WG 1: TS-G.1.3 Radiation Protection Programmes for the Transport of Radioactive Material

Introduction

WG 1 was assigned to undertake a brief review of TS-G 1.3 to identify whether this document needs a revision using the following TOR.

TOR TS-G-1.3

Whilst operators adopt procedures that control the preparation, loading, transport and unloading of packages there can be a misunderstanding of the purpose of a radiation protection programme (RPP) how one is developed and how it is implemented. It is therefore considered that this document provides important guidance for operators and a review of its scope, content and presentation is needed to ensure it provides a comprehensive and understandable source of guidance information. It will also be useful to consider changes that may address findings relating to RPPs from compliance inspection programmes carried out in your country over the 10 years since TS-G-1.3 was published.

Discussion

The scope, structure and the content was discussed.

Key findings

- Add clarification why criticality safety is not included in the scope of TS-G-1.3.
- Update references to standards, facts and figures through the whole document (e.g. BSS)
- Add the use of ALARA in the objective
- Consider the exposure to the members of the public in demonstrating safety in transport of radioactive material (e.g. para 3.7)
- Use of terminologies and paragraph numbers in line with SSR-6
- Revise the dose rate of 20 μSv/h in the driver's section (Para 8.10)
- Revise Chapter 9 to avoid repetition from TS-G-1.2 and provide concise provisions referring to TS-G 1.2
- Avoid duplication of text with SSR-6, TS-G-1.2, TS-G-1.4 and TS-G-1.5
- Complete revision of all annexes with updated information and examples (the examples are considered an essential part of TS-G-1.3, providing practical guidance and graded approach with illustration)
- Remove annex VII (already in SSR-6)
- Revise annex IX with help of IMO representative
- Annex X: Use of more relevant industry example; consider whether this checklist is necessary
- Annex XI: Move to TS-G 1.2

The discussion notes are presented in Attachment 1.

Recommendation

WG 1 recommends revision of TS-G1.3
Attachment 1

Discussion notes

- 3.6: split up into two parts: 1. transport within an establishment and 2. Dedicated carrier / shipper
- 3.7 and Ch. 4: add guidance for members of the public
- 3.9 (a): expand with examples, e.g. checks of package integrity and radiation levels
- 5.5: add guidance on the interrelation between RPP’s of consignors, carriers and consignees
- 5.13: clarify what is meant by ‘authority’
- Ch. 6: revise reference to 20 µSv/hr for drivers (new BSS)
- 6.1: clarify ‘routine and normal conditions’ (ref. SSR-6)
- 6.1.a(ii): align ‘reasonable accurate estimates’ to new BSS ‘conservative estimates’ (see also 6.12 and 6.16)
- 6.16 and annex VIII: be careful presenting figures without proper context
- 6.20: update with current (versions of) computer codes
- 6.21: consider adding examples (e.g. loading and unloading of NORM)
- 8.2: align definition of ‘critical group’ with new BSS
- 8.9: add example of ‘some protective measures’
- 8.10: Revise dose rate of 20 µSv/h in driver’s section
- Chapter 9: Revise Chapter 9 to avoid duplication of TS-G-1.2. Provide a concise summary with reference to TS-G-1.2
- Annex IX: take into account modal emergency response provisions (e.g. IMDG Code)
- Ch. 11: revise taking into account TS-G-1.4
- Annex I: take into account size of package considering the decrease of radiation levels with distance
- Annex I-V: add example for nuclear fuel cycle and different transport modes
- Annex II-10: add check of packages for contamination
- Annex III-13: add alerting first responders
- Annex VII: Remove annex VII
- Annex-IX revise with input from IMO representative
- Annex X: Use of more relevant industry example
- Annex XI: Move to TS-G 1.2
Attachment 2

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