
Economic Commission for Europe**Inland Transport Committee**

17 July 2019

English

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)****Thirty-fifth session**

Geneva, 26-30 August 2019

Item 3 (e) of the provisional agenda

Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN): matters related to classification societies

Minutes of the seventeenth meeting of the informal working group of Recommended ADN Classification Societies

Date: 27 March 2019, 10:00-16:00

Location: DNV GL Maritime Head Office, Hamburg, Germany

Attendees:

- BV: Mr. Guy Jacobs
- DNV-GL: Mr. Torsten Dosdahl (chairman)
- LR: Mr. Bas Joormann, Mr. Karel Vinke
- SRU: Mr. Mykola Slozko
- RRR: Mr. Michael Kozin
- CRS: Mr. Ivan Bilić Prcić
- ADN Safety Committee: Mr. Henk Langenberg (chairman ADN ...), Mr. Benjamin Beldman (The Netherlands, observer)

Not attending (with notices):

- BV: Mr. Jean-Michel Chatelier
- RINA: Mr. Pavlos Safralis
- RMR: Mr. Sergey Legusha

1. Opening

The chairman welcomes the participants. Some additional technical issues have been submitted for agenda item 4.

2. Minutes of Meeting 16th meeting, action points (doc 16.IG.10)

The list of action points is discussed.

(a) Propylene Oxide (LR) – document: doc 17 IG 02a

Mr. Vinke introduced a new version of a muster cargo handling plan for Propylene Oxide, developed on the basis of the IBC Code. Due to very short time between submission of the document and the session the members decided that comments have to be sent to the chairman. They will be collected; the document remains on the agenda for the next meeting.

Action point is still open (**action All**).

(b) Sliding seals (BV) – no document

Action point is still open (**action BV**).

(c) Working group on 9.3.4. (BV) no document

BV is working on a proposal for another calculation method. But this is to be considered in relation to an entire update of 9.3.4. BV is encouraged to work further on this and inform the ADN Safety Committee accordingly (MoM from 16th meeting of this Group). No new information, BV is further working on finalisation of the software. Action point is still open (**action BV**).

- (d) Pressure drop calculations (LR).

Mr. Beldmann informed the group that The Netherland delegation plan to organize a presentation to the theme at the next meeting of the ADN Safety Committee. The group decided to wait for further discussions at ADN Safety Committee. (**actual no action necessary**)

- (e) Using LNG boil off as fuel (LR).

The IGC Code of the IMO has requirements for the use of boil off. Also the IGF Code has some requirements in this respect. It's concluded that the requirements of IGC Code can be used. BV will submit a document with explanation for the ADN Safety Committee (MoM from 16th meeting of this Group).

No new information, will be hold on the agenda for the next meeting (**action BV**).

- (f) Stability, transitional provisions – document: doc 17 IG 02 f

(see MoM 13th and 14th session) - Mr. Weiner (Germany) had asked to reactivate this topic, because it was no longer on the agenda of the 15th and 16th meeting of this group. It was decided that comments to the paper shall be submitted directly to BV Mr. Jacobs and that BV will submit an official paper to the ADN Safety Committee (**action all / BV**).

3. Items from last ADN Safety Committee meeting (report WP.15/AC.2/70)

- (a) Using LNG boil off as fuel – point 29, 1st point.
This point was handled under TOP 2 e)

- (b) Transitional provisions – point 29, 2nd point

Mr. Beldman explains that the MA 018 has to be updated by the member states and the transitional provisions for the electrical and non-electrical equipment (9.3.X.12.4) has to be adapted or deleted.

(**actual no action necessary**)

- (c) (Tanks larger than 1.000 m³ - point 29, 3rd point
Handled under TOP 4 e)

- (d) High velocity valves related to higher temperatures – point 29, 4th point
Handled under TOP 4 f)

- (e) Actual status of approval of loading instruments – point 31 (34 - INF.16)

Document for status of loading instrument approval will be updated and send around for completion (**action DNV GL**)

- (f) UN 2057 Tripropylene – point 71 (34 - INF.9)

Actual no action necessary for this group.

- (g) Fire-extinguishing equipment for dry cargo vessels (9.1.0.40.1) – point 43

It was decided that all group members send their information about current practices regarding the location of the fire-extinguishing equipment for dry cargo vessels latest at the 1st July 2019 to the chairman and he will collect the information and will send a paper to the ADN Safety Committee (**action all**).

4. Technical issues

- (a) Competent authority – *actual no document*.

BV will develop a list and contact the German delegation (Mr. Weiner) for this topic (**action BV**).

