Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods
Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)
Forty-third session
Geneva, 22-26 January 2024
Item 5 (b) of the provisional agenda
Proposals for amendments to the Regulations annexed to ADN: other proposals

ADN Checklist

Transmitted by the Government of the Netherlands* **

Summary

Related documents: ECE/TRANS/WP.15/AC.2/2023/44
Informal document INF.2 of the forty-second session
Informal document INF.17 of the forty-second session
Informal document INF.25 of the forty-second session
ECE/TRANS/WP.15/AC.2/86 (Paragraph 55)
Informal document INF.11 of the forty-first session
ECE/TRANS/WP.15/AC.2/84 (Paragraph 40)

Introduction

1. During the forty-second session of the ADN Safety Committee, the Dutch delegation proposed amendments to the ADN Checklist in 8.6.3. All delegations were invited to send additional comments on this proposal to the representative of the Netherlands. We would like to thank the delegations that send their feedback.

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* Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2024/29
** A/78/6 (Sect. 20), table 20.5
2. The Dutch delegation has received comments in the form of two informal documents of the forty-second session, INF.17 from Germany and INF.25 from FuelsEurope supported by the European Barge Union and the European Skippers Organization (EBU/ESO). These comments were carefully considered and many were included in our revised proposal for amendments to the ADN Checklist (informal document INF.3). The current document provides a reflection on all comments.

I. Comments from informal document INF.17 of the forty-second session (Germany)

3. Checklist in digital form instead of on paper. The informal working group on certificates and other shipboard documents in electronic form is working on proposals to allow for certain documents to be carried on board in an electronic format, the informal working group is also considering the electronic form of the checklist. This proposal aims to update the content of the checklist.

4. Information on previous cargo (“gas-free/degassed” status). The information on the state of emptiness of the cargo tanks could be valuable information for the loading process. On the basis of this comment we amended the proposal to include this information under the table for the particulars of the last cargo.

5. No. 6.1 (unnecessary question, duplicate of 6.2 and 6.4). While the second question of 6.1 (newly proposed question 6.2) seems redundant because questions 6.2, 6.3 and 6.4 (newly proposed questions 6.3, 6.4 and 6.5) cover the subject, with the allowing of other technical solutions for the connection it becomes less clear whether questions 6.2, 6.3 and 6.4 cover the correct connection and an "overarching" question seems to add safety. Therefore, we propose to maintain the second question of 6.1 (newly proposed question 6.2) in the checklist.

6. No. 6.3 "Are all the connecting bolts fitted and tightened?" (permit other technical solutions than "connecting bolts"). The question 6.3 (newly proposed question 6.4) is already proposed to be amended to include the wording "(or equivalent)", as well as added wording in the explanation "or other types of suitable couplings (e.g. claw coupling)". On the basis of the comment on thread projection we have amended the proposal to include the wording "and do their threads project past the nuts".

7. Nos. 12.1 and 12.2 (integration of a footnote into the body of the text, extension to include “unloading”, as gas is also returned during unloading). On the basis of this comment we amended our proposal and rewrote question 12.

8. Nos. 15.1 and 15.2: (confirmation both by the master and the person in charge at the loading/unloading place). We proposed to renumber question 15.1 and 15.2 as 13.1 and 13.2 and to have these questions checked by both the vessel and the loading/unloading place.

9. No. 17: (cf. no. 15). On the basis of this comment we amended our proposal and rewrote question 17 to align it with question 15 structurally.

II. Discussion on responsibilities from informal document INF.25 of the forty-second session (EBU/ESO, supported by FuelsEurope)

10. A number of comments from informal document INF.25 have to do with the responsibilities of the two parties and which party should check for which question. In informal document INF.25 it is proposed to remove the second checkbox for questions 7.1, 7.2, 10.1 (and to split 10.1 up into 10.1.1, 10.1.2 and 10.1.3), 19.1 (numbering as proposed in this document) and 19.4 (numbering as proposed in this document). The Dutch delegation would like to request the ADN Safety Committee to discuss whether the checkbox for the loading/unloading place for these questions should be removed, as is proposed in informal document INF.25 from the last session, or whether the second checkbox should remain. The relevant proposals have been indicated in this document between square brackets, pending the decision of the Safety Committee.
III. Other comments from informal document INF.25 of the forty-second session (EBU/ESO, supported by FuelsEurope)

i. Proposed changes to document ECE/TRANS/WP.15/AC.2/2023/44

Page 1 (d)

