

DANGEROUS GOODS PANEL (DGP)

TWENTY-SEVENTH MEETING

Montréal, 16 to 20 September 2019

- Agenda Item 1: Harmonizing ICAO dangerous goods provisions with UN Recommendations on the Transport of Dangerous Goods
 - 1.2: Develop proposals, if necessary, for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2021-2022 Edition

COMMENTS ON WORKING PAPER SUBMITTED TO THE FIFTY-SIXTH SESSION OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

(Presented by the Secretary)

SUMMARY

Attached is a working paper submitted for consideration at the Fifty-sixth session of the Sub-Committee of Experts on the Transport of Dangerous Goods (Geneva, 2-11 December 2019). It proposes amendments to the excepted quantity provisions in the UN Model Regulations to address perceived differences between limited and excepted quantity thresholds. DGP/27 is invited to provide comments on the proposal to the Secretary for onward submission to the UN Sub-Committee.

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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

Fifty-sixth session

Geneva, 2-11 December 2019 Item 3 of the provisional agenda **Listing, classification and packing**

Limited and excepted quantities

Transmitted by the expert from Canada*

Objective

1. Put forward a proposal to amend the *Guiding Principles for the Development of the UN Model Regulations* to provide further information on the perceived discrepancies between the Limited and Excepted Quantity thresholds.

Introduction

- 2. At the fifty-fifth session of the Sub-Committee, Canada presented informal document INF.11, in which it sought member's support to clarify the discrepancies between the limited and excepted quantity provisions in order to enhance understanding and maximize compliance. The paper was well-received by most members of the Sub-Committee, who agreed that such a clarification would be useful.
- 3. The Excepted Quantity (EQ) exemption allows for dangerous in inner packagings with a maximum volume of 30 mL and outer packaging of 500 mL or 1,000 mL to be transported under relaxed conditions. The Limited Quantity (LQ) exemption allows the transport of much larger quantities (individual packages of maximum weight of 30 kg) of dangerous goods than EQ under similar conditions.

^{*} In accordance with the programme of work of the Sub-Committee for 2019–2020 approved by the Committee at its ninth session (see ST/SG/AC.10/C.3/108, paragraph 141 and ST/SG/AC.10/46, paragraph 14).

4. Shippers, carriers, and trainers have expressed confusion regarding the discrepancies between the respective schemes, given that some dangerous goods are forbidden for transport in EQ – that is, very small quantities contained in robust and tested packagings, yet, the same substances are permitted in LQ, that is, larger quantities contained in non-tested packagings.

Background

- 5. As early as 1985, the Model Regulations allowed for the transport of relatively small quantities of selected dangerous goods under the LQ exemption. However, the Model Regulations did not include the EQ developed for air transportation by the International Civil Aviation Organization (ICAO). Therefore, owing to the lack of harmonization across all modes, the UN Model Regulations adopted, in 2007 the EQ exemption scheme from the ICAO, enabling the seamless transport of select substances across all modes.
- 6. The EQ thresholds for the respective dangerous goods correspond to the quantities permitted for transport on passenger aircraft. As these provisions were developed to maintain the safe transport of dangerous goods by air, some thresholds are more restrictive when compared to the LQ exemption. For instance, certain dangerous goods are totally prohibited from air transportation under the EQ exemption, as they pose a greater risk on board an aircraft.
- 7. Without this background information on the genesis and rationale behind the EQ provisions and quantities, it is difficult to comprehend why certain substances can be transported in LQ, yet, not in much smaller quantities under the EQ exemption.

Proposal

8. Amend the text after the title Chapter 3.5, Excepted quantities in the *Guiding Principles for the Development of the UN Model Regulations* as follows (new text underlined, deleted text strikethrough):

"The rationale behind excepted quantity provisions is that selected dangerous goods packed in very small quantities, other than articles, with limitations on the quantity per inner packaging and outer packaging and in very robust, tested packaging pose a lesser risk in transport than do the same goods packed in larger volumes, and on this basis some relief from the requirements may be accepted. The substances permitted and the provisions applied are based on some 20 years' experience in air transport, with no reported incidents. There is no requirement for such dangerous goods to be labelled or for transport document provisions to be met but a suitable mark, based on the established air transport mark, is used to aid identification of packages.

Given the lower level of measures applied, a threshold limit reflective of the quantities allowed on passenger aircraft has been placed on the total quantity of such goods that may be carried on any one cargo transport unit. Given the difficulty of calculating whether the threshold is reached based on the very small net mass of dangerous goods contained in each package, that threshold is set, uniquely, simply on the total number of packages of dangerous goods packed in excepted quantities. The limit is 1000 packages per cargo transport unit.

Substances permitted in excepted quantities are based on those that may be transported by passenger aircraft by the 2005–2006 edition of the ICAO Technical Instructions. These are:

The Excepted Quantity provisions were first introduced in the International Civil Aviation Technical Instructions (ICAO TI) in 1987 to allow for the transportation of small quantities of dangerous goods by air under relaxed conditions. This scheme was later introduced in the Model Regulations for the uninterrupted movement of dangerous goods across all modes.

These provisions reflect safety considerations pertaining to transportation by air, and, as a result, the quantity limits and packaging requirements for selected dangerous goods are more stringent than those for limited quantities.

The following table describes the methodology for determining the E Codes: "