

Economic Commission for Europe**Inland Transport Committee**

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Working Party on the Transport of Dangerous Goods

English

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)

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Item 5 (b) of the provisional agenda

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

Proposal of editorial improvement regarding the legibility and usability of the ADN

Transmitted by the European Barge Union (EBU) and the European Skippers Organisation (ESO)

I. Introduction

1. During the EBU/ESO members' dangerous goods meeting and from participating ADN-trainers that have joined the Informal Working Group on the Training of Experts (IAG Sachkundigenausbildung), we have received some (mainly) editorial improvements regarding the legibility and usability of the ADN as clarification in general and for the barge crew as specific practical users of the ADN; the ADN-experts on board of barges.

In the following subparagraphs, 8 proposals are presented, of which EBU/ESO ask the Safety Committee to consider an adaption of the ADN concerning the relevant ADN Articles.

II. Listed index of proposals

2. Hereby an overview of the proposal items is listed, which are presented in detail under paragraph III:

- (a) Clarification of the text of ADN 1.1.3.6.1 and 1.1.3.6.2
- (b) Adaption of the heading of ADN 3.2, "Table C"; Explanatory article references, consistent and in line with the structure of the heading of ADN 3.2 Table "A":
- (c) Clarification ADN 7.1.0.5.2 and 7.1.6.12 (VE02); a tank container not being a "container"
- (d) Completion of definition ADN 1.2 and explanatory notes of Table C
- (e) Use of the word "accumulator" in English and German version of ADN and Catalogue of Questions
- (f) Inconsistency Instructions in writing; people on board or crew members ADN 5.4.3

(g) Admission of a sign (“*” for example) in case transitional measures provisions apply for an ADN article.

III. Proposals – A-G

A. Clarification of the text of ADN 1.1.3.6.1

Issue: in the text of ADN 1.1.3.6.1 exemptions are described, in which exemptions are applicable towards the exemptions.

Clarification proposal: to put the text of 1.1.3.6.1 a) and b) in a Table to improve legibility and understanding. Adapt the text as indicated below by striking the subs (i) –(vii) of 1.1.3.6.1 and 1.1.3.6.2 and insert a new table, in which the existing text is incorporated, as follows:

1.1.3.6 Exemptions related to quantities carried on board vessels

1.1.3.6.1 (a) In the event of the carriage of dangerous goods in packages, the provisions of ADN other than those of 1.1.3.6.2 are not applicable when the gross mass of all the dangerous goods carried does not exceed 3,000 kg. ~~This provision does not apply to the carriage of:~~ *the quantity that is indicated in the Table below:*

- (i) ~~substances and articles of Class 1;~~
 - (ii) ~~substances of Class 2, groups T, F, TF, TC, TO, TFC or TOC, according to 2.2.2.1.3 and aerosols of groups C, CO, F, FC, T, TF, TC, TO, TFC and TOC according to 2.2.2.1.6;~~
 - (iii) ~~substances of Classes 4.1 or 5.2, for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2;~~
 - (iv) ~~substances of Class 6.2, Category A;~~
 - (v) ~~substances of Class 7 other than UN Nos. 2908, 2909, 2910 and 2911;~~
 - (vi) ~~substances assigned to Packing Group I;~~
 - (vii) ~~substances carried in tanks;~~
- (b) ~~In the event of the carriage of dangerous goods in packages other than tanks, the provisions of ADN other than those of 1.1.3.6.2 are not applicable to the carriage of:~~
- ~~substances of Class 2 of group F in accordance with 2.2.2.1.3 or aerosols of group F according to 2.2.2.1.6; or~~
 - ~~substances assigned to Packing Group I, except substances of Class 6.1;~~
 - ~~when the gross mass of these goods does not exceed 300 kg.~~

Insert new Table:

<i>Class</i>	<i>Substances or articles in packages, other than tanks (tank containers, vehicles, etc.):</i>	<i>Exempted quantities in kg:</i>
all	<i>Carriage in tanks, of any Class</i>	0
1	Explosive substances and articles	0
2	- substances of Class 2, groups T, F, TF, TC, TO, TFC or TOC, according to 2.2.2.1.3 and - aerosols of groups C, CO, F, FC, T, TF, TC, TO, TFC and TOC according to 2.2.2.1.6;	0
	- substances of Class 2 of group F in accordance with 2.2.2.1.3 or - aerosols of group F according to 2.2.2.1.6;	300
	Any other substances of Class 2	3000
	Flammable liquids, Packing Group I	300
3	Any other substances of Class 3	3000
4.1	Substances of Class 4.1 for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2;	0
	Any other substances of Class 4.1, Packing Group I	300
	Any other substances of Class 4.1	3000
4.2	Any other substances of Class 4.2, Packing Group I	300
	Any other substances of Class 4.2	3000
4.3	Any other substances of Class 4.3, Packing Group I	300
	Any other substances of Class 4.3	3000
5.1	Any other substances of Class 5.1, Packing Group I	300
	Any other substances of Class 5.1	3000
5.2	Substances of Class 5.2 for which a danger label of model No. 1 is required in column (5) of Table A of Chapter 3.2;	0
	Any other substances of Class 5.2	3000
6.1	Toxic substances, Packing Group I	0
	Any other substances of Class 6.1	3000
6.2	Infectious substances of category A	0
	Any other substances of Class 6.2	3000

