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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-third session**

Geneva, 26–30 August 2013

Item 4 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:
Other proposals****Updating of references to norms and standards in the Regulations annexed to ADN****Transmitted by the Government of Germany¹***Summary*

Executive summary:	It has been determined that some of the references included in ADN and applying to technical norms and standards are no longer up to date. This might lead to (safety-critical) technical and practical problems in the application of ADN, e.g. if equipment or facilities according to the currently referenced standard are no longer available.
Action to be taken:	Updating of the references to norms and standards for ADN 2015, mainly in connection with anti-explosion protection.
Related documents:	Informal document INF.30 issued at the twentieth session ECE/TRANS/WP.15/AC.2/42, para. 44 ECE/TRANS/WP.15/AC.1/130/Add.1 (Joint RID/ADR/ADN Meeting report) ECE/TRANS/WP.15/AC.2/2013/16 (Proposal by Austria for a definition of “Escape device (suitable)”)

¹ Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2013/18.

Introduction

1. At its twentieth meeting held in January 2012, the Safety Committee, based on a proposal by EBU, discussed questions of updating certain references to standards contained in the Regulations annexed to ADN (see ECE/TRANS/WP.15/AC.2/42, para. 44). Particular reference was made to the mechanism that had been established by the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods. Germany agreed to organize an informal working group on the subject.
2. Regrettably, apart from Austria no other delegation was able to attend the meeting on 22-23 October 2012, and the meeting had to be cancelled.
3. Based on a compilation of all references to standards contained in ADN 2011, which was prepared by EBU, the German delegation has started to work on the task.
4. It was possible to subdivide the need for action as follows.
 - (a) First of all, regarding parts 1, 2, 4, 5 and 6, whose texts are substantially identical in the three Agreements ADR, RID and ADN, it was possible to refer to the work of the Joint Meeting's standards working group. At its most recent meeting in March 2013, this group worked extensively on the updating of the references. The results will be presented to the Safety Committee for deliberation and (see document ECE/TRANS/WP.15/AC.1/130, Annex II).
 - (b) Some referenced standards have already been updated for ADN 2013 (documents ECE/ADN/18, -18/Add.1, -18/Corr.1, -18/Corr.2).
 - (c) A proposal from Austria has been submitted in respect of the term "Escape device (suitable)" defined in 1.2.1 (document ECE/TRANS/WP.15/AC.2/2013/16).
5. The remaining references to standards that have not yet been covered by the above have been reviewed by the German delegation.

Proposal

6. Germany proposes the amendment of references to standards contained in ADN as listed in the following table. The delegations to the ADN Safety Committee are requested to review and approve the proposed amendments.

Proposal: Update of references to standards contained in ADN 2013

<i>Item</i>	<i>Page ^{*)}</i>	<i>Referred to in</i>	<i>Reference</i>	<i>Notes</i>
1	23	1.2.1	Explosion group means a grouping of flammable gases and vapours according to their maximum experimental safe gaps (<u>standard gap width, determined in accordance with specified conditions</u>) and minimum ignition currents, and of electrical apparatus <u>intended to be used in a potentially explosive atmosphere</u> which may be used in the corresponding potentially explosive atmosphere (see IEC publication 79 and EN 50014:1994 <u>IEC 60079-0:2012</u>).	Adaptation of the definition to the terminology of the currently applicable standard (see also Joint Meeting of March 2013)
2	25	1.2.1	High-velocity vent valve means a pressure reducing valve with a nominal ejection speed greater than the speed of propagation of a flame of a flammable mixture, thus preventing the passage of a flame front <u>means a pressure relief valve designed to have nominal flow velocities which exceed the flame velocity of the flammable mixture, thus preventing flame transmission.</u> This type of installation shall be tested in accordance with European standard EN 12 874: 1999 <u>ISO 16852:2010</u> .	Adaptation of the definition to the terminology of the currently applicable standard
3	34	1.2.1	Protective goggles, protective masks means goggles or face protection which protects the wearer's eyes or face during work in a danger area. The choice of appropriate goggles or masks shall correspond to the dangers likely to arise. For protective goggles or masks, see for example European standard EN 166:2001.	No amendment. No mention at the Joint Meeting in March 2013. No ISO standard.
4	22	1.2.1	<i>Electrical apparatus protected against water jets</i> means an electrical apparatus so designed that water, projected by a nozzle on the enclosure from any direction, has no damaging effects. The test conditions are specified in the IEC publication 529 <u>60529</u> , minimum degree of protection IP55.	
5	38	1.2.1	<i>Temperature class</i> means a grouping of flammable gases and vapours of flammable liquids according to their ignition temperature; and of the electrical apparatus intended to be used in the corresponding potentially explosive atmosphere according to their maximum surface temperature (see IEC publication 79 and EN 50 014:1994)-EN <u>13237:2011</u>)	No ISO standard.

