indicates the number of removable accessories belonging to the wagon; the letter "A" indicates that the accessories are removable, and the denominator of the fraction gives the serial number assigned to the removable accessory in the list below. The names of the accessories may also be added in letters alongside these signs.

Serial number	Description of the removable accessory
1	Removable stanchion
2	Removable side board for flat wagon
3	Removable end board for flat wagon
4	Removable side panel
5	Removable centre post for securing load
6	Stanchion chain
7	Crank handle for car-carrying wagons
8	Adjustment device
9	Swivelling bolster with stanchions
10	Removable bolster
11 – 12	– reserved –
13	– reserved –
14	– reserved –
15 – 16	– reserved –
17	– reserved –
18	– reserved –
19	– reserved –

20	– reserved –
21	– reserved –
22	– reserved –
23	– reserved –
24	Coupling rod (rigid coupling)
25	– reserved –
26	Ice tank or bunker
27	Ice tank screen
28	Ice tank frame
29	Trestle or bar with meat hooks
30	Removable cross-piece for low-loader wagons
31	Removable support bracket (for wagons used for special loads)
32	Securing crossbar (for wagons used for special loads)
33	Removable floor panel (for wagons used for special loads)
34	– reserved –
35	Wedging block
36	Skid, with or without shoes, flat wagons used for carrying cars
37	Securing belts for flat wagons used for carrying cars
38	Girder for removable ramps for flat wagons used for carrying cars
39	– reserved –
40	Spare heating coupling
41	Fire extinguishers
42	Wheel scotches for car-carrying vehicles
43	Loading ramp, gangway
44	– reserved –
45	– reserved –
46	– reserved –
47	Metal cradles for rolls of sheeting
48	Panel for covering markings
49	Loading frame for special types of goods

2.14 Sign for the inside of wagons: "Do not use nails or wire staples"



Hammer and nail: Outline in black
Cross: Black or red

Position: Inside the wagon in a clearly visible place, if possible, at eye level.

Meaning: Nails or staples should not be used on the walls or floor of this wagon.

2.15 Markings for wagons with special fittings (wagons with automatic discharge facility, opening roof, etc.)

Example:	<i>Wandarretierung lösen durch Schließen und Öffnen mit Bedienhebel.</i>	<i>Débloquer l'arrêt mural en l'ouvrant et le fermant avec le levier de commande.</i>
	<i>Release wall locking device by closing and opening with control lever.</i>	<i>Allentare il blocco della parete mediante chiusura e apertura con la leva di servizio.</i>

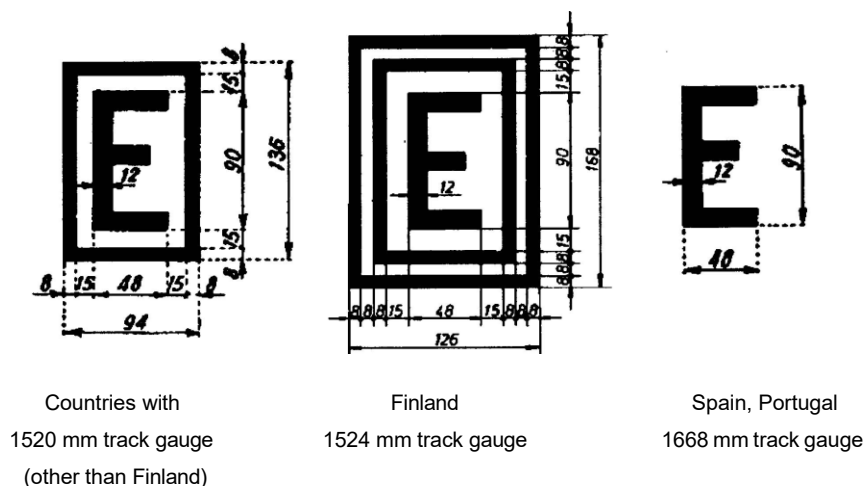
Position: At suitable places on both sides of the wagon.

Meaning: Instructions on how to operate these fittings and the safety measures to be taken, if possible, in several languages.

Suitable pictograms can be added to these instructions.

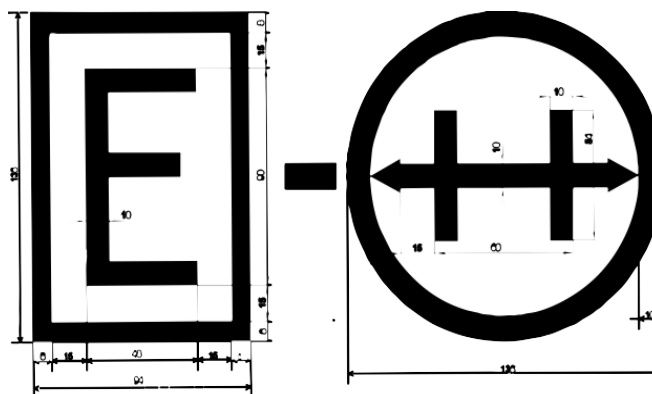
2.16 Signs for wagons built for running between countries with different track gauges

Signs for wagons built for running between countries with different track gauges:



Position and meaning: see point 2.17

2.17 Signs for bogies with gauge-adjustable axles, nominal gauge 1435 mm (automatic gauge changeover facility according to the UIC leaflet 510-4)



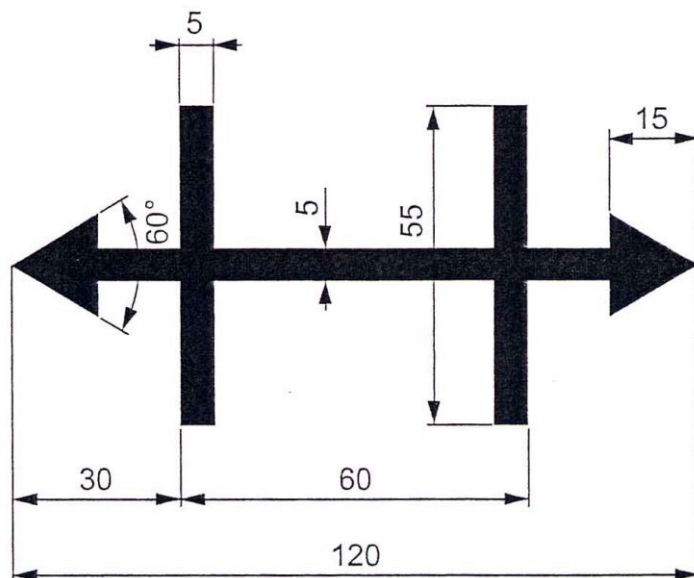
Position: On the right of each side wall. The right-hand sign on its own also features on the bogie frame.

Meaning: The signs shown in point 2.16, which indicate compliance with **UIC leaflets 430- 1** or **430-3**, are affixed to wagons suitable for running between countries with different track gauges. For wagons fitted with automatic gauge changeover facilities, the sign in 2.16 is placed alongside that in point 2.17.

Note 1: When changing axles of this type, the date (month and year) of the last axle-box overhaul must be marked, along with the code number of the wagon keeper (owning RU or RU with which the keeper has concluded a service agreement) on the outside of each axle-box in white paint, clearly visible. Exchangeable bogies are to be fitted with a special overhaul plate.

Note 2: Regulations concerning the use of wagons with interchangeable axles in traffic across the Pyrenees and in traffic with Finland are given in GCU **Appendix 14**.

2.18 Sign for bogies fitted with gauge-adjustable axles, nominal gauge 1520 mm (automatic gauge changeover facility according to the UIC leaflet 510-4)



Position: On the corresponding bogie frames.

Meaning: This sign is used by RUs that are signatories to the PPW*.

The provisions of point 2.17 apply in principle.

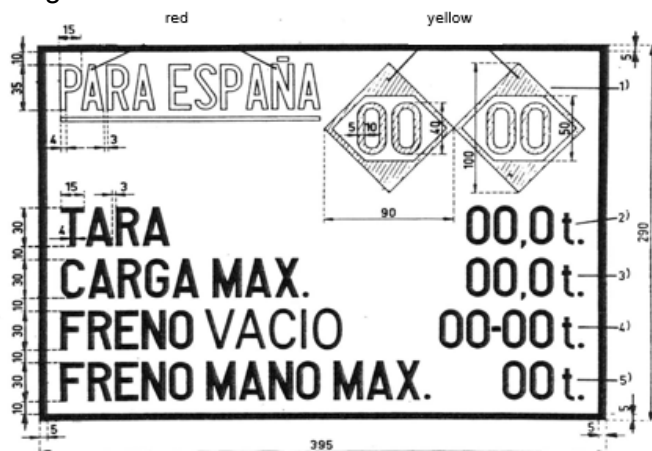
This sign is carried by wagons that have bogies fitted with gauge-adjustable axles with a nominal gauge of 1520 mm. Wagons fitted with bogies of this type should carry the appropriate combination of the signs shown in points 2.16 and 2.18 on the right of each side wall.

*PPW Agreement among members of the OSJD**:
"Regulations governing the use of wagons in international traffic"

**OSJD Organisation for Collaboration between Railways, based in Warsaw

2.19 Additional signs for wagons accepted for running in Spain and Portugal

Figure 1: For wagons fitted with a vacuum brake

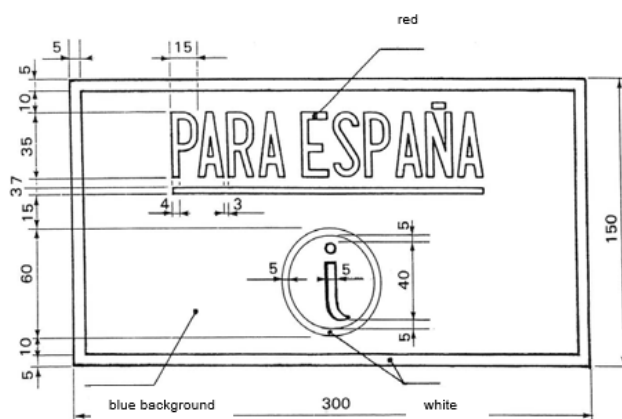


Position: On the right of each side wall, in black on wagons that are painted white, and in white on a blue background for other wagons.

Meaning:

1. Left-hand diamond	Maximum speed at maximum load
Right-hand diamond	Maximum speed when empty. When the maximum speeds when empty and at maximum load are the same, a single diamond marking will suffice
2. TARA	Vehicle tare
3. CARGA MAX	Maximum load limit
4. FRENO VACIO	Vacuum brake
	Left-hand figure= braked weight in "empty" position
	Right-hand figure= braked weight in "loaded" position
5. FRENO MANO MAX	Maximum braked weight of the screw brake

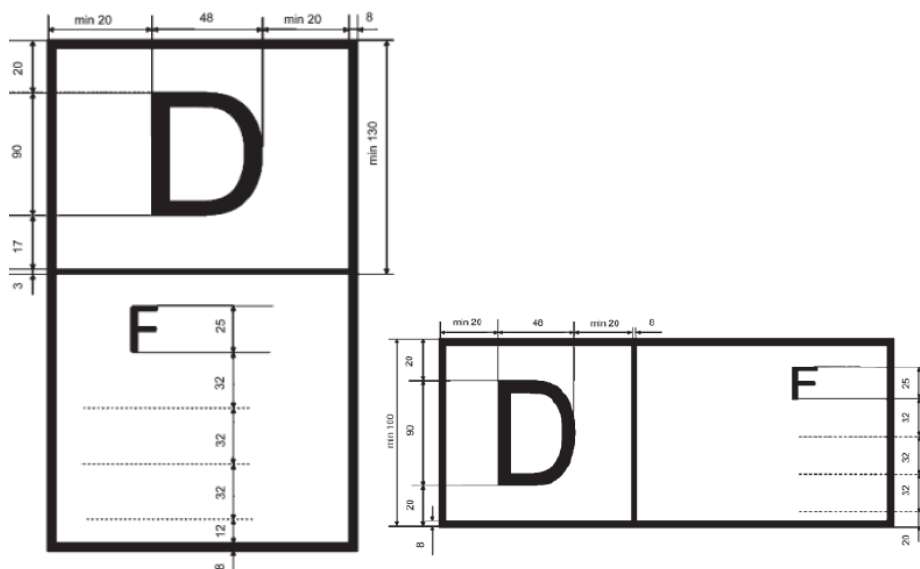
Figure 2: For wagons with only one brake pipe for the vacuum brake:



Position: On the right of each side wall, in black on wagons painted white and in white on a blue background for other wagons.

Meaning: Wagon can be included in a train with the brake isolated.

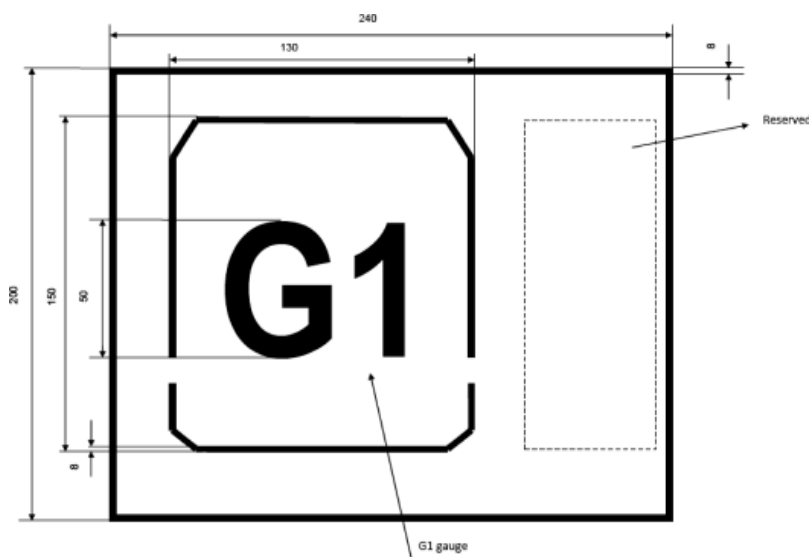
2.20 Approval plate for vehicles without the TEN marking



Vehicles which are not authorised for operations in all member states require an indication of the member state in which they are authorised. The list of authorising member states is to be indicated in accordance with one of the following drawings, where “D” stands for the member state which first issued authorisation (here: Germany), and “F” for the second member state which issued authorisation (here: France).

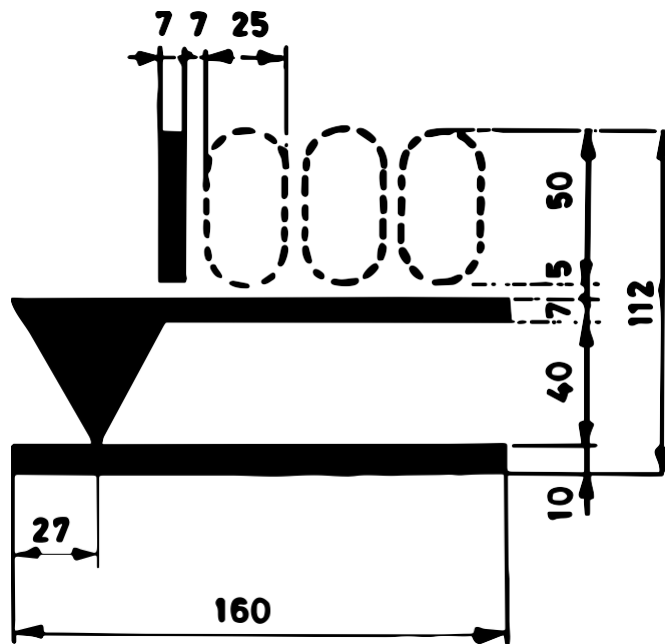
The member states are to be indicated using the codes in Annex P.4. This may concern both TSI-compliant and non-TSI-compliant vehicles. The first digit in these vehicles’ codes as per Annex P.6 is code 4 or 8.

2.21 Marking of wagon gauge



Indicates wagons built to gauge “G1” and authorised for interoperable traffic.

3.1 Height of the loading plane for container wagons in unladen state



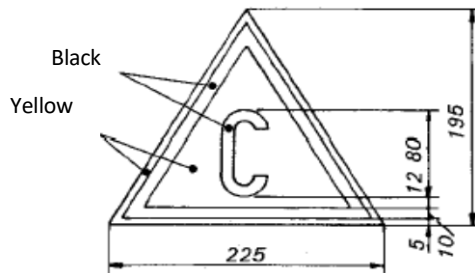
Position: On the right of each solebar.

