

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

INF. 12

22 May 2018

(English only)

RID: 9th Session of the RID Committee of Experts' standing working group (Berne, 28 to 30 May 2018)

Subject: Comments on informal document INF.3

Information from FuelsEurope

SUMMARY			
Executive summary:	The Information submitted by FuelsEurope is commenting INF.3 (Proposal from the Informal working group on checklists for the filling and emptying of rail tank-wagons for liquids). As the members of FuelsEurope are filling and discharging big quantities of dangerous goods on rail, there is a natural interest that practical checklists are developed and used to promote safety in every aspect of the loading and transport operations. FuelsEurope is offering support to jointly develop checklists together with the RID member states to have the same standard in every member state.		
Decision to be taken:	FuelsEurope is asking the member states to devote more time to fi- nalize the checklists. Furthermore, FuelsEurope is asking that before final release of the checklists, they are translated in the RID lan- guages to perform a final check and avoid discussion when the official document will be transmitted.		
Relates documents:	Informal document INF.3 OTIF/RID/CE/GTP/2017-A		

Introduction

- 1. Following a request from the delegation of the Netherlands, FuelsEurope decided to transmit an informal document to the RID Committee of Experts' standing working group including comments made during the meeting and on the draft report of the informal working group after the meeting for further discussions.
- 2. FuelsEurope represents the interest of 41 companies operating refineries in the EU. Members account for almost 100% of EU petroleum refining capacity and more than 65% of EU motor fuel retail sales. FuelsEurope aims to promote economically and environmentally sustainable refining, supply and use of petroleum products in the EU, by providing input and expert advice to the EU Institutions, Member State Governments and the wider community, thus contributing in a constructive and pro-active way to the development and implementation of EU policies and regulations.
- 3. Mineral oil products are transported in big quantities via railway and therefore FuelsEurope represents filler and unloader of tank-wagons for liquids and gases.
- 4. We do appreciate that outdated and incorrect parts of the checklists are either deleted or adopted. In some cases, we do have comments to the informal document INF.3. and the attached checklists.

Information points

- 5. Please note that during the meeting on 28th of February and 1st of March the representative of MWV in the first meeting of the informal working group on checklists for the filling and emptying of rail tank-wagons for liquids represented FuelsEurope.
- 6. Regarding paragraph 6 of the minutes of the meeting, we as an industry do not agree that only safety related issues should be part of the proposed checklist. The checklist, as in the original version should include all relevant RID responsibilities of the filler and unloader. Non RID relevant items should be avoided. Further as we understood from the last report the checklist should cover as many of the filler's and unloader's RID obligations.
- 7. Please note that new proposals coming from FuelsEurope are <u>underlined</u> or in case of proposed deletion crossed out, proposals which are from informal document INF.3 and quoted here are in *italic type*.

Comments on Annex 2: Proposed amendments

8. <u>General remark to the note:</u>

"NOTE: Guidelines in the form of checklists for tank-wagons for liquids and gases are available on the OTIF website (www.otif.org) to help the filler of tank-wagons for liquids and gases fulfil his safety obligations, particularly with respect to the leaktightness of tankwagons."

We would suggest rephrasing the note, due to the fact the proposed wording can be understood that the checklist on the OTIF website are legally binding. As far as we understood the discussion from the informal meeting the intention is to provide a non-legal binding best practice guide-line.

Proposal:

<u>"NOTE:</u> The filler should establish procedures to fulfil the safety obligations according to Chapter 1.4 RID. Guidelines in the form of checklists for tank-wagons for liquids and gases are available on the OTIF website (www.otif.org) to help the filler of tank-wagons for

liquids and gases fulfil his RID safety obligations, particularly with respect to the leaktightness of tank-wagons."

