Regional Priorities for Nuclear and Radiation Safety in the Ibero-american Region

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presented by
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FORO develops its technical programme in accordance with the regional and national needs and priorities taking into consideration the IAEA programme in the same subject areas to maximize results and benefits for the scientific and technical community in these areas.

IAEA/FORO cooperation
jointly working for strengthening radiological and nuclear safety in Ibero-American region
FORO and the IAEA have a long relationship of cooperation in areas of mutual interest aimed at achieving a high level of radiation and nuclear safety and security in a sustainable manner.

- **2003**: Agency´s Extrabudgetary Programme (EBP), funded by voluntary contributions of the FORO´s members and administrated by the IAEA Department of Nuclear Safety and Security (NS)
- **2010**: Practical Arrangements signed in English
- **2011**: Practical Arrangements signed in Spanish.

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Donor countries (regulatory authorities):

- Argentina
- Brazil
- Chile
- Cuba
- Mexico
- Peru
- Spain
- Uruguay

EBP is administrated by IAEA Department of Nuclear Safety and Security (NS)
Iberoamerican network
RED

“To facilitate exchange of information within regulatory bodies in the Ibero-American region”

FORO has established as a high priority for its technical program, the development of the **Iberoamerican network (RED)** to promote exchange of knowledge on nuclear, radiation safety and security. **RED** is the main tool to facilitate and encourage the knowledge sharing among its members, experts from other regulators and the general public.

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What is FORO?

Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO) was created in 1997 to promote radiological and nuclear safety and security at the highest level in the region.

Current members of FORO are the radiological and nuclear safety regulatory authorities of Argentina, Brazil, Chile, Cuba, Mexico, Peru, Spain and Uruguay.
El Comité Técnico Ejecutivo del FORO se reúne en Argentina

Entre los días 4 y 8 de noviembre de 2013, tuvo lugar la segunda y última reunión anual del Comité Técnico Ejecutivo del FORO en la ciudad de San Carlos de Bariloche, Argentina. Como es habitual, la misma contó con la presencia y activa participación la Secretaría de la Asociación y de la Secretaría Científica del Programa Extrapresupuestario (PEP) para la Seguridad Radiológica y Nuclear en Iberoamérica del Organismo Internacional de Energía Atómica (OIEA).

TECDOC FORO – OIEA – OPS: Publicación conjunta de los resultados obtenidos del proyecto “Autoevaluación del programa regulador de la protección radiológica en las exposiciones médicas”.

Recientemente se han publicado los resultados del proyecto del FORO “Autoevaluación del programa regulador de la protección radiológica en las exposiciones médicas” como TECDOC del OIEA y FORO (ref. 1710-5), con el auspicio de la Organización Panamericana de la Salud (OPS) quien también ha participado del Proyecto y copatrocinado su difusión y promoción en toda la región.

La 57ª Conferencia General del OIEA reconoce la labor del FORO y pide a la Secretaría del OIEA apoye sus actividades.

El 19 de septiembre la 57ª Sesión ordinaria de la Conferencia General del OIEA adoptó la Resolución N° 9 sobre las Medidas para fortalecer la cooperación internacional en materia de seguridad nuclear, radiológica, del transporte y los desechos, la cual refleja la voluntad de las Partes de continuar y aumentar dicha cooperación.
Topical areas

The technical program of the FORO is based on the needs and priorities set by its Members, taking into account the regulatory and regional interests in the fields of nuclear and radiological safety and security.

FORO is not a network; it is an association of regulators, but it has developed as well a network: La RED. La RED provides framework for news, regulatory information and a working environment with cooperative functions, which provides the experts of the FORO with an optimal tool for the exchange of technical-scientific information with regulatory interest related with the scope of the technical program of the FORO. La RED has become a very useful communication tool, providing the framework for the efficient information exchange within the working groups and projects of FORO.

On this basis, a group of prioritized topical areas has been defined, under which a series of technical projects and activities are being developed.