Meaning: This sign is carried by container wagons that are suitable for transporting large containers and/or swap bodies. It indicates the height in millimetres of the loading plane when the wagon is not loaded.

3.2 Signs for combined transport wagons in accordance with IRS 50596-6

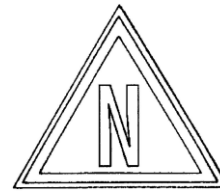
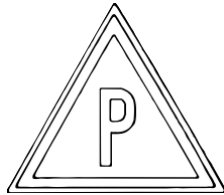
On swap-body carrier wagons and on carrier wagons with independent axes that have equivalent or more favourable characteristics for the coding of load units.

ISO containers on carrier wagons with a bogie pivot pitch > 16.15 up to and including 19.30 m

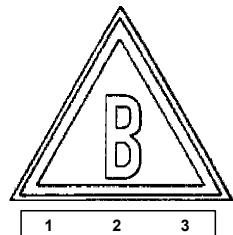


On type 1a and 1b recess wagons or variants for carrying semi-trailers that exceed specified capacity

On recess wagons for semi-trailers



On roller-unit carrier wagons



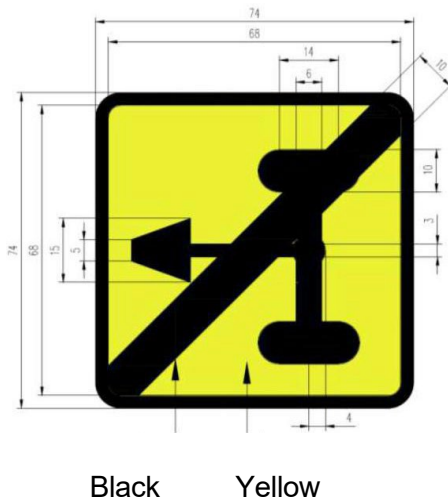
Position: On the left of each side wall.

For wagons used in rail/road combined transport, the following signs:

-  On recess wagons for semi-trailers whose characteristics are defined in **IRS 50596-6**
-  On recess wagons for semi-trailers whose characteristics are defined in **IRS 50596-6**
-  On swap-body carrier wagons whose characteristics are defined in **IRS 50596-6**
-  On roller-unit carrier wagons whose characteristics are defined in **IRS 50596-6**

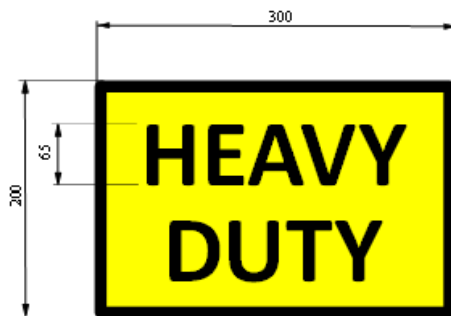
-				On swap-body carrier wagons whose characteristics do not meet the conditions of point 3.2.3 of IRS 50596-6
		+23		On swap-body carrier wagons whose characteristics are more favourable than the conditions in point 3.2.3 of IRS 50596-6
-				On carrying wagons for ISO containers whose characteristics do not meet the requirements of point 3.2.3 of IRS 50596-6
-				On recess wagons whose characteristics when carrying semi-trailers do not meet the conditions of point 3.2.3 of IRS 50596-6
-		+5		On recess wagons whose characteristics when carrying semi-trailers are more favourable than the conditions in point 3.2.3 of IRS 50596-6
-		1 2 3		On roller-unit carrier wagons whose characteristics do not meet the conditions of point 3.2.3 of IRS 50596-6
		+3		
		-2		
-		1 2 3		On roller-unit carrier wagons whose characteristics are more favourable than the conditions in point 3.2.3 of IRS 50596-6
		+6		

Pictogram for seating devices unsuitable for use with steering wedges



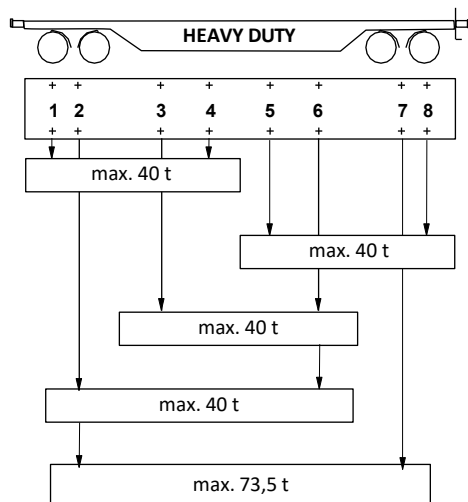
If the seating device is unsuitable for use with steering wedges, the recess wagon is to be marked with the following pictogram, near the wagon compatibility code.

Pictogram to affix for heavy-duty swap bodies transport



This pictogram is positioned on the solebar near the compatibility code of the wagon on the carrier wagon **with marking of reinforced tensioning fittings**

Loading diagram for carrier wagons for heavy-duty swap bodies transport

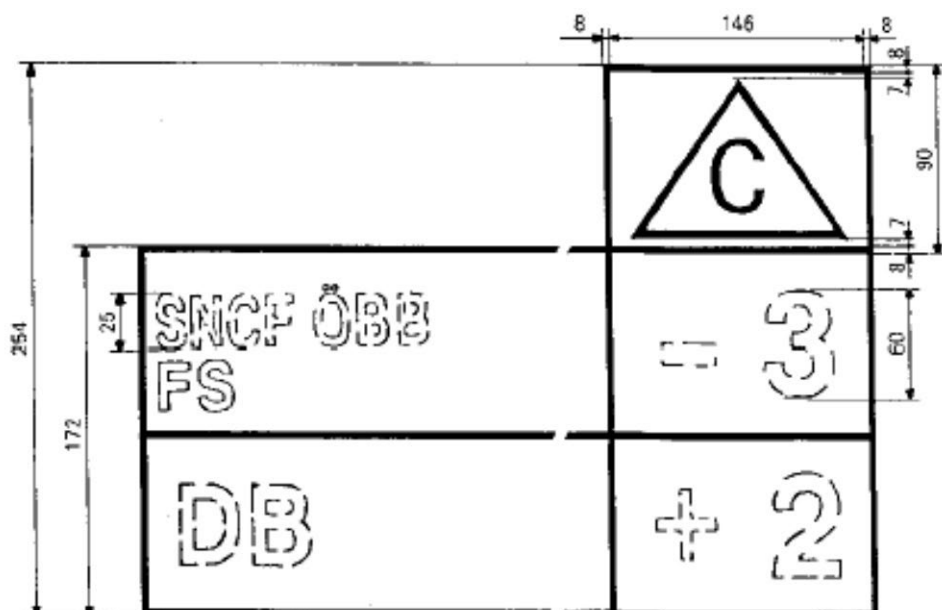


The loading diagram must be affixed to wagons with reinforced tensioning fittings.

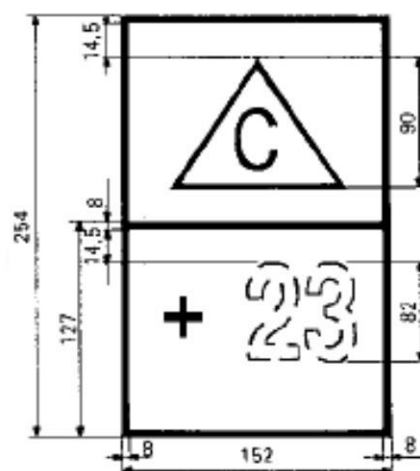
The inscription shall indicate the maximum total permissible mass for each loading position.

The loading diagram shall be at least A4 size and shall be affixed to the solebar.

On swap-body carrier wagons whose characteristics do not meet the conditions of point 3.2.3 of IRS 50596-6



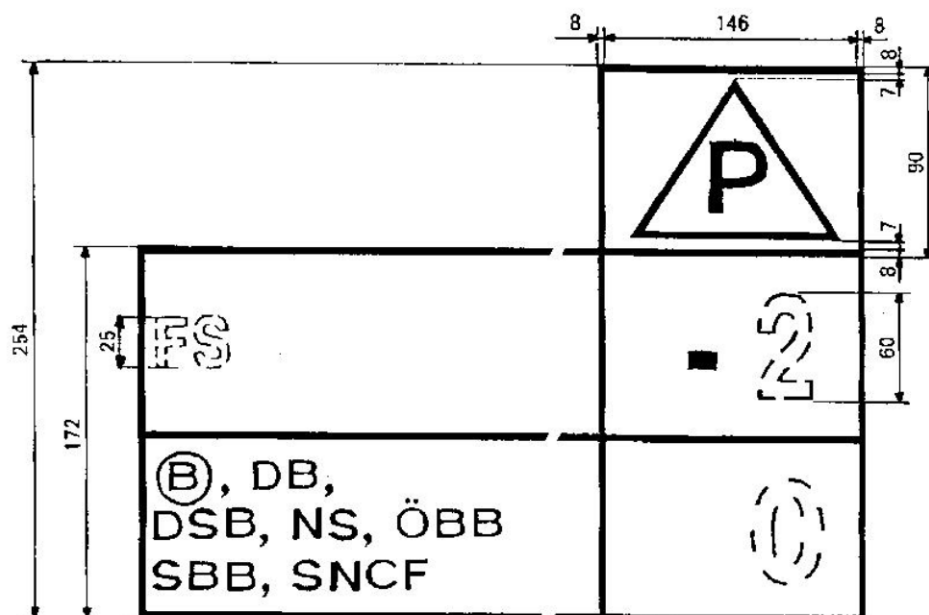
On swap-body carrier wagons with characteristics more favourable than the conditions in point 3.2.3 of IRS 50596-6



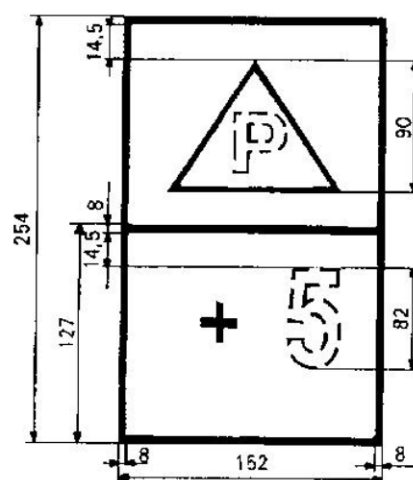
Meaning:

- 3: The wagon can only be loaded with swap bodies that have a profile number that is lower (in this example by at least 3 points) than the profile number assigned to the RU (or RUs) concerned.
- + 2: The wagon can be loaded with swap bodies that have a profile number that is greater (in this example by up to 2 points) than the profile number assigned to the RU (or RUs) concerned.
- + 23: The wagon can be loaded with swap bodies that have a profile number that is greater (in this example by up to 23 points) than the profile number assigned to the RU (or RUs) concerned.

On recess wagons whose characteristics when carrying semi-trailers do not meet the conditions of point 3.2.3 of IRS 50596-6



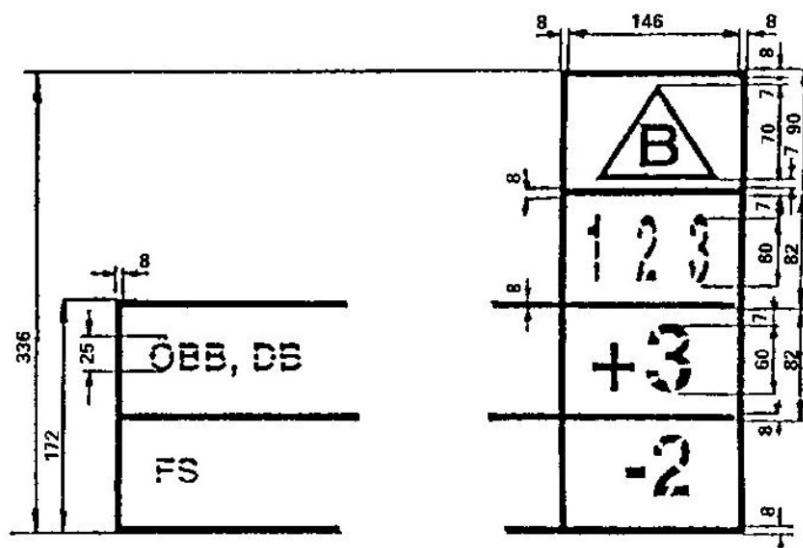
On recess wagons whose characteristics when carrying semi-trailers are more favourable than the conditions in point 3.2.3 of IRS 50596-6



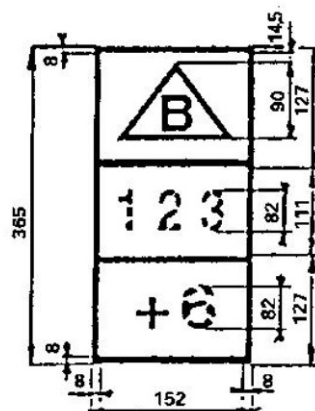
Meaning:

- 2: The wagon may only be loaded with semi-trailers that have a profile number that is lower (in this example by at least 2 points) than the profile number assigned to the RU (or RUs) concerned.
- 0: The wagon may only be loaded with semi-trailers that have a profile number that is no higher than the profile number assigned to the RU (or RUs) concerned.
- +5: The wagon can be loaded with semi-trailers that have a profile number that is greater (in this example by up to 5 points) than the profile number assigned to the RU (or RUs) concerned.

On roller-unit carrier wagons whose characteristics do not meet the conditions of point 3.2.3 of IRS 50596-6



On roller-unit carrier wagons with characteristics more favourable than the conditions in point 3.2.3 of IRS 50596-6



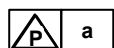
Meaning:

- +3: The wagon may be loaded with roller units that have a profile number that is greater (in this case by up to 3 points) than the profile number assigned to the RU (or RUs) concerned.
- 2: The wagon may only be loaded with roller units that have a profile number that is lower (in this example by at least 2 points) than the profile number assigned to the RU (or RUs) concerned.
- +6: The wagon may be loaded with roller units that have a profile number that is greater (in this example by up to 6 points) than the profile number assigned to the RU (or RUs) concerned.

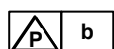
Compatibility code definition in accordance with IRS 50596-5

Recess wagons with enlarged clearance envelopes are given a compatibility code which takes the form of the code letter from the wagon compatibility code (in this case "P") and one of the lower-case letters approved by UIC for specific clearance envelopes/wagon types.

The letters are marked on the recess wagon and in the semi-trailer code number plate and must match when loaded.



Clearance envelope for P semi-trailers with compatibility code "a" on type 4 recess wagon with seating device 113 or 98 cm high



Clearance envelope for P semi-trailers with compatibility code "b" on recess wagon, types BA 739 and 744 with seating device 113 or 98 cm high



Clearance envelope for P semi-trailers with compatibility code "c" on type 2000 recess wagon with seating device 113 or 98 cm high



Clearance envelope for P semi-trailers with compatibility code "d" on Mega 2 type recess wagon with seating device 113, 98 or 85 cm high



Clearance envelope for P semi-trailers with compatibility code "e" on type 5 recess wagon with seating device 113, 98 or 88 cm high



Clearance envelope for P semi-trailers with compatibility code "f" on type 3000 recess wagon with seating device 113, 98 or 88 cm high



Clearance envelope for P semi-trailers with compatibility code "g" on Twin type recess wagon with seating device 113, 98 or 88 cm high



Clearance envelope for P semi-trailers with compatibility code "h" on type 4.2 recess wagon with seating device 113 or 98 cm high



Clearance envelope for P semi-trailers with compatibility code "i" on type MTW recess wagon with seating device 113, 98 or 88 cm high

4.1 Sign for length over buffers

Length over buffers



Position: On the left of each side wall.

Meaning: Indicates the wagon's length over buffers in metres [m].

On wagons made up of separate units joined together by a permanent coupling (multiple wagon units) the total length of the wagon should be indicated.