Comments on Annex 3: Checklists for the filling and emptying of rail tank-wagons for liquids

9. <u>Guidelines – introductory text (both liquids and gases)</u>

To the sentence "*These guidelines have been developed*[...] to help filler and unloaders of tankwagons comply with safety obligations, [...]" the term RID should be introduced before safety obligations, otherwise it could be understood that further safety obligation coming from different regulations are or should be included in these checklists.

The sentence for guidelines – introductory text for liquids would read as follows:

"These guidelines have been developed in cooperation with CEFIC and <u>FuelsEurope</u> in the form of checklists for tank-wagons for liquids to help fillers and unloaders of tank-wagons comply with <u>RID</u> safety obligations, particularly with respect to the leaktightness of tank-wagons."

The sentence for guidelines - introductory text for gases would read as follows:

"These guidelines have been developed in cooperation with CEFIC, EIGA, AEGPL and UIP in the form of checklists for tank-wagons for gases to help fillers and unloaders of tank-wagons comply with <u>RID</u> safety obligations, particularly with respect to the leaktightness of tank-wagons."

10. Filling and discharging of rail tank-wagons (both liquids and gases)

"In addition, the filler and the unloader are required to comply with the requirements of 7.5.1.2 (Provisions concerning loading, unloading and handling)."

The reference to 7.5.1.2 is only relevant for loading operation. This should be changed to 7.5.1 The sentence would be as followed:

"In addition, the filler and the unloader are required to comply with the requirements of 7.5.1 (Provisions concerning loading, unloading and handling)."

11. Filling and discharging of rail tank-wagons (only liquids)

"The filler and the unloader must establish procedures to check the correct functioning of the closures of the tank of a tank-wagon and to ensure the leaktightness of the closing devices before and after filling or unloading."

According to RID the filler and the unloader have to fulfil the requirements of Chapter 1.4. As written here it could be understood that only procedures regarding the correct functioning of the closure of the tank of a tank-wagon has to be established. As we understood from the last report the checklist should cover as many of the filler's and unloader's RID obligations.

"Final report of the 8th session of the RID Committee of Experts' standing working group (Utrecht, 20 – 24 November 2017)

32. Lastly, the standing working group agreed to complete the current checklists for the filling and emptying of tank-wagons for liquids in order to cover as many of the filler's and unloader's obligations as possible, as in the new checklists for gas tank-wagons."

With the proposed wording and checklists we do not see that this mandate from the RID Committee of Experts' standing working group is fulfilled.

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12. Filling and discharging of rail tank-wagons (both liquids and gases)

"As the most frequent cause of leaks is incorrect filling or discharge processes, the main aim behind standardized checklists is to avoid leaks from tank-wagons for gas liquids by means of correct and professional handling on the part of operating staff working for fillers and unloaders. They include the necessary steps (checkpoints) in the appropriate sequence, which is normally observed when filling or emptying liquidsgases into or from tank-wagons in the procedure to ensure leaktightness. They may need to be supplemented by the user with other specific operational steps/procedures (operating instructions)."

We do not agree with this general assumption that the most frequent cause of leaks is incorrect filling or discharge process. Leaks of the valves and this is happening from time to time is due to aging valves and equipment or by manipulation by unauthorized person during transport. A filling process or unloading process is never causing a leaking tank-wagon. We do suggest do rephrase the passage as follows:

"One As the most frequent cause of leaks is the manipulation by unauthorized person during transport causing either malfunction of the valves or an incorrect closed closing device, is incorrect filling or discharge processes, the main aim behind standardized checklists is to avoid leaks from tank-wagons for liquids by means of correct and professional handling on the part of operating staff working for fillers and unloaders. They include the necessary steps (checkpoints) in the appropriate sequence, which is normally observed when filling or emptying liquids into or from tank-wagons in the procedure to ensure leaktightness. They may need to be supplemented by the user with other specific operational steps/procedures (operating instructions)."

13. Filling and discharging of rail tank-wagons (both liquids and gases)

"Further measures shall be agreed with the tank-wagon operator (in accordance with the vehicle keeper marking in the wagon)."

