

IAEA Symposium on International Safeguards



Monday 5 November 2018 - Thursday 8 November 2018

Vienna International Centre

Scientific Programme

PROGRAMME:

The 2018 symposium will follow a new format — emphasizing interaction and dialogue, the generation of new ideas and the achievement of results — and will be streamlined to look at greater depth into a smaller number of topics within four thematic areas.

- 1) Addressing Growing Safeguards Challenges (CHA)
- 2) Leveraging Technological Advancements for Safeguards Applications (TEC)
- 3) Preparing for Safeguards for New Facilities, Processes and Campaigns (NEW)
- 4) Shaping the Future of Safeguards Implementation (SGI)

The symposium will consist of an opening plenary session, several topical interactive sessions addressing four primary themes, and a closing plenary session. Three special events are also planned in conjunction with the symposium: a 'Leading Women of Safeguards' panel; a networking and recruitment event; and a workshop and tour of the Safeguards Analytical Laboratories that are located in Seibersdorf.

In order to meet the symposium's objectives, topical sessions will be designed to facilitate interaction among the participants, with the following notional format:

Short presentations by speakers and panellists and contributors to forums

Facilitated discussions to stimulate dialogue among participants; identify ideas and solutions; and collect key insights and promising opportunities for follow-up.

Key Questions to be addressed under each Theme and Topic are found at the links below (or by clicking on the button 'Key Questions' in the main menu):

Theme 1 (CHA): <https://conferences.iaea.org/indico/event/150/page/1>

Theme 2 (TEC): <https://conferences.iaea.org/indico/event/150/page/2>

Theme 3 (NEW): <https://conferences.iaea.org/indico/event/150/page/3>

Theme 4 (SGI): <https://conferences.iaea.org/indico/event/150/page/4>

Addressing Growing Safeguards Challenges (CHA)

The sessions under this theme will look at a selected set of known challenges facing the safeguards community in the near term, including the potential impact on safeguards of advances and developments such as additive manufacturing, distributed supply chains, and transnational flows of goods and information. The human resource challenges of the safeguards community and innovative ways to address them will also be included. Finally, recognizing the increasing dependence on information technology infrastructure and digital data in safeguards, protecting against cyber security threats will be discussed.

Leveraging technological advancements for safeguards applications (TEC)

The sessions under this theme will build upon insights gained at the emerging technologies workshop organized by the Department of Safeguards in 2017 and seek to bring promising advances into the safeguards realm. The topics to be covered include: safeguards applications of advances in artificial intelligence; analysis, integration and visualization of multi source data; shared ledger technology, image processing, business analytics and robotics.

Preparing for safeguards new facilities, processes and campaigns (NEW)

The sessions under this theme will address safeguards considerations around two areas of nuclear industry development. First, the symposium will explore challenges and opportunities for safeguarding selected new reactor designs which are near the stage of commercial deployment and likely to come under safeguards in the next fifteen years. In addition, the sessions under this theme will look at practical strategies for efficient implementation of safeguards at nuclear new builds, such as vendor–buyer engagement, safeguards-by-design dialogue, and peer-to-peer consultations. The sharing of experiences and lessons learned will be a prominent feature within this theme. Second, safeguards challenges associated with increasing decommissioning activities, spent fuel transfer campaigns and long term disposition of spent fuel and waste will be discussed, and promising ideas, technologies and methods will be identified to address specific needs and opportunities.

Shaping the future of safeguards implementation (SGI)

The sessions under this theme will address the day-to-day implementation of safeguards, seeking new ways of working smarter, streamlining and simplifying, building capabilities, resolving challenges and creating effective cooperation. The focus will be on innovation and improvement, sharing of experiences and lessons learned, across the full range of safeguards activities and practitioners: from States with limited nuclear material to States with complex fuel cycle facilities. Some topics of interest include optimizing the use of reporting tools such as the State declaration portal and Protocol Reporter software; innovations in training, capacity building and knowledge management; the role of regional networks in safeguards and sharing of experiences among such networks; preparing for and implementing new safeguards obligations such as an additional protocol; and safeguards regulation and licensing.