

## Proposal to amend Appendix 10 to the GCU

### Record of amendments

Amended by	Date	Paragraph	Amendment
Burkhard Lerche, WG UIC Maintenance	24/01/2020	ChaptA Pt1 App10	Redrafted
WG UIC Maintenance	28/04/2020	ChaptA Pt1 App10	Final Version
SG UIC WAGON USERS	26/05/2020	ChaptA Pt1 App10	Approval
JC GCU	15/06/2020	ChaptA Pt1 App10	Approval

<b>Title</b>	Adaptation of limit values for flange thickness to EN 15313
<b>Proposed amendment made by: RU/keeper/other:</b>	DB CARGO AG
<b>Proposed amendment to:</b>	<input checked="" type="checkbox"/> Appendix 10
<b>Proposer:</b>	WG Maintenance, B. Lerche
<b>Location, date:</b>	Mainz, 24/01/2020
<b>Concise description:</b>	A review of limit values has revealed a difference between the values contained in EN 15313 compared to those in Appendix 10 to the GCU. The proposed amendment rectifies these differences.

## 1. Starting point (current situation)

### 1.1. Introduction

### 1.2. Mode of operation

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### 1.3. Anomaly/description of problem

Difference between the limit values in EN 15313 and in Appendix 10 to the GCU

### 1.4. Does this concern a recognised code of practice\* (e.g. DIN, EN)?

No  Yes (state which): EN 15313 point (see extract of point 6.2.1.3 limit values for flange thickness

#### 6.2.1.3 Flange thickness "e"

The limit values as a function of the diameter are specified in Table 2.

Table 2 — Flange thickness "e"

$d^a$	$d \leq 760$	$760 < d \leq 840$	$840 < d$
$e$ minimum <sup>b c</sup>	27,5	25,0	22,0
$e$ maximum <sup>b</sup>	33,0		

<sup>a</sup> Wheel diameter (actual dimension).  
<sup>b</sup> This does not apply to wheelsets having reduced wheel flanges or wheelsets without wheel flanges that are not involved in track guidance.  
<sup>c</sup> In all cases, the value of "e" shall be within the tolerances.

NOTE The value of 25,0 mm may have to be approved by the infrastructure manager.

\* "a written set of rules that, when correctly applied, can be used to control one or more specific hazards." (source: Regulation (source: Regulation EC 352/2009, Article 3)

"Technical provisions laid down in writing or conveyed verbally and pertaining to procedures, equipment and modes of operation which are generally agreed by the populations concerned (specialists, users, consumer and public authorities) to be suitable for achieving the objective prescribed by law, and which have either proven their worth in practice or, it is generally agreed, are likely to within a reasonable period of time". (source: BMJ Handbuch der Rechtsförmlichkeit – guide published by German Ministry of Justice)

## 2. Target situation

### 2.1. Elimination of anomaly/problem (solution sought)

### 3. Additional text and/or change relates only to proposed amendments to GCU Appendix 10

Amendment colour code:

Black: Current text, for info and remains unchanged

Red: new text

Blue: (if crossed out): text to be deleted

#### 1. RUNNING GEAR

##### Minimum conditions and limit values for dimensions

##### Wheelsets

1.1.4 Thickness of the flange of one wheel, measured 10 mm below the running circle:

- minimum 22 mm for wheels of diameter greater than 840 mm;
- minimum 25 mm for wheels of diameter less than or equal to 840 mm but greater than 760 mm,
- minimum 27.5 mm for wheels of diameter less than or equal ~~840 mm~~ but at least ~~630~~ ~~(330) mm~~ 760 mm.

Flange thickness must not exceed 33 mm, irrespective of the diameter of the wheel.

These values do not apply to wheelsets with tapered flanges (e.g. certain bogies with three or more axles).

### 4. Reasoning:

#### 5. Assessment of potential positive/negative impacts

*Assess the possible positive and negative effects (operations, costs, administration, interoperability, safety, competitiveness, etc.) on a scale of 1 (very low) to 5 (very high):*

*Reasoning behind amendment:*

Positive effects:

Impact on costs/administration/interoperability/safety/competitiveness:

## 6. Safety appraisal of proposed amendment

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

The risk study becomes obsolete insofar as only the known repositories are implemented

Safety study conducted by:

<b>6.1. Does the change have an impact on safety?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reason:	
<b>6.2. Is the change significant?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Reason:	
<b>6.3. Determining and classifying risk</b>	<input checked="" type="checkbox"/> N/A
6.3.1. Effect of change in normal operation:	
6.3.2. Effect of change in the event of disruption/deviation from normal operation:	
6.3.3. Potential misuse of system:	
<input type="checkbox"/> No	
<input type="checkbox"/> Yes (describe possible misuse):	
<b>6.4. Have safety measures been applied?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes
For each type of risk, one of the following risk acceptance criteria is to be selected:	
<ul style="list-style-type: none"> <li>• Code of practice</li> <li>• Use of reference system</li> <li>• Explicit risk assessment</li> </ul>	
<b>6.5. Has a risk analysis been submitted to the assessment body?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Assessment body:	
Attach the verdict reached by the assessment body	[Appendix]