

Information Note¹

- Event:** Future Directions for Nuclear Safeguards and Verification
- Organizers:** Institute of Nuclear Materials Management (INMM) and the European Safeguards R&D Association (ESARDA)
- Date and Venue:** 17-20 October 2011, Aix-en-Provence, France
- Participants:**
- States:* Argentina (Nuclear Regulatory Authority), Australia (DFAT/ASNO, Australian Safeguards and Non-Proliferation Office), Canada (Canadian Nuclear Safety Association – CNSC), Finland (STUK – Radiation and Nuclear Safety Authority), France (CEA – Commissariat à l’Energie Atomique et aux Energies Alternatives, IRSN – Institute for Radioprotection and Nuclear Safety, Ministry of Defense/Directorate for Strategic Affairs), Hungary (Atomic Energy Authority), United States (DoE/ANL, DoE/ORNL, DoE/NNSA, DoE/INL, DoE/LANL, DoE/SNL, DoE/BNL, DoE/INL, DoE/LLNL, DoE/PNNL DoD/DTRA, Department of State, Nuclear Regulatory Commission), Sweden (Swedish Radiation Safety Association), Switzerland (Federal Office of Energy)
- Other:* European Union (EEAS, EU Satellite Center, EURATOM, Joint Research Center)
- International organizations and other international entities:* Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO), International Atomic Energy Agency (IAEA), 1540 Committee expert
- Industry, civil society and academia:* AREVA, Belgian Nuclear Research Centre (SCK-CEN), CESIM, Darmstadt University of Technology (Germany), EDF, E-geos, Forschungszentrum Julich, Fraunhofer (Germany), International Institute of Nuclear Energy (i2en, France), International Network of Emerging Nuclear Specialists (INENS), Korea Institute of Nuclear Nonproliferation and Control, NTI, Nuclear Material Control Center (Japan), Paks Nuclear Power Plant Ltd (Hungary), Polska Grupa Energetyczna (Poland), SDRI consulting, Spotimage, Taiwan Power Company, Thermofisher, UBA Unternehmensberatung GmbH (Germany), University of Hamburg Center for Science and Peace Research (Germany), University of the Bundeswehr Munich (UniBw, Germany), University of Stockholm (Sweden), University of Uppsala (Sweden), URENCO, USTC consulting, VERTIC

¹ For information – not an official report. The views expressed here do not necessarily represent those of the 1540 Committee or of the organizers or participants in the event.

1. Objectives for a 1540 Committee expert participation

- Raise awareness on the role played by resolution 1540 (2004) in the nuclear area;
- Explain the role of resolution 1540 (2004) in controlling the spread of sensitive nuclear material and technologies;
- Learn about practices and challenges related to illicit nuclear trafficking and new detection technologies;
- Increase understanding of industry's role in implementing the resolution in the nuclear area;
- Expand the network of working contacts.

2. Background

- Established in 1958, INMM aims at encouraging “*the advancement of nuclear materials management in all its aspects; the promotion of research in the field of nuclear materials management; the establishment of standards, consistent with existing professional norms; and, the increase and dissemination of information through meetings, professional contacts, reports, papers, discussions and publications*”. Supported by a variety of entities active in the nuclear area (http://www.inmm.org/source/sustainingMembers/index.cfm?section=sustaining_members), including from the public sector, the industry and the civil society, INMM counts members in France, Germany, Russia, Ukraine, Japan, South Korea, Austria, UK, US, and South Africa. One of the INMM technical divisions deals with non-proliferation and arms control, with a view to “*promote and advance the research, development and application of effective technologies to control proliferation risks and in support of arms control treaties and agreements*” and “*educate and provide outreach to the public about international arms control and nonproliferation issues*”, resolution 1540 (2004) being one of its areas of interest (http://www.inmm.org/AM/Template.cfm?Section=Technical_Divisions&Template=/CM/ContentDisplay.cfm&ContentID=1948#279,11,Slide_11).
- ESARDA's main objective is to “*assist the European safeguards community with the advancement of safeguards, enhancing the efficiency of systems and measures, as well as investigating how new techniques can be developed and implemented*”. ESARDA's membership comprises a variety of entities active in the nuclear area, including from the public sector, the industry and the civil society (<http://esarda2.jrc.it/about/index.html>). ESARDA counts members in European countries.
- The 17-20 October 2011 event was the seventh workshop jointly organized by INMM and ESARDA. It was the second time a 1540 Committee expert would participate in an event organized by INMM (after the participation in the Fourth Annual Workshop on Reducing the Risk from Nuclear and Radioactive Materials, Arlington, Virginia, US, 2-3 February 2010) and the first time in an event organized by ESARDA.

3. Highlights

Opening statements were delivered by the co-Chairs of the workshop, Michel Richard (ESARDA; France/CEA) and Jim Larrimore (INMM International Safeguards Division), and by ESARDA Vice-President Klaas van der Meer and INMM Vice-President Ken Sorenson.

Keynote addresses were delivered by the IAEA Deputy Director General, Head of the Safeguards Department Herman Nackaerts, the Head of Directorate for Nuclear Safeguards in the EC/Directorate General for Energy Piotr Szymanski, the Deputy Director of the CEA Division for

International Affairs Philippe Delaune, the Head of the CEA Global Security and Counter Proliferation Division Etienne Pochon.

The workshop addressed four areas, in particular through parallel working groups established for each of them:

- (i) Future Directions for International Safeguards;
- (ii) Future Directions for Safeguards and Verification Technology and R&D;
- (iii) Broader Perspective on Nonproliferation and Nuclear Verification;
- (iv) Education and Training.

The 1540 Committee expert intervened and participated in the working group dealing with area (iii). The working group explored different aspects of nonproliferation and verification, with a view to share experience and see how tools and culture developed in one area could (or not) be used and/or serve as a model in the other area. Presentations were clustered into three main topics (strengthening the nonproliferation and surety/safety/safeguards culture; review of existing and future nonproliferation and disarmament regimes; opportunities and gaps). The presentation by the 1540 Committee expert on “*Resolution 1540: Overview*” was delivered during the session on existing and future nonproliferation and disarmament regimes.

4. Additional comments

More information on the workshop is available at <http://www.inmm-esarda-aix2011.com/>.

For further information, please contact the 1540 Committee experts by e-mail at 1540experts@un.org