

Proposed amendment to to the GCU

Title	<i>New pictogram “High voltage warning sign”</i>
Nummer	<i>AP-TTI-2025-12</i>
Planned entry into force	<i>01/01/2026</i>
Related Topic proposal	<i>TP-TTI-2025-12</i>
Proposer / issuing working group	<i>WG TTI Claude Weis</i>
Section of the GCU	<i>GCU Appendix 11</i>
Concise description (Management Summary)	<i>EN15877-1:2024 has introduced a new pictogram “High voltage warning sign”. This must be integrated into GCU Appendix 11</i>

Record of amendments:

Status	Date	Comment
<i>In creation</i>	<i>03/02/2025</i>	<i>Initial edition</i>
<i>Update</i>	<i>19/03/2025</i>	<i>Corrections in accordance with the minutes of the TTI WG meeting (03-2025)</i>
<i>...</i>		
<i>Decision Working group</i>	<i>19/03/2025</i>	<i>Approval in accordance with the minutes of the TTI WG meeting (03-2025)</i>
<i>Feedback loop WG TTI after UIC WU SG, UIP and ERFA meetings</i>	<i>16/05/2025</i>	<i>No change reported, approved by all</i>
<i>Decision GCU JC</i>	<i>12/06/2025</i>	<i>Approved by the GCU JC</i>

AP-TTI-2025-12

Updated on 12/06/2025

1. Subject matter and reason for the amendment:

- **Description of the current situation:**

In the Appendix 11 point 8.1 & 8.2 there are 2 different high voltage warning signs.

- **Reason for the planned change (trigger)**

In the new EN15877-1:2024 is an additional warning sign for high voltage

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

- **What is the proposed solution?**

Add the new warning sign for high voltage in point 8.2 in appendix 11
The technical inspectors don't know the the EN15877, for that it must be introduce in the appendix 11

- **Why should it be implemented in the GCU and not regulated outside?**

Technical inspectors need to know about this sign

3. Is it reasonable to amend the GCU?

- **Is the change critical to keep the GCU up to date?** no

- **Is the implementation of the change urgent?** It must be added in the 2026 version

- **What is the estimated scope of application of the amendment?**

That all technical inspectors knows that this sign is regulated when they see it on a waggon

- **Consequences of not implementing the proposal?** Reject of waggons when they didn't know that this warning sign is valid

- **Define overall priority (High, Medium, Low)** Medium

4. Annex:

Proposed amendment to the GCU:

Colour codes for amendment proposals:

Black: Currently applicable text; provides information and remains unchanged

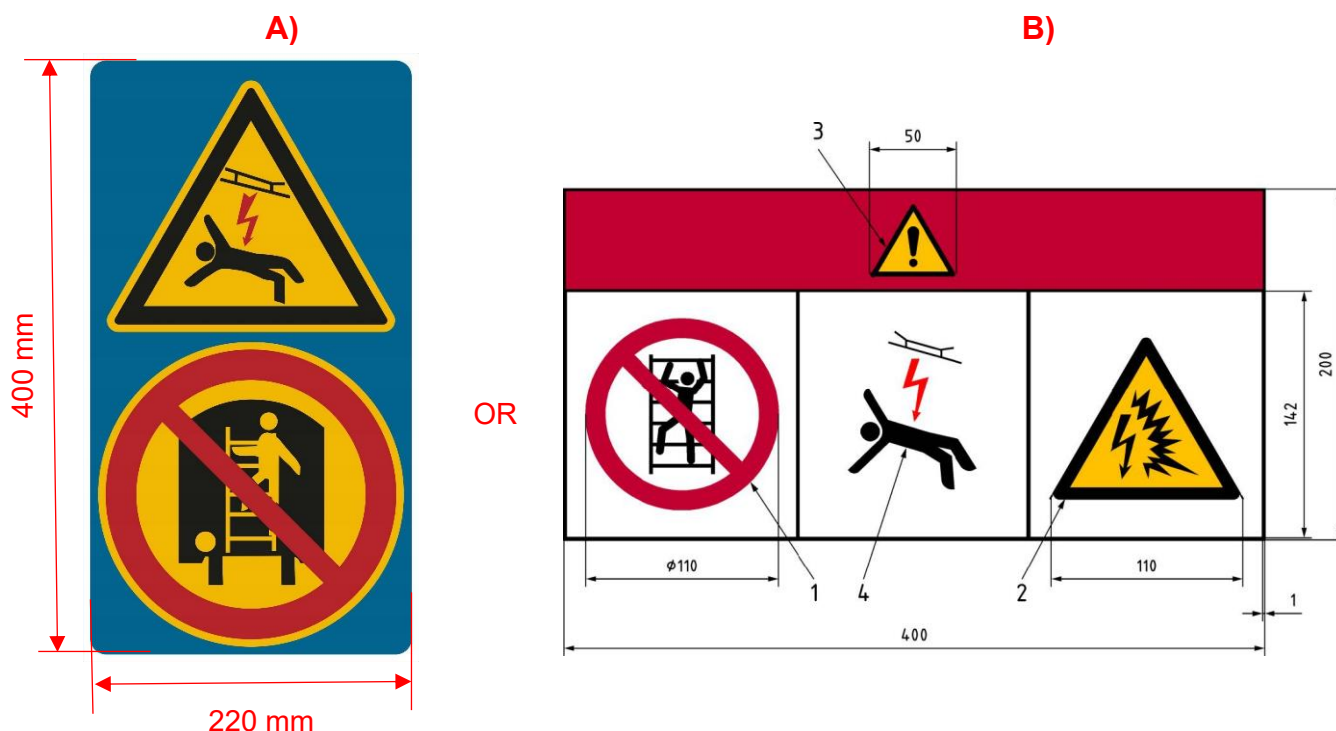
Red: New text

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

(see next page)

English:

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.

~~This pictogram may be shown on a rectangular blue background measuring 400 mm x 220 mm.~~

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.

~~Note: This marking is mandatory as of 1/1/2021.~~

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:

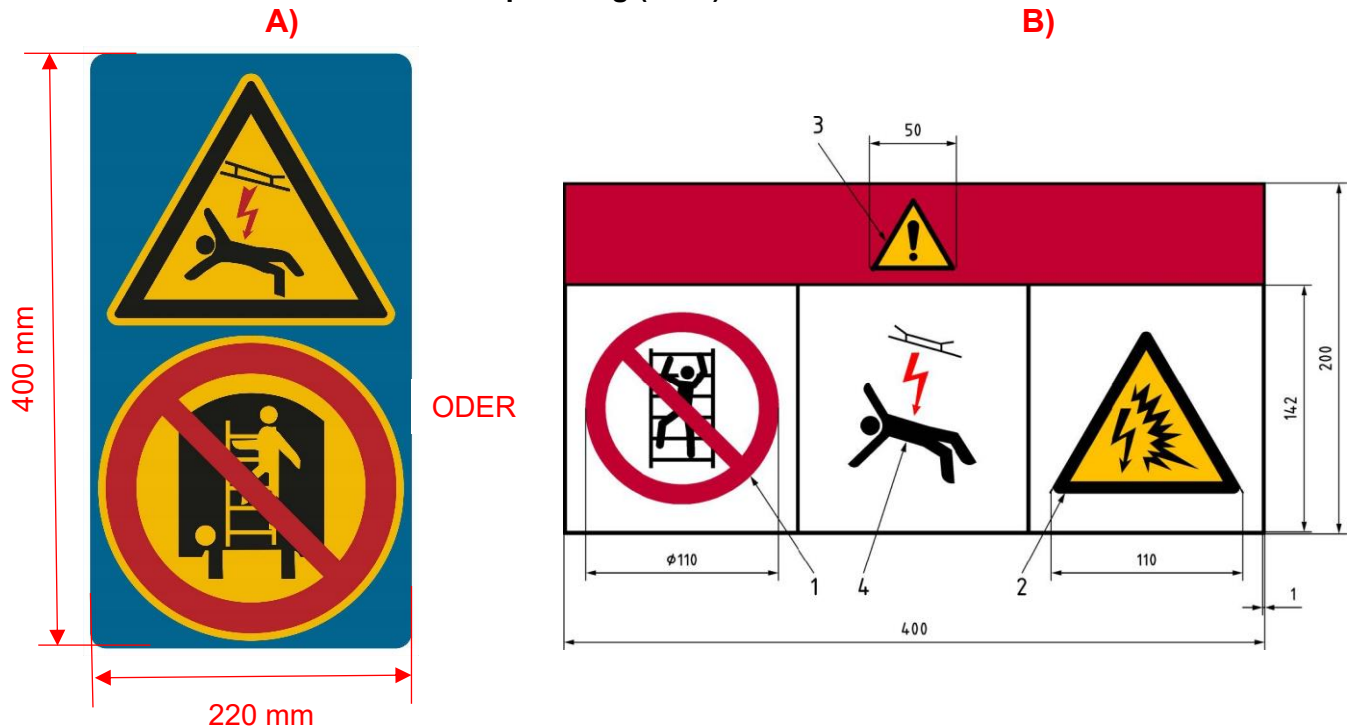
1. The external part of the end walls is fitted with horizontal elements with a maximum vertical distance of 45 cm.
2. These elements must be at least 5 cm in depth or must be comparable to steps of a ladder.