4.2 Signs for tare and braked weight

Figure 1: Wagon tare



Figure 2: Wagon tare and braked weight of the platform-operated hand brake

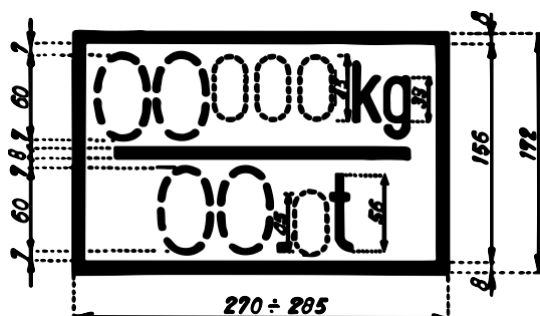
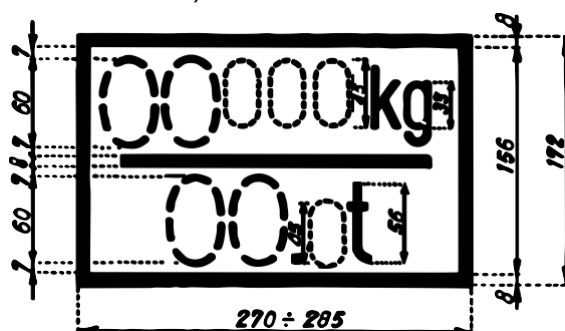


Figure 3: Wagon tare and braked weight of the ground-operated hand brake (the latter to be shown in a red box)

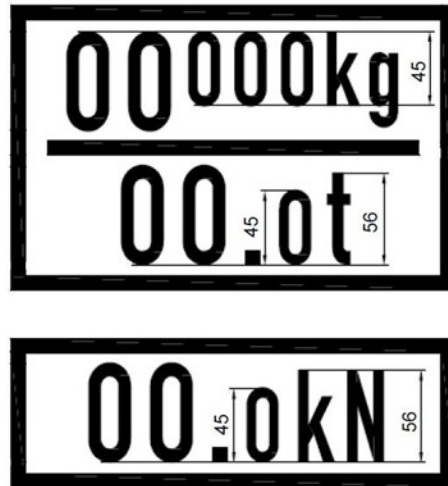


Position: On the left of each side wall

Meaning: Indicates the wagon tare (upper figure) and braked weight (lower figure).
The sign shown in figures 2 or 3 is marked on the wagon when the braked weight is less than the total mass of the vehicle (tare + load corresponding to the maximum weight).
The braked weight as shown in figure 3 must be marked in a red box when it refers to a ground-operated hand brake.
When a wagon is fitted with more than one independently acting hand brake, the corresponding number of brakes must be indicated in front of the braked weight marking (for example: 2 x 00.0 t).

Note: The sign shown in Figure 1 must **not** be affixed to a wagon that is to carry the sign in Figure 2 or 3.

Figure 4: Marking indicating the braked weight and the holding force in kN on vehicles fitted with screw brakes

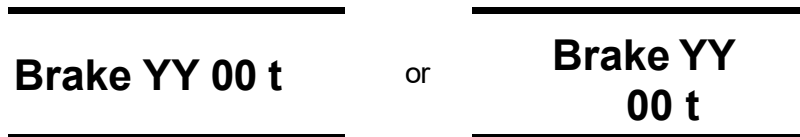


Note: If the wagons are equipped with more than one screw brakes independent of each other, it is appropriate to specify the quantity in front of the relevant indication of holding force (e.g. 2 x 00.0 kN)

This marking is mandatory as of 1/1/2021.

4.3 Signs to indicate the changeover device for air brakes - Marking of the braked weight on wagons.

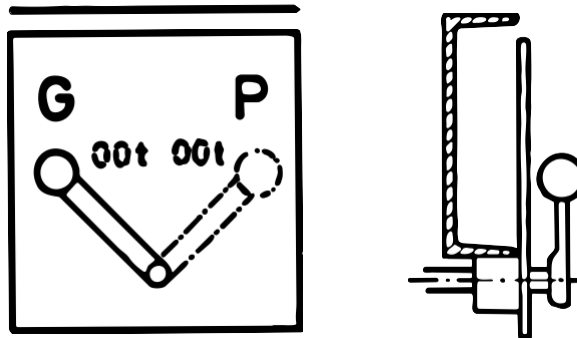
4.3.1 Marking of the braked weight of wagons without changeover device



Position: On each solebar, close to the indication of the brake system.

Meaning: Sign indicating the brake type (YY) as shown in point 4.3.9 and indication of the braked weight (t). This marking may be preceded by the word "brake" (optional).

4.3.2 "Goods — Passengers" (G/P) changeover device (hand operated)



Position: On the plate behind the changeover lever, alongside the corresponding lever position, if the braked weights (t) in the "Goods" (G) and "Passengers" (P) positions are different.

Meaning: On wagons that are fitted with a "goods — passengers" (G/P) changeover device, the changeover from one regime to another is made using a lever fitted with an end knob (as illustrated in point 4.3.2).

In the "goods" braking mode, the lever slants upwards and to the left.

In the "passengers" braking mode, the lever slants upwards and to the right.

4.3.3 "Empty – loaded" changeover device (hand operated)

Vehicles fitted with a single "empty – loaded" changeover device (figures 1 and 2)

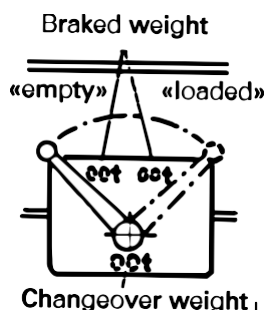


Fig. 1:
«Empty»
braking position
plus one «Loaded»
braking position

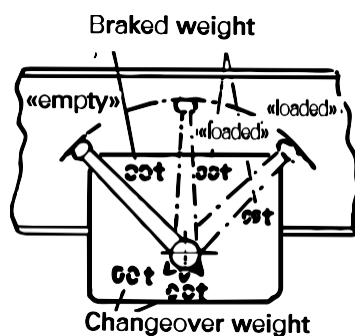
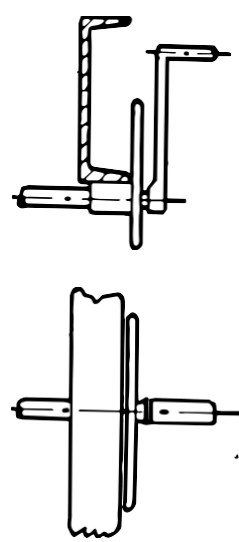


Fig. 2:
«Empty» braking
position plus several
(for example two)
«Loaded» braking
positions



Vehicles fitted with 2 or more "empty – loaded" changeover devices (figures 3 and 4)

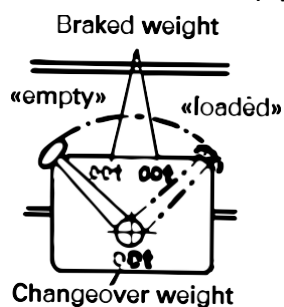


Fig. 3:
«Empty» braking
position plus one
«Loaded» braking
position

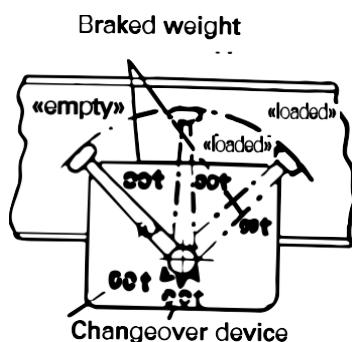
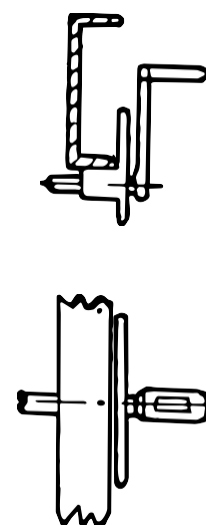


Fig. 4:
«Empty» braking
position plus several
(for example two)
«Loaded» braking
positions



**Position
(figures
1 to 4):**

On each solebar, approximately in the middle of the wagon, on the plate behind the changeover lever. The braked weights (t) are marked next to the corresponding position of the lever. The changeover weights [t] are indicated on the same plate, near the point of rotation of the lever.

Meaning:

On wagons featuring an "empty" braking mode and one or more "loaded" braking modes, the changeover from one mode to another is done using a crank handle as shown in the above figures 1, 2, 3 or 4.

When the wagon has only a single device, it will be fitted with a lever of the kind shown in figures 1 or 2.

When the wagon has two or more separate devices, the levers are fitted with a handle as shown in figures 3 or 4.

In the "empty" braking mode, the lever slants upwards and to the left and will occupy its extreme left-hand position if:

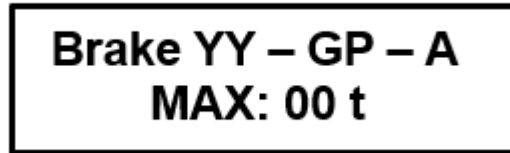
- the wagon is empty,
- the gross weight (tare + load) is less than the changeover weight marked,
- the mass per axle or per bogie is less than half of the changeover weight marked.

In the "loaded" braking mode, in other words when the gross weight (tare + load) is greater than or equal to the changeover weight (the highest, when there are several positions), the lever slants upwards to the right and occupies the extreme right-hand position.

The positions corresponding to the other loaded braking modes are situated between these extreme positions, the braking power increasing from left to right.

4.3.4 Vehicles fitted with automatic load-proportional braking system

Figure 1



Position: In a box painted on each solebar.

Meaning: Indication of the type of brake (YY) in accordance with point 4.3.9. Additional information is also shown in point 4.3.9 (GP, A) and indication of the maximum braked weight [t] → Up to this maximum value, the braked weight [t] is equal to the sum of the wagon tare and the load [t]. This information may be preceded by the word "brake" (optional).

Figure 2

Bremse...–G–A

Position: On each solebar, after the brake system marking.

Meaning: On some older wagons, the braked weights for each load state (maximum of five) are shown as tables. Each column in the table contains two figures:

- above: →the braked weight value [t],
- below: →minimum weight on rail [t] giving a braked weight [t] at least equal to this value.

4.3.5 Vehicles fitted with an automatic "empty – loaded" changeover device

Figure 1: Vehicles featuring several braked weight values in the "goods" and "passengers" changeover

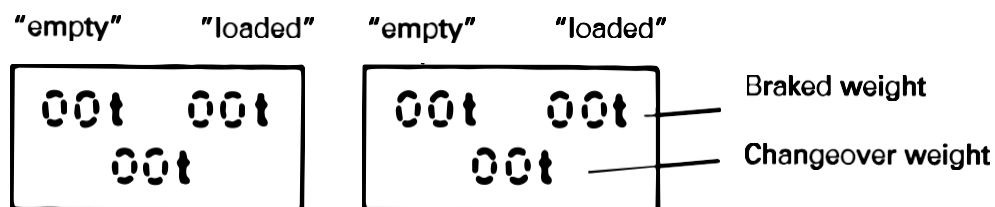


Figure 2: Vehicles featuring a single braked weight value in the "goods" and passengers" changeover

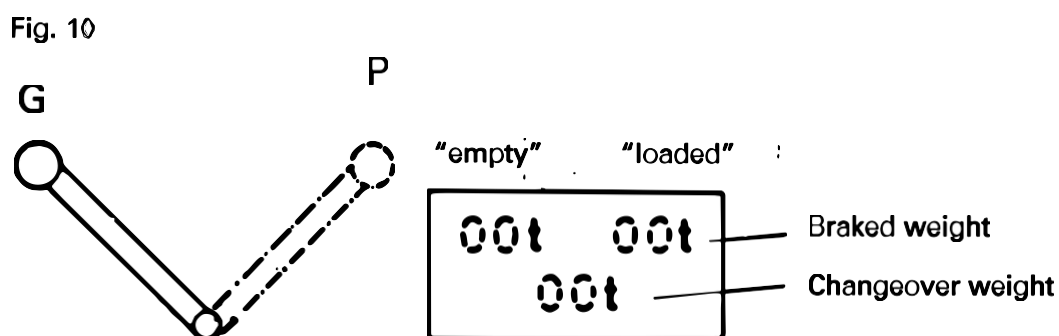
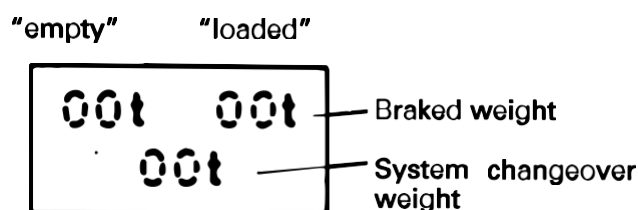


Figure 3: Vehicles featuring a "goods" brake or "passengers" brake only



Position figures 1 – 3: On each solebar near to the brake system marking.

Meaning: On these wagons, the "empty – loaded" changeover takes place automatically when the gross weight (wagon tare + load) [t] is greater than the changeover weight [t] marked.

4.3.6 Marking of the axles of wagons with a single distributor

On wagons fitted with a single brake distributor, an identification marking (serial number) can be applied to the solebar above each axle-box (optional).

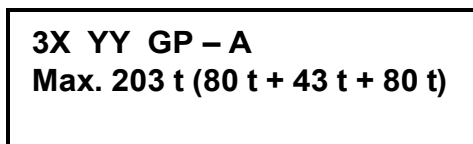
4.3.7 Signs for wagons with more than one distributor

a) Wagons with more than one distributor and separate "empty – loaded" changeover systems

The braked weight [t] of the associated distributor and the changeover weight [t] for the wagon must be marked on the identification plates for each "empty – loaded" changeover device (see point 4.3.3).

b) Wagons with several distributors and automatic load-proportional brakes

Figure 1

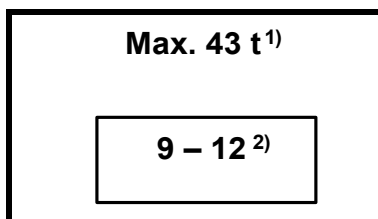


Meaning:

Example of markings for multiple wagons with three distributors (3X), letter code for brake type in accordance with point 4.3.9 (YY); additional letters in accordance with point 4.3.9 (GP, A).

The braked weights [t] of the corresponding distributor should be marked on the plates for each "empty – loaded" changeover device together with the changeover weight for the wagon as a whole.

Figure 2



Position of figures 1 and 2

On each solebar near the brake isolating levers.

Meaning:

¹) Braked weight delivered by the system controlled by the distributor in question.

²) Indication of the end numbers of the axles on which this braking system acts.

The following must also be indicated (see point 4.3.7):

- the number of brake systems,
- the total braked weight and in brackets the braked weight obtained from each distributor.

4.3.8 Marking of the axles of wagons fitted with several distributors and an automatic load-proportional braking system

On multiple wagons with permanent couplings fitted with several distributors and an automatic load-proportional braking system, an identification number should be marked on the solebars to indicate the corresponding position of the axle in ascending order from one end of the wagon to another. This marking must be made by 1.1.2007.

4.3.9 Abbreviated references for compressed air brakes accepted for international traffic as of 1.3.2005

1. Brake type

Kunze-Knorr	Kk
Drolshammer	Dr
Bozic	Bo
Hildebrand-Knorr	Hik
Breda	Bd
Charmilles	Ch
Oerlikon	O
Knorr, type KE	KE
Westinghouse, type E	WE
Dako	DK
Westinghouse, type U	WU
Westinghouse, type A * (approved until 1.1.2000 for new built-wagons)	WA*
Davies and Metcalfe, Distributor DMD 3	DM
MZT HEPOS	MH
SAB-WABCO, Type SW 4/SW 4C/SW 4/3	SW
Distributor KE-483 * (In position "483" the brake meets the conditions of the CIS networks).	KE 483**
Bumar-Fablok MBF-01A, MBF-01B, MBF-02	FL

2. Additional references

Freight train brake	G
Passenger train brake	P
High power brake	R
G/P changeover device	GP
P/R changeover device	PR
G/P/R changeover device	GPR
Automatic load-proportional braking system	A
Electromagnetic rail brake	Mg

Position: In the middle of each solebar, or on parts covering the solebar or on special boards fitted at the height of the solebars, near the changeover devices for the brake with the other brake markings.

