

Proposed amendment to to the GCU

Title	<i>Implementation of the JNS Results Gotthard in Appendix 10 GCU</i>
Nummer	<i>AP-MNT-2025-07</i>
Planned entry into force	<i>01.01.2026</i>
Related Topic proposal	<i>TP-MNT-2025-07 – Implementation of the JNS Results Gotthard in Appendix 10 GCU</i>
Proposer / issuing working group	<i>WG MNT</i>
Section of the GCU	<i>GCU Appendix 10</i>
Concise description (Management Summary)	<i>The final report following the JNS Normal Procedure “Accident Gotthard base tunnel - broken wheels” has been published on 11.07.2024. It contains recommendations regarding the check and the maintenance of wheelsets. This also affects the appendix 10 of the GCU.</i>

Record of amendments:

Status	Date	Comment
<i>Work order</i>	<i>29/01/2025</i>	<i>During the WG MNT meeting in Paris</i>
<i>In creation</i>	<i>21/02/2025</i>	<i>Created by the modularisation WG</i>
<i>Updates</i>	<i>04/03/2025</i>	<i>Updated during an online WG MNT meeting</i>
	<i>10/03/2025</i>	<i>Updated during the ad hoc WG TTI/MNT meeting on the JNS topic “Accident Gotthard base tunnel - broken wheels”</i>
	<i>24/04/2025</i>	<i>Update of the presentation of changes to M03.003</i>
<i>Decision Working group</i>	<i>04/03/2025</i>	<i>Approved by the WG MNT</i>
<i>Feedback loop WG MNT after UIC WU SG, UIP and ERFA meetings</i>	<i>12/05/2025</i>	<i>Updated (editorial correction) following to UIC WU SG meeting and approved by the WG MNT</i>
<i>Decision GCU JC</i>	<i>12/06/2025</i>	<i>Approved by the GCU JC</i>

1. Subject matter and reason for the amendment:

- The final report following the JNS Normal Procedure “Accident Gotthard base tunnel - broken wheels” has been published on 11.07.2024. It contains recommendation regarding the check and the maintenance of wheelsets. This also affects the appendix 10 of the GCU.
- This amendment proposal aims at implementing the measures from the final report version 2.0 JNS Normal Procedure “Accident Gotthard base tunnel - broken wheels” slides 38, 39 and 59.
(https://www.era.europa.eu/domains/accident-incident/joint-network-secretariat-jns_en).

As during maintenance based on appendix 10 GCU, the wheels BA004 and comparable cannot be identified, the visual inspection is extended to all types of wheels. This measure shall be reduced to wheels which are not able to withstand high thermal stresses as soon as the markings of the wheels BA004 and comparable have been removed.

2. Description of the intended amendment and reason to implement it in the GCU:

- Slide 38-39 recommends that tread braked wagons with wheels without white stripes (non-thermostable wheels) are subjected to a visual inspection of the wheelset during GCU repairs (limited to visible parts of the wheel). Today this inspection only applies to wagons fitted with LL-brake blocks (cf. 1.6.2).
- Slide 59 recommends defining more precisely the area of non-acceptable cracks in the wheel-rim.
- Both recommendations should be implemented without major changes to the GCU, as it concerns the GCU repairs and already existing checks described in Appendix 10.

3. Is it reasonable to amend the contract?

- The measures proposed by the JNS are based on the experience during maintenance and operation. It concerns all GCU repairs on wagons equipped with non-thermostable wheelsets. Therefore, criticality and urgency are high which leads to a high priority in sum.

4. Annex: final report following the JNS Normal Procedure “Accident Gotthard base tunnel - broken wheels” (see enclosed slides 38, 39 and 59).

Proposed amendment to the GCU:

Colour codes for amendment proposals:

Black: Currently applicable text; provides information and remains unchanged

Red: New text

Blue: (may be crossed out): Text to be deleted

Symbols are used as follows:

→ Link to other section of the GCU

☑ Communication between keeper and workshop

📄 Documentation of the work acc. to app. 10 annex 6

Note: if changes of the annex 6 are required, they have to be named below.

English:**M00.002*: Additional inspections by the workshop**

Technical conditions:	-
Preparative:	-
No.	Instruction tasks, quality requirements 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: Wheelsets fitted with LL blocks must be inspected and dealt with as follows: - Inspect running surfaces →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>

- 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.

As new point in

M03.003 Replace brake blocks on wagons without compact brakes

Technical conditions:	-
Preparative:	For wagons with compact brakes, obtain keeper instructions →M00.001
No.	Instruction tasks, quality requirements 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 →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 block Additional notes: Only brake blocks written on the freight wagon may be used →3.7.2 or →3.8.3, →3.8.4
5.	Adjust the brake rigging
6.	Carry out a functional check of the brake →M03.001

German:

M00.002* Zusatzprüfungen durch die Werkstatt

Technische Voraussetzungen:		-
Organisatorische Vorbereitungen:		-
Nr.	Arbeitsinhalt, technischer Sollzustand und sonstige Hinweise	
1.	Radsätze von: - nicht mit LL-Sohlen ausgerüsteten Wagen (nur bei einer EVIC-Prüfung nach Nr. 3) - mit LL-Sohlen ausgerüsteten Wagen sind wie folgt zu prüfen: Die Radsätze von mit LL-Sohle ausgerüsteten Wagen müssen wie folgt geprüft und behandelt werden: - Prüfung der Lauffläche der Radsätze →1.6.1 - Sichtprüfung der Räder hinsichtlich der Kriterien thermischer Überbeanspruchung →1.18 <i>Sonstige Hinweise: bei unzulässigen Abweichungen ggf. eine Bremsprüfung zur Schadensursachenfeststellung durchführen →M03.002 und betroffene Radsätze tauschen →M01.001.</i>	

1.14 Ein Vollrad oder ein Radkörper darf:

- keinen durch Schweißung behobenen Fehler und
- keinen Riss aufweisen (**z. B. gerissener Radkranz oder Radsteg**).