- (b) Battery powered ships (LR) – *actual no document*.
It was discussed whether additional requirements in ADN are necessary e.g. for power packs in the cargo hold, but first the general technical development in the CESNI-PT working group will be awaited.
No action required yet. Topic will be closed.
- (c) Explosion Group (BV). – *document 16.IG.4c*
The document was already discussed during the 16th meeting and it has been agreed where flame arrestors in exhaust systems are not used on gas tankers and explosion protection in Table C for gases are inserted for sake of completeness.
No further action necessary yet. Topic will be closed.
- (d) Interpretations ADN 2019 (BV) – *doc 16.IG.4d (distributed for 16th meeting), doc 16.IG.10*.
The conclusions of this document were discussed and agreed during the 34th meeting of ADN Safety Committee.
No further action necessary yet. Topic will be closed.
- (e) Tanks larger than 1.000 m³ (BV) – *actual no document*.
This item is on hold as BV's new software is not yet ready. When this software is ready it will be a starting point for further discussion whether an update of 9.3.4 is necessary.
Topic shall remain on the agenda (action BV).
- (f) High velocity valves related to higher temperatures (BV) – *doc 16.IG.4f (distributed for 16th meeting), doc 16.IG.10*.
The issue is clear and it's discussed if this really is a problem in practice. It's a common understanding that testing and certification of the P/V valves at higher reference temperatures is required to establish a maximum temperature the P/V valve is suitable to be used for. BV will develop an official paper and will send it to the ADN Safety Committee (**action BV**)
- (g) Vessel record (LR) – *doc 17 IG 04g*
Document was discussed and in principle agreed. Some adaptations will be made by Mr. Jormann and send around. After acceptance the chairman will send the final document to the ADN Safety Committee. (**action LR / DNV GL**)
- (h) Pushed boats and convoys (DNV GL) – *doc 17 IG 04h*
Document was discussed and in principle agreed. DNV GL will develop an official proposal and send around for comments. After acceptance the chairman will send the final document to the ADN Safety Committee. (**action DNV GL**)
- (i) Ventilation system dry cargo vessels (DNV GL) – *doc 17 IG 04i*
Document was discussed and following minimum requirements agreed as common point of view:
- Two ventilation ducts with two independent power sources. At pushed barges one power source could be installed on board of the push boat.
 - Due to end of transitional provisions for the ventilation of hold these facilities have to be installed at least to the renewal of ADN approval certificate.
- No further action necessary. Topic will be closed.
- (j) Sampling device on board of tankers Type N (BV) – *doc 17 IG 04j*
For the most participants the time was too short to collect the requested information about the used flame arresters for the sampling openings at tank vessels in service. LR confirms the point of view in the document that the most actual used flame arresters are from deflagration safe type but not capable of withstanding steady burning. LR is further the opinion that a detonation safe type is sufficient for this purpose. Further the difference between deflagration safe type and capable of withstanding steady burning type was discussed.

Finally it was decided that all members of the group will collect more information about the used flame arresters and that discussion of the paper will be continued at the next meeting of the group. **(action all)**

(k) Explosion group of non-electrical equipment (BV) – *doc 17 IG 04k*

It was discussed that it is difficult for the surveyors to identify the explosion group of non-electrical equipment on board of the vessels, specially the mechanical parts of cargo pumps.

The group decided that in such cases at least a declaration of the manufacturer has to be available on board that the device fulfills the requirements of a defined explosion group / subgroup and temperature class. For vessels in service before 1995 the transitional provision will be used and for the issue of the product list the temperature class T4 and explosion group II B will be assumed. No further documentation will be requested for non-electrical devices.

No further action necessary. Topic will be closed.

(l) List and Inspection of NON-electrical equipment (BV) – *doc 17 IG 04l*

BV presented with this paper a list of non-electrical equipment on board of a tank vessel. At this list is indicated whether an equipment is relevant for the EU Directive 2014/34 or not. Due to the short time for the members of the group to study this document it was decided that all members will check the list and will try to collect further information for non-electrical equipment on board of tank vessels. The discussion of the paper will be continued at the next meeting of the group. Then the group will also decide how to handle with equipment which is not relevant for the EU Directive 2014/34. **(action all)**

(m) Classification of zones (BV) – *doc 17 IG 04m*

The definition of zones for a tank vessel was discussed and the group came to the conclusion that the zones defined in ADN 1.2.1. – “Classification of Zones” has to be adapted and the concrete construction of each vessel has to be considered for this definition of the zones. The requirements for the classification of zones at the aft and fore ship part of the vessel must normally not adapted and has to be used as shown on the sketches in ADN. The definitions given in ADN 1.2.1 – “Explosion protection” are more a kind of an example of an explosion protection concept and do not contradict directly to the zones defined in the ADN.

No further action necessary. Topic will be closed.