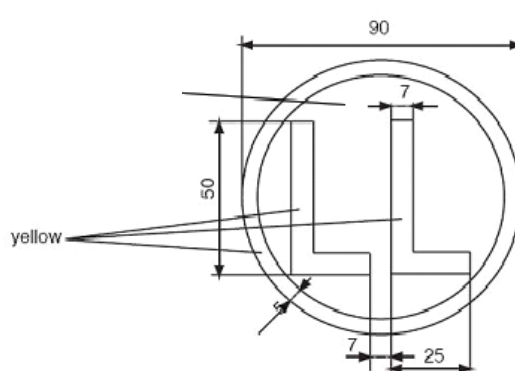
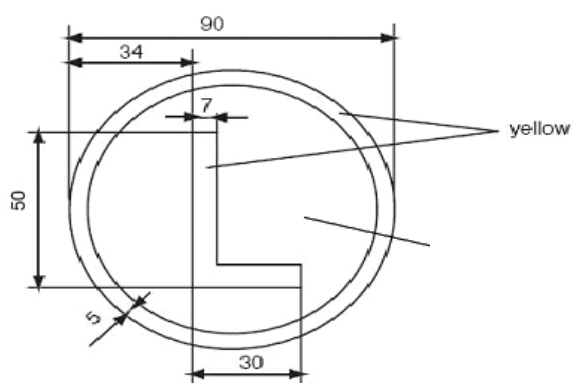
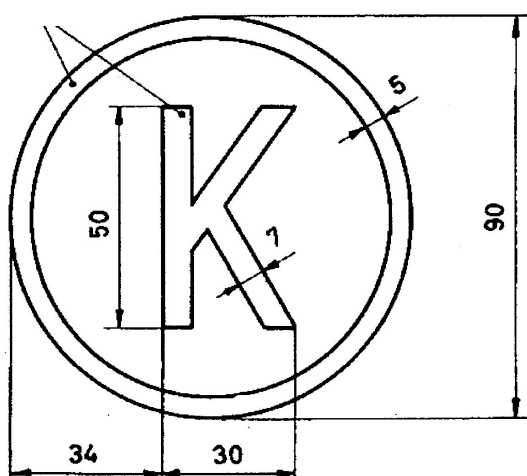
4.4 Signs for wagons fitted with composite brake blocks

Position: On both sides of the wagon, directly to the right of the marking indicating the type of brake.

Meaning: Marking for vehicles fitted with composite brake blocks with a

- high coefficient of friction ('K' type block)
- medium coefficient of friction ('L' type block)
- low coefficient of friction ('LL' type block)

ivory to yellow

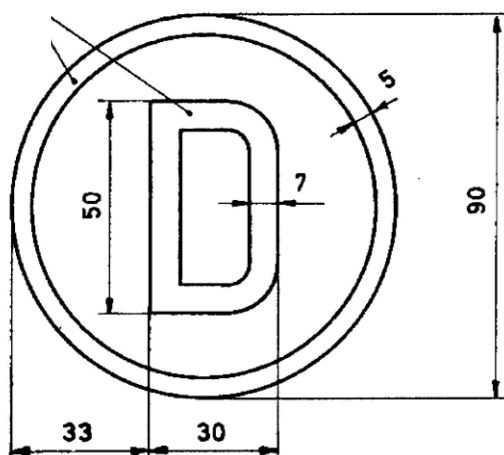


Sign(s) (e.g. C810, J816M): directly below or next to the symbol corresponding to the "K" type block. Declaration of several types of blocks possible.



4.5 Sign for wagons fitted with disc brakes

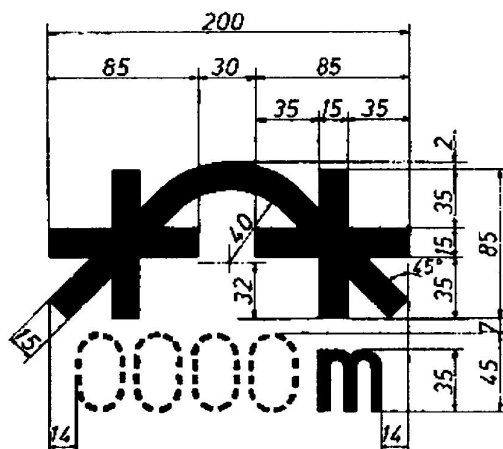
Ivory to yellow



Position: On both sides of the wagon, directly to the right of the marking indicating the type of brake.

Meaning: Wagons that carry this sign are fitted with disc brakes.

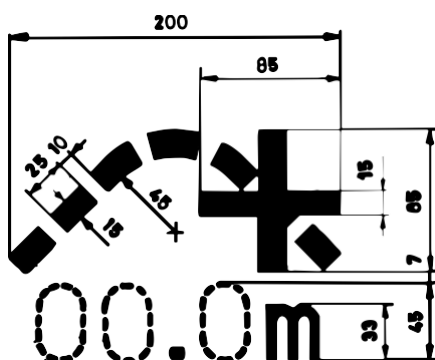
5.1 Sign for wagons not authorised to negotiate all shunting humps



Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: This marking is compulsory for wagons which, because of their design are liable to sustain damage when crossing shunting humps with a vertical radius of 250 m. The value marked indicates the smallest curve radius that the wagon can negotiate.

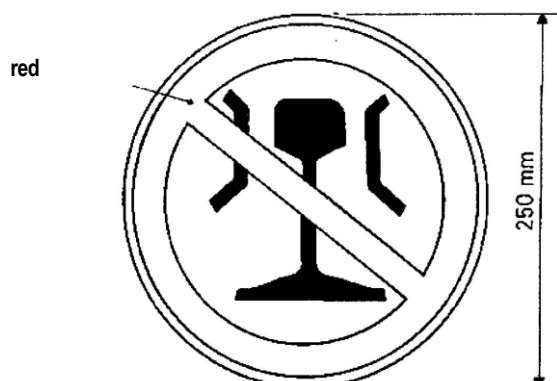
5.2 Sign for bogie wagons with a distance of more than 14.0 m between inner axles and accepted on shunting humps



Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: This marking is compulsory on bogie wagons that are suitable for crossing shunting humps, but which have a distance of more than 14.0 m between consecutive inner axles. The value indicated is the largest distance between two consecutive axles.

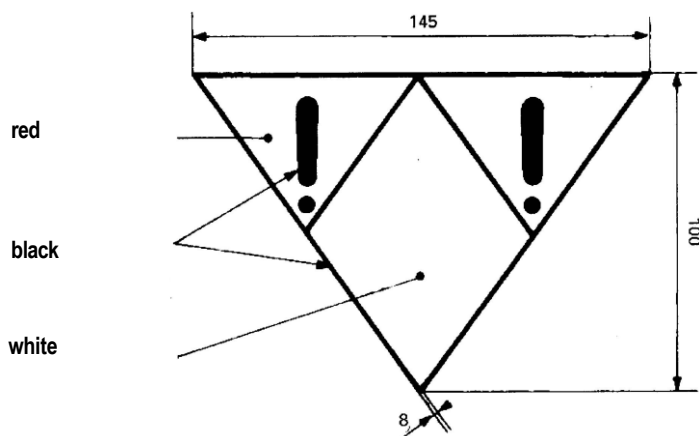
5.3 Sign for wagons that are not authorised to pass through retarders or other shunting and stopping devices in active mode



Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Because of design considerations these wagons must not pass through retarders or other types of shunting and stopping devices in active position.

5.4 Sign for wagons not to be loose-shunted

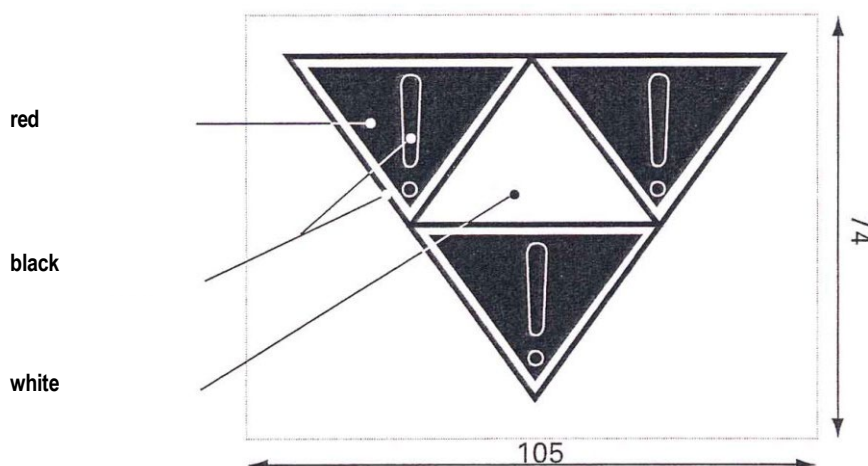


Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Special care should be taken when marshalling trains to avoid damaging the wagon. Wagon must not be loose-shunted and must be protected against buffing by other rolling stock without taking special precautions.

Note: This marking is compulsory on wagons with special fittings (electronic equipment, refrigerator units, etc.) for which normal buffing impacts are not authorised as they are liable to damage the equipment. These wagons may not carry the RIV sign but can be covered by bilateral agreements.

5.5 Sign for wagons that must not be fly- or gravity-shunted



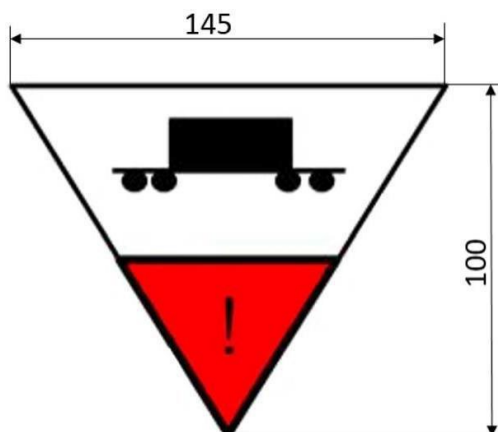
Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Wagon

- must not be fly- or gravity-shunted,
- must be marshalled by a motive power unit,
- must not be loose-shunted and must be protected against buffing by other rolling stock.

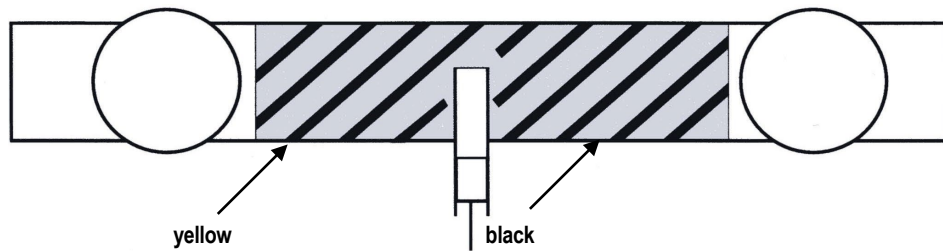
Note: Point 5.3.4.1 of the RID states that in place of the shunting label (shown in model 15) the wagon may instead carry permanent shunting signs (wagon markings) providing they conform precisely to the prescribed example.

5.6 Sign for fly and hump shunting not permitted for containers or loaded pocket wagons



Note: Fly or hump shunting and buffing is not permitted when the wagon is loaded. Shunting may be performed without restriction when the wagon is empty.

5.7 Marking for wagons fitted with anti-crash components



Position: On the headstocks, between the buffers.

Appearance: Paint: black diagonal warning stripes painted on a yellow background.

Meaning: Wagon fitted with anti-crash components. The Berne rectangle clearances may be encroached. Follow shunting instructions.

5.8 Marking for wagons fitted with long-stroke shock absorbers (shock absorber fitting)

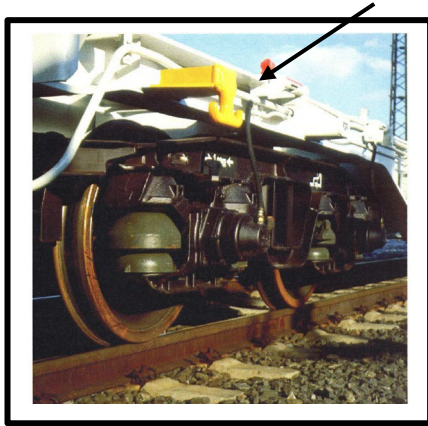


Black and yellow striped surface to be left clear

Position: Black diagonal warning stripes painted on a yellow background covering the danger areas for wagons fitted with shock absorbers.

Meaning: In the event of impact, the wagon ends become displaced in relation to the underframe. Distances and clearances are reduced as a result. Particular care must therefore be taken during shunting operations.

5.9 Marking for wagons fitted with projecting tow hooks



Position: Tow hooks and their fenders projecting more than 150 mm, and any supports and brackets, should be colour-marked as follows:

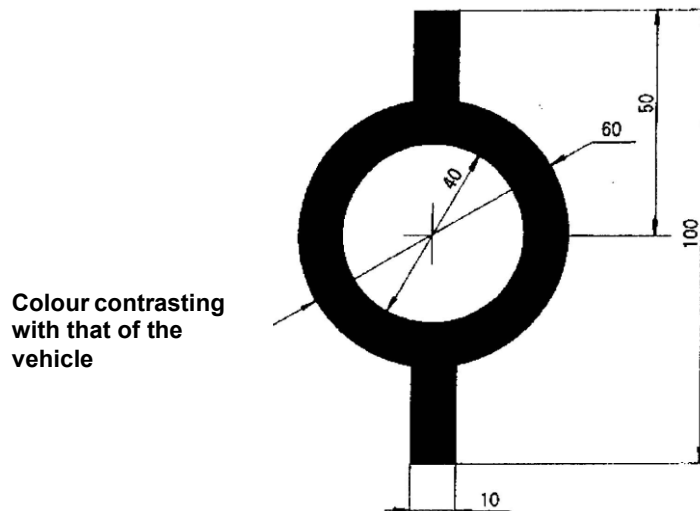
- Tow hooks and fenders: in yellow.

Colour-marking of tow hook supports and brackets:

- Projecting up to 250 mm: in yellow,
- Projecting more than 250 mm: black diagonal stripes on yellow background.

Meaning: Marking serving as a warning against the risk of injury.

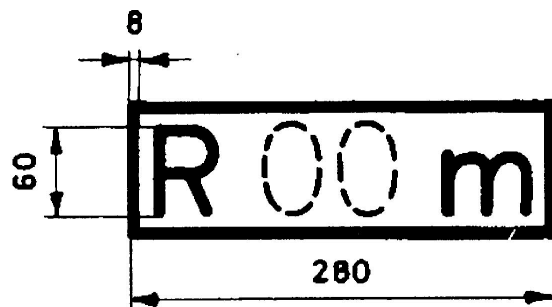
5.10 Sign for permanently coupled wagon units



Position: On each headstock, next to the right-hand buffer.

Meaning: Not to be uncoupled in service. This sign is only used on wagons made up of several units that are permanently coupled together.

5.11 Sign for bogie wagons only able to negotiate curves with a radius greater than 35 m

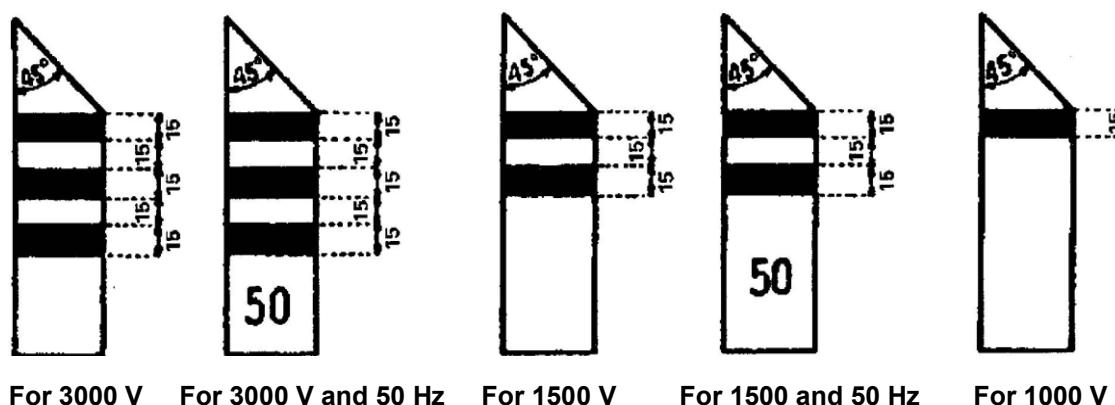


Position: On the left of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: Indicates the minimum curve radius that the wagon can negotiate.

Note: On wagons with special fittings, for example low-loader wagons, this indication refers to the central position of the lateral sliding device and/or the maximum distance between bogie centres.

