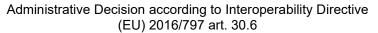


RECOMMENDATION FOR USE

NB-Rail Coordination Group





RFU-RST-312 Issue 01
Date 21/06/2021

TITLE	
INTERPRETATION OF TSI LOC&PAS §4.2.8.4 (ELECTRICAL HAZARDS)	
ORIGINATOR	SUBJECT RELATED TO
BELGORAIL	Regulation (EU) 1302/2014 (TSI LOC&PAS)

AMENDMENT RECORD:

17-06-2021 First issue

DESCRIPTION AND BACKGROUND EXPLANATION

LOC&PAS TSI Chapter 4.2.8.4 Protection against electrical hazards

"(1) Rolling stock and its electrically live components shall be designed such that direct or indirect contact with train staff and passenger is prevented, both in normal cases and in cases of equipment failure. Provisions described in the specification referenced in Appendix J-1, index 54 shall be applied in order to meet this requirement."

Index 54 is the standard EN 50153:2014, applicable in its relevant clauses (calling up EN 50122-1:2011).

This RFU aims at defining what has to be considered as "live components".

RFU PROPOSAL

It is proposed to consider as "live components" any conductor parts of the vehicle itself that can be energised when in normal use and any exposed parts that can become energised in failure mode.

The NoBo shall request the Applicant to provide a list of all the equipment that can be energised in case of failure; this equipment could be identified by a risk assessment. This list will be established by the applicant according to the safe integration (as required by art. 18.4(c) of IOD 2016) which refers to the application of Common Safety Methods (CSMs). This includes risk assessment according to Annex I of CSM-RA Reg. (EU) 402/2013.

NOTE: the safe integration principle is described in the ERA Clarification Note ERA1209/063.

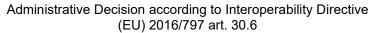
For uncovered walkways of vehicles with cab and foreparts (not intended for use by the public), as well as for special vehicles, the EN 50122-1:2011, figures 3 and 4 (protection by clearance) should be considered as reference.

The requirements of EN 14033-1:2017, section 14.2.2 in connection with table B1, may be taken as general guidance for any type of vehicle. Should it not be possible to respect these requirements, alternatively mitigation measures should be identified in the list provided by the applicant.



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RFU-RST-312

Issue 01 Date 21/06/2021

THIS RFU WAS AGREED ON

PLENARY MEETING 62

THIS RFU ENTERS INTO FORCE ON

21/06/2021

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

RFU APPLICATION IS MANDATORY STARTING FROM

01/10/2021

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

PLE 62 - 17/06/2021: No COMMENTS