Economic Commission for Europe

Inland Transport Committee

17 August 2022

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)

Fortieth session

Geneva, 22-26 August 2022 Item 3 (c) of the provisional agenda Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN): interpretation of the Regulations annexed to ADN

Transport of Carbon Dioxide (CO₂), refrigerated, liquid

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

Summary

Related documents: Informal document INF.12 - . Report of the Informal working group of substances

para. P, item 64-66;

Informal document INF.6 of the thirty-ninth session (including the table of the

"triple point" of carbon dioxide), January 2022;

Working document ECE/TRANS/WP.15/AC.2/2022/15 of the thirty-ninth session,

January 2022

Referring to the documents mentioned above and discussions already held in the ADN Safety Committee and discussed during the meeting of the Informal Working group of substances (informal document INF.12 - Report paragraphs 64-66) regarding the transport of Carbon Dioxide, EBU/ESO would like to propose the following two amendments to the ADN; adaptions indicated bold and underlined:

1. To add remark 42 for UN No. 2187in column 20 of Table C:

2187 CAF	RBON DIOXIDE,	2	3A	2.	.2	G	1	1	1	9.	5	1	yes	no	PP	0	31,39, 42
REF	RIGERATED																
LIQ	UID																

- 2. To add an extra sentence to remark 42 of Table C, column 20:
 - "42. Loading of refrigerated liquefied gases shall be carried out in such a manner as to ensure that unsatisfactory temperature gradients do not occur in any cargo tank, piping or other ancillary equipment. When determining the

holding time (as described in 7.2.4.16.17), it shall be assured that the degree of filling does not exceed 98% in order to prevent the safety valves from opening when the tank is in liquid full condition.

When refrigerated liquefied gases are carried using a system according to 9.3.1.24.1 (b) or 9.3.1.24.1 (c), a refrigeration system is not required.

In the case of UN 2187 "CARBON DIOXIDE, REFRIGERATED LIQUID", this provision applies when the possibility of sublimation is avoided. Therefore, the transport temperature should be above -41°C."