TRANSSC Technical Expert Group on Transport Operational Matters (TTEG-OM)

Issues on Freight Containers

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Urgent Issue 1: Q from ICAO

• **Question 1:** In case the freight container is used as a packaging e.g. IP-2 does Table 5-1 apply or not?
• **Question 2:** In case the freight container is used as packaging do these requirements apply or are the labelling requirements for packagings sufficient?
• **Question 3:** In case the freight container is used as packaging is the TI limited to 10?
• **Question 4:** 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 the shipment must in addition also be transported under special arrangement. Why did IAEA impose this requirement (special arrangement) only in case the surface radiation level exceeds 2mSv/h.

Ref. INF-022/TRANSSC35
Examples:

- Freight container
  - Uranium ore concentrate package
  - 20’ ISO Freight Container

- Freight container used as packaging
  - 200L drum containing low level radioactive waste
  - Type LLW-1 packaging

(from WNTI Good Practice Guide GPG3)
Question 1: TI and CSI limits for seagoing vessels –
In SSR-6 (Table 10 and 11), limits are applicable equally to closed type freight containers and open type ones, while in IMDG Code, limits are applicable only to closed type freight containers. What limits are applicable to open type freight containers?

Question 2: Is TI determination by direct measurement of dose rate (para. 524 of SSR-6) applicable to open type freight containers, since workers are easily accessible to packages on the container?

Ref. INF18/TRANSSC34. These issues are currently addressed by Criticality WG (TTEG), but it seems better to be addressed by TTEG-OM or TTEG-Radiation Protection.
For your reference

### TABLE 10. TRANSPORT INDEX LIMITS FOR FREIGHT CONTAINERS AND CONVEYANCES NOT UNDER EXCLUSIVE USE

<table>
<thead>
<tr>
<th>Type of freight container or conveyance</th>
<th>Limit on sum of TIs in a freight container or aboard a conveyance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sea-going vessel</strong>:</td>
<td></td>
</tr>
<tr>
<td>(i) Hold, compartment or defined deck area:</td>
<td></td>
</tr>
<tr>
<td>Packages, overpacks, small freight containers</td>
<td>50</td>
</tr>
<tr>
<td>Large freight containers</td>
<td>200</td>
</tr>
<tr>
<td>(ii) Total vessel:</td>
<td></td>
</tr>
<tr>
<td>Packages, overpacks, small freight containers</td>
<td>200</td>
</tr>
<tr>
<td>Large freight containers</td>
<td>No limit</td>
</tr>
</tbody>
</table>

*From DS496-Step 11 (deleted) From SSR-6 2018 Edition*
Medium Term Issue 1: Definition

- **Question 1:** In the definition of freight container, how far should we chase the consistency to that of UNOB and transport modal regulations?
  - Permanent enclosed character
  - Large/small freight container
  - CSC (International Convention for Safe Containers)

- **Question 2:** Is it beneficial to include open type freight containers to the definition of freight container in SSR-6?
  - Some requirements for freight containers needs interpretations, that have not been agreed during the last revision cycle, to be applied to open type freight containers.
  - Why don’t we go back to the definition in the 2009 Ed. of SSR-6 to avoid problems?
Open Type Container Related Questions

For Flat Bed Container (FBC), Flat Rack Container (FRC) and Open Top Container (OTC);

• Small or large container (internal volume) ?
• Exclusive use applicable?
• Labels on 4 sides? Labels required, when labels on packages can be seen?
• Placards on 4 sides?
• Transport Index (TI) ? Limits?
Medium Term Issue 2: vs Package (1)

- **Question 1**: The multiplication factors (Table 7 in SSR-6) shall be applied to determine the TI for freight container depending its size. Then, why should such factors be applied to package with same size?
Medium Term Issue 2: vs Package (2)

- **Question 2**: For the transport of radioactive material, a freight container may be used as a packaging (UNOB). Why SSR-6 specifically note “freight container used as packaging”?
- What are the merits to use a freight container as a packaging”?
- How can the differences in requirements for freight containers and those used as packagings be justified? → e.g., ICAO questions
- Are the alternative requirements for freight containers used as Type IP-2 or Type IP-3 (para. 629) justified? (Are routine conditions of transport covered by those specified in ISO 1496/1?)
Way forward: Proposals

- To establish “Freight Container Working Group” within TTEG-Operational Matters (TTEG-OM).
  - Work on corresponding basis

- Need experts to join FC-WG!!

- Time frame:
  - Urgent issues: by TRANSSC38
    The secretariat will send definitive statements endorsed in TRANSSC38 to ICAO and IMO.
  - Medium term issues: step by step by the end of the first term of TTEG activities (2 years from now?).
    Some outcomes may be submitted to the next review/revision cycle.
Thank you for your attention!