



Organisation intergouvernementale pour les transports internationaux ferroviaires  
Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr  
Intergovernmental Organisation for International Carriage by Rail

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**INF. 2**

31/08/2021

Original: English

**Joint Coordinating Group of Experts**  
(Video conference, 7 and 8 September 2021)

**Agenda item 3: Review of and report on the list of priority items agreed at the previous meeting**

**1 b – Design and construction of vehicles: specification method; functional/technical solutions**

**ITEM 2: 6.8.3.1.6**  
**Crash buffer and buffer override**

**Transmitted by UIP**

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JCGE

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## JCGE – Web Meeting

7.+ 8.9.2021

ITEM 2: 6.8.3.1.6

### **Crash buffer and buffer override**



### **CURRENT REQUIREMENTS OF “RID”**

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- 300 mm for all DG-Tanks
- TE 22 in case of higher risk hazard potential  
e.g. class 2 (gases)
- TE 22 and 25 in case of very high hazard potential  
e.g. chlorine
  
- no requirements in case of intermodal transportation
- DAC requirements to be defined



## JCGE-DISCUSSION

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already agreed:

- RID – to be reduced to safety targets
- TSI – concrete requirements for DG-wagons to be implemented

and

- Extra Lange Tankcontainers as BTC and
- Digital Automatic Coupler “DAK” to be considered



## STANDING WORKING GROUP RID “2020”

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UIP proposed 3 steps/levels of protection

1. General requirements for all DG  
e.g. 300 distance to tank - ends
2. Protection against risks of buffer override  
e.g. crash buffer or catching devices
3. Passive Protection to reduce risk of penetration by buffer override  
e.g. headshields or stronger ends



## STANDING WORKING GROUP RID

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Basically agreed on and

UIP was asked for further concrete proposals (wording) for implementation of safety targets in RID

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## JCGE IMPLEMENTATION OF DAC

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Implementation of DAC – concrete DG-requirements urgently to be defined!

and if implementation until 2030, do we need further discussion on requirements against buffer override?

Energy absorption required? (today, based on SMGS only 135 kJ required)

Defined catching and fixing mechanism required

Head shield,... seems to be set for TE 25, as of today in RID

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How to deal with “Intermodal Transport” or upcoming “modular systems” as measures under discussion are more operational:

- No shunting ? Or if shunting ? As TE 22/25 have been developed after shunting accidents
  - Loading e.g. in center of longer intermodal wagons proposed as substitution?
  - Further discussion, see “BTC”



Current position of UIP regarding tank wagons:

#### 6.8.2.1.29 “300 mm requirement”

To be deleted as due to CEFIC/BASF “no effect” and just old requirement from UIC before implementation of TE 22 and TE 25

or at least:

Substituted by working: “Not required if protection by TE 22 or 25 is available”



## Current position of UIP regarding tankwagons:

### TE 22 new: protecting mechanism to reduce risk of buffer override

Note: is fulfilled if crash buffers or catching devices in acc. with ... are mounted or the tanks are equipped with passive elements as headshields acc. TE 25

### TE 25 new: protecting mechanism to reduce risk of penetration of tank ends

Note: is fulfilled if headshields acc. ... are available, otherwise wall thickness of ends to be increased by x % or sandwich cover to be realized



## Questions to JCGE:

How to proceed with DAC, as the specification is under final discussion

How to handle with operational issues e.g. free shunting and associated risks in intermodal and in modular approach

How and when TSI requirements to be defined as change in RID is only possible with requirements in TSI or relevant standards – not included in 2022 work package



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Thank you very much