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.

German:

8.2 Warnzeichen für Hochspannung (Halt!)



Anordnung: An Wagen mit Aufstiegstritten oder Leitern in deren unmittelbarer Nähe, und zwar in einer Höhe, dass das Zeichen vor Erreichen der Gefahrenzone gesehen werden kann. Anzubringen bei Wagen, bei denen der oberste Aufstiegstritt oder die oberste Leitersprosse für das Piktogramm A) höher als 2000 mm und für das Piktogramm B) höher als 1450 mm über der Schienenoberkante liegt oder bei Wagen, deren Aufbau ein Aufklettern ermöglicht.

~~Diese Kennzeichnung darf auf einem blauen rechteckigen Hintergrund mit den Abmessungen 400 mm x 220 mm dargestellt werden.~~

Bedeutung: Warnung vor Hochspannung! Halt! Betreten eines besonderen Gefahrenbereichs. Nur Befugte dürfen unter Beachtung geeigneter Schutzmaßnahmen in diesem besonderen Gefahrenbereich arbeiten.

~~Beachten: Diese Anschrift ist ab dem 01.01.2021 verpflichtend.~~

Erläuterung: Dieses Piktogramm soll Mitarbeiter im Bahnbetrieb und unbefugte Dritte vor den Risiken der Hochspannung am Wagen warnen.

Wagen, deren Aufbau ein Aufklettern ermöglicht, erfüllen zwei Kriterien:

Erstes Kriterium: die Aussenseite der Stirnwände hat horizontale Verstrebungen mit einem max. vertikalen Abstand von 45 cm.

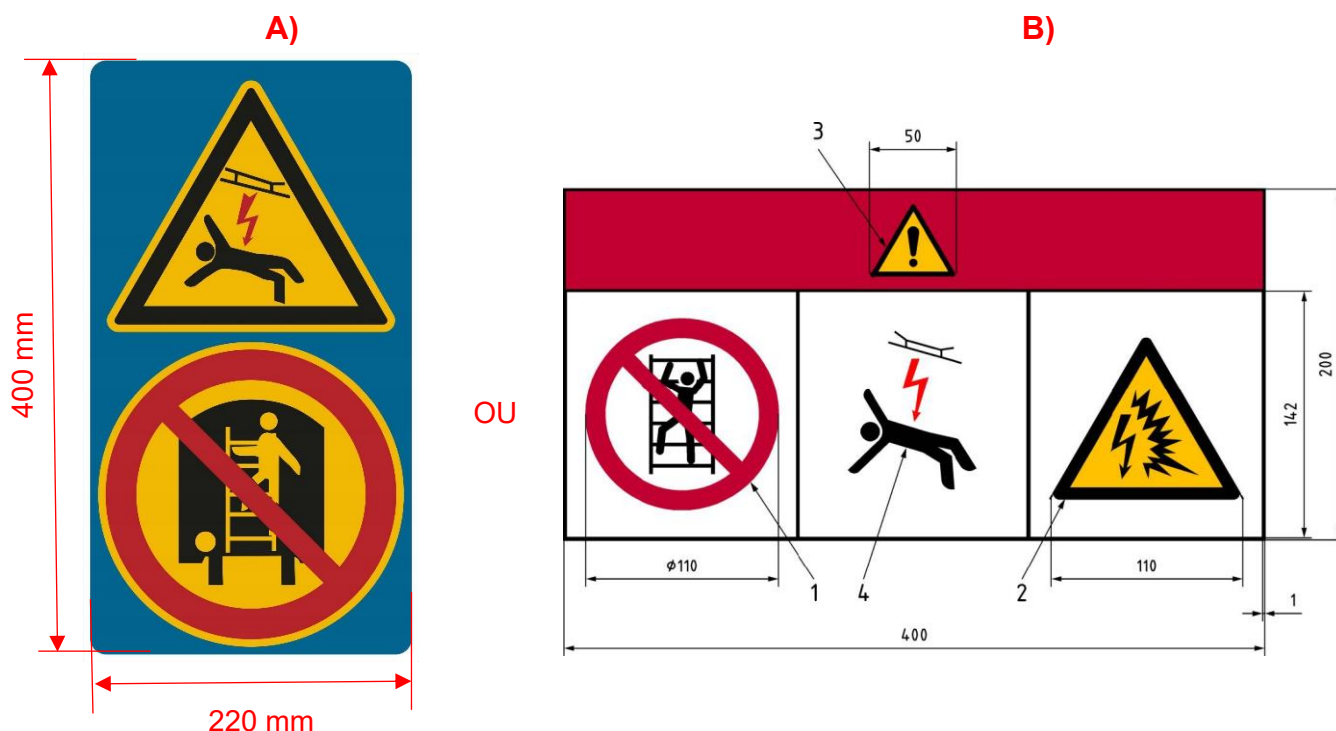
Zweites Kriterium: die Auftrittsflächen müssen eine Tiefe von mindestens 5 cm haben oder einen Leiterartigen Durchstieg erlauben.

