TFWG update
TRANSSC 39
About TFWG

• Transport Facilitation Working Group (TFWG) established in April 2014
• Independent, multi-stakeholder group of experts whose role is to propose strategies and activities necessary to enable the efficient global transport of radioactive materials.
• A forum for sharing findings and coordinating efforts
• TFWG submits reports to the Inter-Agency Group (IAG), composed of representatives of the IAEA, ICAO, and IMO Secretariats as well as UNECE, and to TRANSSC
• www.tfwg.info
TFWG Members

Co-Chairs:
• Nat Bruno - Brazilian Nuclear Energy Commission
• Serge Gorlin - World Nuclear Association

Secretary:
• Ulric Schwela – Salus Mineralis

• Manju Saini - Atomic Energy Regulatory Board, India
• John Mulkern - World Nuclear Transport Institute
• Simon Clark - Office for Nuclear Regulation, UK
• Terry Soulsby - International Source Suppliers and Producers Association
• Nontutuzelo Mmutle - National Nuclear Regulator, South Africa
• Mario Mallaupoma - Peruvian Institute of Nuclear Energy
• Jack Edlow - Edlow International
• Zhengcai Chen - formerly of Ministry of Transport, China
• Bernard Monot – Navy Blue Consulting
• Roland Chavasse – Tantalum Niobium International Study Centre
• Martin Comben – International Irradiation Association
TFWG Meeting – 29 Oct 2019

• Attendance:
  – Brazil, Argentina, France, Switzerland, Russia, Australia, UK, Sweden, Japan, Paraguay, S. Africa
  – IAEA: NE, NS, OLA
  – WNTI, TIC, WNA, Cameco

• Presentations:
  – Marcelo Bohlke – Brazilian Permanent Mission
  – Anthony Wetherall – IAEA OLA
  – Abel Gonzalez – ANRA, CSS
  – Frank Koch – ENSI
  – Industry updates: WNTI, TIC, WNA
Maritime situation

- Consolidation of shipping lines
- Shipping alliances
- Trend towards larger vessels
June 2018: International Maritime Organization’s Facilitation Committee accepted a report submitted by WNTI "Difficulties in Shipments of IMDG Code Class 7 Radioactive Materials"
## What are its effects?

<table>
<thead>
<tr>
<th>Product</th>
<th>Consequences of non-shipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teletherapy/radiosurgery sources</td>
<td>Detriment to public health delaying or restricting patient treatment. Potentially fewer patients treated</td>
</tr>
<tr>
<td>Irradiator (sterilizer) sources</td>
<td>Increased cost to sterilize products; shortage of sterile medical disposable products</td>
</tr>
<tr>
<td>Nuclear fuel (U3O8, UF6, fuel assemblies)</td>
<td>Security of supply to nuclear facilities affected; added physical protection risk to the material when sent indirectly; more countries decide to develop proliferation-sensitive fuel cycle facilities</td>
</tr>
<tr>
<td>Disused sources</td>
<td>Difficulty in shipping sources from countries where sources cannot be adequately managed sometimes due to political unrest. Sources become out of regulatory control</td>
</tr>
</tbody>
</table>

Source: Adapted from Annex of IMO FAL 42/16/1
• DOS side meeting at GC 2018
• Hosted by Brazil, organised by TFWG
• First meeting on denials at GC for 10 years
• Goal: highlight IMO FAL 42/16/1 and IAEA GC resolutions regarding DOS
• Attendance: 50 with 20 MS
r) Recognising that denials of and delays in shipment of nuclear and radioactive materials can affect the provision of medical treatment and diagnosis, the selection of routes and modes of shipment, and the predictability of transport.

80. **Encourages** efforts to avoid and address problems related to denials of and delays in the shipment of radioactive material, particularly shipment by air and **calls upon** Member States to facilitate the transport of radioactive material, and to identify, if they have not done so, a national focal point on denials of shipment of radioactive materials to achieve a satisfactory and timely resolution of this issue; [This text was in previous resolution]

81. **Requests** the Secretariat to hold a technical meeting to share experience and with a view to establishing a Working Group, with full participation of interested Member States and relevant experts, to consider the options for addressing denials of and delays in shipment, including a code of conduct on facilitation, and provide an initial report on these options to the Member States by June 2020
Conclusions

• DOS is a perennial issue
• Causes relating to economics, regulation as well as perception.
• The serious effects include detriment to public health and added safety and physical protection risk
• The TFWG has provided a forum for diverse stakeholders to share findings and coordinate efforts
• Recent acceptance of Brazil proposal to IAEA GC Nuclear Safety Resolution
Thank you for your attention
IAEA Transport Conference (July 2003)

IAEA’s International Conference on the Safety of Transport of Radioactive Material held in Vienna from 7 to 11 July 2003 noted:

- “the increasing frequency of use of radioactive material in medical applications, including life-saving measures requiring urgent transport, and the difficulties that are being experienced in accomplishing those transports”

- “the nuclear industry and other industries using radioactive material are facing a reduced availability of transport modes and carriers as a result of decisions by commercial carriers, ports and handling facilities not to accept radioactive material”
International Steering Committee

• International Steering Committee on Denials of Shipments (ISC-DOS) under IAEA: 2006 – 2013
• Membership included representatives from the International Maritime Organization (IMO), International Civil Aviation Organisation (ICAO), the International Federation of Airline Pilots (IFALPA), Member States and industry bodies
• Created valuable networks
• Succeeded in understanding causes and raising awareness
President’s findings:
• Denial of shipments continues to be a problem which must be addressed

• DOS is also hindering radioactive source returns as well as beneficial uses involving radioactive material. Information on why carriers deny shipments should be developed.

• DOS can adversely affect security - e.g., if a package is left at a facility, it may be misplaced or abandoned. Efforts to reduce denials have both safety and security benefits.
“The people that we have had trouble with are those that we call minor competent authority, people like ports and airfields, station-masters and people who are somewhere in the chain, and they have enough power to refuse to accept your material, but not enough time to understand what the regulations are about”
Code of Conduct – potential elements

• Appoint a responsible person for each MS
  – Establish a National Network involving key stakeholders (e.g. regulators; government agencies; customs organizations; shippers; freight forwarders; transport companies; port authorities; insurers)
  – Maintain a database of national competent authorities responsible for Cl. 7 transport, and relevant regulations
  – Hold annual meeting
Code of Conduct – potential elements

• Ensure at least one port / airport within national jurisdiction that is capable of allowing import / export / transhipment of Cl. 7, with staff responsible for safety / security qualified according to national standards

• MS to allow transit of nuclear and RAM via ports / airports even if the cargo is not destined for that country
Code of conduct – potential elements

• MS to publish any differences within their national regulations in relation to SS-R-6, IMDG Code, ICAO TI etc. [ICAO TI already encourages this]

• Organize a regular review meeting