5.12 Signs indicating wagons fitted with a train line



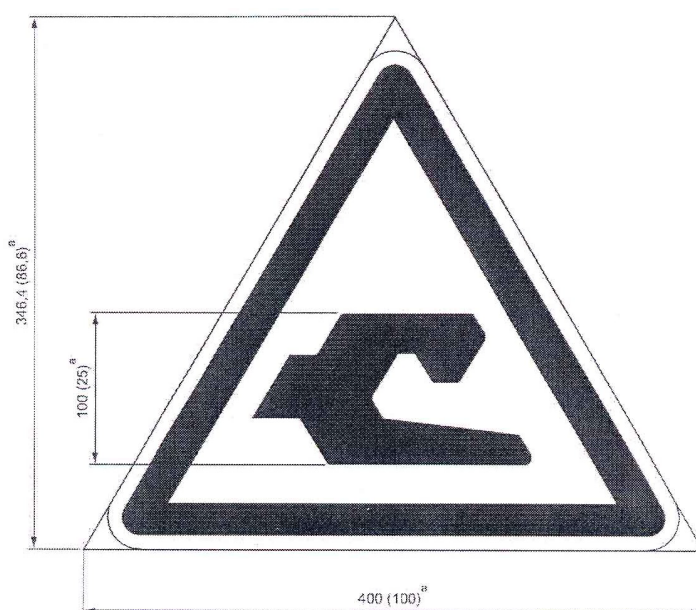
Position: On the lower part of the corner posts, on both outward-facing surfaces. For wagons without corner posts, it is recommended that the required markings be affixed to metal panels.

Appearance: Light yellow rectangle approx. 200 mm high, the same width as the corner post and with the top corner cut off at an angle of approx. 45° inclined downwards towards the centre of the wagon. Black horizontal stripes approx. 15 mm high are painted on the yellow rectangle at intervals of 15 mm.

Meaning: Wagon is fitted with a train line. One black stripe indicates a 1000 V DC cable, two stripes a 1500 V cable and three stripes a 3000 V cable. Approval for running on 50 Hz AC electrified networks is indicated by the number "50".

5.13 Sign for wagons fitted with the automatic coupler

(Sign according to OSJD* standard)



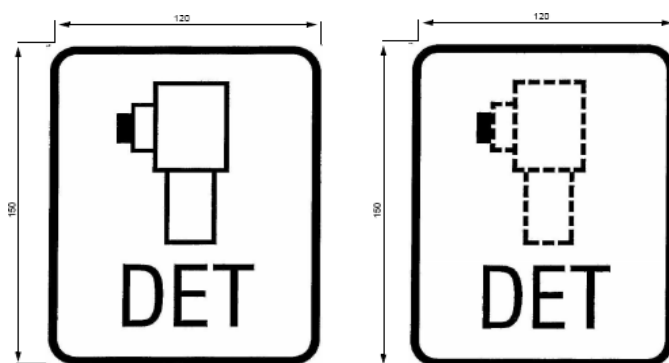
Position: At each end of the wagon sides or solebar and on each end wall.

Meaning: Wagon fitted with automatic couplers.

Note: On wagons fitted with the automatic coupler, the Berne rectangle clearances may be partially encroached.

*OSJD: Organisation for Collaboration between Railways, based in Warsaw.

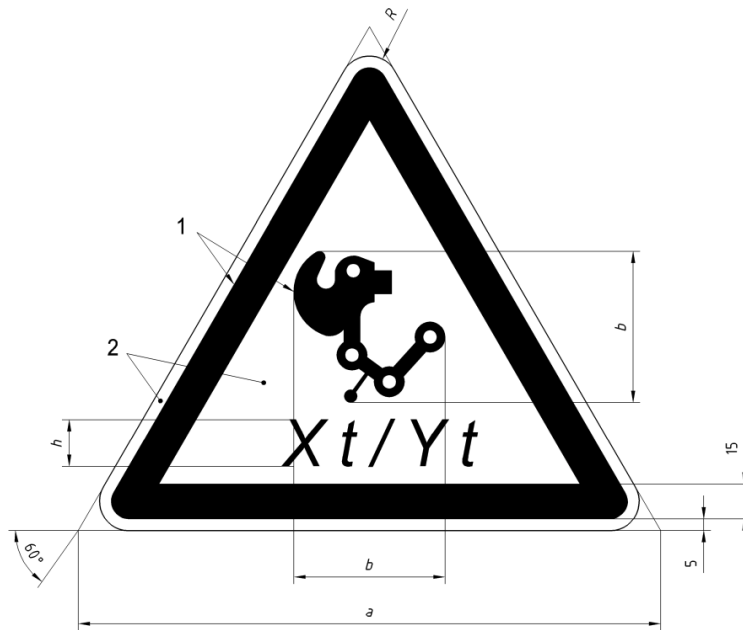
5.14 Sign for derailment detectors



Position: On both sides of the wagon, when the derailment detector is visible. The picture on the sign has a dotted outline when the detector is not visible.

Meaning: Wagon derailment detectors are devices used to detect implausibly high vertical accelerations on the vehicle. A derailment is assumed to have taken place, and an emergency brake application is triggered or an alarm sounded. The system cannot prevent a derailment itself from occurring.

5.15 Sign for strengthened screw coupling



Key 1 Black
 2 Yellow

Template	Sizes			
	a	b	h	R
1	400	130	30	22
2	200	65	20	11

Position: At each extremity of the side faces of the wagon or on frame girder. This marking must be chosen according to the reserved space for that purpose.

Meaning: Wagon with strengthened screw coupling – X t is related to coupling resistance, Y t to coupling hook. A strengthened screw coupling is described in EN 15566:2009, paragraph 4.1, Table 1. System's recognition is over 1 MN.

– reserved –

6.1 Sign for wheels able to withstand high thermal stresses



Figure 1



Figure 2

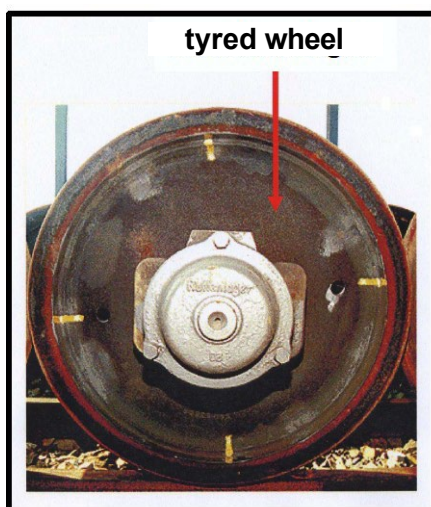
Position: On the axle-box cover. (see figure 1)

On the axle box (see figure 2) for housing types without cover.

Meaning: The axles in question have wheels that are able to withstand high thermal loading, in accordance with **UIC leaflets 510-2** and **510-5**, Appendix H.

Note: It should be noted there are housings which, due to their design, do not have a cover. They can be recognisable by housing without holes for cover fastening.

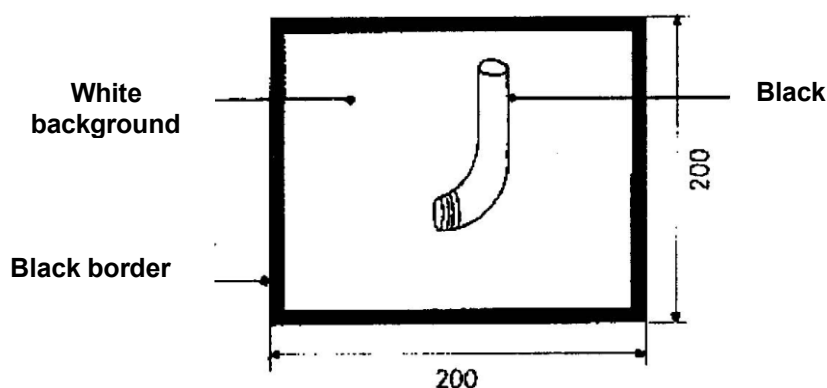
6.2 Marking of tyred wheels



Position: Four coloured stripes, at 90° intervals, on the outer surface of the wheel tyre and rim.

Meaning: Control mark to check the position of the tyre in relation to the wheel rim.

6.3 Sign for ventilation pipes



Position: On tanks, next to the pipes in question.

Meaning: The ventilation pipes marked with this symbol do not need to be sealed off completely.

6.4 Sign for tank wagon tests, coding of tanks and special regulations

Figure 1

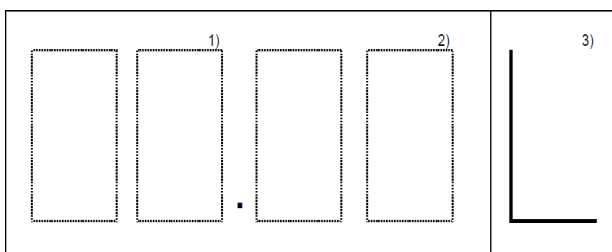


Figure 2 (example)

TE 5

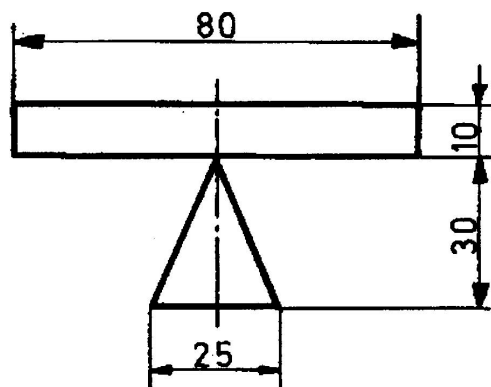
Position: On each side of each tank, on the right.

Meaning figure 1: Indication of the next tank test (end of month) for the carriage of dangerous goods in accordance with the RID. The marking specifies 1) the month, 2) the year and if necessary, the letter "L" as per RID 6.8.2.4.3.; 3) that the date of the next tank test is extended by 3 months.

Meaning figure 2: Example of an alphanumerical code for all the special regulations* applicable: here, the wagon is fitted with a highly flammable insulating material.

***Note:** The tank code should also be marked near the date of the tank test, in characters at least 90 mm high. The alphanumerical code for all applicable special regulations under the RID should also feature below the tank code or right beside it, in characters 50 mm high. This marking must be made by 1/1/2011 at the latest.

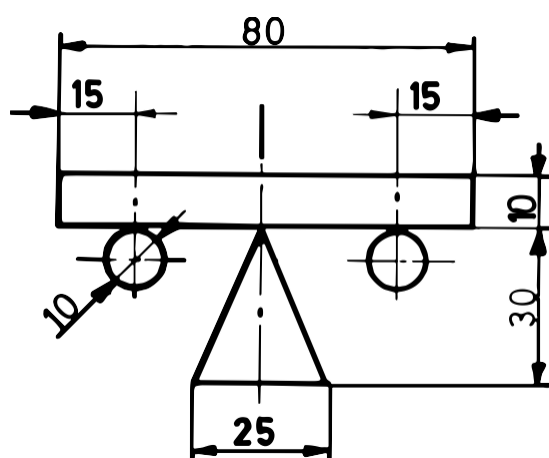
7.1 Sign indicating points for lifting the wagon body in the workshop



Position: At the designated points on the solebars.

Meaning: Marking indicating where to place jacks, lifting devices, etc. in order to lift the whole of the wagon body.

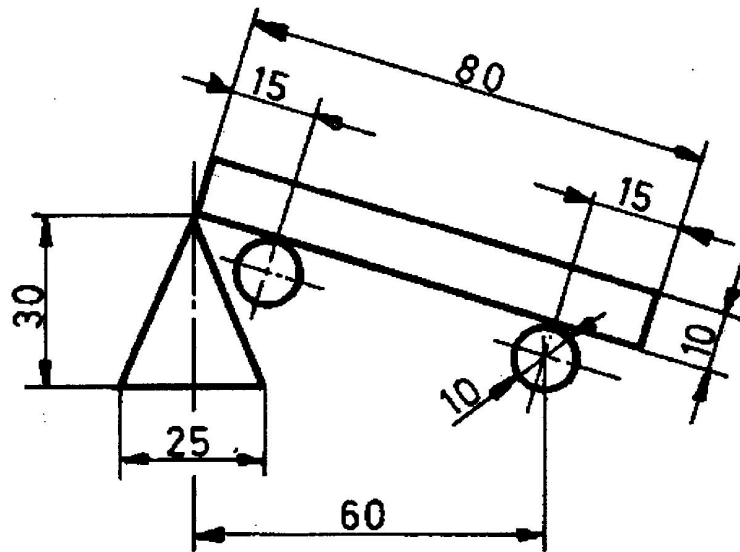
7.2 Sign for lifting at 4 points with or without running gear



Position: At the designated points on the solebars.

Meaning: Marking indicating where to place jacks, lifting devices, etc. in order to lift the whole of the wagon body, including the running gear where appropriate.

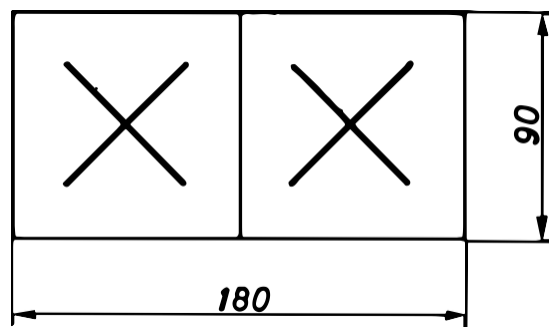
7.3 Sign for lifting or re-railing with or without running gear at one end only or close to the end



Position: At the designated points on the wagon headstocks or nearby.

Meaning: Marking indicating where to place jacks, lifting devices, etc. in order to lift the whole of the wagon body by one end, or close to the end, including the running gear where appropriate.

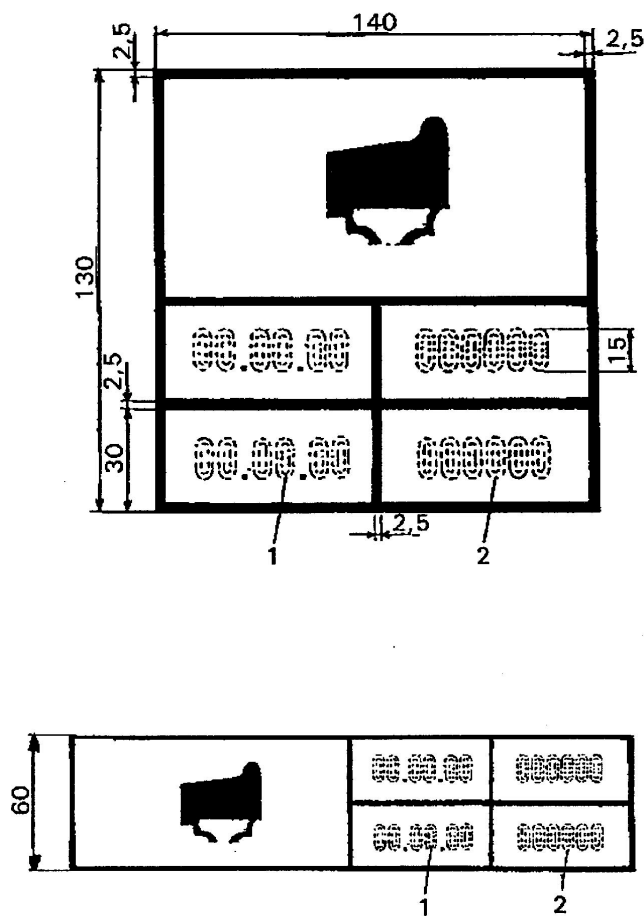
7.4 Sign for the replacement of springs



Position: On the right of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: On wagons with a rigid underframe (tank wagons, hopper wagons, etc.), this sign indicates that if one spring is damaged, both springs must be replaced. This does not apply to suspension springs with progressive stiffness (e.g. parabolic springs). See also point 2.10, chapter A of GCU **Appendix 10**.

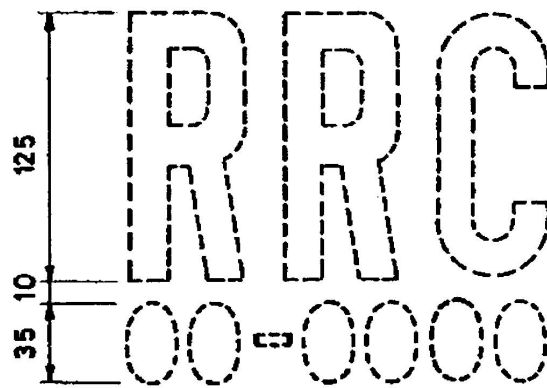
7.5 Sign for wheel tyre inspection



Position: On the right of each solebar, or on parts covering the solebar or on special boards fitted at the same height as the solebars.