Sind beide Kriterien erfüllt, muss das Piktogramm 8.2 „Warnung vor Hochspannung (Halt!)“ angebracht sein, nicht aber das Piktogramm 8.1 „Warnung vor Hochspannung (Blitzpfeil)“.

Für Wagen mit Leitern und Aufstiegstritten müssen beide Warnzeichen (8.1 und 8.2) angebracht sein.

French:

8.2 Signes d'avertissement pour haute tension (Arrêtez !)



Positionnement :

Sur les wagons munis de marchepieds ou d'échelles, à proximité immédiate de ceux-ci, et à la hauteur des yeux. A utiliser sur les wagons pour lesquels le marchepied supérieur ou la partie la plus élevée de l'échelle se trouve **pour le pictogramme A) à plus de 2000 mm et pour le pictogramme B) à plus de 1450 mm** au-dessus du niveau du rail ou sur les wagons dont la structure permet de monter sur celui-ci.

~~La figure peut être contenue sur un rectangle de fond bleu de 400 mm par 220 mm.~~

Signification :

Avertissement de la présence de haute tension. Arrêtez ! Vous pénétrez dans une zone particulièrement dangereuse. Seul le personnel dûment autorisé peut travailler dans cette zone en ayant pris toutes les précautions nécessaires au préalable.

~~Remarque : Cette inscription est obligatoire à partir du 01.01.2021.~~

Explication :

Ce pictogramme est destiné à avertir le personnel de visite et les tiers non autorisés des risques de haute tension sur le wagon.

Les wagons dont la structure permet de monter dessus, répondent à deux critères :

Premier critère : la partie externe des parois d'extrémité est dotée d'éléments horizontaux avec une distance verticale maximale de 45 cm.

Deuxième critère : ces éléments doivent avoir une profondeur d'au moins 5 cm ou doivent pouvoir être assimilés à des échelons d'échelle.

Si les deux critères sont remplis, le pictogramme 8.2 « Signes d'avertissement pour haute tension (Arrêtez !) » doit être affiché, mais pas le pictogramme 8.1 « Signe d'avertissement pour haute tension (éclair) ».

Les deux pictogrammes d'avertissement (8.1 et 8.2) doivent être apposés sur les wagons munis d'échelles et de marchepieds.

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 signatories.

1.1. Does the proposed change have an impact on safety?	☒ No ☐ Yes
Justification: No, because the current sign remains valid	
1.2. Is the proposed change significant?	☒ No ☐ Yes
Justification: No, because both the old and new signs are valid.	
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> • Code of practice EN 15877-1:2024 • Use of reference system • Explicit risk assessment	
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]