(n) Protection wall (BV) – *doc 17 IG 04n*

Different questions in connection with the requested “protection wall” was discussed and the following was concluded:

- To prevent damage to the wall in locks, it is acceptable to reduce the width of the wall above deck in that way that the vertical outline above deck is drawn in by a maximum of 5°.
- The protection wall is not in general requested – see ADN 9.3.X.10.3 last sentence.
- The transitional provision for the “Protective wall” is unclear and should be adapted. BV will develop a proposal for the next meeting.

The topic remains on the agenda and will be further discussed at the next meeting. **(action BV)**

o. Protection wall (BV) – *doc 17 IG 04n*

The document was discussed and all members agree that there is a mistake in the wording of ADN 9.3.2.12.4 (b)(i). BV will send the document as official proposal to ADN Safety Committee. **(action BV)**

p. Transition provision, correction English version (BV) – *doc 17 IG 04p*

The document was discussed and all members agree that there should be a mistake in the transitional provisions of the English and probably Russian version. BV will send the document as official proposal to ADN Safety Committee. **(action BV)**

- q. Model of certificate of approval, correction (BV) – *doc 17 IG 04q*

The group came to the conclusion that some contents of the model of ADN certificate of approval appear twice in this model. A document with proposed changes will be prepared by DNV GL and send to ADN Safety Committee. The group also agrees to BV's proposed changes of the French version of the model certificate. BV will send a document to ADN Safety Committee. (**action DNV GL / BV**)

- r. 9.3.x.62 Valve for degassing to reception facilities (BV) – *doc 17 IG 04r*

The group discussed the paper and came to the following conclusions:

- to 1. The low-pressure valve mentioned in ADN 9.3.X.62 is an under-pressure valve with a setting pressure $> - 5$ kPa, so that this valve opens before the requested under pressure safety valve of the cargo tanks or piping system.
- to 2. The explosion group of the facilities mentioned in 9.3.X.62 are not considered when issuing the vessel's product list. It will be considered as movable equipment which has to be suitable for the product which shall be degassed with this equipment.
- to 3. See point 1.
- to 4. –
- to 5. There seems to be a disharmony in the requirements for the flame arrester. In 9.3.X.62 is requested that it has to be capable of withstanding a deflagration and in 1.4.3.8.1 is requested that it has to be capable of withstanding a detonation. The group could not solve which request is the right one for this purpose and asks the Safety Committee to discuss this point and decide which kind of flame arresters have to be used for the degassing facilities.
- to 6. Due to the fact that the type and approval of this equipment is not sufficient defined, the classification societies will not accept fixed installations on board of the tank vessels. The group recommend that the available under-pressure safety valve should be used to lead the air into the cargo tanks. This is common practice at sea going ships.
- to 7. The conditions for the degassing process have to be agreed between degassing facility operator and ship owner to ensure that the requirement with respect to the opening point of the low-pressure valve will be fulfilled.
- to 8. Has to be seen as a clarification for the degassing process.

Actual no action necessary for this group.

- s. Classification of Zones – Zone1 (BV) – *doc 17 IG 04s*

The wording for the definition of the zone 1 was discussed and the group came to the conclusion that the wording is partly a little bit unclear for the different languages. The English version seems the clearest definition. With respect to the cylinder around the openings the group concluded that the prescribed cylindrical zone around the openings from Zone 0 should be a semi-sphere at the top of the cylinder with a radius of 2,5 m. The Group asks the Safety Committee to review and confirm this interpretation. A second question in this document handles about the definition of zones for tank vessels with a hold space. This question could be solved on the basis of the actual definitions and the connected sketches. Nevertheless, the group believes the relationship between written definitions and illustrative sketches could be made clearer.

Actual no action necessary for this group.

- t. Windlass in Zone 2 (BV) – *doc 17 IG 04t*

At the discussion about this document it came up that not only a protective wall will be a solution for the arrangement of the anchor winch which is normally not explosion safe. The winch can also be arranged on a platform which is at least 500 mm high. The winch would then be outside Zone 2 and must not fulfil requirements for explosion protection. In Harbours with a defined zone on shore the anchor winch cannot be used.

A protection wall at the fore ship has only to be installed if a forward accommodation is arranged. On the basis of the sketch for the definition of zones the group concluded that

this wall has to be one meter high above deck and has to be extend one meter to forward direction of the vessel.

The Group asks the Safety Committee to review and confirm this interpretation.
Actual no action necessary for this group.

- u. Deflagration, detonation and steady burning (BV) – *doc 17 IG 04u*

Paper was discussed and it was decided that BV will send this paper for further discussion to the Safety Committee. (**action BV**)

5. Any other business

No further points were discussed under this item.

6. Next meeting

Next meeting will be held on Wednesday 23 October 2019 in Hamburg and will start at 9:30 a.m.
