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

Proposal for correction of paragraph 7.2.2.19.3 – revised version of document ECE/TRANS/WP.15/AC.2/2023/18

Transmitted by the Informal Group of Recommended ADN Classification Societies*

Introduction

1. At its twenty-fifth and twenty-sixth meetings, the informal group of Classification Societies discussed the content of 7.2.2.19.3 with the requirements for vessels used for propulsion of a pushed convoy or a side-by-side formation comprising a tank vessel carrying dangerous substances. The group concluded that during different re-numberings and adaptions of Part 9 during the last years some references in 7.2.2.19.3 were not fully correctly adapted.

2. As a result of the first discussion of the proposed changes during the forty-second session of the ADN Safety Committee the group verified in a second step, whether the building requirements of all referenced paragraphs in 7.2.2.19.3 are further necessary or applicable for this kind of vessels.

3. The study of the actual references from 7.2.2.19.3 shows that, in opinion of the group, the following references in bold are not correct and need to be adapted:

“7.2.2.5, 8.1.4, 8.1.5, 8.1.6.1, 8.1.6.3, 8.1.7, 8.3.5, 9.3.3.0.1, 9.3.3.0.3.1, 9.3.3.0.5, …”

4. As a basis for its study, the group compared the content of the references in 7.2.2.19.3 of ADN 2009, which was the last version of ADN before the introduction of the new

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** A/78/6 (Sect. 20), table 20.5
explosion protection concept, which led to extensive re-numbering in the regulation, with the content of the references in ADN 2023 and identified the following discrepancies in 7.2.2.19.3, which are shown in the table below.

5. Table with the results of comparison:

<table>
<thead>
<tr>
<th>References to requirements in ADN 2009</th>
<th>Reference to requirements with the same content in ADN 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.3.3.0.1 (a) The vessel’s hull and the cargo tanks shall be constructed of shipbuilding steel or other at least equivalent metal.</td>
<td>9.3.3.0.1.1</td>
</tr>
<tr>
<td>The independent cargo tanks may also be constructed of other materials, provided these have at least equivalent mechanical properties and resistance against the effects of temperature and fire.</td>
<td>9.3.3.0.1.3</td>
</tr>
<tr>
<td>9.3.3.0.1 (b) Every part of the vessel including any installation and equipment which may come into contact with the cargo shall consist of materials which can neither be dangerously affected by the cargo nor cause decomposition of the cargo or react with it so as to form harmful or hazardous products.</td>
<td>9.3.3.0.2</td>
</tr>
<tr>
<td>9.3.3.0.1 (c) Inside vapour pipes and gas discharge pipes shall be protected against erosion.</td>
<td>9.3.3.0.1.2</td>
</tr>
<tr>
<td>9.3.3.0.3 (d) All permanently fitted materials in the accommodation or wheelhouse, with the exception of furniture, shall not readily ignite. They shall not evolve fumes or toxic gases in dangerous quantities, if involved in a fire.</td>
<td>9.3.3.0.6</td>
</tr>
<tr>
<td>9.3.3.0.5 The use of plastic material for vessel’s boats is permitted only if the material does not readily ignite.</td>
<td>9.3.3.0.4 last line from table 4</td>
</tr>
</tbody>
</table>

6. The comparison of the building requirements referred to in 7.2.2.19.3 shows that the technical content of these requirements is more or less unchanged in ADN 2009 and ADN 2023. With the following changes the above mentioned incorrect references could be solved:

(a) “9.3.3.0.1” needs to be replaced by the following “9.3.3.0.1.1 for the vessel’s hull, 9.3.3.0.1.2, 9.3.3.0.1.3 and 9.3.3.0.2”;
(b) “9.3.3.0.3.1” needs to be deleted, this paragraph does not exist in ADN 2023;
(c) “9.3.3.0.5” needs to be changed into “9.3.3.0.4 last line from table 4 for the vessel’s boat”;
(d) 9.3.3.0.6 needs to be added.

7. As requested by the ADN Safety Committee, as a next step the group analysed whether the building requirements of all the paragraphs referred to in 7.2.2.19.3 are still necessary or applicable for this kind of vessels and concluded that the following references could be deleted:

“9.3.3.0.1.2 Inside venting piping shall be protected against corrosion.”

