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NB-Rail Association

RECOMMENDATION FOR USE

NB-RAIL COORDINATION GROUP

Administrative Decision according to Interoperability Directive
(EU) 2016/797 art. 30.6



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RFU-RST-026

Issue 04

Date 13/11/2024

TITLE

FREE SPACES AT END OF WAGON

ORIGINATOR

NB-RAIL SG-RST

SUBJECT RELATED TO

- Commission Regulation (EU) 321/2013 (WAG TSI)
- Regulation (EU) 1236/2013
- Regulation (EU) 2015/924
- Regulation (EU) 2019/776
- Regulation (EU) 2020/387
- Regulation (EU) 2023/1694
- (Commission Decision 2006/861/EC (CR WAG TSI) is here used for general information)

AMENDMENT RECORD:

30-04-2008 Second Issue

25-02-2021 Legal references and vocabulary update

13/11/2024 – Updates with respect to Regulation (EU) 2023/1694 amending (EU) No 321/2013 (TSI WAG)

DESCRIPTION AND BACKGROUND EXPLANATION

Question: How is the pneumatic half coupling to couple either the brake pipes or the main reservoir pipes to be considered with the reservation of free spaces at the end of a freight wagon or passenger vehicle?

Explanation: In order to allow operation and coupling of trainsets or vehicles with buffers and screw coupling systems the free space for the shunter, the so-called “Berne rectangle” has been defined

Therefore the clause 4.2.2.2 of the CR WAG TSI (2006/861/EC) required the reservation of free spaces within the proximity of the buffers as follows:

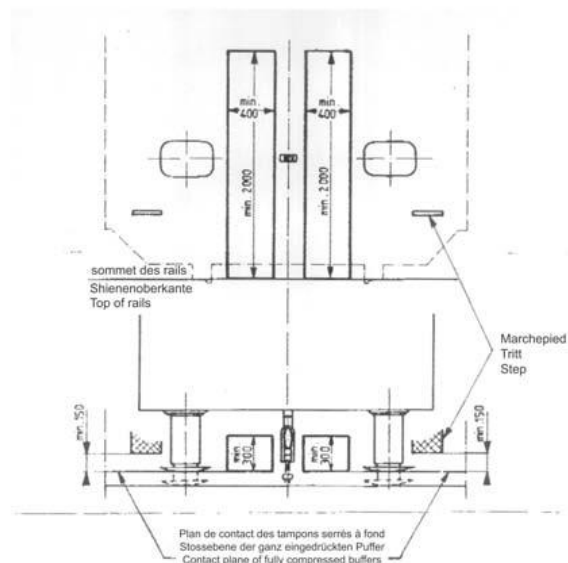


Figure 1 - Berne rectangle (CR WAG TSI Annex A, Fig. A5)



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“4.2.2.2 Safe access and egress for rolling stock

Vehicles shall be designed so that staff are not exposed to undue risk during coupling and uncoupling. If screw couplers and side buffers are used, the required spaces shown in Annex A fig. A5 shall be free of fixed parts. Connecting cables and flexible hoses may be inside this space.”

According to the WAG TSI (EU) 321/2013 as amended by: ((EU) No 1236/2013, (EU) 2015/924, (EU) 2019/776 and (EU) 2020/387 the same requirement applies to the wagons fulfilling the additional optional conditions of Appendix C through the reference to clause 6.2.1 of EN 16116-2:2013 in condition C.1.

According to the WAG TSI (EU) 321/2013 as amended by: ((EU) No 1236/2013, (EU) 2015/924, (EU) 2019/776, (EU) 2020/387 and (EU) 2023/1694 the same requirement applies to the wagons fulfilling the additional optional conditions of Appendix C.1 through the reference to EN 16839:2017 point 4.

According to clause 4.2.2.2.5 LOC&PAS TSI (EU) Nr. 1302/2014 as amended by (EU) 2016/919, (EU) 2018/868, (EU) 2019/776 and (EU) 2023/1694 the same requirement applies to units fitted with manual coupling systems of UIC type as per clause 4.2.2.2.3(b) of LOC&PAS TSI through the reference to EN 16839:2017 point 4.

Description of the situation:

How now is the sentence “Connecting cables and flexible hoses may be inside this space” to be interpreted?

According to EN 15807:2011 the pneumatic half coupling is the assembly of components to connect the brake pipe or main reservoir pipe of a rail vehicle to the brake pipe or main reservoir pipe, respectively, of another rail vehicle. The main components of the pneumatic half coupling are:

- Brake coupling head,
- Nipple to connect the pneumatic half coupling to the end cock or pipe on the vehicle,
- Hose clip that mechanically fixes the hose to the coupling head or the nipple,
- Sealing washer,
- Flexible hose and constituents.

There is for example the view that the flexible part of the pneumatic half coupling does not have to be considered where flexibility is sufficient. This means that the flexible part may encroach into the required free space.

