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)

Twenty-fourth session
Item 5 (b) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN:
Other proposals

Safety and control installations – level gauges according to
9.3.1.21.3/9.3.2.21.3 of ADN

Transmitted by the Government of Germany\(^1\,\^2\)

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**Summary**

**Executive summary:** The permissible maximum filling level currently required to be marked on level gauges in type C or G tanker vessels is not sufficient when these vessels are carrying substances for which a type N or C tanker vessel would suffice. In such cases filling levels higher than those set for substances explicitly assigned to type C or G in Table C are permissible.

**Action to be taken:** Amend ADN sections 9.3.1.21.3 and 9.3.2.21.3 to allow level gauges to be marked with other filling levels.

**Related documents:** None.

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\(^1\) In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94, ECE/TRANS/2012/12, programme activity 02.7, (A1b)).

\(^2\) Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2014/2.
Introduction

1. According to ADN 7.2.4.21.1, the degree of filling given in column (11) of Table C of Chapter 3.2 shall not be exceeded. The degree of filling is 97% for type N vessels, 95% for type C vessels and 91% for type G vessels.

2. In ADN 9.3.X.21.3, the second sentence states that “the permissible maximum filling level of the cargo tank shall be marked on each level gauge”.

3. According to ADN 7.2.1.21.2 to 7.2.1.21.4, substances for which a type N is sufficient may also be carried in a vessel of type C or G provided that all conditions of carriage prescribed for those substances are met. According to 7.2.1.21.5, substances that have to be carried in type C vessels may also be carried in a type G vessel.

4. According to ADN 1.4.3.3 (e), the filler shall, during the filling of the tank, observe the maximum permissible degree of filling or the maximum permissible mass of contents per litre of capacity for the substance being filled.

5. As a general rule type C tanker vessels have a marker on the level gauge to show when the tanks are 95% full. On type G vessels the marking generally shows 91%. This is in line with the indications in Table C for substances for which a vessel of that kind is required under column (6).

6. For example, when transporting UN No. 1202 DIESEL FUEL in a type C tanker vessel, the maximum degree of filling may be 97% in accordance with the indication in column (11) when under column (6) a type N vessel should be used (second line, and in accordance with the result from the flowchart).

7. In the case of carriage of UN No. 1202, as in the example above, where the maximum degree of filling is above the marking on the level gauge, the inspecting authorities could find a violation of the requirement for marking.

Proposal

8. Amend paragraphs 9.3.1.21.3 and 9.3.2.21.3 as follows:
   (a) Amend ADN 9.3.1.21.3, second sentence (type G vessels), as follows:
       “The permissible maximum filling levels of 91%, 95% and 97%, as given in the list of substances, shall be marked on each level gauge.”
   (b) Amend ADN 9.3.2.21.3, second sentence (type C vessels), as follows:
       “The permissible maximum filling levels of 95% and 97%, as given in the list of substances, shall be marked on each level gauge.”

9. In 1.6.7.2.2.2 insert the following transitional provision:

<table>
<thead>
<tr>
<th>9.3.1.21.3</th>
<th>9.3.2.21.3</th>
<th>N.R.M., Renewal of approval certificate after 31 December [2018]</th>
</tr>
</thead>
</table>
Justification

10. This proposal aims to avoid uncertainty during inspection of type C or G vessels carrying substances for which a type N vessel would be sufficient and for which a degree of filling of 97% would therefore also be permissible in a type C vessel.

11. In compliance with ADN 7.2.4.21.1, it is therefore important to ensure, when filling the boat, that the degree of filling does not exceed the level given for that substance in column (11) of Table C.

12. The transitional provision should make it possible to add further markings to the gauges or replace them within a suitable time.

Safety

13. From the technical standpoint there is no safety problem. The degrees of filling required under Table C in Part 3 will still be observed.

Feasibility

14. The proposed rule is considered to be feasible in principle. Delays to transport caused by avoidable objections by the inspection authorities will be avoided.