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-ninth session
Geneva, 24–28 January 2021
Item 5 (b) of the provisional agenda
Proposals for amendments to the Regulations annexed to ADN: other proposals

Provisions of cofferdams

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

Related documents:
- Informal document INF.21 of the thirty seventh session of the ADN Safety Committee meeting, provided by EBU/ESO;
- ECE/TRANS/WP.15/AC.2/2021/25, Report of the thirty-seventh session (para. 49);
- ECE/TRANS/WP.15/AC.2/2021/25, provided by EBU/ESO;
- ECE/TRANS/WP.15/AC.2/2021/25, Report of the thirty-eighth session (paras. 33 and 34)

Introduction

1. Referring to the informal document INF.21 of the thirty seventh session and document ECE/TRANS/WP.15/AC.2/2021/25, this document is to follow up this topic "Cofferdams". During the thirty seventh and thirty eighth sessions, discussions about the safety aspects of the use of cofferdams have been held.

2. The following observations have been determined:
   (a) For nautical safety reasons, the inland navigation industry has a strong wish to be able to use the cofferdams in certain situations, especially when the barge is empty. In the

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** In accordance with the programme of work of the Inland Transport Committee for 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20) para 20.51).
earlier proposal, mentioned in working document 2021/25, the requirements of intact and damage stability conditions and calculations are taken into account;

(b) In despite of an in depth research of EBU/ESO and discussions in the ADN Safety Committee, it did not became clear why older tank barges, constructed before 2000, are allowed to use the cofferdams for ballast (based on transitional provisions, applicable until 2038) and more recent barges, built after 2000, are not allowed to;

(c) The origin of the provisions date from the period of single hull barges which could both be constructed by welding the steel plates and frames but also by the formally used technique of revited (nailed) constructions. Nowadays all tank barges in service are constructed with welded constructions. This was confirmed by the Recommended ADN Class Societies. The obligation of daily inspection is considered as superfluous;

(d) Cofferdams must be equipped to be filled in the case of fire of the engine room anyway (ADN 9.3.x.20.2);

(e) Cofferdams can be directly compared with the U-formed ballast tanks around the cargo tanks of double hull barges; both type of spaces have walls which are directly the outer hull of the barge and shared walls with the cargo tanks. Conservation of those spaces are equal.

(f) Also barges have been constructed with a combination of cofferdams and ballast tanks on front or end of the cargo area;

(g) Cofferdams are under the bulkhead thickness measurement supervision program of Class, the same as is required for other spaces of the barge. Besides, cofferdams shall be tested by a pressurizing test under supervision of Class, the latest every 11 years (referring to ADN 9.3.2.23 and 9.3.3.23);

(h) If the proposal below would be adopted, the current transitional provisions could be deleted.

Proposal

3. To increase safety and to avoid outdated provisions in the ADN about operational aspects of the cofferdams, which do not contribute to safety, EBU/ESO proposes the following:

(a) **Amend the sentence of ADN 7.2.3.1.1:**

"7.2.3.1 Access to cargo tanks, residual cargo tanks, cargo pump-rooms below deck, cofferdams, double-hull spaces, double bottoms and hold spaces; inspections

7.2.3.1.1 The cofferdams shall be empty, **as long as the cargo tanks are filled.** They shall be inspected frequently, at least on a monthly basis once a day in order to ascertain that they are dry (except for condensation water)."

(b) **Reformulate ADN 7.2.3.20 by deleting the first sentence and adding "Cofferdams, not fitted out as service spaces " in the second sentence:**

"7.2.3.20 Water ballast

7.2.3.20.1 Cofferdams and hold spaces containing insulated cargo tanks shall not be filled with water. **Cofferdams, not fitted out as service spaces**, double-hull spaces, double bottoms and hold spaces which do not contain insulated cargo tanks may be filled with ballast water provided:

- Cargo tanks are empty;
- The specific situation has been taken into account in the intact and damage stability calculations; and
- The filling is not prohibited in column (20) of Table C of Chapter 3.2."
(c) Add "cofferdams, which are not fitted out as service space" in 9.3.2.11.5 and 9.3.3.11.5:

"9.3.2/3.11.5 Double-hull spaces, cofferdams, which are not fitted out as service space and double bottoms in the cargo area shall be arranged for being filled with ballast water only. Double bottoms may, however, be used as oil fuel tanks, provided they comply with the provisions of 9.3.2/3.32."

4. As a consequential amendment, transitional provision 1.6.7.2.2.2 should be deleted:

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th>Subject</th>
<th>Time limit and comments</th>
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</thead>
<tbody>
<tr>
<td>7.2.3.20.1</td>
<td>Ballast water</td>
<td>N.R.M.</td>
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<td></td>
<td>Prohibition against filling</td>
<td>Renewal of the certificate of approval after</td>
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<td>cofferdams with water</td>
<td>31 December 2038</td>
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<td></td>
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<td>Until then, the following requirements apply on board</td>
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<td>vessels in service:</td>
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<td>Cofferdams may be filled with water during unloading to</td>
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<td>provide trim and to permit residue-free drainage as far as</td>
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<td>possible.</td>
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<td>When the vessel is underway, cofferdams may be filled</td>
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<td></td>
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<td>with ballast water only when cargo tanks are empty.</td>
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5. EBU/ESO would like to ask the ADN Safety Committee to discuss this proposal.