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Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

1 December 2015

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Item 7 of the provisional agenda
Global harmonization of transport of dangerous goods
regulations with the Model Regulations

Information on the next amendment to the IMDG Code

Transmitted by the International Maritime Organization (IMO)

Introduction

- 1. The Editorial and Technical (E&T) Group of the IMO's Sub-Committee on Carriage of Cargoes and Containers (CCC) met from 21 to 25 September 2015 under the chairmanship of Mrs. Gudula Schwan (Germany). The report of the group is contained in document E&T 24/WP.1.
- 2. The group finalized the draft amendment 38-16 to the IMDG Code¹ taking into account the report of the forty-seventh session of the Sub-committee of Experts on the Transport of Dangerous Goods (UNSCETDG) and latest amendments to the United Nations Recommendations on the transport of dangerous goods, nineteenth revised edition.

Lithium Batteries contained in Vehicles, engines and machinery

- 3. Concerning the requirements for lithium batteries contained in SPs 240, 312, 363 and 385, the group considered a proposal by Germany (CCC 2/6/13) to further amend Special Provisions (SPs) 240, 312, 363 and 385 and noting that CCC 2 agreed, in principle, to solve this safety related matter through the inclusion of maritime related SP's 900 series for the transport of lithium batteries contained in vehicles, engines and machinery.
- 4. In this context, the E&T group agreed to adapt SPs 961 and 962 with regard to small production runs and prototype batteries and damaged batteries included in vehicles and to draft a new special provision (SP 972) for machinery and engines (UN 3528, 3529 and 3530) containing lithium batteries.
- 5. Consequently, the requirements for lithium batteries contained in SPs 240, 312, 363 and 385, as contained in the UN Model Regulations 19th revised edition, have not been incorporated into the draft amendment 38-14.
- 6. The above-referred draft Special Provisions are shown in the annex to this document.

¹ Amendment 38-16 to the IMDG Code is to be considered and adopted by the Maritime Safety Committee at its ninety-sixth session in June 2016 (see also Circular Letter 3598).



Editorial corrections to the amendments to the IMDG Code (amendment 37-14)

P200

7. When finalizing the editorial corrections to the English text of amendment 37-14 to the IMDG Code (resolution MSC. 372(93)), the group noted that as a consequence of the deletion of the text in the columns for test pressure and filling ratio in P 200, table 2, for UN 1058, it was necessary to insert letter "z" in the column for special provisions.

Other related matters

- 8. The following IMO Circulars related to the transport of dangerous goods by sea have been issue.
- CCC.1/Circ.3 Revised guidance on the continued use of existing IMO type portable tanks and road tank vehicles for the transport of dangerous goods;
- **MSC.1/Circ.1517** Carriage of dangerous goods, the international maritime dangerous goods (IMDG) CODE Contact information for the designated national competent authority;
- **CSC.1/Circ.150** International convention for safe containers (CSC), 1972, Implementation, testing, inspection and approval.

Proposal

8. The Sub-Committee is invited to note the information provided and take action as appropriate.

Annex

Draft special provisions for maritime transport in regard to lithium batteries contained in vehicles, engines and machinery

Adapted Special Provisions

"961 Vehicles are not subject to the provisions of this Code if any of the following conditions are met:

1. Vehicles are stowed on the vehicle, special category and ro-ro spaces or on the weather deck of a ro-ro ship or a cargo space designated by the Administration (flag State) in accordance with SOLAS 74, chapter II-2, regulation 20 as specifically designed and approved for the carriage of vehicles, and there are no signs of leakage from the battery, engine, fuel cell, compressed gas cylinder or accumulator, or fuel tank when applicable. When packed in a cargo transport unit the exception does not apply to container cargo spaces of a ro-ro ship.

In addition, for vehicles powered solely by lithium batteries and hybrid electric vehicles powered by both an internal combustion engine and lithium metal or ion batteries, the lithium batteries shall meet the provisions of 2.9.4, except that 2.9.4.1 does not apply when pre-production prototype batteries or batteries of a small production run, consisting of not more than 100 batteries, are installed in the vehicle and the vehicle is manufactured and approved according to the provisions applied in the country of manufacture or country of use. Where a lithium battery installed in a vehicle is damaged or defective, the battery shall be removed.

- 2. Vehicles powered by a flammable liquid fuel with a flashpoint of 38°C or above, there are no leaks in any portion of the fuel system, the fuel tank(s) contains 450 L of fuel or less and installed batteries are protected from short-circuit;
- 3. Vehicles powered by a flammable liquid fuel with a flashpoint less than 38°C, the fuel tank(s) are empty and installed batteries are protected from short circuit. Vehicles are considered to be empty of flammable liquid fuel when the fuel tank has been drained and the vehicles cannot be operated due to a lack of fuel. Engine components such as fuel lines, fuel filters and injectors do not need to be cleaned, drained or purged to be considered empty. The fuel tank does not need to be cleaned or purged;
- 4. Vehicles powered by a flammable gas (liquefied or compressed), the fuel tank(s) are empty and the positive pressure in the tank does not exceed 2 bar, the fuel shut-off or isolation valve is closed and secured, and installed batteries are protected from short circuit;
- 5. Vehicles solely powered by a wet or dry electric storage battery or a sodium battery, and the battery is protected from short circuit."

"962 Vehicles, not meeting the conditions of special provision 961 shall be assigned to class 9 and shall meet the following requirements:

- 1. Vehicles shall not show signs of leakage from batteries, engines, fuel cells, compressed gas cylinders or accumulators, or fuel tank(s) when applicable;
- 2. For flammable liquid powered vehicles the fuel tank(s) containing the flammable liquid shall not be more than one fourth full and in any case the flammable liquid shall not exceed 250 L unless otherwise approved by the competent authority;
- 3. For flammable gas powered vehicles, the fuel shut-off valve of the fuel tank(s) shall be securely closed;

4. Installed batteries shall be protected from damage, short circuit, and accidental activation during transport. Lithium batteries shall meet the provisions of 2.9.4, except that 2.9.4.1 does not apply when pre-production prototype batteries or batteries of a small production run, consisting of not more than 100 batteries, are installed in the vehicle and the vehicle is manufactured and approved according to the provisions applied in the country of manufacture or country of use. Where a lithium battery installed in a vehicle is damaged or defective, the battery shall be removed and transported according to SP 376, unless otherwise approved by the competent Authority.

The provisions of this Code relevant to marking, labelling, placarding and marine pollutants shall not apply."

New Special Provision

"972 Lithium batteries shall meet the provisions of 2.9.4, except that 2.9.4.1 does not apply when pre-production prototype batteries or batteries of a small production run, consisting of not more than 100 batteries, are installed in the engine or machinery. Where a lithium battery installed in an engine or machinery is damaged or defective, the battery shall be removed."