

## Proposed to amend GCU Appendix 10

### Record of amendment

Amendment made by	Date	Paragraph	Amendment
Burkhard Lerche, WG UIC Maintenance	24/02/2020	1.18 ChaptA, Pt1 App10	Development of proposal
WG UIC Maintenance	28/04/2020	1.18 ChaptA, Pt1 App10	Final Version
SG UIC WAGON USERS	26/05/2020	1.18 ChaptA, Pt1 App10	Approval
JC GCU	15/06/2020	1.18 ChaptA, Pt1 App10 Chapt C	Approval after change

<b>Title</b>	Implementation of the results from the JNS "Broken Wheels" in 1.18 Chapter A Point 1 Appendix 10 GCU
<b>Proposed amendment made by (RU / keeper / other body):</b>	DB CARGO AG
<b>Proposed amendment concerns:</b>	<input checked="" type="checkbox"/> Appendix 10
<b>Proposer:</b>	WG Maintenance, B Lerche
<b>Location, date:</b>	Mainz, 24/02/2020
<b>Concise description:</b>	Implementation of the results from the JNS "Broken Wheels" in 1.18 Chapter A Point 1 Appendix 10 GCU

**1. Starting point (current situation):****1.1. Introduction**

Recommendations for amendments to Appendix 10 GCU have been provided in the results from the JNS "Broken Wheels". They are being implemented here.

**1.2. Mode of operation**

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**1.3. Anomaly / description of problem:****1.4. Does this concern a recognised code of practice\* (e.g. DIN, EN)?**

No  Yes (state which): JNS "Broken Wheels" presentation of results

\* "Code of practice: a written set of rules that, when correctly applied, can be used to control one or more specific hazards."  
(Source: Regulation EC 352/2009, Article 3)

"Technical provisions laid down in writing or conveyed verbally and pertaining to procedures, equipment and modes of operation which are generally agreed by the populations concerned (specialists, users, consumer and public authorities) to be suitable for achieving the objective prescribed by law, and which have either proven their worth in practice or, it is generally agreed, are likely to within a reasonable period of time" (Source: BMJ Handbuch der Rechtsförmlichkeit – German Ministry of Justice)

**2. Target situation****2.1. Elimination of anomaly/problem (goal)**

### 3. Additional text and/or change relates only to proposed amendments to GCU Appendix 10

Amendment colour code:

Black: Current text, for info and remains unchanged

Red: new text

Blue: (if crossed out): text to be deleted

## 1. RUNNING GEAR

### Minimum conditions and limit values for dimensions

#### Wheelsets

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
- ~~a paint burn of 50 mm or more at the connection between the rim and wheel centre or recent traces of rust on the tyre (unpainted wheels) or~~
- fusion of brake blocks ~~or~~
- deterioration of wheel tread with build-up of metal (see 1.3.4 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<sup>R</sup>.

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.

#### Appendix 10 – Annex 6

GCU intervention code	Intervention(s)	Any additional information necessary	Inspection as per Appendix 9	Rules as per Appendix 10
CU10180	Test for overheating			1.18
CU10181	Thermally overloaded thermostable wheelsets without wheelset replacement	Axle number		1.18

4. Reasoning:

<b>5. Assess potential positive/negative impacts</b>
<i>Assess the possible positive and negative effects (operations, costs, administration, interoperability, safety, competitiveness, etc.) on a scale of 1 (very low) to 5 (very high). Justify observations</i>
Impacts: Impact on costs (-2), administration (-2), interoperability, safety (+3), competitiveness:

## 6. Safety appraisal of proposed amendment

Description of actual/target system, and scope of change to be made (see points 1 and 2).

The risk study becomes obsolete insofar as only the known repositories are implemented

Safety study conducted by:

<b>6.1. Does the change have an impact on safety?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
Reasoning:	
<b>6.2. Is the change significant?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reasoning:	
<b>6.3. Determining and classifying risk:</b>	<input checked="" type="checkbox"/> N/A
6.3.1. Effect of change in normal operation:	
6.3.2. Effect of change in the event of disruption / deviation from normal operation:	
6.3.3. Potential misuse of system:	
<input type="checkbox"/> No	
<input type="checkbox"/> Yes (describe possible misuse):	
<b>6.4. Have safety measures been applied?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes
For each type of risk, one of the following risk acceptance criteria is to be selected:	
<ul style="list-style-type: none"> <li>• Code of practice</li> <li>• Use of reference system</li> <li>• Explicit risk estimate</li> </ul>	
<b>6.5. Has a risk analysis been submitted to the assessment body?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Assessment body:	
Attach the verdict reached by the assessment body:	[Appendix]