Management of FORO

Executive Technical Committee
Secretariat of FORO

Knowledge management
Information Technologies

Topical areas

Radiation protection of workers
Radiation protection of patients

Radiation prot. of public and environment
Emergency preparedness and response

Accident and Incident Investigation
Control of radiation sources
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<th>FORO Thematic Areas</th>
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<td>1. Radiation protection of workers</td>
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<td>2. Radiation protection of patients</td>
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<td>3. Radiation protection of public and environment</td>
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<td>4. Emergency preparedness and response</td>
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<td>5. Accident and Incident Investigation</td>
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<td>6. Control of radiation sources</td>
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<td>7. Decommissioning of installations</td>
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<td>8. Radioactive waste management</td>
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<td>9. Nuclear safety</td>
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<td>10. Transport of radioactive material</td>
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<td>11. Legal issues</td>
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<td>12. Human and organizational factors</td>
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<td>13. Physical security</td>
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1. Prevention of accidental exposures in radiotherapy
2. Safety culture in practices with radiation sources
3. Safety of radioactive sources
4. Licensing of cyclotrones
5. Long term operation of NPP
6. Stress evaluation of NPPs
7. Training of regulatory staff
8. Emergency Preparedness and Response
9. Integrated Information Management
10. FORO network - RED

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Three technical documents jointly published with the IAEA (in Spanish)

- IAEA TECDOC 1670/S: Análisis Probabilista de Seguridad de Tratamientos de Radioterapia con Acelerador Lineal
  - Probabilistic Safety Assessment to radiotherapy treatments using lineal accelerators
- IAEA TECDOC 1685/S: Aplicación del Método de la Matriz de Riesgo a la Radioterapia
  - Application of Risk Matrix Methodology in Radiotherapy
- TECDOC 1710/S: Programa Nacional de Protección Radiológica en las Exposiciones Médicas
  - National Programme for Radiological Protection in Medical Exposures

SEVRRRA - Radiotherapy risk assessment tool

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“Guidelines for promoting and developing Safety Culture on practices involving the use of ionizing radiation sources”

Presented at IRPA Regional Conference in Rio de Janeiro, Brazil, 2013

Synergies with IAEA to widely promote the results in Latin America (RLA9066):

- Regional meeting on Safety Culture for managers (IRD-CNEN, Brazil)
- Regional survey performed on safety culture good practices and initiatives - 18 Member States and 89 facilities
- Presentation at the Joint Congress of the Spanish Medical Physics Society and the Spanish Radiation Protection Society.(Caceres, Spain)
- Implementation of the “Work environment” design in REPROLAM for Safety Culture issues

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Control of exposures & waste management related to orphan sources in the metal recycling industries

A technical report on strategies for prevention, detection and response of radioactive material inadvertently incorporated into scrap metal and other associated products is under preparation for publication

Web site: on orphan radioactive sources in scrap metal (Spanish)
A document on **FORO criteria for licensing and inspection of cyclotrons** for producing radionuclides for positron emission tomography in medical applications is in final preparation (in English)
Regulatory practices for ageing management and long term operation

- A document with guidelines on regulatory criteria, assessment, regulatory inspection and periodic safety reviews in relation to ageing management and long term operation of nuclear power plants

Ready for wide dissemination. Available in Spanish (www.foroiberam.org) and English (in the pipeline for publication)
To evaluate resistance of NPPs against extreme natural hazards in the countries of the FORO

- **A document** was produced in line with EU stress test requirements and the IAEA Methodology for National Safety Assessments being developed in the framework of the IAEA Action Plan
  - Presented at event organized at same time as the 2012 meeting of the Convention on Nuclear Safety

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Objectives & Outputs

To harmonize and efficiently provide training for fulfilling the competence needs through regional training centres

- Development of **a questionnaire on national strategies** for building and managing competencies in line with the IAEA safety standards

- Establishment of **competence profiles and harmonised regional competence gap analysis** based on SARCoN Tool
  - SARCoN - Systematic Assessment of Regulatory and research reactors COnpetence Needs

- **Planning and prioritization of competence gaps** in the region

- Identification of **regional educational institution** to fulfil the gaps
Emergency preparedness and response

To harmonize regulatory criteria on emergency preparedness and respond in the Ibero-american region

• A common methodology to prepare and update risk maps
• A common methodology of accident analysis and a procedure for applying lessons learned.
• A web site for information exchange related to emergencies in the region using the FORO’s Website.

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Looking forward

- **Strengthening cooperation** in the areas of:
  - Waste management
  - Safety of radioactive disused sealed sources
  - Probabilistic assessment to reduce risks in industrial radiological practices
  - Capacity building through competence development
  - Knowledge management aiming to capture and retain critical competences

- **Enhance synergies** with IAEA related activities within the TC programme and other NS regular activities, including regulatory networks and fora

- **Enhance collaboration** with other international organizations and associations

- Continue **promoting the results of** FORO activities to other countries within the region

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Muchas Gracias
Thank you