Introductions

1. Following requests by the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), the Freight Container Working Group (FCWG) was created under the TRANSSC Technical Expert Group – Operational Matters (TTEG-OM). The FCWG was tasked to provide regulatory interpretations and develop regulatory change proposals, where warranted, to address issues raised by the ICAO and IMO in regards to the transportation of freight containers used as packaging.

2. This paper presents the proposed formal regulatory interpretations regarding the current Regulations that are the result of the FCWG deliberations on the five questions raised by ICAO and IMO. Regulatory changes proposed as a result of the FCWG deliberations are presented in a separate paper at TRANSSC 40.

3. The summary of the FCWG discussions and the supporting rationale are available in a separate report (TTEG-OM-TR001) for further reference.

4. TRANSSC is kindly requested to comment on these proposed responses that are presented for approval/ modification/rejection during TRANSSC 40. A comment resolution table has been created by the FCWG for this purpose.
5. Following the decision of TRANSSC, the approved FCWG responses to the five questions will be forwarded to the ICAO and IMO, and further work might be undertaken accordingly.

Proposed Responses to the ICAO AND IMO Questions

6. Question 1 (ICAO):

If a shipment must be transported under exclusive use, only in the case the surface radiation level of a package or overpack exceeds 2mSv/h (TI if the package or overpack exceeds 10) the shipment must in addition also be transported under special arrangement. In all other cases when exclusive use is required (e.g. use of IP packaging, TI of freight container exceeds 50, …) no special arrangement is required. Why did IAEA impose this requirement (special arrangement) only in case the surface radiation level exceeds 2m Sv/h. (IAEA Para. 579)?

Answer:


7. Question 2 (ICAO):

The maximum transport index for a package not under exclusive use is 10 (IAEA Table 81) and for a freight container not under exclusive use it is 50 (IAEA Table 102). In case the freight container is used as packaging, is the TI limited to 10?

Answer:

The intent of the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6, 2018 Edition) is understood to require the application of the most restrictive TI limit - multiplication factor combination (package versus freight container) to freight containers used as packaging, which is the one that allows the least amount of containers on the conveyance.

To assess the container as a package, the TI shall first be derived without the multiplication factor, as it is not applicable to a package. If this TI value is greater than 10, the container must be shipped under exclusive use, as per para. 526, using this TI value. In this case, there is no need to assess the container as a freight container since “exclusive use” is the most restrictive possible outcome.

If the TI (as a package) is equal to or less than 10, the container shall also be assessed as a freight container. To assess the container as a freight container, the TI shall be derived using the multiplication factor of Table 7. Then, these two TI values, derived without and with the multiplication factor, shall be compared to the TI limits of Table 10 for packages and freight containers, respectively, for the intended conveyance(s). The TI value that allows the least amount of containers on the conveyance(s) shall be used.

Note that regulatory change proposals are being submitted to provide relief from this regulatory

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1 ICAO TI Table 5-2
2 ICAO TI Table 7-6
double assessment burden and thus, to ease the implementation and enforcement of the appropriate requirements in the next edition of SSR-6.

8. **Question 3 (ICAO):**

In case the freight container is used as packaging, do the placarding requirements for freight containers apply or are the labelling requirements for packaging sufficient?

**Answer:**

The intent of the IAEA *Regulations for the Safe Transport of Radioactive Material* (SSR-6, 2018 Edition) is understood to require the application of both the labels as a package and the placards as a freight container. Paragraph 534 (5; 3.6.1.1 of ICAO-TI) allows the use of enlarged labels only, where appropriate, instead of using both labels and placards.

9. **Question 4 (ICAO):**

In case the freight container is used as a packaging (e.g., IP-2), does TABLE 7 in the SSR-6 apply or not?

**Answer:**

The intent of the IAEA *Regulations for the Safe Transport of Radioactive Material* (SSR-6, 2018 Edition) is understood to require the application of the most restrictive TI limit - multiplication factor combination (package versus freight container) to freight containers used as packaging, which is the one that allows the least amount of containers on the conveyance.

See the response to **Question 2** for when the multiplication factor should be applied.

Note that regulatory change proposals are being submitted to provide relief from this regulatory double assessment burden and thus, to ease the implementation and enforcement of the appropriate requirements in the next edition of SSR-6.

10. **Question 5 (IMO):**

TI and CSI limits in the IMDG Code are not in line with those in the SSR-6 (and UNOB). In other words, are these limits applicable to open-type (e.g., flat rack) freight containers?

**Answer:**

As there is no need to differentiate open-type freight containers from closed type containers on the basis of TI and CSI limits on the conveyance, it is recommended to the IMO to delete “(closed containers)” in Table 7.1.4.5.3.1 and Table 7.1.4.5.3.4 of the IMDG Code.