Unbedeutende Gussfehler in den Radkörpern sind akzeptabel.

Als neuen Punkt in

M03.003 Bremssohlen an Wagen ohne Kompaktbremse ersetzen

Technische Voraussetzungen:		-
Organisatorische Vorbereitungen:		Bei Wagen mit Kompaktbremse, Halteranweisungen einholen →M00.001
Nr.	Arbeitsinhalt, technischer Sollzustand und sonstige Hinweise	
1.	Bremssohlen prüfen →3.7.1 oder →3.8.1, →3.8.2, →Anhang 4	
2.	Bremssohlen ausbauen: Bremsgestänge am Bremsgestängesteller aufdrehen	
3.	Die Radsätze müssen wie folgt geprüft und behandelt werden: - Prüfung der Lauffläche der Radsätze →1.6.1 - Sichtprüfung der Räder hinsichtlich der Kriterien thermischer Überbeanspruchung →1.18 <i>Sonstige Hinweise: bei unzulässigen Abweichungen ggf. eine Bremsprüfung zur Schadensursachenfeststellung durchführen →M03.002 und betroffene Radsätze tauschen →M01.001.</i>	
4.	Bremssohlen einbauen <i>Sonstige Hinweise: nur die am Güterwagen angeschriebenen Bremssohlen dürfen verbaut werden →3.7.2 oder →3.8.3, →3.8.4</i>	
5.	Bremsgestänge einstellen	
6.	Funktionsprobe der Bremse durchführen →M03.001	

French:

M00.002* Examens supplémentaires par l'atelier

Conditions techniques :	-
Mesures préparatoires :	-
n°	Contenu de l'intervention, état technique théorique et autres indications
1.	Les essieux de wagons • non équipés de semelles LL (seulement en cas d'un contrôle EVIC selon n° 3) • équipés de semelles LL sont à contrôler comme suit : Les essieux montés sous les wagons équipés de semelles LL doivent être examinés et traités comme suit : • Examen de la table de roulement des essieux montés →1.6.1 • Examen visuel des roues au regard des critères de surcharge thermique →1.18 <i>Indications complémentaires : en cas d'écarts non admissibles, réaliser éventuellement un essai de frein pour déterminer la cause du dommage →M03.002 et remplacer les essieux concernés →M01.001.</i>

1.14 Une roue monobloc ou un corps de roue plein ne doit présenter :

- Aucun défaut réparé par soudure,
- Aucune fissure (**par exemple jante ou toile fissurée**).

Des défauts sans importance au corps de roues en acier moulé provenant de la coulée sont acceptables.

Comme nouveau point dans :

M03.003 Remplacer les semelles de frein sur les wagons sans frein compact

Conditions techniques :	-
Mesures préparatoires :	Pour les wagons avec frein compact, demander les instructions au détenteur →M00.001
n°	Contenu de l'intervention, état technique théorique et autres indications
1.	Vérifier les semelles de frein →3.7.1 ou →3.8.1, →3.8.2, →Appendice 4
2.	Démonter les semelles de frein : • Desserrer la timonerie au niveau du régleur de la timonerie
3.	Les essieux doivent être contrôlés et traités comme suit : • Examen de la table de roulement des essieux montés →1.6.1 • Examen visuel des roues au regard des critères de surcharge thermique →1.18 <i>Indications complémentaires : en cas d'écarts non admissibles, réaliser éventuellement un essai de frein pour déterminer la cause du dommage →M03.002 et remplacer les essieux concernés →M01.001.</i>
4	Monter les semelles de frein Indications complémentaires : monter uniquement les semelles inscrites sur le wagon →3.7.2 ou →3.8.3, →3.8.4
5.	Régler la timonerie
6.	Réaliser le test de fonctionnement du frein →M03.001

Annex: Safety Assessment of proposed amendment

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

Performance of risk analysis is unnecessary where only recognised standards are implemented.

This Safety Assessment is created and released by the working group and validated by the vote of the GCU signatories

1.1. Does the proposed change have an impact on safety?	☐ No ☒ Yes
Justification:	
1.2. Is the proposed change significant?	☒ No ☐ Yes
Justification: implementation of the measures of the JNS report	
1.3. Determining and classifying risk, if necessary	☐ N/A
1.3.1. Effect of change in normal operation: 1.3.2. Effect of change in the event of disruption/deviation from normal operation: 1.3.3. Potential misuse of system: ☐ No ☐ Yes (describe possible misuse):	
1.4. Have safety measures been applied?	☐ No ☐ Yes
<i>For each type of risk, one of the following risk acceptance criteria is to be selected:</i> • <i>Code of practice</i> • <i>Use of reference system</i> • <i>Explicit risk assessment</i>	
1.5. Has a risk analysis been submitted to the assessment body?	☐ No ☐ Yes
Assessment body: Attach the verdict reached by the assessment body	[Appendix]