11. Last session we proposed a footnote to read: “This is the actual quantity as stated in the transport document that will be loaded”. This is not possible, since the transport document is only completed after the filling. The proposed footnote in informal document INF.25 referred to a document that is not defined in ADN (the order). Since the footnote was only proposed as a clarification, we have withdrawn a proposal for this footnote. The quantity stated in the checklist is of particular interest for the end-phase of the loading, where a reduction of the loading velocity should ensure that over-filling does not occur.

Page 1 (e)

12. On the basis of this comment we withdraw the proposal to reduce the number of lines for the table for the particulars for the last cargo. Since it is possible that a cargo will be loaded into several cargo tanks that each held different last cargoes, this should be reflected in this table. To allow for sufficient space, we also propose to move this table to the second page.

Page 2 (h)

13. On the basis of this comment we amended our proposal to rewrite the sentence on draining.

Page 2 (j)

14. The text which we proposed last session contains amendments to align the text with 7.2.4.10.1 to avoid confusion. The proposed text in informal document INF.25 deviates more from the text in 7.2.4.10.1, it was unclear how a larger deviation of the text would lead to less confusion and therefore we have maintained our original proposal. To include the reference to 7.2.4.10.1 we additionally propose to include the following explanation for the questions: “The list shall be completed, after the pipes intended for the handling are connected and prior to the handling, in duplicate and signed by the master or a person mandated by the designated responsible persons on board and at the shore facility, as described in 7.2.4.10.1.”

Questions (l) question 7

15. See the discussion under paragraph 10. Should the checkbox for the loading/unloading place for questions 7.1 and 7.2 be removed?

Questions (u) question 20

16. On the basis of this comment we amended our proposal to include a line for the Temperature to be agreed.

Questions (renumbered question (m ii 8.2), new question 21.2

17. See the discussion under paragraph 10. Should the checkbox for the loading/unloading place for question 19.4 be removed?

Explanation Question 12

18. On the basis of this comment we amended our proposal to include a reference to 7.2.4.16.12.
ii. Proposed corrections to document ECE/TRANS/WP.15/AC.2/2023/44

New question 9.2
19. On the basis of this comment we included a proposal for this amendment in our working document.

Explanation, Question 9
20. On the basis of this comment we amended the references for questions 9.1 and 9.2. We however propose to also refer to 7.2.3.25.1 and 7.2.3.25.2 for question 9.2.

Additional proposals for ADN 8.6.3

Particulars of vessel
21. On the basis of this comment we amended our proposal to include information on the explosion (sub)group and temperature class of the vessel. We do agree that this information is important and relevant for the safety of the loading process. However, the decision whether a vessel is suitable for a certain cargo should be made well in advance of the filling in of the checklist.

Question 1 – Is the vessel permitted to carry this cargo?
22. In informal document INF.25 it is proposed to amend question 1 to: “Is the cargo to be carried present on the ship’s substance list?”, wording which now can be found in the proposed explanation of the question. We decided that the current wording of question 1 is more to the point and should not be amended. We did not include this comment into our proposals.

Question 10.1
23. See the discussion under paragraph 10. Should question 10.1 be divided into three sub-questions: 10.1.1 At the vessel, 10.1.2 At the loading/unloading place?, and 10.1.3 At the connection interface? With the responsibilities for the vessel and the loading and unloading place only shared for the connection interface?

Question 12.2
24. On the basis of this proposal we include a checkbox for the vessel for question 12.2.

New questions 13
25. The authors of informal document INF.25 proposed to add the following explanation for question 15 (new numbering question 13):

“13.1: The vessel ensures that the maximum working pressure of the vessel’s cargo discharge pump(s) meets the unloading place’s conditions. The unloading place only confirms the question if the conditions are met.

13.2: The loading place ensures that the maximum working pressure of the shore pump meets the vessel’s conditions. The vessel only confirms the question if the conditions are met.

See also 7.2.4.16.1.”