^{*)} The page numbers refer to the printed version of the English version of ADN 2013.

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13	197	3.2.3.2	7) No maximum experimental safe gap (MESG) has been measured in accordance with IEC 79-1A <u>a standardized determination procedure</u> ; therefore, assignment has been made to the explosion group which is considered safe.	
14	197	3.2.3.2	8) No maximum experimental safe gap (MESG) has been measured in accordance with IEC 79-1A <u>a standardized determination procedure</u> ; therefore, assignment has been made to the explosion group in compliance with EN 50014.	This footnote 8 could be combined with footnote 7. If they were combined to form one footnote, this would lead to changes in Table C, columns (16) and (17). The informal working group on substances could possibly be requested to prepare the corresponding amendments.
15	204	3.2.3.3	Column 16: Determination of explosion group Flammable substances shall be assigned to an explosion group on the basis of their maximum experimental safe gaps. The maximum experimental safe gaps shall be determined in accordance with standard IEC 60079-1-1 <u>The maximum experimental safe gaps shall be determined in accordance with IEC 60079-20-1.</u>	
16	210	3.2.4.1, 3.1	Technical safety properties Auto ignition temperature in accordance with IEC 60079-4 (corresponds to DIN 51 794) °C; where applicable, indicate the temperature class in accordance with EN 50 014:1994. <u>Auto-ignition temperature in accordance with IEC 60079-20-1, EN 14522, DIN 51 794 °C; where applicable, indicate the temperature class in accordance with IEC 60079-20-1</u>	Adaptation to the terminology of the currently applicable standard
17	210	3.2.4.1, 3.2	Flash-point For flash-points up to 175 ° C Closed-cup test methods – non-equilibrium procedure Abel method: EN ISO 13736: 1997 <u>2008</u> Abel-Pensky method: DIN 51755-1:1974 and DIN 51755-2:1978 or AFNOR: M 07-019-NF M T60-103:1968 Pensky-Martens method: EN ISO 2719: 2004 <u>2012</u> Luchoire apparatus: French standard AFNOR T 60-103:1968-NF T60-	

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18	211	3.2.4.1, 3.4	<p data-bbox="672 209 772 229"><u>103:1968</u></p> <p data-bbox="672 252 1086 272">Tag method: ASTM D56-02<u>05(2010)</u></p> <p data-bbox="672 295 1198 325">Closed-cup test methods – equilibrium procedure</p> <p data-bbox="672 347 1467 400">Rapid equilibrium procedure: EN ISO 3679:2004; ASTM D3278-96:2004 <u>ASTM D3278-96(2011)</u></p> <p data-bbox="672 422 1400 475">Closed-cup equilibrium procedure: EN ISO 1523:2002+<u>AC1:2006</u>; ASTM D3941-90:2004<u>D3941-90(2007)</u></p> <p data-bbox="672 497 996 518">For flash-points above 175 ° C</p> <p data-bbox="672 541 1444 593">In addition to the above-mentioned methods, the following open-cup test method may be applied:</p> <p data-bbox="672 616 1332 636">Cleveland method: EN ISO 2592:2002; ASTM D92-02b<u>12</u>.</p> <p data-bbox="672 667 1467 719">Maximum safe gap in accordance with IEC 60079-1:2003 <u>IEC 60079-20-1:2010</u> mm.</p>	

Reasons for the amendments

7. The fact that standards in the ADN have become obsolete and are no longer applied means that the equipment and facilities with the referenced quality can no longer be found on the market, while on the other hand the equipment and facilities that are available and in conformity with the latest standards may not (yet) be used. This impacts negatively on the proper operation of vessels.

8. Inasmuch as definitions have been re-formulated, the terminology of the currently applicable technical standards is adopted.

9. Regarding lines 8-13 in the table: For the determination of the auto-ignition temperature there exist several determination procedures chronologically situated in the past, which would otherwise have to be listed one by one.

Safety

10. A decrease of safety levels in the updated standards is not discernible.

Implementation

11. It is not expected that the amendments would involve a disproportionate effort in ensuring the proper upkeep of the vessels. The classification society that is responsible for the vessels concerned will be in charge of verifying compliance with the updated standards, when it performs the next periodic interim inspection within the framework of 9.3.X.8 or the next renewal of the certificate of approval. An intermediate regulation is not required.