As to our knowledge the term vehicle keeper does not exist in RID, and therefore should not be introduced in a document related to RID. The new sentence would read as follows:

"Further measures shall be agreed with the tank-wagon operator (in accordance with the vehicle keeper marking in the wagon)."

14. Filling and discharging of rail tank-wagons (both liquids and gases)

"The term "suitable tool" used in the checklists means a tool with which the necessary force is generated by means of even leverage and damage to the sealing elements is avoided."

The wording "suitable tools" should be also mentioned within the checklists. This would avoid that the definition is overseen.

15. Filling and discharging of rail tank-wagons (both liquids and gases)

"The equipment used must be in compliance with applicable international regulations, e.g. regulation for explosive atmosphere."

Please note that tools must be non-sparking. As an example a hammer with a rubber or bronze head is a non-sparking tool.

16. Filling and discharging of rail tank-wagons (both liquids and gases)

Mark should be in plural as all others are in plural.

"According to paragraph [...], ensure that the placards, marks, orange-coloured [...]"

17. Filling and discharging of rail tank-wagons (both liquids and gases)

п.			
	filling device	loading arm/hose	
	discharge device	unloading arm/hose	

Filling and discharge device as mentioned in 6.8.2.2.2 is not the loading or unloading arm/hose. In respect of the wording in 6.8.2.2.2 this is part of the tank. Therefore we suggest changing to the correct terminology. The loading and the unloading arm/hose is part of the loading/unloading facility and subject to the relevant legislation for the facility.

Comments on the checklists

18. General remark (for liquids):

We would suggest that the header "Points relevant to leaktightness for filling tank-wagons [...] liquids" should be changed to:

"Points relevant to leaktightness for filling liquid dangerous goods into non-pressurized tankwagons [...]"

This makes it clear that the checklists are for non-pressurized tank-wagons.

19. Comments on the checklists (relevant for all four checklists for liquids and gases) - item 1.1

Item 1.1: In the explanation column "evidence" should be changed to "obvious".

Item 1.1: "*No damage to tank* [...]" should be moved to the check column as this is the check and not the explanation.

The absence of a danger for the filling and/or unloading process should be in column "Check" and not in the column "Explanation". Reason this is an obligation for the unloader according to RID 1.4.3.7.1 (b) and for the filler according to RID 1.4.3.3 (a).

20. <u>Comments on the checklists (relevant for top filling, bottom filling checklists for liquids) – item</u> <u>1.3</u>

The note does not make sense as from our understanding as no multi-compartment tanks on tank-wagons for liquids are used for transporting dangerous goods. We do suggest deleting this part.

21. <u>Comments on the checklists (relevant for top filling, bottom filling checklists for liquids and gases) – item 1.4</u>

A remark should be added, making it clear that this is only relevant if no cleaning between loading and new loading took place. Further, we did not find any remark what to do in case the tankwagon comes from maintenance or cleaning full of nitrogen or oxygen.

22. <u>Comments on the checklists (relevant for top filling, bottom filling checklists for liquids) – item</u> <u>1.7</u>

In the "Check"-column, the following wording should be inserted: "<u>no leakages visible (visible inspection).</u>"

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23. <u>Comments on the checklists (relevant for all four checklists for liquids and gases) – item 1.9, item 1.4, item 1.8, item 1.7, item 1.5, item 1.6</u>

Item 1.9 (Top filling liquids), item 1.4 (top discharge liquids/gases and bottom discharge liquids), item 1.8 (bottom filling liquids), item 1.7 (bottom filling gases), item 1.5 (bottom discharge gases), item 1.6 (Top filling gases):

Filling device as described in informal document INF.3, page 3 and page 24 is not part of the RID. From our understanding the check should be for the parts as described in 6.8.2.2.2 therefore we suggest changing to the proper terminology.

