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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)

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Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN): Interpretation of the Regulations annexed to ADN

Fire-extinguishing system on board a convoy (pusher and non-motorized barge) or on board a single barge (non-motorized)

Transmitted by the Government of France*, **

Summary

Executive summary: This document outlines the difficulties in applying the provisions of the

Regulations annexed to ADN related to fire-extinguishing systems to

non-motorized barges

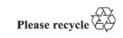
Action to be taken: See paragraphs 9 and 10

Related documents: None

^{**} In accordance with the programme of work of the Inland Transport Committee for 2018–2019, (ECE/TRANS/2018/21/Add.1 (9.3)).









^{*} Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2018/33.

Introduction

- 1. In the case of tank vessels, 9.3.x.40.1 of the Regulations annexed to ADN lays down a number of requirements relating to fire-extinguishing systems, some of which are recalled below:
- (a) They shall be supplied by two independent pumps, one of which shall be ready for use at any time, and the two pumps shall not be installed in the same space;
- (b) It shall be possible to reach any point of the cargo area with two jets of water which do not emanate from the same hydrant;
- (c) The water supply system shall be capable of being put into operation from the wheelhouse and from the deck.
- 2. While the above rule is perfectly clear in the case of self-propelled vessels, it is more difficult to apply in the case of tank barges (non-motorized) forming part of a pushed convoy or a side-by-side formation.
- 3. Chapter 7.2 includes the following two provisions:
- "7.2.2.19.2 For the purposes of the application of this Chapter, the entire pushed convoy or side-by-side formation shall be deemed to be a single vessel." and
- "7.2.2.19.3 When a pushed convoy or a side-by-side formation comprises a tank vessel carrying dangerous substances, vessels used for propulsion shall meet the requirements of the following paragraphs:
- ... 9.3.3.40.1 (however, one single fire or ballast pump shall be sufficient), ..."

Analysis

- 4. In the case of a tank barge (non-motorized), a joint reading of the provisions of 9.3.x.40.1 and those of 7.2.2.19.2 and 7.2.2.19.3 raises the following questions:
- (a) Does 7.2.2.19.3 (by the specific application of 9.3.3.40.1) effectively exempt the barge from having two fire pumps on board in favour of a single pump?
- (b) If this is the case, must the barge be connected to the pusher at all times? If so, what equipment can or must be present on board the barge and on board the pusher?
- (c) Can an unsecured barge (disconnected from the pusher) be loaded, unloaded or at berth while it is full or empty but not gas-free?
- (d) If so, what technical conditions apply when there are two pumps on board the barge?
- (e) If so, what technical conditions apply when there is a single pump on board the barge?

Possible interpretations

- 5. When a barge is part of a pushed convoy that is under way, loading, unloading or at berth:
- (a) The convoy is deemed to be a single vessel. It is to remain in formation at all times, including during loading and unloading and when at berth;
- (b) There might be only a single fire pump on board the pusher and a single pump on board the barge;
 - (c) There must be a fire hose connection between the pusher and the barge;
- (d) The fire pump on board the pusher should be capable of being put into operation from the wheelhouse and from the deck [Of the pusher? / Of the barge? At the front? At the rear?];

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- (e) The fire pump on board the barge should be capable of being put into operation from the wheelhouse and from the deck [Of the pusher? / Of the barge? At the front? At the rear?];
 - (f) One of the two pumps must be ready for use at any time;
- (g) The pump on board the barge must be able to draw power from the pusher's electrical system unless it has its own suitable power source (or be able to draw power from the pusher even if it has its own power source?).
- 6. When an unsecured barge (disconnected from the pusher) is docked for loading or unloading or is at berth, full or empty, but not gas-free, with two fire pumps on board:
- (a) The barge is deemed to be a vessel and has two pumps on board that draw power from an on-board generator (the two pumps should, however, be independent);
- (b) What should be done if there is only a single generator? Is it acceptable for the second pump to be powered from land?
- (c) Should the pumps be installed in different spaces? (Must one of the pumps be located on the deck?)
- (d) Should the pumps be capable of being put into operation from two different locations? (From the front? From the back?)
 - (e) One of the two pumps must be ready for use at any time.
- 7. An unsecured barge (disconnected from the pusher) is docked for loading or unloading or is at berth, full or empty, but not gas-free, with a single fire pump on board. Is this permitted under the ADN and, if so:
- (a) Should the fire pump on board be powered by an on-board generator or can it be powered from the dock?
- (b) Should there be a second pump located on the dock with a hydraulic connection between the dock and the barge?
- (c) Should both pumps be capable of being put into operation from the dock (under 9.3.x.56.3, movable electrical cables are prohibited in the cargo area) and from the barge (from one or two locations on the barge?)?
 - (d) One of the two pumps must be ready for use at any time.

Action to be taken

- 8. The purpose of this document is not simply to outline an interpretation by France of the Regulations annexed to ADN in the specific cases set out in paragraph 4.
- 9. Rather, France would like to receive feedback from other States so as to learn more about their practices and the solutions that they have adopted to address the issues raised above.
- 10. Should there be broad agreement on the solutions to be adopted in this connection, consideration might be given to amending the Regulations annexed to ADN for entry into force in 2021.

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