

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)

Thirty-second session

Geneva, 22 - 26 January 2018

Item 5 (b) of the provisional agenda

Proposals for amendments to the regulations annexed to the ADN:

Other proposals

12 January 2018

English

Implementation of the modified concept for explosion protection on inland waterway vessels - supplement

Transmitted by the Government of Germany

<i>Summary</i>	
Executive Summary:	During the review of the session documents regarding explosion protection published in November, a number of editorial and material errors were discovered in the proposed amendments discussed in the previous sessions, some of which can have an adverse impact on the level of protection.
Action to be taken:	Revision of individual proposed amendments.
Related documents:	CCNR-ZKR/ADN/WP.15/AC.2/2018/11

I. Proposals and justifications

1. Replace the amendment to 1.2.1, definition of “*Protective gloves*”, by the following:

“1.2.1 Replace the definition of “*Protective gloves*” by the following:

“Protective gloves means gloves which protect the wearer’s hands during work in a danger area. The choice of appropriate gloves shall correspond to the dangers likely to arise (see for example European standards EN 374-1:2003, EN 374-2:2015 or EN 374-4:2014). In the case of dangers caused by electrostatic charging/discharging, they shall meet the requirements of standard EN 16350:2015.””.
2. Replace the amendment to 1.2.1, definition of “*Protective shoes (or protective boots)*”, by the following:

“1.2.1 Replace the definition of “*Protective shoes (or protective boots)*” by the following:

“Protective shoes (or protective boots) means shoes or boots which protect the wearer’s feet during work in a danger area. The choice of appropriate protective

shoes or boots shall correspond to the dangers likely to arise, especially those caused by electrostatic charging/discharging, and meet the requirements of international standard ISO 20345:2012 or ISO 20346:2014.”.”.

Justification for 1. and 2.:

Editorial revision.

Avoiding sources of ignition caused by electrostatic charging is an indispensable part of the measures for anti-explosion protection. Therefore, the use of sufficiently dissipative protective gloves, protective shoes and protective boots must be obligatory.

3. 1.6.7.2.1.1 of ADN This amendment does not apply to the English version.

Justification:

Since the amendment does not apply to the English version, the justification is not translated.

4. 1.6.7.2.1.2 In the first column of the new transitional provision for 9.3.1.8.3, 9.3.2.8.3, 9.3.3.8.3 “Verification of the oxygen measuring system”, replace the reference to “9.3.1.8.3, 9.3.2.8.3, 9.3.3.8.3” by “8.1.6.3”.

Justification:

The contents of 9.3.1.8.3, 9.3.2.8.3, 9.3.3.8.3 were moved to 8.1.6.3.

5. 1.6.7.2.2.2 Amend the new transitional provision for 9.3.2.22.4 (d)/9.3.3.22.4 (e) to read as follows:

9.3.2.22.4 (d) (e) 9.3.3.22.4 (e) (d)	Explosion group/subgroup	N.R.M. from 1 January 2019 Renewal of certificate of approval after 31 December 2024
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Justification:

Editorial error.

6. 1.6.7.2.2.2 Delete the new transitional provision for 7.2.4.25.5

Justification:

Deletion of the amendment instruction for 7.2.4.25.5.

7. Add the following sentence to the amendment instruction for 7.1.3.51.8 of ADN: “The competent authority may allow exceptions in individual cases.”.

Justification:

The traffic situation or cases where the ship sustains damage can make it necessary to immediately call at such a loading or unloading station. The competent authority has to examine whether the anti-explosion protection can be ensured in a different manner or whether facilitations are justifiable.

8. Add the following sentence to the amendment instruction for 7.1.4.7.3 of ADN: “The competent authority may allow exceptions in individual cases.”

Justification:

The traffic situation or cases where the ship sustains damage can make it necessary to immediately call at such a loading or unloading station. The competent authority has to examine whether the anti-explosion protection can be ensured in a different manner or whether facilitations are justifiable.