24. <u>Comments on the checklists (relevant for top filling, bottom filling checklists for liquids) – item</u> <u>1.10, item 3.1</u>

Item 1.10: The maximum loading mass should be changed to maximum load limit.

Item 3.1: Similar to item 1.10, the maximum gross mass should be changed maximum load limit.

The sentence in the explanation column "[...] *it is not overloaded or overfilled, as determined in 1.10.*[...]" should be changed to "[...] ... in <u>item</u> 1.10 <u>of this checklist.</u>[...]" this would avoid misunderstandings in respect to ADR/RID 1.10.

The sub point in the explanation column "Overfilling of the tank may generate pressure [...]" this could be deleted as tanks for liquid products are non-pressure tanks. An overload of liquid should do no harm to the material as the density of fluids differs not that much (except liquid HG or PB).

25. <u>Comments on the checklists (relevant for checklists for top filling, bottom filling and bottom discharge liquids)</u>

We suggest harmonizing the checklists numberings. In the checklist for top filling following item should be added:

Insert item 3.3.1 (by analogy to item 3.4 in the bottom discharge checklist for liquids) which should read as follows in its "Check"-column:

"Closing device (e.g. screw thread, blank flange) correctly mounted (gaskets present and checked), closed with suitable tools and leaktight on both sides of the wagon (visual inspection)."

In the checklist for top filling (item 3.3.1), bottom filling (item 3.4) and bottom discharge (item 3.4) the wording in the explanation column should read as follows:

"If the closing device was only used on one side, it only needs to be checked on this side if the other (unused) device has been sealed or secured and it can thus be ascertained that it has not been used. There must be no leakage, i.e. there must be no drips on the outlets. If drips are found, further suitable measures are necessary."

26. <u>Comments on the checklists (relevant for checklists for top and bottom filling for liquids) – item</u> 3.4, item 3.6

Top filling (item 3.4), bottom filling (item 3.6) concerning the check column "[...] *Operational openings* [...]":

Suitable tools should only be used for hand wheel and closing cap. The current wording is misleading and could be understood that all openings have to be closed with suitable tools although they might be closed by hand. Further following change in the explanation column is proposed "The blank flanges on the closure that have been used must be equipped with new suitable gaskets. They must be in a proper condition and must be replaced when necessary."

27. <u>Comments on the checklists (relevant for all checklists for liquids and gases) – item 3.3, item 3.4, item 3.6</u>

Item 3.4 (Top filling liquids), item 3.3 (top and bottom discharge liquids), item 3.6 (bottom filling liquids), and item 3.3 (checklists for gases)

We ask to reconsider following part "Bolts in blank flanges must be of proper length.". As filler or unloader we can according to RID rely that the tank-wagon received is equipped according to RID. Due to this and due to the fact that the proper length of bolts is only known by the tankwagon operator we suggest rephrasing the sentence. We do understand the intention behind it, however it is unclear how this can be checked without having the tank-wagon approved design information.

28. Comments on the checklists (relevant for all checklists for liquids) - item 3.4, item 3.5, item 3.6

Item 3.4 (Top filling liquids), item 3.4 (top discharge), item 3.6 (bottom filling liquids), item 3.5 (bottom discharge). The wording in all four checklists should be harmonized.

"There must be no leakages detected by appropriate methods, e.g. testing devices". This part is too general and can be misunderstood. For liquid products a testing device for leakages does not exist according to our knowledge. We would appreciate if this could be changed to "There must be no leakages detected by visual inspection."

29. <u>Comments on the checklists (relevant for all four checklists for liquids) – item 3.5, item 3.6, item 3.7, item 3.6</u>

The comment is related to item 3.5 (top filling), item 3.6 (top discharge), item 3.7 (bottom filling) and item 3.6 (bottom discharge):

"Outside of tank free of dangerous residues." to be changed to "The outside of the tank is free of dangerous residue."