Meaning: This plate indicates the date (day, month and year) (1) of the last two checks to ensure the tyre is firmly in place on the wheel body. In addition to the date, the initials of the RU and the code number of the workshop are also specified (2).

7.6 Sign for inspection periods for temperature-controlled units

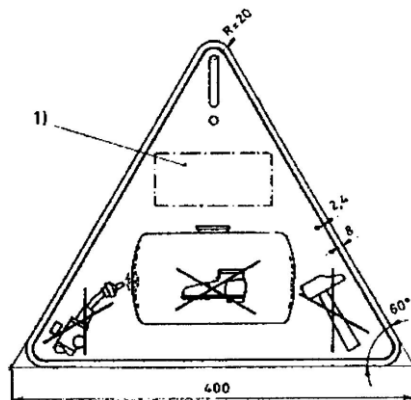


(Blue characters on a white background)

Position: On the right of each side wall, beneath the UIC or UIC St sign.

Meaning: On wagons used to carry perishable foodstuffs, this sign shows the distinguishing mark for the temperature control system under the ATP agreement and indicates the expiry date (month and year) of the certificate held by the wagon.

7.7 Sign for the protection of the inner lining of tank wagons



(Paint: Black outline and markings on a yellow background)

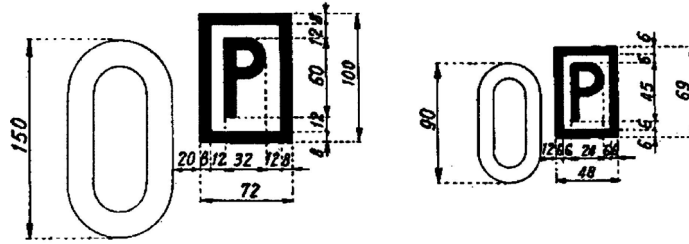
Position: On the tank at clearly visible points

Meaning: Precautions designed to protect the inner lining (enamel, coat of paint, etc.).

Note: The words "inner lining" may be added to this pictogram in one or more languages.

7.8 Signs for privately-owned wagons, unified wagons, standard wagons

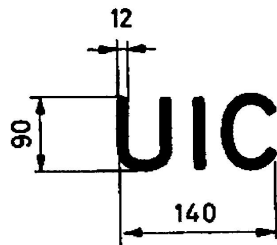
Figure 1: Sign for privately-owned wagons (registered with an RU before the GCU entered force)



Position: On the left of each side wall, after the wagon self-check digit.
Marking: if there is no room on the left, the name or company and initials of the wagon keeper may be marked on the right-hand side.

Meaning: Privately-owned wagons, registered by their keepers with an RU. The keeper's name or company and initials should also be indicated (together with its fax number). This marking will be cancelled in the future.

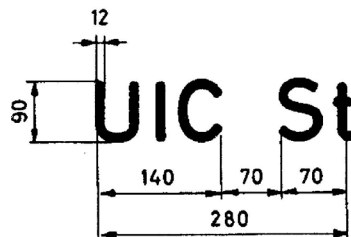
Figure 2: Sign for unified wagons



Position: On the right of each side wall.

Meaning: Wagon meeting standard international regulations (unified wagons).

Figure 3: Sign for standard wagons



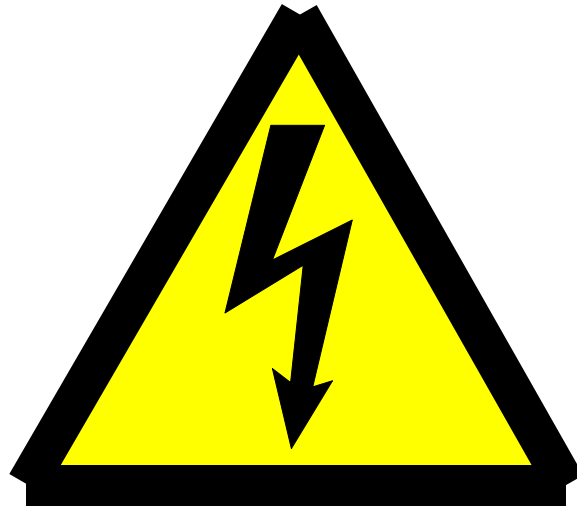
Position: On the right of each side wall.

Meaning: Only unified wagons built in accordance with ERRI drawings (standard wagons) may carry this marking.

7.9 Markings for certain spare parts

- 7.9.1 Standard screw couplers carry the "St" marking.
- 7.9.2 Wheelsets suitable for axle-loads of more than 20.0 tonnes carry the sign 2Q= 00.0 t indicating the permissible axle-load:
 - either on the identification ring for wheelsets
 - or on the inner face of the wheel hub for wheelsets
- 7.9.3 Suspension leaf springs suitable for axle-loads of more than 20.0 tonnes carry the sign 2Q = 00.0 t on the shackle, indicating the permissible axle-load.
- 7.9.4 When welding or heating work on or near the wagon buffers can constitute an accident hazard, a yellow disc of 50 mm diameter should be painted on the buffer casing.
- 7.9.5 For standard buffers with a stroke of 105 mm, the sign 105 – X shall be marked on the buffer casing the owner's mark to indicate the buffer stroke and buffer category (A, B or C) as defined in the UIC Code. Buffers manufactured before 1/1/1981 that do not meet the conditions of category A do not feature the category letter.

8.1 Sign for high voltage warning sign (lightning flash)

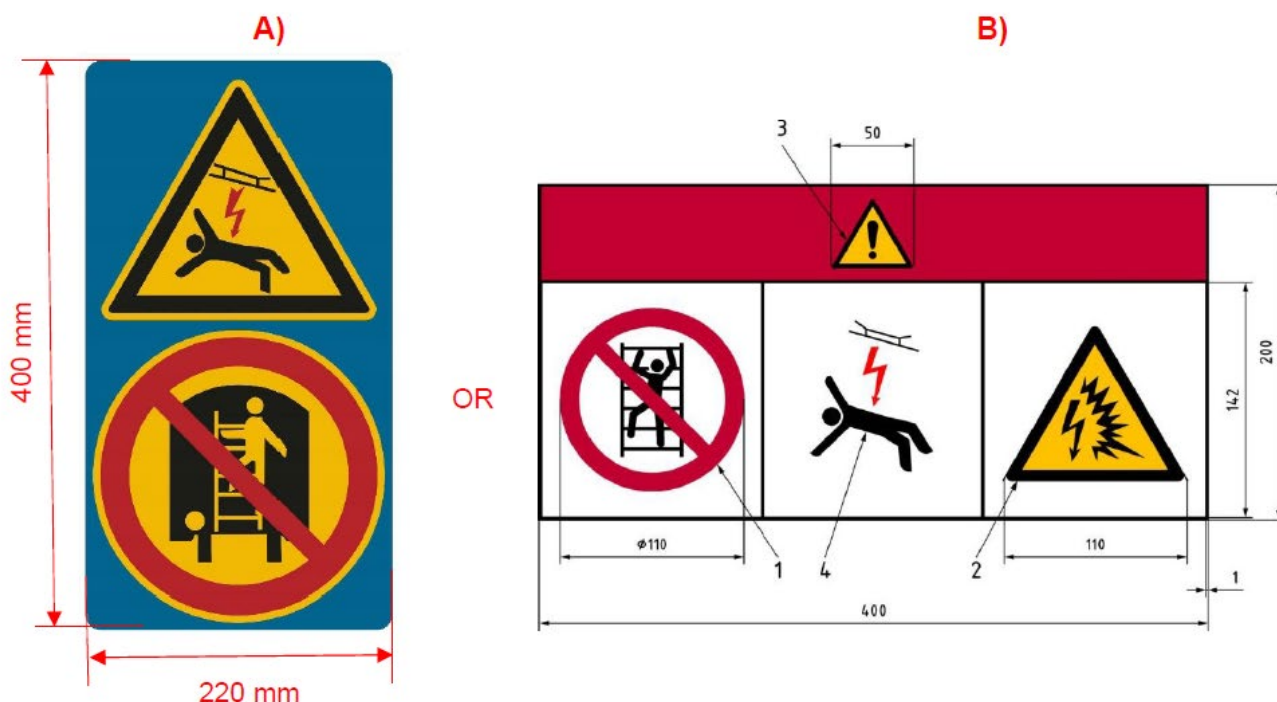


Position: On wagons fitted with steps or ladders, in the immediate vicinity of these fittings and at a height such that the sign is visible before the danger zone is reached. For use on wagons where the top step or upper part of the ladder is more than 2000 mm above rail level.

Meaning: Warning against high voltage. Stop! You are entering a particularly dangerous area. Only duly authorised personnel may work in this area having first taken the necessary precautions.

Note: The size of the sign will depend on where it is to be placed.

8.2 Signs for high voltage warning sign (Stop!)



Position: On wagons with steps or ladders, in the immediate vicinity of these fittings and at a height such that the sign is visible before the danger zone is reached. For use on wagons where the top step or upper part of the ladder for the pictograph A) is more than 2000 mm and for the pictograph B) upper 1450 mm above rail level, or whose design enables them to be climbed.

Meaning: Warning - high voltage. Stop! You are entering a particularly dangerous area. Only duly authorised personnel may work in this area having first taken the necessary precautions.

Explanation: This pictogram is intended to warn inspection personnel and unauthorised third parties of the risk of high voltage on the wagon.

Wagons whose design enables them to be climbed fulfil two criteria:

1. The external part of the end walls is fitted with horizontal elements with a maximum vertical distance of 45 cm.
2. These elements must be at least 5 cm in depth or must be comparable to steps of a ladder.

If both criteria are fulfilled, the pictogram in 8.2, "Signs for high voltage warning sign (Stop!)" must be affixed, but the pictogram in 8.1, "Sign for high voltage warning sign (lightning flash)" is not required.

Both warning pictograms (8.1 and 8.2) must be affixed on wagons equipped with ladders and steps.

APPENDIX 12 TO THE GENERAL CONTRACT OF USE

CATALOGUE OF DAMAGE TO WAGONS

Category	Part	Type of damage	Additional information	Responsibility of		
				Keeper	User RU	
Running gear						
	Wheelset		Inspection in accordance with Appendix 10, Annex 3 EUROPEAN VISUAL INSPECTION CATALOGUE (EVIC) FOR FREIGHT WAGON AXLES, including replacement of the wheelsets	X		
	Tyred wheel	Tyre lose, laterally displaces, cracked	No sign of thermal overloading	X		
			Visible signs of thermal overloading (brake equipment faulty)	X		
			Visible signs of thermal overloading (brake equip. operational)		X	
	Tyre / wheel centre / solid wheel / wheel tread	Thermal overloading	Brake equipment faulty	X		
			Braking equipment operational		X	
		Cracks in the disc	No sign of thermal overloading	X		
			Visible signs of thermal overloading (brake equipment faulty)	X		
			Visible signs of thermal overloading (brake equipment		X	
		Clamping notches		X		
		Measuring circle not visible	Excessive wear of wheel centre (diameter too small)	X		
		Damage from track brakes	Notches with sharp-angled apex in the tyre and the rim or the lower rim of the tyre		X	
		Traces of abrasion, flanges damaged	Accidental damage ¹⁾		X	
		Cavity, shelling or flaking	Not including thermal overloading	X		
		Metal inclusions, flats	Brake equipment faulty	X		
			Brake equipment operational		X	
		Occasional dents in wheel tread	Accidental damage ¹⁾		X	
		Out-of-roundness			X	
				If the damage can be clearly attributed to the RU		X
	Axle shaft	Traces of abrasion on the axle shaft	Damage to wagon	X		
			No damage to wagon		X	
		Bent out of shape Cracks			X	
	Axle-boxes	Hot axle-box	Not the result of force	X		
			Confirmed	X		
			Not confirmed		X	
		Recent leakage of lubricant	High Axle-box temperatures, abnormal noises in the box when the axle rotates	X		
		Traces of contact on the axle-box housing (top-contact with bogies)	Suspension and dampers in good condition and wagon not overloaded		X	
	Manganese plates	Missing		X		
		Cracked weld beads		X		

¹⁾ Accidental damage in the sense of Appendix 12 is understood as damage not resulting from wear but either from inappropriate handling of the wagon (e.g. shunting accidents, side- on collisions or other sudden events), or which can be attributed to culpable violation of wagon custody obligations by an RU.

Category	Part	Type of damage	Additional information	Responsibility of	
				Keeper	User RU
Suspension					
	Springs	Ruptured, cracked, etc.		X	
		Fatigued		X	
		Wrongly fitted (parallel)		X	
		Wrongly fitted (characteristic curve) or wrong type of leaf spring		X	
	Friction damper	Any type of damage		X	
Brake					
	Mechanical and pneumatic brake parts	Defective brake rigging	Accidental damage ¹⁾		X
			Wear	X	
		Defective changeover device	Accidental damage ¹⁾		X
			Defective hand brake	Wear	X
		Brake blocks (all types of damage)		X	
		Defective hand brake	Accidental damage ¹⁾		X
			Wear	X	
		Safety stirrup missing		X	
		Safety stirrup damaged or defective	Accidental damage ¹⁾		X
		Other brake parts defective (e.g. distributor, load-weigh valve, brake cylinder, changeover device, relay valve, etc.)	Confirmed (brake report included)	X	
			Not confirmed		X
		Brake pipe leaking	Wear	X	
			Accidental damage ¹⁾ (distorted, cracked)		X
		Defective brake hose	cracked, leaking	X	
		Defective brake connection		X	
		Defective air brake parts	Confirmed by brake test	X	
			Not confirmed by brake test		X

1) Accidental damage in the sense of Appendix 12 is understood as damage not resulting from wear but either from inappropriate handling of the wagon (e.g. shunting accidents, side- on collisions or other sudden events), or which can be attributed to culpable violation of wagon custody obligations by an RU.

Category	Part	Type of damage	Additional information	Responsibility of		
				Keeper	User RU	
Underframe and bogie						
	Wagon underframe	Fatigue cracks, fissuring	Except traces of fatigue	X		
	Headstock or solebar	Deformed			X	
	Axle guard	Deformed			X	
		Broken or loose		X		
	Axle guard tie bar	Bent or broken			X	
		Loose		X		
	Suspension bracket	Loose, fatigue cracking		X		
		Fissured, deformed	Accidental damage ¹⁾		X	
	Underframe / bogie connection	Connecting parts loose or damaged		X		
	Bogie frame	Deformed			X	
		Fatigue cracks		X		
	Bogie side bearers	Any type of damage		X		
	Overhaul plate	Vehicle erroneously removed from service before expiry of overhaul period	Costs for authorisation to run / special consignment		X	
	General markings as required by law	Incomplete		X		
		Illegible	E.g. because of projecting load, papered over, graffiti, etc.	X		
			Graffiti on RID dangerous goods wagon			X
	Earthing cable	Missing				X
		Damaged	Wear		X	

Category	Part	Type of damage	Additional information	Responsibility of Keeper	User RU
Buffing and draw gear					
	Buffer	Different types	Not previously changed by an RU	X	
		Buffer position not within tolerance range / Plunger stuck	Traces of impact (contact between plunger and sleeve)		X
			Old cracks and / or welds	X	
	Anti-crash device	Defective	hunting impacts at too high speeds		X
			Normal wear	X	
	Buffer head	Broke or distorted			X
	Buffer sleeve	Broken or cracked	Normal wear	X	
			Result of force ¹⁾		X
	Buffer fastening	Loosened	Normal wear	X	
		Broken	No fatigue cracks		X
	Buffer spring	Ineffective	Can be compressed by hand	X	
	Draw hook / draw bar	Broken	Fatigue (old crack)	X	
			Accidental damage ¹⁾ (clean recent breakage)		X
		Twisted			X
	Drawgear	Torn out	Accidental damage ¹⁾		X
	Screw coupler	Wear		X	
Accidental damage ¹⁾				X	
Screw coupling dummy hook	Twisted, broken			X	
Superstructure					
	In general	Wear and tear		X	
		Accidental damage ¹⁾ when in the custody of the			X
	Ladders, walkways, steps, towing rings, handrails, label-holders	Wear		X	
		Accidental damage ¹⁾ when in the custody of the			X
	Tank	Damage resulting from damaged underframe	Accidental damage ¹⁾ when in the custody of the RU		X
		Damage to the tank	Accidental damage ¹⁾ when in the custody of the RU		X
		Bracing / sealing caps not air / waterlight	Accidental damage ¹⁾ when in the custody of the RU		X
		Tank cradle cracked		X	
			Accidental damage ¹⁾ when in the custody of the RU		x
	Earthing cable (on the tank)	Missing, damaged		X	
		Wear		X	

¹⁾ Accidental damage in the sense of Appendix 12 is understood as damage not resulting from wear but either from inappropriate handling of the wagon (e.g. shunting accidents, side-on collisions or other sudden events), or which can be attributed to culpable violation of wagon custody obligations by an RU

APPENDIX 13 TO THE GENERAL CONTRACT OF USE

**LIST OF REPAIRS WHICH MAY BE CARRIED OUT BY THE RU ON THE PLACE
OF IMMOBILIZATION OF THE WAGON OR IN THE NEARBY VICINITY**

The application of appendix 13 is neither mandatory for the RU nor may its application be demanded by the Keeper.