This raises the question of what is flexible. Different interpretations of this requirement by Notified Bodies should be avoided.



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RFU PROPOSAL

The pneumatic half coupling is considered to be flexible for its entire length excluding the length of the assembly of the flexible hose with the nipple.

The free space available at the ends of the vehicle is to be measured to the end of the nipple which connects the pneumatic half coupling to the end cock, or pipe located on the vehicle, not taking into account the flexible hose (see distance measure A in Figure 2).

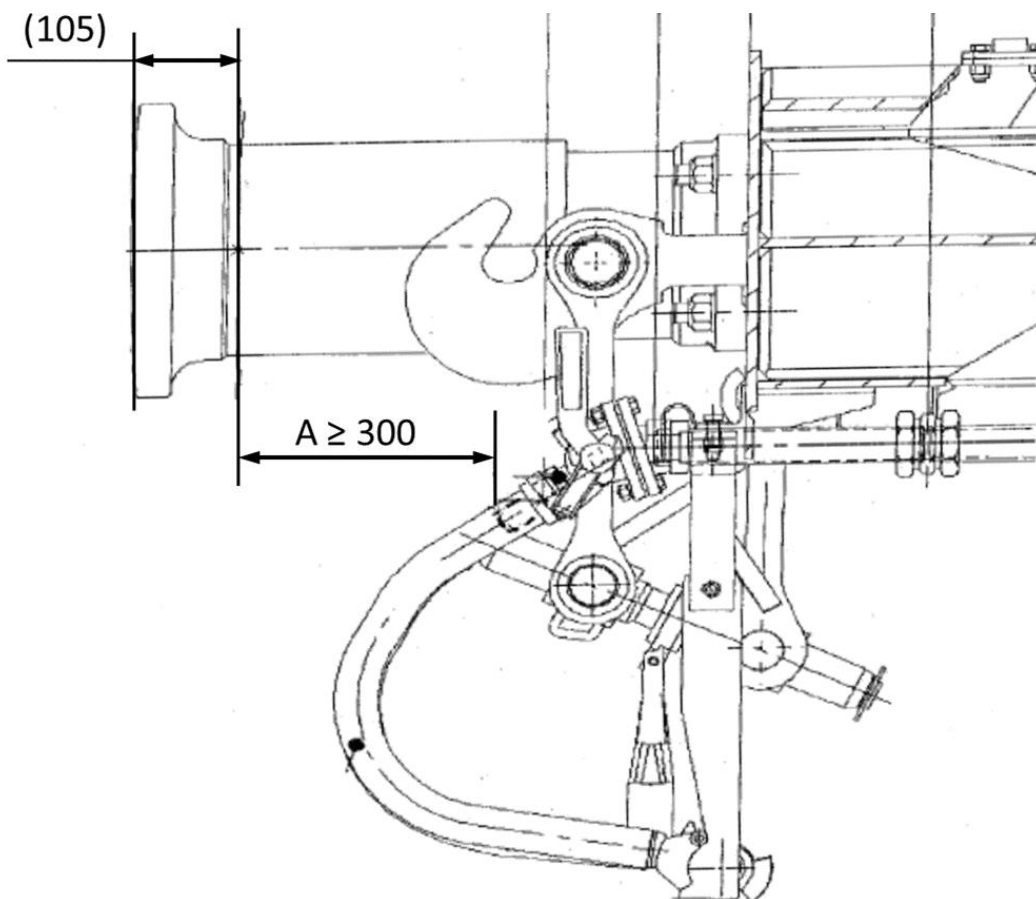


Figure 2 - Distance measure A

Note: The free space at the end of a wagon (Berne Rectangle) is in the current TSI only compulsory for wagons that comply with Annex C.

The decision to apply it or not to other wagons remains with the applicant (and is expected to be taken within the 'requirements capture process'). If the applicant has not applied it at other wagons, it is highly recommended that the NoBo informs the applicant that this topic is related to health and safety at work and that it should be considered also for other wagons. Refer also to RFU-STR-088.



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THIS RFU WAS AGREED ON

PLENARY MEETING 72

THIS RFU ENTERS INTO FORCE ON

27/11/2024 (DATE OF PUBLICATION)

FROM THIS DATE ON THIS RFU CAN BE APPLIED INSTEAD OF THE PREVIOUS MANDATORY VERSION.

RFU APPLICATION IS MANDATORY STARTING FROM

27/11/2024

AT THIS DATE ANY PREVIOUS VERSIONS (*OR, ALTERNATIVELY, VERSION XX*) OF THIS RFU WILL BE WITHDRAWN.

RFUS SHALL BE APPLIED BY ALL NOBOS. PLEASE REFER TO RFU-STR-702, CHAPTER 3 OF THE SECTION "DESCRIPTION AND BACKGROUND EXPLANATION", FOR THE LEGAL BASIS SUPPORTING THIS OBLIGATION.

ERA COMMENTS

PM 72 – 13/11/2024: NO COMMENTS -