Class	Substances or articles in packages, other than tanks (tank containers, vehicles, etc.):	Exempted quantities in kg:
7	Substances of Class 7 under UN Nos. 2908, 2909, 2910 and 2911	3000
	Any other substances of Class 7	0
8	Toxic substances. Packing Group I	300
	Any other substances of Class 8	3000
9	All substances of Class 9	3000

B. Adaption of the heading of ADN 3.2 Table C

Issue: Explanatory article references in the heading of the Table C are inconsistent; not in line with the structure of the heading of ADN 3.2 Table “A”. It would be helpful to add explanatory article references as available in the Table A:

UN No. or ID No.	Name and description	Class	Classification Code	Packing group	Labels	Special provisions	Limited and excepted quantities		Carriage permitted	Equipment required	Ventilation	Provisions concerning loading, unloading and carriage	Number of blue cones/lights	Remarks
	3.1.2	2.2	2.2	2.1.1.3	5.2.2	3.3	3.4	3.5.1.2	3.2.1	8.1.5	7.1.6	7.1.6	7.1.5	3.2.1
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)

Clarification proposal: add relevant explanatory references in the heading of Table C:

Column 2:	Article 3.1.2
Column 3a:	Article 2.1
Column 3b:	Article 2.2.
Column 4:	Article 2.1.1.3
Column 5:	Article 3.2.3.1
Column 6:	Article 7.2.1.21
Column 7-10:	Article 3.2.3.1
Column 11:	Article 7.2.4.21
Column 12:	Article 3.2.3.1
Column 13:	Article 7.2.4.22.3
Column 14-17:	Article 3.2.3.1
Column 18:	Article 8.1.5
Column 19:	Article 7.2.5.0
Column 20:	Article 3.2.3.1

C. Clarification of a tank container, not to be considered as container in ADN 7.1.0.5.0.2 and 7.1.6.12.

Issue: It is notified that during the training of experts, it came out to be unclear that in relation to ADN 7.1.5.0.2 “Marking” and ADN 7.1.6.12 “Ventilation”, a tank container shall not be considered as a container, while the wording suggest it to be included. The exemption of the blue cone marking and ventilation obligation in “VE02” is therefore, not totally clear. In the definition of ADN 1.2. of “container”, only a foot note remarks that a tank container is excluded from the scope of the definition of “container”.

It would be helpful to add a small note in these sub-articles to clarify the article and avoid unnecessary misunderstanding.

Clarification proposal: add the relevant articles as follows, by adding the text *as marked*:

7.1.5.0.2 Vessels carrying the dangerous goods listed in Table A of Chapter 3.2 in packages placed exclusively in containers shall display the number of blue cones or blue lights indicated in column (12) of Table A of Chapter 3.2 where:

- three blue cones or three blue lights are required, or
- two blue cones or two blue lights are required, when a substance of Class 2 is involved or packing group I is indicated in column (4) of Table A of Chapter 3.2 and the total gross mass of these dangerous goods exceeds 30,000 kg, or
- one blue cone or one blue light is required, when a substance of Class 2 is involved or packing group I is indicated in column (4) of Table A of Chapter 3.2 and the total gross mass of these dangerous goods exceeds 130,000 kg.

This article is not applicable in relation to the carriage of tank containers.

7.1.6.12 Ventilation

The following additional requirements shall be met when they are indicated in column (10) of Table A of Chapter 3.2:

...

VE02: Holds containing these substances shall be ventilated with the ventilators operating at full power, when after measurement it has been established that the holds are not free from gases from the cargo. The measurement shall be carried out immediately after loading. The measurement shall be repeated after one hour for monitoring purposes. The results of the measurement shall be recorded in writing.

Alternatively, on vessels only containing these substances in containers *or in tank containers* in open holds, the holds containing such containers may be ventilated with the ventilation operating at full power only when it is suspected that the holds are not free of gas.

Prior to unloading, the unloader shall be informed about this suspicion.

D. Completion of definition ADN 1.2 and explanatory notes of Table C

Issue: throughout the ADN, some substantial terms are being used, without proper clarification. This concerns both terms which should be clarified in the definitions of ADN 1.2 or as explanatory notes of ADN 3.2 Table C.

