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-fourth session
Geneva, 21–25 January 2019
Item 5 (b) of the provisional agenda
Proposals for amendments to the Regulations annexed to ADN:
Other proposals

Section 7.1.7 of ADN — Special provisions applicable to the carriage of self-reactive substances of Class 4.1, organic peroxides of Class 5.2 and substances stabilized by temperature control (other than self-reactive substances and organic peroxides)

Transmitted by the Government of Germany*,**

Summary

Executive summary: At its thirty-third session, the Safety Committee adopted a new section 7.1.7 for inclusion in ADN 2019 as part of the process of harmonization with ADR.

Germany had raised a number of concerns during the session regarding the proper assignment of the obligations arising from 7.1.7 and was invited to present an official proposal for the thirty-fourth session.

Action to be taken: Agree a common understanding of the obligations arising from 7.1.7
Supplement the obligations of the consignor in 1.4.2.1.1
Add a mandatory requirement for documentation to 7.1.7.4.2
Add a new stowage requirement “HA11” to 7.1.6.14

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

1. Subsection 7.1.7.4 places specific obligations on enterprises participating in the carriage of temperature controlled cargo transport units. The German delegation is of the view that it is not sufficiently clear to which participating enterprises these obligations fall. At the thirty-third session of the Safety Committee, some delegations recommended that the assignment of obligations could be documented with a confirmed interpretation by the ADN Safety Committee.

2. After the thirty-third session, the German delegation followed up on that recommendation, consulting with the delegation of the Netherlands on a common understanding of the assignment of the obligations arising from 7.1.7.

3. It was noted that most of the obligations established under 7.1.7.4 could be assigned to specific enterprises right away, without any specific mention of them in Chapter 1.4. Some obligations, however, would have to be spelled out in the list in Chapter 1.4. This assignment of obligations and the corresponding proposals for amendment are presented in the table below.

4. Because temperature controlled freight containers must, for instance, at all times be accessible on board to allow for temperature checks and, if necessary, repairs to refrigeration systems, a proposal has been made to introduce an additional stowage requirement in ADN and to make it applicable to certain UN numbers.

5. The requirements under 7.1.4.4.4 concerning connecting electric cables have been deemed suitable for the refrigeration systems described in 7.1.7.4.5.

Assignment of obligations

6. Germany invites the ADN Safety Committee to consider and approve its proposal for the assignment of the obligations deriving from 7.1.7 and to make the proposed amendments to Chapter 1.4.