30. <u>Comments on the checklists (relevant for top and bottom filling checklists for liquids) – item</u> 3.6, item 3.8

Comment is related to the check column of item 3.6 (top filling) and item 3.8 (bottom filling:

The sentence "*closing device is leaktight <u>both sides</u> (visual inspection)*" could lead to the misunderstanding that the inner side of a valve/closing device has to be visual inspected when the tank is filled. We propose following wording: "<u>The</u> closing devices are leaktight (visual inspection) <u>on</u> both sides <u>of the wagon</u>."

Comment is related to the explanation column of item 3.6 (top filling) and item 3.8 (bottom filling:

The explanation should be rephrased, as in most of the cases the closing device is screw cap. In general a screw cap cannot be sealed, this means even if it was not open/used during loading it cannot be verified that it was not used (according to the explanation). We suggest using the wording "if the other (unused) device has been sealed or secured in case of a screw cap is tool-tight and it can thus be [...]".

31. Comments on the checklists (relevant for top and bottom discharge checklist for liquids) – item 1.2

We recommend naming the stop-valves (bottom valve, side valve) otherwise this point leads to different interpretation.

As in these checklists tank-wagons for fluid gas under pressure are not considered, there is no kind of tank-wagon with blank flanges as closing device.

Further to avoid any misunderstandings the sentence "[...] *closing device* [...] *are closed both sides and* [...]" should be changed to "[...] closing device [...] are closed both sides <u>of the tank-wagon</u> and [...]".

Explanation column to item 1.2: "[...] *in the same proper condition as when they are in-stalled.*[...]". Either change "they are" to "were" or delete.

In case the sentence remains it would read as follows:

"[...] in the same proper condition as when they are were installed.[...]"

<u>Comments on the checklists (relevant for top and bottom discharge checklist for liquids) – item</u>
<u>1.3</u>

Explanation column: "[...] in the transport documents and by comparison with the UN number on the orange-coloured plate and with [...]"

33. <u>Comments on the checklists (relevant for top and bottom discharge checklist for liquids) – item</u> <u>1.4</u>

Check column: The sentence should be re-written in following form:

"The discharge devices are properly connected and the stop-valves are opened in the correct order." This would avoid misunderstandings.

Explanation column: The wording in the column "Explanation" is too general. The explanation should clearly mention that within the operating instructions the opening sequence of the stop-valves has to be regulated.

34. <u>Comments on the checklists (relevant for top and bottom discharge checklist for liquids) – item</u> <u>1.5</u>

From an operator's point of view the item 1.5 can be deleted as it is the same as item 1.2.

35. Comments on the checklists (relevant for all four checklist for liquids) - item 2.1

The need for supervision should be clarified in all four checklists.

For the discharge checklists item 2.1 (explanation column should be changed to "<u>Permanent</u> supervision will enable rapid emergency response (e.g. in case of a leakage, etc.)."

For the filling checklists item 2.1 (explanation column should be changed to "<u>Permanent super-</u> vision will enable rapid emergency response (e.g. in case of overfilling, leakage, etc.)."

36. <u>Comments on the checklists (relevant for top and bottom discharge checklist for liquids) – item</u> 3.1

Replace "or" with "," and the last "," with "or" in the series of measures.

The sentence would read as follows:

"Other suitable measures are, e.g. sight glass or , use flow meters in the discharge device pipes, weighing, change in pump noise, or product no longer carried."

37. Comments on the checklists (relevant for bottom discharge checklist for liquids) - item 3.2

General remark to the description of the procedure in the explanation column of item 3.2:

The procedure for bottom discharge is as follows:

- The bottom valve is the first (inner/internal) stop valve.
- After closing the internal stop valve (bottom valve) close the external stop valve (lever operated ball valve or hand wheel). Then disconnect the unloading connection while using a collecting container/drip tray/bucket to catch up residues underneath the disconnection. When there is no significant substance feint, close the closing device (Cap with intact gasket, inspected visually before mounting). Depending on substance properties there might be still product adhesions inside.

