

**Economic and Social Council**Distr.: General
10 November 2023

Original: English

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 on transitional provisions of gas detectors****Transmitted by European Barge Union (EBU) and European Skippers Organisation (ESO)*,*****Summary*

Related documents: Informal document INF.5 of the fortieth session ECE/TRANS/WP.15/AC.2/72; (Report of the thirty-sixth session, addendum)
Informal document INF.21 of the forty-first session ECE/TRANS/WP.15/AC.2/86; para. 24 (Report of the forty-second session)

Introduction

1. At its fortieth session in August 2022, the ADN Safety Committee discussed informal document INF.5, "Proposal regarding transitional provisions of gas detectors" which was transmitted by EBU/ESO. At its forty-second session in August 2023, the ADN Safety Committee discussed informal document INF.21, "Proposal regarding transitional provisions of gas detectors", which was also transmitted by EBU/ESO. With this document EBU/ESO would like to continue the discussion and make a proposal to amend a current transitional provision.

* Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2024/25

** A/78/6 (Sect. 20), table 20.5



2. In the barging industry flammable gas detectors are already used for many years. These detectors have been tested and approved according to the version of the standard which was valid at the actual introduction into the market.
3. Due to the added requirement in ADN 2019, specifying a version of the standard (60079-29-1:2016), which the gas detector must comply with, means that a lot of these detectors will become unacceptable/not allowed.
4. In practice the industry is now confronted with class surveyors which require a gas detector that complies with standard EN 60079-29-1:2016 to be on board before a certificate of approval can be issued. Which means:
 - that good working approved equipment must be disposed of and replaced by newly acquired equipment;
 - a previous investment is nullified (destruction of money);
 - unnecessary (e-)waste is generated.
5. For example the Dräger X-am 7000 was produced till 2019. But is tested against standard EN 60079-29-1:2007 (which is one version previous to the standard required by ADN 2019).
6. EBU/ESO has carried out a sample in the industry, 214 gas detectors were examined, which are currently operational. Approximately 60 per cent of the gas detectors (n=125) did not comply with standard EN 60079-29-1:2016.
7. Extrapolating the mentioned sample and percentage leads to a conservative estimation of more than 600 gas detectors in the industry that do not comply with standard EN 60079-29-1:2016.
8. In addition, EBU/ESO has conducted research into the way in which these standard changes are implemented on the shore side. Such equipment remains compliant with the standard applicable at the time of purchase. In addition, devices that no longer comply with the new standard will no longer be sold as soon as the new standard comes into effect. This document applies to the gas detectors that are currently in operation on board inland vessels.
9. Finally, it goes without saying that all gas detectors are subject to periodic inspections by accredited specialized organizations. In the event of rejection, the device will be taken out of service. In these cases gas detectors will be purchased that comply with the actual/applicable standards.

I. Current ADN text

10. The current ADN 2023 describes the following with respect to the gas detector meter:

"1.2.1 Definitions

Gas detector means a portable device allowing measurement of any significant concentration of flammable gases below the LEL and which clearly indicates the concentration of such gases. Gas detectors may be designed for measuring flammable gases only, but also for measuring both flammable gases and oxygen. This device shall be so designed that measurements are possible without the necessity of entering the spaces to be checked.

The maximum detection level of the sensors is 5% of the LEL of the most critical substance in the vessel substance list for tank vessels or the cargo for dry cargo vessels. The flammable gas detector shall be certified according to IEC/EN⁷ 60079-29-1:2016. If it is used in explosion hazardous areas, it shall also comply with the requirements for use in the zone concerned and evidence of such compliance (e.g., conformity assessment procedure according to Directive 2014/34/EU,³ the IECEx System,⁴ ECE/TRADE/391⁵ or at least equivalent) shall be supplied;"

11. Subsequently the following transitional provision is described, concerning the gas detector:

"1.6.7.2.2.2 Table of general transitional provisions: Tank vessels

1.2.1	Gas detector Test according to IEC 60079-29-1:2016	N.R.M. from 1 January 2019 Renewal of the certificate of approval after 31 December 2020
-------	--	--

"

II. Request to the ADN Safety Committee

12. This document focuses on the specific case of flammable gas detectors. In principle, however, the problem also applies to other devices whenever they have to comply with a specific standard cited in the ADN.

13. The ADN Safety Committee is requested to consider to state that equipment which is approved and accepted according a certain standard when introduced into the market will remain acceptable for the rest of its technical life cycle. Even when new standards are made available, which do not lay down additional (test) requirements.

14. During the forty-second meeting of the ADN Safety Committee, whilst discussing informal document INF.21 of EBU/ESO, the Belgian government remarked that, in European Standard laying down technical requirements for Inland Navigation vessels (ES-TRIN regulations), whenever a requirement or paragraphs refer to a European or International Standard, such items of equipment may, after any new publication or revision of the standard, continue to be used for a further twenty years following the new publication or the revision of the standard.

15. The Belgian government would make a proposal for the forty-third session where, in such terms, certain pieces of equipment could also be subject to the same transitional period in the ADN.

16. If adopted, subject flammable gas detectors remain compliant with the standard applicable at the time of purchase plus further twenty years following the new publication or the revision of a standard.

17. Another possible solution could be to consider an extension of the current transitional provision, in line with other provisions which have been adapted during the 2019 revision of the ADN, concerning explosion safety. Many transitional provisions expire at "Renewal of Certificate of Approval after 31 December 2034".

III. Proposal I

18. The ADN Safety Committee is requested to discuss a general approach towards equipment that is subject to standard/norm revisions. A possible approach is mentioned in section II, paragraphs 14 - 16 of this document. If our proposal as mentioned under section II above is adopted, it would automatically mean that this equipment remain compliant with the standard applicable at the time of purchase plus further twenty years following the new publication or the revision of a standard.

IV. Proposal II

19. Subsequently, if the general approach towards equipment that is subject to standard/norm revisions is not adopted, the ADN Safety Committee is requested to discuss an amendment of the requirement for the specific standard of the flammable gas detector as mentioned in section II, paragraph 17 of his document.

20. To prevent unnecessary investments and generation of waste EBU/ESO proposes the following amendment of the transitional provision 1.6.7.2.2.2 on the definition of the gas detector as follows (next text in bold, deleted text in strikethrough):

“1.6.7.2.2.2 Table of general transitional provisions: Tank vessels

1.2.1	Gas detector Test according to IEC 60079-29-1:2016	N.R.M. from 1 January 2019 Renewal of the certificate of approval after 31 December 2020 2034 ”
-------	--	--

V. Sustainable Development Goals (SDGs)

21. If the mentioned transitional provision is amended the following Sustainable Development Goal (SDG) is fulfilled: Goal 12 – Responsible consumption and production.
