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## RECOMMENDATION FOR USE

### NB-RAIL COORDINATION GROUP

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



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**RFU-STR-043**

Issue 05

Date 19/06/2024

#### TITLE

TOLERANCES

#### ORIGINATOR

SG RST AND SG INF

#### SUBJECT RELATED TO

IOD (EU) 2016/797  
ALL TSIS

AMENDMENT RECORD: ISSUE 03, IOD REFERENCES UPDATE

ISSUE 04: UPDATE OF REFERENCED STANDARD ISO 1101

ISSUE 05: UPDATE OF REFERENCED STANDARDS

#### DESCRIPTION AND BACKGROUND EXPLANATION

##### Scope

This proposal covers conformity assessment according to all modules of all TSIs based on the Interoperability Directive.

##### Background

Some numerical requirements ("values to be assessed") in TSI's are given with tolerances, some without.

For such "values to be assessed" without defined tolerances, it is unclear whether formulations in the text like "minimum", "more than", "maximum", ... have to be taken into account or not (e.g. if a text like "minimum" implies a tolerance of -0/+x).

Therefore, it has to be defined, how cases without tolerances have to be handled.

##### Concept

NB Rail defines how to deal with the different values given in the TSIs.

Tolerances are not applicable for design values.

#### RFU PROPOSAL

There are 4 cases which have to be treated separately.

Case 1): There is a value given with tolerances (+/-) in the TSI.

Solution: Use the values with the given tolerances.

Case 2): There is given a maximum value in the TSI.

Solution: This value is an absolute maximum value. There is a tolerance of 0.

Case 3): There is given a minimum value in the TSI.

Solution: This value is an absolute minimum value. There is a tolerance of 0.

Case 4): There is given a certain value without tolerances and the value is not defined as a minimum or maximum value.



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Solution: General tolerances shall be used. Depending on the character of the product and the value to be assessed, the standard document in which this general tolerance is defined may vary.

Examples of such standards are:

- Tolerances may also be taken from an appropriate voluntary standard covering the Railway Equipment used at the assessment.
- EN 22768-1:1993: General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications.
- ISO 22081: Geometrical product specifications (GPS) – Geometrical tolerancing – General geometrical specifications and general size specifications
- ISO 13920:2023: Welding - General tolerances for welded constructions - Dimensions for lengths and angles - Shape and position)
- ISO 1101:2017 Geometrical Product Specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out
- other standards for general tolerances in other fields of applications like electrical engineering, civil engineering, ...)

If no standard is available then the Notified Body should apply the tolerances which are in line with essential requirements of (EU) 2016/797. A risk based approach may in some cases be required to define the tolerances. Any such occurrences should be brought to the attention of NB RAIL and ERA.

Figure for the cases:



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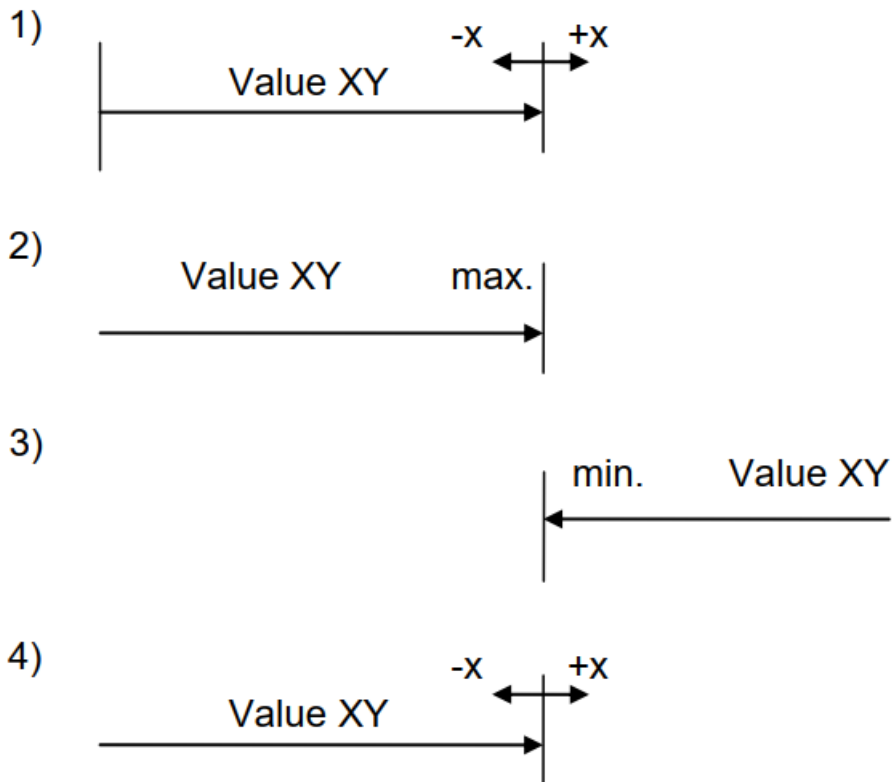


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**THIS RFU WAS AGREED ON**

PLENARY MEETING 071

**THIS RFU ENTERS INTO FORCE ON**

03/07/2024 (DATE OF PUBLICATION)

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

**RFU APPLICATION IS MANDATORY STARTING FROM**

03/07/2024 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 071 – 19/06/2024: NO COMMENTS