Clarification proposal:

Add the following terms and explaining to:

1. ADN 1.2 Definitions:

Boiling Point (Reference of articles: Ch. 2, many positions, ADN 3.2 Table C, column 2, many positions, ADN 3.1.21, ADN 3.2.3.3):

“The boiling point of a substance is the temperature at which the vapor pressure of the liquid equals the pressure surrounding the liquid and the liquid changes into a vapor” (Wikipedia)

Initial Boiling Point (References of articles: ADN 3.2 Table C, column 2, many positions, ADN 2.2.3.1.3, ADN 2.3.3.2, ADN 3.2.3.3): *“Initial boiling point means the temperature of a liquid at which its vapor pressure is equal to the standard pressure (101.3 kPa), i.e., the first gas bubble appears.”*

Boiling Traject *“A boiling range is the temperature range involved in the distillation of oil, from the start to the time when it evaporates”*

2. Explanatory notes of Table C, column 5:

CMR:

Remark: there is already a definition, with another purpose, in ADN 1.2; CMR is defined as *“CMR means the Convention on the Contract for the International Carriage of Goods by Road (Geneva, 19 May 1956), as amended”* – this explaining of CMR is not meant in the reference of articles CMR (meaning Carcinogenic, Mutagenic etc.): ADN 3.2 Table C, column 2, many positions, ADN 3.2.3.3, ADN 5.4.1.1.2

In ADN Table C, column 5, the explanatory note shows: *“In the case of a substance or mixture with CMR properties, the code ‘CMR’ is added to the information.”*. This does not provide sufficient information.

In ADN 3.4.2.3 and ADN 3.2.3.3 a minor explaining and reference to the Global Harmonisation System is made:

“Substances with long-term effects on health - CMR substances (Categories 1A and 1B in accordance with the criteria of chapters 3.5, 3.6 and 3.7 of GHS), provided that they are already assigned to Classes 2 to 9 by virtue of other criteria.*

C carcinogenic

M mutagenic

R toxic to reproduction”

Proposal: add to ADN 3.2 Table C, column 5, to the existing explanatory note *as marked* below:

In the case of a substance or mixture with CMR properties, the code ‘CMR’ is added to the information.

CMR is used to indicate substances with long-term effects on health -carcinogenic, mutagenic or toxic to reproduction, Categories 1A and 1B in accordance with the criteria of chapters 3.5, 3.6 and 3.7 of GHS),*

Aquatic hazardous:

In the case of a substance or mixture hazardous to the aquatic environment, the code ‘N1’, ‘N2’ or ‘N3’ is added to the information. *“See ADN 2.2.9.1.10”*

E. Use of the word “Accumulator” and “Akkumulator” in English and German version of ADN

Issue: the word “Accumulator” is not in line with practice on board. “Batteries” to start engines f.e. are meant. Barge crew do not recognize what is meant by “Accumulator”. This applies to the English, German (“Akkumulator vs. “Akku” oder “Batterie” (and even the Dutch translation “Accumulator” vs. “Accu”).

Clarification proposal:

Change “Accumulator” in “Battery” in the English version

Change “Akkumulator” in “Batterie” or “Akku” in German version

This proposal applies to the articles mentioned above, but also apply to the questions 110 02.0-16 and 110 02.0-22 of the Catalogue of Questions. It is suggested to ask the Informal

Working group of experts to adapt the Catalogue, in case the ADN Safety Committee agrees to improve the wording as mentioned above.

Reference of articles in the ADN:

9.1.0.52,4 and 9.3.x.52.2, Table A, Special Provisions of ADN 3.3.

F. Inconsistency Instructions in writing; “people on board” or “crew members” ADN 5.4.3

Issue: according to the instructions in writing (ADN 5.4.3.2.), the barge master shall ensure that **each crew member** understands and is capable in carrying out the instructions properly.

According to ADN 1.3.2.2.5, the master shall bring the instructions in writing referred to in 5.4.3 to the attention of **the**

other persons on board to ensure that they are capable of understanding and applying them.

This might be seen as a conflict. ADN 1.3.2.2.5 is covering a wider range; also “other people on board”, such as safety advisors, authorities, inspection bodies, experts of class societies and any other people on board should be warned about the dangers of the cargo and how to handle in case of an emergency situation.

Clarification proposal:

Adapt 5.4.3.2 as follows, in line with the safety obligation as mentioned in ADN 1.3.2.2.5:

5.4.3.2 These instructions shall be provided by the carrier to the master in the language(s) that the master and the expert can read and understand before loading. The master shall ensure that each member of the crew **and any other persons on board** concerned understands and is capable of carrying out the instructions properly.

G. Admission of a sign (“*” for example) in case transitional measures provisions apply for an ADN article.

Issue: it would be easier to interpret the ADN in the case that in the text it would be marked if for a certain article, a transitional provision is applicable.

Clarification proposal:

Mark any relevant article for which an transitional provision is applicable with an “*” or likewise, to trigger the reader of the ADN that an transitional provision is applicable.

The UN ECE ADN Safety Committee is asked to consider the proposals, established from the practise and concerns of the practical people on board of barges. All proposals are meant to improve the legibility and usability of the ADN.