
Economic Commission for Europe

Inland Transport Committee

21 January 2022

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)**

English

Thirty-ninth session

Geneva, 24–28 January 2022

Item 5 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:
other proposals**

**Amendments due to enter into force on 1 January 2023,
updating of references to standards
(ECE/TRANS/WP.15/AC.2/2022/4)****Transmitted by the Government of Germany****Proposal**Read Section A. 1. b) of Working Document ECE/TRANS/WP.15/AC.2/2022/4 as follows
(Changes are underlined):

- « **A.** **Proposed amendments to the Regulations annexed to ADN**
- 1.** **Section 1.2.1 “Definitions” – make the following changes:**
- (b)** **In the definition of “gas detection system”:**

Replace “EN 50271:2010” with “EN 50271:2010 or EN 50271:2018”.

7. Title of the standard: “Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen – Requirements and tests for apparatus using software and/or digital technologies”.

8. The edition of the standard mentioned is out of date. The changes include technically relevant aspects of compliance with safety integrity level (SIL) 1 and adjustments to the structure of EN 50402 (“Electrical apparatus for the detection and measurement of combustible or toxic gases or vapours or of oxygen – Requirements on the functional safety of gas detection systems”).

9. It is no longer possible to obtain gas detection systems for new builds or spare parts for vessels already in service that comply with the previous edition of the standard. We are not aware of any reason why the current edition would not be suitable for ADN.

10. Insert the following transitional provision in ADN 1.6.7.2.2.2, Table of general transitional provisions: Tank vessels:

1.2.1	<p>Gas detection system</p> <p>Test according to IEC/EN 60079-29-1:2016 and <u>EN 50271:2010</u> or EN 50271:2018</p>	<p>N.R.M. from 1 January 2023</p> <p>for vessels brought into service before 1 January 2019: Renewal of the certificate of approval after 31 December 2024</p> <p><u>[deleted: For vessels brought into service from 1 January 2019 on]</u></p>
-------	---	--

11. The amended version of the standard contains safety-related elements. Gas detection systems should therefore be modernized in order to maintain the best possible level of safety.
12. However, the 2010 edition of the standard for gas detection systems was only introduced with effect from 1 January 2019 (ADN 2019). No inspection standard was mentioned in the definition until ADN 2019. A transitional period is still applicable: “Renewal of the certificate of approval after 31 December 2024”.
13. A differentiated transitional period should therefore be introduced.
14. This does not imply any change for vessels already in service as at 1 January 2019. The more recent standard will only need to be applied for those vessels when the certificate of approval is renewed after 31 December 2024. In practical terms, those vessels will not need to apply the 2010 version of the standard.
15. (deleted) ».

Justification

With regard to a smaller improvement of function and safety level in the new version of the standard, but expected high costs for the replacement of gas detection systems, the deletion of the proposed requirement to replace gas detection systems with renewal of Certificate of Approval seems to be appropriate and EN 50271 :2018 should be added, but not replace EN 50271 :2010.