9. Replace the amendment to 7.1.4.75 “Risk of sparking” by the following:

“Replace 7.1.4.75 “Risk of sparking” by the following:

“7.1.4.75 Risk of sparking

All electrically continuous connections between the vessel and the shore shall be so designed that they do not present a source of ignition. If the vessel substance list as referred to in 1.16.1.2.5 includes substances that require anti-explosion protection in accordance with column (17) of Table C of 3.2.3.2, taking off clothes shall be prohibited in zone 1.”.

Justification:

Avoiding sources of ignition caused by electrostatic charging is an indispensable part of the measures for anti-explosion protection. Taking off clothes that are not sufficiently dissipative can lead to such electrostatic charging and must therefore be prohibited in zone 1.

10. This amendment does not apply to the English version.

Justification:

Since the amendment does not apply to the English version, the justification is not translated.

11. Add the following sentence to the amendment instruction for 7.2.4.7.1 of ADN: “The competent authority may allow exceptions in individual cases.”.

Justification:

The traffic situation or cases where the ship sustains damage can make it necessary to immediately call at such a loading or unloading station. The competent authority has to examine whether the anti-explosion protection can be ensured in a different manner or whether facilitations are justifiable.

12. Add the following new amendment to 7.2.4.75:

“7.2.4.75 Amend to read as follows:

“7.2.4.75 Risk of sparking

All electrically continuous connections between the vessel and the shore shall be so designed that they do not present a source of ignition. If the vessel substance list as referred to in 1.16.1.2.5 includes substances that require anti-explosion protection in accordance with column (17) of Table C of 3.2.3.2, taking off clothes shall be prohibited in zone 1.”.

Justification:

Avoiding sources of ignition caused by electrostatic charging is an indispensable part of the measures for anti-explosion protection. Taking off clothes that are not sufficiently dissipative can lead to such electrostatic charging and must therefore be prohibited in zone 1.

13. Amend the third indent of the proposal for 8.3.5 of ADN to read as follows:

“- When the vessel is not in the vicinity of or within an onshore assigned zone and, in the case of a tank vessel, has a certificate attesting to the totally gas-free condition of the vessel in accordance with 7.2.3.7.6 or an authorization from the competent authority or in the case of a dry cargo vessel, has a certificate attesting to the totally gas-free condition of the protected area or an authorization from the competent authority.”.

Justification:

The possibility of substituting the certificate attesting to a totally gas-free condition for an authorization by an authority that has been in place up to ADN 2017 should also be maintained for tank vessels.

14. Amend the proposed amendment to 9.1.0.52.1 (b) of ADN to read as follows:

“b) Mobile and fixed telephone installations as well as stationary and portable computers in the accommodation or the wheelhouse;”.

Justification:

The aforementioned devices are used either in the wheelhouse as on-board computer, e. g. in the loading instrument system, or they are used for operational or personal purposes by the vessel’s crew, e. g. mobile telephones. Also requiring the “limited explosion risk” type for these devices is disproportionate.

15. In the proposed amendment to 9.3.2.21.1 (f) and 9.3.2.21.1 (f) of ADN, replace the second reference to “9.3.2.21.1” by “9.3.3.21.1”.

Justification:

The provision also applies to type N vessels.

16. In the proposed amendment to 9.3.2.22.4 (b) of ADN, delete the second indent.

In (e), amend the beginning of the sentence to read as follows:

“(e) The autonomous protection system mentioned in (c) [...]”.

Justification:

This requirement is already included in the definition.

Remark: in the german language version of document 2018/11 „autonome Schutzsysteme“ in the plural, in the english language version of document 2018/11 „autonomous protection system“ in the singular.

17. In the proposed amendment to 9.3.2.22.4 (a) of ADN, delete the words “of the shut-off valve”.

18. In the proposed amendment to 9.3.3.22.4 (b) of ADN, delete the words “of the shut-off valve”.

Justification for 16 and 17:

The “shut-off valve” mentioned is no additional component but refers to the safe depressurization device itself.

II. Feasibility

19. None of the proposed amendments requires additional investment in shipbuilding or changes to transport processes.

Potential additional costs for protective gloves, protective shoes or protective boots are justified by successful anti-explosion protection and the improved protection of the personnel on board.

The procedure of obtaining authorization from the competent authority introduced in No. 13, reflects the current legal situation.