This list contains repair works to re-establish the running order in the scope of article 19 which may be carried out by the RU without the prior agreement of the keeper irrespective of the amount of the related costs.

If the listed repair works are not carried out on the spot where the wagon has been immobilized or in the very nearby vicinity by the operating staff, inspectors, mobile units, etc., the RU will send the wagon to a workshop. In this case, the regular procedure of article 19.1 will be applied.

If appendix 13 is applied, the provisions set out in article 19.5 have to be complied with for the re-establishment of the running order of the wagon.

List:

Code Code Code	Anomalie Mängel Irregularities
3.1.1	Organe mécanique ou pièce de timonerie décroché(e) ou cassé(e) Herunterhängende oder gebrochene Teile des Bremsgestänges Part of brake rigging hanging down or broken
3.1.2	Etrier de sécurité du triangle de frein inefficace Fangeinrichtung unwirksam Safety strap ineffective
3.1.3	Robinet d'isolement du frein Bremsabsperrhahn Brake isolating cock
3.1.3.2	position pas nette Stellung nicht eindeutig position unclear
3.3.2.1	Demi-accouplement avarié manquant Bremskupplungen schadhaft, fehlen Brake coupling damaged or missing
3.3.5.1	Robinet d'arrêt d'air, inutilisable, non étanche, forcé, poignée manquante Luftabsperrhahn nicht gangbar, undicht, verbogen, fehlender Griff Stopcock, unusable, leaking, warped or handle missing

Code Code Code	Anomalie Mängel Irregularities
5.2.3	Plateau de tampon - Surface de contact Pufferteller - Berührungsfläche Buffer head - Contact surfaces
5.4.4	Fixation défectueuse Befestigung nicht sichergestellt Fastening defective
5.4.4.1	2 boulons ou plus desserrés 2 oder mehr Schrauben lose 2 or more bolts loose
5.4.4.2	1 boulon manquant 1 Schraube fehlt 1 bolt missing
5.4.4.3	1 boulon desserré 1 Schraube lose 1 bolt loose
5.6	Tendeur d'attelage Schraubenkupplung Screw, coupler
5.6.1	Partie manquante, avariée ou inutilisable Teil fehlt, ist beschädigt oder unbenutzbar Part missing, damaged, or inoperative
5.6.3	Tendeur décroché Herabhängende Kupplung Coupler unhooked
5.8	Autres organes de traction Andere Teile der Zugeinrichtung Other draw gear parts
5.9	Amortisseur à longue course Langhubstoßdämpfer Long-stroke damper
6.1.1	Marques et inscriptions manquantes, illisibles ou incomplètes Anschriften fehlen, nicht lesbar oder unvollständig Markings on wagons and load units, missing, illegible or incomplete
6.1.7.4	Poignées: absentes, avarie qui met en danger la sécurité du personnel, arrachées ou déformation hors tolérance Griffe: fehlen, Schaden der die Sicherheit des Personals gefährdet, angerissen oder unzulässig verbogen Handles: missing, damage representing a safety hazard for staff, torn off or deformed beyond tolerated limit
6.1.7.5	Tôles : inscription, rabatables; portes étiquettes - Fixation insuffisante Ungenügende Befestigung der Anschriftentafeln, Klapptafeln, Zettelhalter Inadequate securing of inscription plates, folding plates, label holders
6.1.7.6	Tôles : inscription, rabatables; portes étiquettes - Absence Fehlen der Anschriftentafeln, Klapptafeln, Zettelhalter Missing: inscription plates, folding plates, label holders
6.1.7.8	Accessoires amovibles non assurés Lose Wagenbestandteile nicht gesichert Loose wagon accessories not secured

APPENDIX 14

TO THE GENERAL CONTRACT OF USE FOR WAGONS

ADDITIONAL CONDITIONS FOR THE USE OF WAGONS ON FERRIES AND IN EXCHANGE WITH RAILWAYS OPERATING ON STANDARD OR BROAD GAUGE LINES

A – CONDITIONS TO BE MET FOR THE CONVEYANCE OF WAGONS ON FERRIES**Group 1**RUs operating train ferry services:

DB Schenker Rail Deutschland AG (DBSR)
DB Schenker Rail Dänemark (DBSR)
Green Cargo (GC)
Polish State Railways S.A. (PKP)
TRENITALIA S.P.A. (FS)
Romanian Railways (CFR)

Routes:

Trelleborg-Sassnitz ferry port (GC/DBSR)
Trelleborg-Rostock Port ferry terminal (GC/DBSR)
Swinoujście-Ystad (PKP/GC)
Constanta-Samsun (CFR/TCDD)
Reggio Calabria-Messina (FS)
Villa S. Giovanni-Messina (FS)
Civitavecchia-Golfo Aranci (FS)

Conditions to be met by

- 1 Two-axle wagons:**
No restrictions apply.
- 2 Three-axle wagons:**
Three-axle wagons will only be taken on board ferries when the water level permits.
They must be able to negotiate the curves on board the ships (see list of routes for groups 1 and 2).
- 3 Bogie wagons suitable for unrestricted conveyance by ferry:**
Wagons with two- or three-axle bogies are accepted without restriction provided they are able to negotiate both the maximum ferry ramp angle and the on-board curves (see Appendix 11, points 5.10 and 2.12 and the list of routes in groups 1 and 2).
- 4 Other bogie wagons and shipments carried on more than one wagon or with a buffer wagon:**
Wagons with two- or three-axle bogies that do not meet the conditions set out above, as well as wagons with bogies that have more than three axles and shipments that must be carried on more than one wagon (loads carried on two wagons coupled together or with a buffer wagon) may only be taken on board by special agreement and if the water level permits.
It is the responsibility of the forwarding RU to make the necessary arrangements with the RUs involved in operating the ferry. The other RUs on the wagon's route must be advised of the authorisation obtained by an indication to this effect in the accompanying documentation.

Group 2

RUs operating train ferry services:

Turkish State Railways (TCDD)

Routes:

Sirkeci-Haydarpasa

Tatvan-Van

No restrictions apply.

List of train ferry routes in Groups 1 and 2

Wagons that can be accepted without special arrangement must be able to negotiate the curves and angles indicated for the ferries operating each of the respective routes.

Route	Number of tracks on the ferry	Curve and counter-curve			Maximum ramp angle in relation to the horizontal α	Observations
		Radius in m	Length of transition section in m	Radius in m		
1	2	3	4	5	6	7
Trelleberg-Sassnitz ferry port	5 6 8	150	0	140*	2°30'	
Trelleberg-Rostock Port	5 6 8	150	0	140*	2°30'	
Swinoujscie-Ystad	4	—	—	—	2°30'	
Constanta-Samsun	5+1	120	2.5	120	1°30'	
Reggio Calabria-Messina	3	150	15.5	150	1°30'	
Villa S. Giovanni-Messina	3 4	150 120	15.5 19.6	150 120	1°30'	
Civitavecchia-Golfo Aranci	3	—	—	—	1°30'	
Sirkeci-Haydarpasa	3	—	—	—	—	
Tatvan-Van	2 1	120 —	— —	120 —	—	

Groupe 3**Train ferry routes between standard gauge RUs and Finland:**

Lübeck-Skandinavienkai (Germany) – Turku (Finland)¹⁾

Wagons that can be accepted without special arrangement must be able to negotiate the curves and angles indicated for the ferries operating each of the respective routes.

Route	Number of tracks on the ferry	Curve and counter-curve			Maximum ramp angle in relation to the horizontal α	Observations
		Radius in m	Length of transition section in m	Radius in m		
1	2	3	4	5	6	7
Lübeck-Skandinavienka – Turku	2	150	6	100	2°30'	
	2	150	6	100	2°30'	
	1	—	—	—	2°30'	
Rules governing the reciprocal use of wagons in traffic with Finland are set out in part C below						

¹⁾ Open as a CIM line only for international shipments of large containers and swap bodies.

B – RULES GOVERNING THE USE OF WAGONS WITH INTERCHANGEABLE AXLES IN TRAFFIC ACROSS THE PYRENEES

1 General

1.1 The provisions of the GCU apply to wagons with interchangeable axles unless otherwise specified in this Appendix.

1.2 In the following text, “wheelsets” refer to both wheelsets on standard gauge lines and on broad gauge lines.

1.3 This appendix specifies the conditions for exchange of wagons whose wheelsets are interchangeable between an RU certified in France and an RU certified in Spain where the parties have concluded an agreement for exchange of wagons with interchangeable wheelsets at a station on the French-Spanish border that has a wheelset changing facility.

1.4 The transferee RU shall be responsible for changing the wheelsets on wagons accepted for exchange in specialist facilities, or for ensuring that the wheelsets are changed.

1.5 It is incumbent upon the keeper of the wagon suitable for traffic across the Pyrenees to supply wheelsets for each type of gauge.

1.6 Because of the conditions prevailing at wheelset changing facilities, the only vehicles that can be accepted for exchange between RUs are wagons with interchangeable axles or bogie wagons with interchangeable axles for which the owner RUs or keepers have concluded a prior agreement with the wheelset changing facility or facilities concerned. This prior agreement must, in particular, define the conditions governing the supply of the axles.

1.7 Failing such prior agreement wagons used on standard or broad gauge lines are subject to the general conditions applicable to wagons not for variable gauge service.

1.8 For transport and storage of wheelsets in the wheelset changing facility the provisions of Appendix 10, Annex D apply.

2 Additional technical conditions

2.1 In accordance with ECM requirements, taking into account their specific uses and loads, the keeper must perform an overhaul of the interchangeable wheelset or arrange for the overhaul to be performed in a manner that fulfils its obligations as described in Article 7 of the GCU.

2.1.1 The date of the last overhaul of the wheelset, the code number of the keeper and the identification mark of the workshop that carried out the overhaul are to be indicated on a loose collar attached to the axle body or on a plate affixed to the axle-box.

2.1.2 The wheelsets must also bear the keeper's code number and the date (month and year) of expiry of the last overhaul on the front of each axle-box, painted in white and clearly visible.

2.2 When the date of expiry of the last overhaul has passed (last day of the month indicated) or is illegible, when determined during the special technical acceptance inspection performed by the transferee RU when leaving the wheelset changing facility at an exchange station, or when determined by a user RU, the wagon must be immobilised (**removed**).

2.3 If the marking on the axle-boxes is illegible, missing or erased on one side, the wagon must be withdrawn from service (**K label**); if the marking is illegible, missing or erased on both sides, the wagon must be immobilised (**removed**).

2.4 To be admitted for exchange with a change of wheelsets for traffic across the Pyrenees, the wagons must:

- be marked with the **E** sign on each side wall in accordance with Appendix 11 to the GCU (point 2.16)
- have a minimum distance of 1,840 mm and a maximum distance of 1,860 mm between the centres of the buffer rods or guides

3 Exchange of wagons with a change of wheelsets at the France-Spain border

3.1 Custody of the wagons with interchangeable wheelsets is transferred from the transferor RU to the transferee RU when the wagons arrive at the wheelset changeover facility.

3.2 For changes of wheelsets, the technical transfer inspection consists of:

- performance prior to the wheelset changeover of a technical handover inspection (THI) conducted by the transferor RU;
- performance after the wheelset changeover of a special technical acceptance inspection by the transferee RU, during which the parts of the wagon affected by the wheelset changeover are subject to particular attention.

Exchange of wagons between the two RUs within the framework of a quality assurance agreement is not permitted.

The other points contained in Appendix 9 to the GCU shall apply.

3.3 At the changeover point, wagons should be fitted with wheelsets belonging to the keeper.

3.4 Wheelset changeover may not be used to justify a request for the wagon to be weighed at the changing point.

3.5 Instead of the wheelsets being changed, the wagon load must be transhipped in the following cases:

3.5.1 if the wagon used is unfit to continue its run beyond the changeover point,

3.5.2 if the wheelsets on the transferee RU's gauge are missing,

3.5.3 if the available capacity at the wheelset changeover point is exceeded,

3.5.4 if the wheelset changeover facility is inoperable.

3.6 The cost of the transhipment operation shall be borne as follows:

- case described in point 3.5.1: by the RU responsible for use of the wagon when it is not suitable for traffic across the Pyrenees,
- case described in point 3.5.2: by the keeper,

- Case described in points 3.5.3 and 3.5.4: by the RU which should normally conduct the changeover operation if it failed to report the problem in accordance with Article 11 of the GCU.

3.7 The transferee RU must monitor wheelset changeover operations from the perspective of operating safety.

4 Cost of wheelset changeover and supply at France-Spain exchange stations

The costs associated with the wheelset changeover operation shall be covered by a flat-rate tariff charge payable to the transferee RU.

These costs do not include fees for supply of wheelsets, which are borne directly by the keeper or by the entitled party.

5 Return of empty wagons

Unless otherwise specified, empty wagons must be returned home via the same exchange station as that at which the wheelsets were changed on the outward run.

6 Temporary suspension of the use of wagons traffic across the Pyrenees

6.1 The keeper of a wagon suitable for traffic across the Pyrenees in accordance with may decide to use it solely subject to the conditions applicable to wagons not suitable for changing wheelsets, only on standard or broad-gauge lines, subject to the conditions applicable to wagons not suitable for changing wheelsets.

6.2 The conditions of preventive maintenance for these wagons may consequently be revised at the decision of the keeper.

6.3 Wagons of this nature are identified on the basis of additional markings and wheelset overhaul markings as provided for in point 2 of this Appendix, permanently affixed to each wall of the wagon, and wheelsets marked with a green saltire.

6.4 The keeper decides on resuming use with a change of wheelsets of a wagon suspended in accordance with the conditions of the present article for traffic across the Pyrenees, provided that:

- the prescribed markings have been affixed to the wagons and wheelsets,
- the wheelsets have been overhauled in accordance with point 2 of this Appendix.

C - RULES GOVERNING THE RECIPROCAL USE OF WAGONS WITH INTERCHANGEABLE¹⁾ AXLES (FOR INDIVIDUAL AXLE WAGONS) OR BOGIES²⁾ (FOR BOGIE WAGONS) IN TRAFFIC WITH FINLAND**1 General**

- 1.1 The provisions of the GCU shall apply to wagons with interchangeable axles unless otherwise stipulated in this Annex.
- 1.2 Because of the conditions prevailing at the Tornio (Finland) wheelset/bogie changeover facility, only wagons for which the keeper has concluded a prior agreement with a Finnish RU operating the facility or on whose behalf it is operated can be accepted for exchange between Sweden and Finland and vice-versa.
This prior agreement must, in particular, define the conditions governing the changing and supply of the axles.

2 Additional technical conditions

- 2.1 If the overhaul period for an interchangeable wheelset has been exceeded by more than 3 months, the wheelset is to be regarded as damaged and must be replaced.
- 2.2 If the overhaul period for an interchangeable bogie has been exceeded by more than 3 months, the keeper shall be informed and asked for instructions. **K labels** shall be affixed to the wagon, deleting the words "after unloading to be repaired".
- 2.3 The distance between buffer centres must be:
- maximum 1,800 mm,
 - minimum 1,780 mm.
- However, for wagons built before 1.7.1984, a buffer centre distance of between 1,760 mm and 1,740 mm is acceptable.