26. The proposal from informal document INF.25 is that the unloading place / the vessel only confirm the question if the conditions are met, however both questions have a line with an agreed pressure to be filled in. Also, according to 7.2.4.16.1 it is required that the pressure is determined in agreement with the personnel of the shore installation. Therefore, we are of the opinion that the “second party” should be included in the determination of the agreed pressure. However, we do agree that an explanation for question 13 could be beneficial, we therefore propose a slight variation to the wording to reflect that the “second party” has to be consulted in the determination of the pressure:
“13.1: The pressure to be filled in, is determined in agreement, the vessel ensures that the maximum working pressure of the vessel’s cargo discharge pump(s) meets the unloading place’s conditions does not exceed the agreed pressure. The unloading place only confirms the question if the conditions are met.

13.2: The pressure to be filled in, is determined in agreement, the loading place ensures that the maximum working pressure of the shore pump meets the vessel’s conditions does not exceed the agreed pressure. The vessel only confirms the question if the conditions are met.

See also 7.2.4.16.1.”

27. We have included both variants in square brackets in our proposal as option 1 and option 2.

Question 19

28. See the discussion under paragraph 10. Should the checkbox for the loading/unloading place for question 19.1 be removed?

Question 20

29. The authors of informal document INF.25 proposed to add the following explanation for question 20 (new numbering question 19.2):

“If this question is applicable
The loading place ensure the permissible maximum loading temperature meets the conditions as described in instruction 7.2.3.28. The vessel only confirms the question positively if the conditions are met.”

30. The proposal from informal document INF.25 is that the vessel only confirms the question if the conditions are met, however, based on another proposal from informal document INF.25 a temperature to be agreed has to be filled in. We propose to harmonize the wording of this explanation to reflect that the loading temperature has to be determined in agreement:

“For 19.2: If this question is applicable. The loading temperature is determined in agreement, the loading place ensures that the permissible maximum loading temperature meets the conditions is within the permissible temperatures as described in instruction on maximum loading temperature (7.2.3.28). The vessel only confirms the question positively if the conditions are met.”

31. We have included both variants in square brackets in our proposal as option 1 and option 2. We also propose to include 7.2.3.28 as a reference for 19.2

(New) questions 19 to 21

32. On the basis of this comment we amended our proposal to renumber questions 19 to 21 (of our proposal of last session) as question 19, with sub questions 19.1 through 19.4

IV. Proposal

33. The Netherlands propose the following amendments, new text is bold and underlined, deleted text is strikethrough. An updated version of the (English) ADN Checklist in 8.6.3 containing all proposed amendments in track changes, as well as a “clean new” version, is provided in informal document INF.3.

i. Re: ADN Checklist

– Insert page numbers to every page and include the total number of pages (i.e. “1 of 8”).
ii. Re: Page 1

- Insert “The Explanation section constitutes an integral part of this Checklist” after the introductory sentence at the top of page 1.

- Insert “……………………(explosion (sub)group / temperature class)” to the right of “(vessel type)”, and underneath “No.………….. (official number)”.

- Amend the Table following “- Particulars of the cargo as indicated in the transport document” as follows:
  1. Change the column order to align with Table C: “Quantity m³ / UN Number or Identification number / Proper shipping name * / Packing Group / Dangers***”;
  2. Only for the English version: Remove the dotted line from the cell “Dangers***”;
  3. Reduce the number of dotted lines to one, except for “Proper shipping name *”.

- Renumber the relevant footnotes.
- Move the line “- Particulars of last cargo*”, the table following it and the relevant footnote to the next page.

iii. Re: Page 2

- In the Table following “- Particulars of last cargo*”:
  1. Insert a column “Cargo tank number(s) of vessel” and a column “Discharged/empty/gas free”;
  2. Only for the English version: Remove the dotted line from the cell “Dangers***”;
  3. Change the column order to align with Table C: “Cargo tank number(s) of vessel / UN Number or Identification number / Proper shipping name ** / Packing Group / Dangers*** / Discharged/empty/gas free”;

- Insert a new header before the table with the loading/unloading rate:
  “- Particulars of loading/unloading”.

- In the Table concerning Loading/unloading rate:
  1. Remove the column “Proper shipping name**” and the accompanying footnote, redistribute the remaining columns over the width of the page;
  2. Add “(s) of vessel” to “Cargo tank number”.

