

2nd Virtual Roundtable on Strengthening the Coordination of International Programmes and Organisations involved in the Adoption of Alternative Technologies to Radioactive Sources in Support of Radiological Security

Tuesday 27 April 2021. 15:00 – 18:00 CET

Background

In December 2020, WINS organised its first Virtual Roundtable on *Strengthening the Coordination of International Programmes and Organisations involved in the Adoption of Alternative Technologies to Radioactive Sources in Support of Radiological Security* (for further details see:

<https://wins.org/event/7804/virtual-roundtable-on-strengthening-the-coordination-of-international-programmes-involved-in-the-adoption-of-alternative-technologies>).

The main objective of the roundtable was to bring together influential international organisations and individual experts involved in the development, procurement, commissioning and disposal of radiation-generating equipment (isotopic or non-isotopic) to review ongoing activities and better understand the missions of various international programmes and organisations. Another objective of the roundtable was to demonstrate the diversity of stakeholders involved and how decision makers amongst them can influence which equipment or which technology will actually be used. It was finally an opportunity for participating organisations and experts to better know each other and identify gaps and opportunities for enhancing their respective coordination and contributions.

This roundtable was the first step of a set of activities to be conducted by WINS to support the strengthening of the coordination of various national and international stakeholders involved in the adoption or development of alternative technologies.

The roundtable discussions demonstrated that on-going efforts to support the adoption of non-isotopic alternative technologies are not yet fully coordinated with other international programmes and that some overlap, duplication of efforts, or conflicting priorities exist. It was reported that in some cases sponsors were funding the replacement of radioactive sources and associated devices with an alternative technology while others were still funding the purchase of a new, similar source-based device. In addition, while some IAEA activities clearly encourage the adoption of alternative technologies, the Agency may still provide high activity sources for medical or industrial applications through its Technical Cooperation programme to its Member States requesting such support, as long as they meet the required safety standards.

Building on the discussions and key findings of the December roundtable, WINS has developed a plan of action for focussing and structuring its activities in the area of alternative technologies to radioactive sources. This Action Plan is designed around the following four main activities:

1. Mapping out international stakeholders (i.e. organisations and programmes) involved in the development, procurement, commissioning and disposal of radiation-generating equipment (isotopic and non-isotopic);
2. Reviewing and assessing the effectiveness of existing mechanisms as well as supporting the coordination and cooperation of international stakeholders in order to identify potential issues and suggest solutions that could help avoid duplication of initiatives or conflicting objectives;

3. Supporting the adoption of mature and cost-effective alternative technologies by facilitating access to information on the availability and performance of these technologies and by disseminating success stories summarising the experiences and lessons learned from the cases of successful adoption;
4. Establishing collaboration agreements with key partner organisations, including the IAEA, VCDNP, and others as appropriate, and maintaining close contacts with Vienna-based Permanent Missions.

In view of the above, and in support of the on-going efforts to strengthen the coordination of international stakeholders and as part of its Action Plan implementation, WINS has decided to invite interested parties to further discuss the priority themes identified during the December roundtable through quarterly roundtables. The next Virtual Roundtable will be organised on 27 April 2021.

Scope and Objectives of the Roundtable

The purpose of the April 2021 Roundtable is to provide an opportunity to continue the discussions initiated in December 2020, with particular focus on the applications of radiation technologies in the medical sector (blood irradiation, cancer therapy, etc.).

The discussions will review the use of isotopic and non-isotopic radiation-generating equipment in the medical sector and will help to refine the understanding of the remaining challenges of switching to non-isotopic technologies.

WINS will also report on the progress made in mapping international stakeholders involved in the adoption and development of alternative technologies.

The Roundtable discussions and its key findings will be used to identify next steps, and to update WINS Action Plan, especially in support of the Ad Hoc Meeting of Stakeholder States Involved with Technological Alternatives to High-Activity Radioactive Sources scheduled for 14-18 June 2021.

Key issues to be discussed

The use of isotopic and non-isotopic radiation-generating equipment in the medical sector: Trends and forecast

- Supply of HASS – Facts and Figures
- Available alternative technologies for medical applications
- Perspective on the use of Co-60 and Linac in LMICs

Challenges of switching to non-isotopic technologies in the medical sector

- Are suitable alternative technologies available for all medical applications involving HASS?
- Development of novel Linacs
- Decision making process and criteria for selecting the technology
- Technical and regulatory prerequisites for an effective change
- How are the challenges addressed through bilateral or multilateral support programmes at the moment?

Role of International programmes and the need for coordination

- WINS effort in mapping out international stakeholders
 - Main international programmes and organisations involved in the development, procurement, commissioning and disposal of radiation-generating equipment (isotopic or non-isotopic)
 - What are their respective missions and objectives?
 - How do radiological security concerns influence their support processes?
- Coordination among programmes
 - What are the existing coordination mechanisms? How effective are they?
 - How is bilateral and multilateral support coordinated?
 - What are the specific flaws of current coordination efforts that if addressed can enhance existing efforts?
 - What are the ways to address the identified flaws in order to create a fully coordinated effort in adopting alternative technologies?
 - Are potential improvements already well known and documented?

Target Audience

The roundtable will be open to the attendees of the December 2020 Roundtable and to selected further representatives from:

- International organisations and initiatives, including those funding relevant projects in the medical sector
- Medical organisations using high activity radioactive sources and/or alternative technologies
- Manufacturers of alternative technology devices and associated R&D organisations
- International medical associations
- Regulatory authorities and other governmental organisations.