<table>
<thead>
<tr>
<th>Section</th>
<th>Obligation</th>
<th>Enterprise responsible</th>
<th>Assignment of obligations</th>
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<tbody>
<tr>
<td>7.1.7.4.1</td>
<td>(a) Thorough inspection of the cargo transport unit prior to loading; (b) Instructions to the carrier about the operation of the refrigeration system including a list of the suppliers of coolant available en route;</td>
<td>Loader</td>
<td>1.4.3.1.1 (c)</td>
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<td></td>
<td></td>
<td>Consignor Carrier</td>
<td>1.4.2.1.1 (b), amended 1.4.2.2.1 (b)</td>
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<td>Amend 1.4.2.1.1 (b) to read as follows: (b) Furnish the carrier with information and data in a traceable form and, if necessary, the required transport documents and accompanying documents (authorizations, approvals, notifications, certificates, etc.), taking into account in particular the requirements of Chapter 5.4, of 7.1.7 and of the tables in Part 3;</td>
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<td>Section</td>
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<td>7.1.7.4.1</td>
<td>(c) Procedures to be followed in the event of loss of control;</td>
<td>Consignor</td>
<td>1.4.2.1.1 (b) as amended above</td>
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<td>(d) Regular monitoring of operating temperatures;</td>
<td>Carrier</td>
<td>1.4.2.2.1 (i)</td>
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<td></td>
<td>Consignor</td>
<td>1.4.2.1.1 (b) + new subparagraph (f)</td>
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<td></td>
<td></td>
<td>Loader</td>
<td>1.4.3.1.1 (c)</td>
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<td>English:</td>
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<td>(e) Provision. Availability of a back-up refrigeration system or spare parts;</td>
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<td>Add the following new subparagraph 1.4.2.1.1 (f):</td>
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<td>(f) make the back-up refrigeration systems and spare parts required under 7.1.7.4 available to the carrier</td>
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<td>7.1.7.4.2</td>
<td>Any control and temperature sensing devices in the refrigeration system shall be readily accessible and all electrical connections weather-proof.</td>
<td>Consignor: 1st, 2nd and 4th sentences</td>
<td>1.4.2.1.1 (c)</td>
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<td>The temperature of air space within the cargo transport unit shall be measured by two independent sensors and the output shall be recorded so that temperature changes are readily detectable.</td>
<td>Carrier: 1st and 3rd sentences</td>
<td>1.4.2.2.1 (i)</td>
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<td>The temperature shall be checked every four to six hours and logged.</td>
<td></td>
<td>1.4.2.2.1 (c)</td>
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<td></td>
<td>When substances having a control temperature of less than +25 °C are carried, the cargo transport unit shall be equipped with visible and audible alarms, powered independently of the refrigeration system, set to operate at or below the control temperature.</td>
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<td>In 7.1.7.4.2, amend the third sentence to read as follows:</td>
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<td>The temperature shall also be checked frequently and preparations made for implementation of the emergency procedures.</td>
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<td>The temperature shall be checked every four to six hours, recorded and logged in writing in the book described in 8.1.2.1 (g).</td>
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<td>7.1.7.4.3</td>
<td>If during carriage the control temperature is exceeded, an alert procedure shall be initiated involving any necessary repairs to the refrigeration equipment or an increase in the cooling capacity (e.g. by adding liquid or solid refrigerants).</td>
<td>Carrier</td>
<td>1.4.2.2.1 (i)</td>
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</tbody>
</table>
Section | Obligation | Enterprise responsible | Assignment of obligations
---|---|---|---
7.1.7.4.7 | If the emergency temperature is reached, the emergency procedures shall be initiated. | Consignor | 1.4.2.1.1 (c)
 | Carrier | 1.4.2.2.1 (c) (Visual inspection)

7.1.7.4.8 | Where substances are required to be carried in insulated, refrigerated or mechanically-refrigerated vehicles or containers, these vehicles or containers shall satisfy the requirements of Chapter 9.6 of ADR. | Consignor | 1.4.2.1.1 (c)
 | Carrier | 1.4.2.2.1 (c) (Visual inspection)

If substances are contained in protective packagings filled with a coolant, they shall be loaded in closed or sheeted vehicles or closed or sheeted containers.

If the vehicles or containers used are closed they shall be adequately ventilated.

Sheeted vehicles and containers shall be fitted with sideboards and a tailboard.

The sheets of these vehicles and containers shall be of an impermeable and non-combustible material.

**Additional stowage requirement**

7. Germany proposes that the following stowage requirement should be added specifically for temperature controlled cargo transport units. It is based on stowage requirement HA01 and stowage code SW1 under 7.1.5 of the IMDG Code, with the addition of 7.1.7.1, 7.1.7.4.2 and 7.1.7.4.3. The following selection of affected UN numbers is based on the carriage prohibitions in RID.

8. At the end of 7.1.6.14, add the following stowage requirement:

“HA11: Cargo transport units containing materials to be transported under temperature control in accordance with 7.1.7 of these regulations must be kept at least 3.00 m from all sources of heat and stowed in such a way that:

• it is possible to regularly monitor service temperatures,

• visible and audible alarms are noticeable in the wheelhouse,

• any necessary repairs to the refrigeration system, increases in refrigeration capacity and other steps of the emergency procedure can be carried out.

The requirements established under 7.1.4.4.4 remain applicable.”

9. In Table A, Column (11), for UN Nos. 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3231, 3232, 3233, 3234, 3236, 3237, 3238, 3229, 3240, 3533 and 3534, insert “HA10, HA11”.
Safety

10. Transport safety is improved where ADN requirements are written clearly and make unequivocally clear to whom they apply.

Implementation

11. No existing obligation has been amended. No amendment is necessary in relation to shipbuilding nor in relation to the cargo transport units to be transported. Operational requirements for loading and carriage may be easily observed through organizational measures.