- After the Table concerning Loading/unloading rate:
  1. Insert a new header “- End of loading”;
  2. Amend the first question as follows:

    “How will the cargo piping be drained after loading or unloading by stripping or by blowing residual quantities to the shore installation/to the vessel after loading/unloading?****”;

  3. Amend the options as follows: “by blowing****” and “by stripping****”;
  4. Insert the option “by gravity****” after “by stripping****”;

- Renumber the relevant footnotes.
- Insert a page break before the header “Questions to the master or the person mandated by him and the person in charge at the loading/unloading place”.

- Amend the text preceding the Questions as follows:
“Questions to the master or the person mandated by him and the person in charge at the loading/unloading place at the shore facility responsible for the handling

Non-applicable questions have to be deleted crossed out.”

iv. Re: Questions

Amend Question 6 as follows:

1. Amend header 6 as follows: “6. Vessel/shore connections”;
2. “6.1 Is the piping for loading or unloading between vessel and shore in satisfactory condition?”;
3. “6.2 Is the piping for loading or unloading correctly connected?”;
4. “6.3 Are all the connecting flanges fitted with suitable gaskets?”;
5. “6.4 Are all the connecting bolts (or equivalent) correctly fitted, and do their threads project past the nuts?”;
6. “6.5 Are the shoreside loading/unloading arms free to move in all directions and do the hose assemblies have enough room for easy movement?”;
7. Align the numbering of all question numbers to the left side.

Amend Question 7 as follows:

1. Insert a new header: “7. Vessel piping systems”;
2. Renumber Question 7 to 7.1;
3. “7.1 Are all flanges of the connections of the piping for loading and unloading and of the venting piping not in use, on board, correctly blanked off?”;
4. [Remove the “O” for the loading and unloading place for question 7.1 and replace it by a “–”].

Amend Question 8 as follows:

1. Renumber Question 8.1 to 8;
2. Renumber Question 8.2 to 19.4.

Amend Question 9 as follows:

1. Insert a new header: “9. Connections between piping”;  
2. Renumber question 9 to 9.1;
3. Insert a new Question “9.2 Are the moveable connecting pieces between the suitable venting equipment on the one hand and the piping for loading and unloading on the other hand disconnected?” for the vessel.

Amend Question 10 as follows:

1. Insert a new header: “10. Safety provisions”;  
2. Renumber Question 10 to 10.1;
3. [Add a new Question “10.1.1 At the vessel” for the vessel];
4. [Add a new Question “10.1.2 At the loading/unloading place” for the loading/unloading place];
5. [Add a new Question “10.1.3 At the connection interface” for the vessel and the loading/unloading place];
6. [Remove the “O”s for the vessel and the loading/unloading place for question 10.1].
Amend Question 11 as follows:
1. Insert a new header “11. Communication”;
2. Renumber Question 11 to 11.1;
3. Insert a new Question “11.2 The language used for operational verbal communication is …………” for both vessel and loading/unloading place.

Amend Question 12 as follows:
1. Insert a new header “12. Venting and vapour return piping”;
2. “12.1 For the loading of the vessel, Is the venting piping, where required, or if it exists, connected with the vapour return piping?”
3. For question 12.2 add “O” for the vessel and remove the footnote for the loading/unloading place.

Amend Question 13 as follows:
1. Renumber Question 13 to 14.

Amend Question 14 as follows:
1. Renumber Question 14, first indent to 10.2;
2. Renumber Question 14, second indent to 7.2;
3. [Remove the “O” for the loading and unloading place for question 7.2 and replace it by a “…”];
4. Renumber Question 14, third indent to 10.3;
5. Delete Question 14, fourth indent;
6. Renumber Question 14 to 15;
7. Amend the header “15. Check on the most operational requirements on board.”
8. Replace dashes with numbers (15.1, 15.2, etc.);
9. Align the numbering of all question numbers to the left side;
10. Insert a new Question “15.2 Are the ventilation systems and gas detection systems switched on and operational?”, for vessels only.

Amend Question 15 as follows:
1. For Question 15.1, add “O” for “loading/unloading place”;
2. For Question 15.2, add “O” for “vessel”;
3. Renumber Question 15.1 to 13.1;
4. Renumber Question 15.2 to 13.2;
5. Insert a new header “13. Working pressure”.