Shut-off device is not a RID terminology according to RID it has to be stop valve. In our opinion the part "internal and external shut-off and closing devices are closed in accordance with the operating instructions" could be deleted, if the operating instructions at the unloading site are meant. In case the sentence refers to operating instructions from the tank-wagon than this has to be mentioned. Otherwise it is unclear.

Explanation column:

For better understanding following sentence should be changed:

"Following the cGlosing sequence observed (from inside to outside), internal and external shutoff and closing devices are closed in accordanceing to with the operating instructions."

38. Comments on the checklists (relevant for bottom discharge checklist for liquids) - item 3.3

Similar as in item 3.2 (replace shut-off devices by stop valves). In addition the sentence "*The closures must be equipped with suitable gaskets. They must be in a proper condition and must be replaced when necessary. Bolts in blank flanges must be of proper length.*" should be in the explanation of item 3.4. instead. "*Closures*" should be replaced by "<u>Closing device</u>" otherwise it could be understood the unloading site has to change all gaskets including those of side and bottom valves. Closures is the umbrella RID-term for all bottom openings. Further we are not aware that non-pressurized tank-wagons for liquids are equipped with blank flanges.

39. <u>Comments on the checklists (relevant for bottom filling and discharge checklist for liquids) –</u> <u>item 3.5, item 3.4</u>

The comment is relevant for item 3.5 (bottom filling) and item 3.4 (bottom discharge).

The sentence in the check column "Closing device (e.g. screw thread, blank flange) correctly mounted (seals present and checked), closed with suitable tools and leaktight on both sides (visual inspection)." could lead to the misunderstanding that the inner side of a valve has to be visual inspected when the tank is filled. We propose following wording: "Closing device (e.g. screw thread, blank flange cap with sealing) are correctly mounted (seals present and checked), closed with suitable tools and leaktight on both sides 3. Sealing the tank is filled. We propose following wording: "Closing device (e.g. screw thread, blank flange cap with sealing) are correctly mounted (seals present and checked), closed with suitable tools and leaktight (visual inspection) on both sides of the wagon."

The sentence in the explanation column should be rephrased, as in most of the cases the closing device is screw cap. In general a screw cap cannot be sealed, this means even if it was not open/used during loading it cannot be verified that it was not used (according to the explanation). We suggest using the wording "if the other (unused) device has been sealed or secured <u>in case of a screw is tool-tight</u> and it can thus be [...]".

The sentence in the explanation column: "*To close the cap, only suitable tools may be used.*" is redundant and could be deleted. Other changes are mentioned in item 3.3 and item 3.6 (Points relevant to leaktightness for filling tank-wagons (top filling) liquids).

40. Comments on the checklists (relevant for bottom discharge checklist for liquids) - item 3.6

The check should be rephrased to reflect the new development of tank-wagons, that no ladders exist to climb on the roof of a wagon. This means that this should be only checked in case the unloader opened the dome. In all other cases the unloader has to trust that the filler correctly locked and sealed the dome.

Comments on Annex 4 Revised checklists for the filling an emptying of liquefied gas tankwagons

41. General Remark on the revised checklists:

There are overlaps between the checklists and the existing control measures in accordance with RID 4.3.3.4.1 to 4.3.3.4.3, but also requirements that are not covered by the checklists (as with the checklists for liquids, by the way):

- Check the information on the tank plate and wagon panel (4.3.3.4.1)
- Check of pressure of inert gases in the gas phase
- Visual check of the wagon, its marks, placards, etc.

42. Comments on the checklists (relevant for bottom filling checklist for gases) - item 1.7

The sequence of opening the valves does not make sense. In item 1.7 all internal and external stop-valves on the filling side are opened and in item 1.7.1 "Verify that the internal stop-valves are leaktight and secured against unintentional opening". From our point of view the leakthightness should be checked before opening, as the valves could become untight after opening and closing.
