Participants:
Makoto Hirose (Japan, Chair WG Freight Containers)
Paul Hinrichsen (South Africa, Chair WG NORM)
Ingo Reiche (Germany)
Daniel Daigle (Canada)
Michael Wallin (Sweden)
Bruno Desnoyers (ISO/Orano)
David Brennan (IATA)
Katherine Rooney (ICAO)
Bok Hyong Lee (Korea)
Jang Ki-Won (Korea)
Christopher Jones (UK)
Eric Reber (IAEA)
Jarlath Duffy (Ireland)
Pierre Malesys (WNTI)
Rick Boyle (USA)
Yusuke Masuda (Japan)
Min Zhang (China)
Asger Krüger (Denmark)
Christian Cymorek (TIC)
Roland Chavasse (TIC)
Mohamed Abdel Halim Abdel Aziz Badr (Egypt)
Mathieu Ter Morshuizen (Netherlands, Secretary TTEG-OM / acting Chair)

Apologies: John Templeton (Australia, Chair TTEG-OM)

Agenda:

Due to limited time available the following the group decided to limit the agenda to the following items:

1. Issue with the transport of Ignition Exciters (paper INF-25)
Feedback item 1:

Mr David Brennan presented an issue with the transport of gas turbine engines that that are fitted with spark gaps containing a small quantity of Kr-85 inside the ignition igniters.

Significant quantities of these gas turbine engines are transported by road, sea and air where the engines are being shipped to/from a maintenance facility and to/from customers. The engines are classified as UN 3528, Engines, internal combustion, flammable liquid powered, but there have been questions asked as to the presence of the spark gaps, which when shipped by themselves are classified as UN 2911, Radioactive material, excepted package – instruments.

In the discussion of the issue it was proposed that the approach should be to apply special provision 290 from the UN Model Regulations which requires that where the radioactive material has a subsidiary hazard, but the radioactive material is classified as an excepted package that the other class takes precedence but that the proper shipping name for the other class is appended with the radioactive material, excepted package proper shipping name.

Subsequently to the discussion in the meeting of the TTEG-OM it was identified that special provision 290 in the UN Model Regulations only applies to substances that have multiple hazards, for example a radioactive material in liquid form that also meets the classification criteria for a flammable liquid.

As these engines are articles and there are two separate hazards, the engine, which is classified in Class 3 and the spark gaps which are in Class 7, there will need to be further consideration on a solution.

Feedback item 2. and 4. (WG NORM):

Issues discussed:

1. Tantalite Shipping Issue: Germany

Mr Ingo Reiche (Germany) raised an incident in which a shipment of tantalite, destined for entry to a German port, was denied entry.
The discussion began with Mr Christian Cymorek (Strat. Raw Material Projects) explaining that a shipment of tantalite was destined for Germany, on board a ship. Upon arrival at the German port the shipment was denied entry by the port.

It would seem that there was uncertainty, from Mr Cymorek, on how to determine if the shipment was exempt from the Regulations or not. Hence while on board the vessel it was labelled as “Non radioactive” while upon landing this was re-classified, by Mr Cymorek, as “radioactive”. This re-labelling caused concern for the shipper and this may have been a contributing factor in the denial.

When Mr Reiche explained the story from the regulators point of view he mentioned two issues;

a) The re-labelling
b) Uncertainty of the regulator in determining if the shipment was classified as exempt or not exempt.

In responding to this case Mr Hinrichsen explained that firstly the shipment should not have been re-labelled half-way through the shipment. Secondly the first document produced by the NORM WG explained in simple detail exactly how to do the determination of exemption for such a material. It seemed that the NORM document explained all of the calculation issues raised by both Mr Cymorek and by Mr Reiche.

There were also elements of DOS in this story and these elements were discussed.

2. WNTI Comments on Doc TRANSSC NORM WG-001

THE DETERMINATION OF EXEMPTION FROM THE INTERNATIONAL ATOMIC ENERGY AGENCY REGULATIONS FOR THE SAFE TRANSPORT OF NATURALLY OCCURRING RADIOACTIVE MATERIAL

A large number of comments had been received, on the above document, from WNTI.

The document discusses both paragraph 107 and Table 2 of SSR-6 and in both cases refers to the issue of Exemption of NORM. WNTI made the comment that paragraph 107 of SSR-6, referred to Exclusion rather than to Exemption and accordingly the document had to make a very clear distinction between Exclusion (when referring to p 107) and Exemption (when referring to Table 2).

After some discussion on the issue it was agreed that paragraph 107 of SSR-6 made no reference to the concept of Exclusion and in fact simply referred to instances where “These regulations do not apply …….” Hence these are not to be taken as instances of Exclusion.

While paragraph 106 says “These regulations apply to the transport of radioactive material …….” While paragraph 236 defines radioactive material in terms of Table 2; Radioactive material

236. Radioactive material shall mean any material containing radionuclides
where both the activity concentration and the total activity in the consignment exceed the values specified in paras 402–407.

Paragraphs 402-407 being inclusive of Table 2.

The decision was then made to tidy up any references, in the document, to exemption and when referring to paragraph 107 to simply state that these were the conditions where transport was not subject to SSR-6 rather than using the terms Exempt or Excluded.

3. WNTI Comment on Doc TRANSSC NORM WG 002

TRANSPORTING NORM IN ACCORDANCE WITH THE REQUIREMENTS OF SSR-6

There was no time to go through the WNTI comments in any detail. However the gist of the WNTI comments was that the terminology in the document was very open to interpretation on a country-by-country basis. For example the document called ALL transported mining materials (ores) NORM while according to WNTI Uranium Concentrate was not generally called NORM. After some discussion the Group agreed but also said the doc should use the generic term NORM as the term Uranium Oxide Concentrate or TENORM did not even appear in SSR-6. Each member state was free to call these things as they wished. However the underlying principles on how these transports should be handled was independent of the name assigned.

There is an example in the document discussing how to transport uranium oxide. WNTI felt the example should refer, perhaps, to tantalum. The group agreed with this on the grounds that, the underlying principles were independent of the name assigned, and also that transporters of uranium oxide generally understood the issues well, while transporters of tantalum, and other lower activity minerals, understood it less.

Feedback item 3. and 5. (WG Freight Containers):

Because of the time available two of the four papers were discussed:

FCWG-01 (https://www-ns.iaea.org/committees/files/TRANSSC/1921/INF-05.bSpecialArrangementforFreightContainersusedaspackagingforAirTransportFCWG-01.pdf): Identification of similar requirement for transport by sea but only if the exclusive use vehicle needs to be unloaded. The logic that an aircraft cannot be loaded without removing the load from the vehicle leads to automatically requiring special arrangement for Air transport. WG agreed that there was a safety basis and a logic basis for the rules as written and there is no reason to modify it. WG to respond to ICAO question.

General query as to how do we respond to ICAO/IMO on this topic?
Note that it is key now how the freight container is loaded – if it is loaded as a package then the package limits apply – if the FC is loaded with individual packages then the freight container limits apply. This could be decided by how the items are declared on the documentation and packed/labelled, if each package is correctly labelled/packaged/declared and contained within a FC then it is a FC with associated limits, if they are not then the FC is a package. There was a discussion on why a FC with TI50 is more safe than a FC being a Package with TI of 50? A number of points were raised on how the regs could be interpreted and justified. Is the current logic correct – is there further work required to look into options for change? Future work is needed, further responses requested by email.