Do not amend Question 16.

Amend Question 17 as follows:
1. Insert a new header “17. Overflow prevention”;
2. Amend the first Question 17: “17.1 Is the overflow prevention device following system plugged in, in working order and tested when loading? Overflow prevention device □ when loading □ when unloading”. 
3. Amend the second question 17: "17.3 is the device for switching off the on-board pump from the shore facility plugged in, in working order and tested when unloading? (only when unloading the vessel);"

4. Add a new question "17.2 Is the overflow prevention device plugged in, in working order and tested when unloading?" for the vessel and the loading/unloading place.

Amend Question 18 as follows:

"To be filled in only in the case of loading or unloading of substances for the carriage of which a closed cargo tank or an open cargo tank with flame arrester is required.

Amend Questions 19 and 20 as follows:

1. Change the asterisks in the columns “vessel” and “loading/unloading place” from two to one;

2. Change the accompanying footnote accordingly from two to one asterisk.

3. Reumber question 20 as question 19.2;

4. Add “(agreed temperature __ °C)” after the question mark for question 19.2;

5. Insert a new Question “19.3 Are suitable facilities to collect leaked liquids provided underneath the refrigerated liquified gas connections and are they empty?” for both vessel and loading/unloading place;

6. [Remove the “O” for the loading and unloading place for Questions 19.1 and 19.4].

Rearrange the Questions in a numerical ascending order.

v. Re: Explanation

- Insert the following text after the header Explanation:

“General information

Particulars of vessel

For “vessel type”, state the type of vessel, cargo tank design, type of cargo tank and opening pressure of the pressure relief valves/high-velocity vent valves/safety valves following the definitions given in 1.2.1 and the certificate of approval (for example, C-2-2-50).

Particulars of last cargo

This concerns the last cargo of all tanks to be loaded.

For “Discharged/empty/gas free” indicate whether the cargo tank is discharged, empty or gas free, for the condition of being gas free, evidence should be provided.

Particulars of loading/unloading

It should be unambiguous to which cargo tank the “cargo tank number(s) of vessel” refers. Where necessary, add additional information to distinguish between cargo tanks (e.g. “starboard 1-1”).

The “estimated residual quantity” is the maximum quantity of product that will flow after active loading or unloading has stopped. It is the amount of product remaining in the hose or loading arm estimated from the last closed valve, expressed in litres. Operationally, the quantity at which loading is stopped in the final stage should be agreed upon in order to safely receive the residual quantity.

The “permissible maximum pressure in the cargo tank” refers to the maximum pressure of the high-velocity vent valve.”
− Insert a new header “Questions”, followed by following text:

“The list shall be completed, after the pipes intended for the handling are connected and prior to the handling, in duplicate and signed by the master or a person mandated by the designated responsible persons on board and at the shore facility, as described in 7.2.4.10.1.”.

− Amend the section “Explanation” as follows:

Add: “Question 1

Prior to loading, both parties will check whether the vessel is permitted to carry this cargo by means of the vessel substance list.

See also 1.4.2.2.1a, 1.4.3.3n, 7.2.1.21.”

Question 2

(Reserved)”.

Question 3: Add a new paragraph to read:

“See also 1.1.4.6, 7.2.4.76, 7.2.5.3.”

Question 4: Add a new paragraph to read:

“See also 1.4.3.3(q), 1.4.3.7.1(g).”

Add: “Question 5

See also 7.2.4.53.”

Question 6: Replace the last sentence by:

“In addition, all flanged joints must be fitted with appropriate gaskets and sufficient bolt connections or other types of suitable couplings (e.g. claw coupling) in order to exclude the possibility of leakage.

For 6.1, see also 9.3.x.25.

For 6.3, see also 1.4.3.3(t), 1.4.3.7.1(k).

Add: “Question 7

All openings of the venting piping and connections to shore installations used for loading and unloading, through which the loading and unloading operation is carried out, shall be provided with safety valves. All openings, when not in use for loading and unloading, shall be fitted with a blind flange.

Question 8

The receptacle intended for recovering possible liquid spillage shall be earthed to the metal structure of the vessel. Pipe connections shall be relieved of pressure prior to connection or disconnecting and the minimal amount of product that may be released shall be caught in the receptacle.