8. This paragraph is not necessary for the propulsion vessels in a convoy, as the venting pipes, if any, on board of such a vessel are not connected to the venting pipes of the tank vessel with an ADN approval certificate and are covered by other technical regulations.

“9.3.3.0.1.3 The independent cargo tanks may also be constructed of other materials, provided these have at least equivalent mechanical properties and resistance against the effects of temperature and fire.”

9. This paragraph is not necessary for the propulsion vessels in a convoy, as these vessels have no cargo tanks for the carriage of dangerous goods.
9.3.3.0.2 Every part of the vessel including any installation and equipment which may come into contact with the cargo shall consist of materials which can neither be dangerously affected by the cargo nor cause decomposition of the cargo or react with it so as to form harmful or hazardous products. In case it has not been possible to examine this during classification and inspection of the vessel a relevant reservation shall be entered in the vessel substance list according to 1.16.1.2.5.

10. This paragraph is not necessary for the propulsion vessels in a convoy, as these vessels do not carry dangerous goods themselves and cannot come into contact with them under normal working conditions and do not have their own list of substances.

9.3.3.12.6 last sentence - Ventilation inlets of service spaces in the cargo area may be located within that area.

11. This sentence is not applicable for the propulsion vessels, as these vessels have no cargo area in accordance with the ADN definition of cargo area.

**Proposal for amendment**

12. In summary of the above studies, the group asks the ADN Safety Committee to consider and adopt the following proposals for the adaptation of 7.2.2.19.3 for the next version of ADN:

   (a) "9.3.3.0.1" needs to be replaced by the following "9.3.3.0.1.1 for the vessel’s hull";

   (b) "9.3.3.0.3.1" needs to be deleted, this paragraph does not exist in ADN 2023;

   (c) "9.3.3.0.5" needs to be changed into "9.3.3.0.4 last line from Table 4 for the vessel’s boat";

   (d) 9.3.3.0.6 needs to be added.

   (e) The transitional provision for 7.2.2.19.3 needs also to be adapted (new text in bold and italic style, deleted text in strikethrough) as follows:
Vessels used for propulsion
Adaptation to new provisions
Provisions of 9.3.3.12.4, 9.3.3.51 and 9.3.3.52.1 to 9.3.3.52.8

N.R.M. from 1 January 2019
Renewal of certificate of approval after 31 December 2034

Until that date, the following requirements apply to vessels in service:

Vessels moving a pushed convoy or a side-by-side formation shall comply with the requirements of the following sections, subsections and paragraphs: 1.16.1.1, 1.16.1.2, 1.16.1.3, 7.2.2.5, 8.1.4, 8.1.5, 8.1.6.1, 8.1.6.3, 8.1.7, 9.3.3.0.1.1 for the vessel’s hull, 9.3.3.0.3.1, 9.3.3.0.4 last line from table 4 for the vessel’s boat, 9.3.3.10.1, 9.3.3.10.4, 9.3.3.12.4 (a) except the wheelhouse, 9.3.3.12.4 (b) except for the t90 response time, 9.3.3.12.6, 9.3.3.16, 9.3.3.17.1 to 9.3.3.17.4, 9.3.3.31.1 to 9.3.3.31.5, 9.3.3.32.2, 9.3.3.34.1, 9.3.3.34.2, 9.3.3.40.1 (although a single fire or ballast pump is sufficient), 9.3.3.40.2, 9.3.3.41, 9.3.3.50.1 (c), 9.3.3.50.2, 9.3.3.51, 9.3.3.52.6, 9.3.3.52.7, 9.3.3.52.8, 9.3.3.56.5, 9.3.3.71 and 9.3.3.74, when at least one vessel of the convoy or side-by-side formation is carrying dangerous goods.

The requirement of 9.3.3.10.4 may be met by fitting vertical protection walls not less than 0.50 m in height.

Vessels moving only type N open tank vessels do not have to meet the requirements of paragraphs 9.3.3.10.1, 9.3.3.10.4 and 9.3.3.12.6. These derogations shall be specified in the certificate of approval or the provisional certificate of approval as follows: "Permitted derogations": "Derogation from 9.3.3.10.1, 9.3.3.10.4 and 9.3.3.12.6; the vessel may only move type N open tank vessels.".