## 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

3 December 2019

Fifty-sixth session
Geneva, 4-10 December 2019
Item 9 of the provisional agenda
Guiding principles for the Model Regulations

# Comments on document ST/SG/AC.10/C.3/2019/44 – Limited and excepted quantities

#### Transmitted by the International Civil Aviation Organization (ICAO)

#### Introduction

- 1. The ICAO Dangerous Goods Panel has reviewed the proposal submitted by the expert from Canada in ST/SG/AC.10/C.3/2019/44 and offers the following comments.
- 2. There is very little support for the proposed deletion of two sentences nor the additional text in the second paragraph. The proposed additional phrase "reflective of the quantities allowed on passenger aircraft" is considered to be factually incorrect there is no limit on the number of packages of dangerous goods in excepted quantities that can be loaded onto a passenger aircraft. It was noted that the 1000 package limit per cargo transport unit (CTU) was an arbitrary number that was developed by the UN Subcommittee based on fears that there could be an unlimited number of packages of excepted quantities loaded into a CTU which might potentially create a fire risk.
- 3. One suggestion is to retain the first proposed sentence and to modify it as follows:
- "The substances permitted and the provisions applied are based on some 20 years' experience in air transport, with no reported incidents some 20 years' experience in air transport, with no reported incidents criteria established by the International Civil Aviation Organization (ICAO) Dangerous Goods Panel."
- 4. A second suggestion is to move the proposed two new paragraphs to follow immediately after the first paragraph as it is believed this would make for a more logical presentation.
- 5. Additionally, some members believed that the central issue is the correlation of the permitted amounts for limited quantities with that for excepted quantities in the UN Model Regulations, noting that there are many substances permitted as limited quantities in the Model Regulations which are not so permitted in the Technical Instructions (e.g. UN 1133, Adhesives, PG I; UN 1261, Nitromethane). However, the correlation between limited quantities and excepted quantities in the Technical Instructions is almost 100% a few anomalies exist where they are permitted in limited, but not in excepted, quantities (e.g. UN 2059, Nitrocellulose solution, flammable, PG II and PG III and UN 1204, Nitroglycerin solution in alcohol). To assist the UN Subcommittee, the DGP could consider these anomalies in the next biennium and report back on the outcome of the discussion.

### **Proposal**

6. Revise the proposed text in ST/SG/AC.10/C.3/2019/44 as follows:.

"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—criteria established by the International Civil Aviation Organization (ICAO) Dangerous Goods Panel. 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.

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.

Given the lower level of measures applied, a threshold limit reflective of the quantities allowed on passenger aircraft 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 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: "