3 Changeover of wheelsets or bogies

- 3.1 The keeper of the wagon, in agreement with the Finnish RU involved, shall ensure that the interchangeable wheelsets or bogies are available as required at Tornio. The detailed arrangements shall be set out in the agreement to be concluded in accordance with point 1.2 of this Appendix.
- 3.2 As a rule, the Finnish RU involved shall be responsible for conducting the wheelset or bogie changeover operation in Tornio.
In cases where the Finnish RU involved does not itself carry out the changeover, it shall inspect the operation from the point of view of operating safety exclusively.
- 3.3 Wheelset or bogie changeover may not be used to justify a request for the wagon to be weighed at Tornio.

¹⁾ In the text that follows, the term "wheelset" is used to refer to both standard gauge and broad gauge equipment.

²⁾ In the text that follows, the terms "wheelset" and "bogie" are used to refer to both standard gauge and broad gauge equipment.

3.4 Instead of the wheelsets or bogies being changed, the load itself must be transshipped in the following cases:

3.4.1 if the wagon used is unfit to continue its run beyond Tornio,

3.4.2 if the wheelsets or bogies are missing,

3.4.3 if the available capacity at the wheelset/bogie changeover point in Tornio is exceeded,

3.4.4 if the wheelset/bogie changeover facility is inoperable.

3.5 The cost of the transshipment operation shall be borne as follows:

- case described in point 3.4.1: by the RU responsible,
- case described in point 3.4.2: by the keeper,
- case described in points 3.4.3 and 3.4.4: by the Finnish RU involved if it failed to report the problem in accordance with Article 11 of the GCU.

4 Cost of wheelset and bogie changeover and supply at Tornio

The costs associated with wheelset and bogie changeover operations shall be covered by a flat-rate charge for each wagon submitted for changeover, payable to the Finnish RU involved. These charges shall be brought to account through the usual tariff mechanisms.

5 Additional wagon markings

5.1 All wagons must be marked on the right of each side wall (or on the right of each solebar for flat wagons) with the **E** sign shown in **point 2.16 of Appendix 11** (Finland) which certifies that they meet the constructional provisions of **UIC Leaflet 430-3** and are accepted for traffic with Finland.

5.2 Wagons with interchangeable axles (axle wagons) must also carry the following additional marking near to the overhaul markings, in the language of the RU with which the wagon keeper has concluded a service agreement, and in Finnish:

"Observe axle overhaul markings"

"Huomi Pyöräkerran korjausmerkintä".

5.3 Wagons with interchangeable bogies (bogie wagons) must also carry the following additional marking near to the overhaul markings, in the language of the RU with which the wagon keeper has concluded a service agreement, and in Finnish:

"Observe bogie overhaul markings"

"Huom! Telin korjausmerkintä".

5.4 Interchangeable axles must be permanently marked on each axle-box with the code number or initials of the RU with which the keeper has concluded a service agreement, as well as the overhaul period and date (month and year) of their last overhaul.

5.5 Interchangeable bogies must be clearly marked on the solebar in white paint with the code number or initials of the RU with which the keeper has concluded a service agreement, the keeper's identification mark, as well as the overhaul markings described in **point 2.3 of Appendix 11**.

6. Reserved

APPENDIX 15
TO THE GENERAL CONTRACT OF USE FOR WAGONS

WAGON PERFORMANCE MESSAGE (WPM)

Appendix 15 describes in more detail the information-related requirements laid out in article 15.

In accordance with pages 3-4, the user RU must send the Wagon Performance Message to the wagon keeper for all wagons registered in the GCU database.

The user RU must send the complete set of wagon performance data for the entire custody period of a wagon in accordance with GCU Article 1.4. The wagon performance data must be sent to the keeper by the end of the month at the latest for each period of custody concluded in the previous month. Wagon performance data for multiple wagons may be contained in a single Wagon Performance Message.

Should the user RU transfer a wagon to a third-party RU in accordance with GCU article 16, the last user RU which is a GCU signatory remains responsible for submitting the complete Wagon Performance Message on behalf of the third-party RU.

The user RU is informed if the wagon number is not found in the GCU database.

The performance message should be sent electronically in XML¹ or CSV format² in accordance with the description hereafter. The keeper must be sent a separate performance message for every custody period.

To correct any erroneous performance data within a message, the RU should send an identical dataset with a negative mileage that cancels out the erroneous dataset. A new, correct dataset is also to be sent if required.

The GCU Bureau provides a communication platform (GCU Broker) to the signatories for transmission of the Wagon Performance Message.

¹ The XSD diagram and sample files are available to download from the GCU website.

² CSV files can be produced and read using (for example) MS Excel

Wagon Performance Message in CSV format with 5 sample data records

WagonNumberFreight	UserRU	PeriodStart	PeriodEnd	Country	Kilometers	TotalLoadWeight
338078605601	2887	29.10.2016 09:00	29.10.2016 12:01	DE	124	64200
338078605601	2887	29.10.2016 12:01	30.10.2016 08:24	AT	354	0
338078605601	2887	31.10.2016 12:25	01.11.2016 13:10		355	58000
338078605601	2887	29.10.2016 12:01	31.10.2016 08:24		634	50000
338078134636	1234	29.10.2016 12:01	31.10.2016 08:24	AT	734	58230

Performance message with a correction posted for the last dataset in the report above

WagonNumberFreight	UserRU	Period Start	Period End	Country	Kilometers	TotalLoadWeight
338078134636	1234	29.10.2016 12:01	31.10.2016 08:24	AT	-734	58230
338078134636	1234	29.10.2016 12:01	31.10.2016 08:24	DE	634	58230

Remarks

- A semi-colon (";") is to be used as the separating character for CSV files.
- The header must be included in the file.
- If the times for PeriodStart and PeriodEnd are unknown, "00:00" is to be used ("DD.MM.YYYY 00:00").
- A CSV sample file and template are available to download from the GCU website.

Description of wagon performance message (WPM) elements in CSV format

Element	Status	Definition
WagonNumberFreight	Mandatory	Full 12-position wagon number, including check digit, without spaces or hyphens. Example: 338078605601
User RU	Mandatory	4-position numerical company code of the user RU.
PeriodStart	Mandatory	Starting date and time of the wagon performance message (beginning of custody period). Format: dd.mm.yyyy hh:mm
PeriodEnd	Mandatory	End date and time of the wagon performance message (end of custody period). Format: dd.mm.yyyy hh:mm
Country	Conditional ³	Identification of the country where the wagon performance was executed using the 2-position alphanumerical country code in accordance with ISO 3166-1. Example: FR
Kilometers	Mandatory	Actual kilometric performance of the wagon for the period specified (start date to end date). Kilometric performances within a station due to, for example, shunting movements for the purpose of loading/unloading or train formation can be disregarded. Tariff kilometres, estimations or timetabled kilometres are not sufficient to meet this requirement. Example: 423 (without decimal place)
TotalLoadWeight	Mandatory	Payload (net tonnage), including container, in kg. Empty = 0 kg Example: 55400 (without decimal place)

³ Obligatory in Germany under the "Noise Bonus" system. Performance data for cross-border traffic must be submitted separately by country within a single custody period.

APPENDIX 16
TO THE GENERAL CONTRACT OF USE FOR WAGONS

TECHNICAL WAGON DATA

Appendix 16 describes in more detail the information-related requirements laid out in article 7.4.

In accordance with pages 5-8, the keeper must provide the administrative and technical vehicle data for all wagons registered in the GCU database as soon as possible prior to the use of a wagon. The RU has access to this data at all times and may use it for its own operational purposes only.

The GCU Bureau provides a communication platform (GCU Broker) to the signatories for transmission of technical vehicle data.

Additional information - for example, a brief description of any instructions destined for technical inspectors and operational staff - must be made available bilaterally. Information is always required if vehicle-related technical matters are not provided for in Appendix 9 to the GCU.

Description of elements of technical wagon data

Element	Type	Definition
WagonNumber-Freight	Mandatory	Identifies uniquely the freight wagon by its number
PreviousWagon-Number-Freight	Optional	For identification of a wagon after renumbering
Registration-Country	Mandatory	ISO country code of registration country
DatePutIntoService	Mandatory	Date of first operation
AuthorisationValid Until	Conditional	End date for restricted authorisation (applicable only in special cases)
SuspensionOf-Authorisation	Conditional	Information if authorisation has been suspended by the authority
DateSuspensionOf Authorisation	Conditional	Date of the suspension of authorisation; must be provided in case of suspension
Multilateral-Authorisation-Countries	Conditional	List of countries/railway letter codes where a wagon with a limited interoperable authorisation is allowed to be operated (derogation plate); first entry is the authorising country/railway and following entries are the accepting countries/railways
ChannelTunnel-Permitted	Optional	Indication if wagon is allowed to pass the Channel Tunnel - if the transport is planned between UK and France and should use Eurotunnel infrastructure
QuieterRoutes-Exemption-Country	Conditional	ISO code of country where the wagon has an exemption in accordance with TSI Noise to run on quieter routes although it is not TSI Noise compliant.
KeeperShortName VKM	Mandatory	Vehicle Keeper Marking of the wagon keeper as listed in VKM register (http://www.era.europa.eu/Document-Register/Pages/list-VKM.aspx , column B - without special characters)
ECM	Mandatory	Full name of the assigned Entity in Charge of Maintenance
PlannedChangeOf ECM	Conditional	Date until the current Entity in Charge of Maintenance is assigned to the wagon and full name of the following Entity in Charge of Maintenance
ECMCertificate	Mandatory	ECM certificate information
InteropCapability	Mandatory	Identification of the general interoperability capability of the wagon.
GCUWagon	Mandatory	Indication if wagon is operated under the GCU contract
LetterMarking	Mandatory	Complete wagon category letter code. The Identification marking for freight rolling stock (wagon type) is defined in the Uniform Technical Prescription applicable to Vehicle Numbers and linked alphabetical marking on the bodywork: The Railway Vehicle Marking (UTP Marking), issued by the OTIF.
TankCode	Conditional	Tank code (applies only for tank wagons). The codes are defined in the RID regulation, chapter 4.3.3 and 4.3.4.1.1
WagonNumberOf-Axles	Mandatory	Number of Axles for a wagon
WheelSetType	Optional	Type name of the wheel sets, and the name of the type depends on the manufacturer.
WheelDiameter	Optional	Diameter of wheels measured in mm. Reference wheel diameter at maximum.

Element	Type	Definition
WheelsetGauge	Mandatory	Track Gauge measured in mm; multi-entry for wagons with changeable wheel set gauge
WheelSet-Transformation-Method	Conditional	Description of the wheel set transformation method for wagons with a changeable wheel set gauge.
NumberOfBogies	Conditional	Number of bogies.
BogiePitch	Conditional	Bogie Wheelbase measured in mm.
BogiePivotPitch	Conditional	Largest distance between two adjacent bogie pitches in mm.
InnerWheelbase	Mandatory	Maximum distance between two adjacent axles in mm
CouplingType	Optional	Classification of coupling.
BufferType	Optional	Classification of buffer. The following values are mostly used in the sector: A, AX, B, C, CX, L0 (130), L0 (150), L2 (130), L2 (150), L4 (130), L4 (150)
NormalLoading-Gauge	Conditional	Indicates the wagon loading gauge. When the wagon loading gauge is marked on the wagon the information must be provided in the RSRD message. Codes are defined in UIC leaflet 505-1/503 and EN 15273-2:2013 Code list.
MinCurveRadius	Mandatory	Minimum allowed curve radius of the wagon. Measured in Metres.
MinVerticalRadius YardHump	Mandatory	Minimum allowed vertical radius over yard humps. Measured in Meters.
WagonWeight-Empty	Mandatory	The weight of an empty wagon according to the entry in the rolling stock database. Measured in kg.
LengthOverBuffers	Mandatory	Length over buffers is expressed in cm.
MaxAxleWeight	Mandatory	Indicates the maximum design axle weight (to).
LoadTable	Mandatory	Indicates the load tables marked on the wagon. When load tables are marked on the wagon the information must be provided in the RSRD message. Several load tables (international, product specific for LPG wagons and additional/country specific) can be specified by providing the element several times consecutively. For special wagons with specific load tables (e.g. heavy haul wagons) no load table need to be provided. The complete load table must be provided including the empty load row (if existent).
NumberOfBrakes	Mandatory	Number of air brake control valves.
BrakeSystem	Optional	Abbreviation of air brake system. Following values are examples: Kk; Dr; Bo; Hik; Bd; Ch; O; KE; WE; DK; WU; WA; DM; MH, SW; KE 435; through brake pipe
AirBrakeType	Mandatory	Classification of air brake.
BrakingPower-VariationDevice	Mandatory	Type of braking power variation device.
AirBrakedMass	Mandatory	Different uses depending on air brake variation device: No variation device = sole braked mass of wagon Brake device with changeover weights = braked mass empty Brake with auto continuous device = maximum braked mass
ChangeOver-Weight	Conditional	Change over weight of braked weight in tonnes variation device.
AirBrakedMass-Loaded	Conditional	Braked weight in tonnes loaded for change over weight.
BrakeSpecial-Characteristics	Mandatory	General brake characteristics. Code list refers to UIC leaflet 920-13.
HandBrakeType	Mandatory	Classification of hand brake.

Element	Type	Definition
HandBraked-Weight	Conditional	Braked weight of the hand brake in tons.
ParkingBrakeForce	Conditional	Braked weight of the hand brake in kN.
BrakeBlockName	Optional	Name of the brake block type, including the length in mm.
CompositeBrake-BlockRetrofitted	Conditional	Indication if composite brake blocks are retrofitted or originally equipped.
CompositeBrake-BlockInstallation-Date	Conditional	Date of composite brake block installation, for originally equipped wagon = date put into service.
MaxLengthOfLoad	Optional	Loading length in mm for flat wagons and covered wagons with a flat floor, minus the thickness of any intermediate partitions (useful length).
LoadArea	Optional	Surface area in m ² of the floor of covered wagons and wagons with an opening roof and flat floor.
HeightOfLoading-PlaneUnladen	Optional	Height of the loading plane when wagon is empty measured in mm.
RemovableAccessories	Optional	The type and number of removable accessories are to be indicated.
LoadingCapacity	Mandatory	Usable Cube - measured in M3.
MaxGrossWeight	Mandatory	Weight of max Gross Load Weight plus the tare weight of the equipment.
VapourReturn-System	Optional	Indication if tank wagon is equipped with a vapour return system.
FerryPermittedFlag	Optional	Indication whether the wagon may be used on ferries between Great Britain and Continental Europe.
FerryRampAngle	Conditional	Maximum allowed angle of the ferry ramp (in grades: °).
Temperature-Range	Optional	Allowed environmental temperature range.
Technical-Forwarding-Restrictions	Conditional	This element is designed to identify any special aspects or restrictions which might be relevant to wagon handling operations in train formation yards or in trains because of technical feature of the wagon or its load. All codes of transport restrictions for Freight Traffic (cf. UIC 920-13) and Passengers Traffic are in the same list which is contained in the code list RestrictionCodes. In this element only those codes are used, that have "T - Technical" characteristics and "F - Freight" as type.
DateLastOverhaul	Mandatory	Date of the last overhaul. For wagons newly placed on the market, date put into service shall be used.
OverhaulValidity-Period	Conditional	Validity period of last overhaul in years as marked on the wagon. At least "OverhaulValidityPeriod" or "PlannedDateNextOverhaul" shall be provided.
Permitted-Tolerance	Mandatory	Permitted tolerance after date of overhaul (in months). In case no tolerance is allowed, value shall be "0".
PlannedDate-NextOverhaul	Conditional	Date of planned next overhaul. It must be within the validity period of the last overhaul. The element serves as indication of the actually planned date of next overhaul by the wagon keeper/ECM. At least "OverhaulValidityPeriod" or "PlannedDateNextOverhaul" shall be provided.
DateOfNextTank-Inspection	Conditional	Date of the next tank inspection applies only for tank wagons.

Remarks

Values and codes list for the different data elements are part of the XSD schema and referenced in the GCU Broker website. The XSD schema and sample files are available to download from the GCU Broker website.