See also 7.2.4.16.5.

Question 9

The suitable venting equipment (fan, flame arresters and connecting pieces) should be disconnected from the piping for loading and unloading before the loading and unloading starts.

For 9.1, see also 7.2.3.25.1, 7.2.3.25.2.

For 9.2, see also 7.2.3.7, 7.2.3.25.1, 7.2.3.25.2.”

Question 10: Add at the end:

“For 10.1, see also 1.4.3.7.1(l), 1.4.3.3(u).

For 10.2, see also 7.2.4.40.
For 10.3, see also 7.2.4.41.”

**Question 11:** Add a new last sentence to read as follows:

“Communication shall be ensured for the entire duration of the loading/unloading operation. It shall take place in a language both persons can understand.”

Add: **“Question 12**

In addition to the requirement of 7.2.4.25.5 ADN other regulations could prescribe the use of the vapour return piping and the venting piping, such as local regulations or permits.

For 12.1, see also 7.2.4.25.5.

For 12.2, see also 1.4.3.3s, 1.4.3.7.1j, 7.2.4.16.6.

For 12.3, see also 1.4.3.3r, 1.4.3.7.1i, 7.2.4.16.12.”

Add: **“Question 13**

[OPTION 1:][13.1: The vessel ensures that the maximum working pressure of the vessel's cargo discharge pump(s) meets the unloading place’s conditions. The unloading place only confirms the question if the conditions are met.

13.2 The loading place ensures that the maximum working pressure of the shore pump meets the vessel’s conditions. The vessel only confirms the question if the conditions are met.

See also 7.2.4.16.1.]

[OPTION 2:][13.1: The pressure to be filled in, is determined in agreement, the vessel ensures that the maximum working pressure of the vessel's cargo discharge pump(s) does not exceed the agreed pressure.

13.2 The pressure to be filled in, is determined in agreement, the loading place ensures that the maximum working pressure of the shore pump does not exceed the agreed pressure.

See also 7.2.4.16.1.”]

**Question 13:** Renumber as 14

Add: **“Question 15**

The systems mentioned in 15.3 shall remain switched on during the operation.

“Ventilation systems” refers to systems for the accommodation, wheelhouse and service spaces as described in 9.3.x.12.4.

For 15.6, see also 7.2.3.51.6, 9.3.x.12.4

**Question 16**

See also 9.3.x.21.4.”

**Question 17:** At the end add:

“For 17.1 and 17.2, see also 7.2.4.13.2, 9.3.x.21.5.”

Add: **“Question 18**

See also 7.2.3.22.

**Question 19**

[OPTION 1:][If this question is applicable The loading place ensures that the permissible maximum loading temperature meets the conditions as described in instruction on maximum loading temperature 7.2.3.28. The vessel only confirms the question if the conditions are met.]

[OPTION 2:][ For 19.2: The loading temperature is determined in agreement, the loading place ensures that the permissible maximum loading temperature is within the
permissible temperatures as described in instruction on maximum loading temperature (7.2.3.28).]

For 19.2, see also 7.2.3.28.

For 19.3, see also 7.2.4.29, 9.3.1.21.11.

For 19.4, see also 7.2.4.2.9.”

vi. Consequential amendments

Amend the second sentence of 7.2.4.10.1 as follows:

“Irrelevant questions should be crossed out.”

V. Justification and Sustainable Development Goals

34. With this proposal we aim to align the ADN checklist more with the ADN itself. To that end, we propose to include references to relevant parts of ADN in the explanations of the ADN checklist and to re-arrange the columns for the particulars of the (last) cargo.

35. To prevent misunderstandings over the checklist, we propose to add a number of explanations. Furthermore, we made some proposals to improve the checklist editorially.

36. As a clear ADN checklist contributes to a safer loading/unloading process with less accidents, incidents and spills; this proposal could be linked to Sustainable Development Goals: 6; improve water quality by reducing pollution, 8; promote safe and secure working environments for all workers, 9; improved infrastructure, and 15; prevention of unnecessary spills to the aquatic environment.

VI. Action to be taken

37. The ADN Safety Committee is requested to consider the proposals and to take action as it deems appropriate.