





Ibero-American Forum of Radiological and Nuclear Regulatory Agencies

Example of Sustainable Regional Cooperation

3rd International Regulators Conference on Nuclear Security Marrakech, 1 – October 2019

Alfredo de los Reyes

Chairman of the FORO Steering Committee

About FORO

FORO	 Association of Nuclear and Radiological regulators with the aim of promoting Radiation Protection, Nuclear Safety and Security at the highest level in the region.
Vision	 Fruitful environment for strengthening safety through exchange of information and practices and a robust technical and scientific program in matters of mutual interest.
Mission	• Promoting of safety, enhancing the harmonization of regulatory practices and cooperating with national, regional and international organizations (IAEA, WHO, ICRP, IRPA,) and associations with similar objectives.
	Our language: Spanish

FORO Members



Autoridad Regulatoria Nuclear

Comissão Nacional de Energia Nuclear

Comisión Chilena de Energía Nuclear

Ministerio de Minas y Energía

Dirección de Seguridad Nuclear

Consejo de Seguridad Nuclear

Comisión Nacional de Seguridad Nuclear y Salvaguardias

Instituto Peruano de Energía Nuclear

Autoridad Reguladora Radiológica y Nuclear de Paraguay

Autoridad Reguladora Nacional en Radioprotección

FORO Areas of Work & Technical Programme

- Radiation protection of workers
- Radiation protection of patients
- Radiation protection of the public and the environment
- Emergency preparedness and response
- Accident and Incident Management
- Control of radiation sources
- Decommissioning and closure of Installations

- Radioactive waste management
- Nuclear safety
- Transport of radioactive material
- Knowledge management
- Human and organizational factors
- Physical Protection
- Nuclear Security
- Legal issues

FORO Projects (1)

Issue Identification from Areas of Interest National regulatory or IAEA's proposal

Identification of experts National regulatory and IAEA's experts

Draft of Project (objectives, time schedules, costs...)

Technical revision Steering Committee (Senior Experts), CTE

Approval Board of Chairpersons, *Plenario*





Numbers

- Since 2003, **13 projects have been completed**, in nuclear safety, radiation protection, source control, emergencies, safety culture and capacity building (more information in: **www.foroiberam.org**)
- > Nowadays **7 projects under development**
- 5 joint publications with IAEA (one of them with WHO as well)
- > Participation of **more than 100 experts** from the 10 member organisations
- I M€ spent to finance the technical program so far
- > **3 Newsletters** (Spanish, Portuguese and English)



FORO Projects (3)

Thirteen completed projects

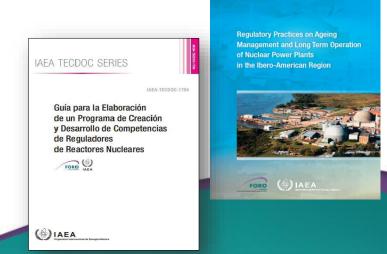
- Prevention of accidental exposures in radiation therapy through the application of probabilistic risk assessment (PSA + Matrix + SEVRRA tool)
- Collaborative approaches between regulatory and health authorities for regulatory control of medical exposures
- ✓ Assessment and inspection of NPPs' ageing management and long-term operation
- ✓ Control of **inadvertent radioactive material** from scrap metal in recycling industries
- Harmonization of regulatory criteria in emergency preparedness and response



FORO Projects (4)

Thirteen completed projects

- ✓ Assessment of **stress tests performed to NPPs** in the FORO countries
- ✓ Licensing of cyclotrons for the production of radionuclides for P.E.T.
- Capacity building for regulatory staff for the safety of nuclear reactors.
- ✓ Safety culture on practices involving the use of ionizing radiation
- ✓ Risk assessment methodology for **industrial practices**
- ✓ **Clearance criteria** in radioactive installations.



FORO Projects (5)

Seven projects under development

- Capacity building for regulatory staff for medical and industrial installations.
- ✓ SEVVRA Tool for advanced medical applications (Intensity Modulated Radiation Therapy and Diagnostic Nuclear Medicine).
- ✓ Use of **Safety Culture** results for a **Industrial Gammagraphy** facility
- ✓ Inspections manual and ageing management procedures for **Research Reactors**
- ✓ Licensing of Radiopharmacy Centralised Systems
- Inspection of non regulated transport
 packages
- ✓ NPPs Operators licensing



FORO Projects (6)

Areas of interest for future projects

- ✓ Nuclear Security / Physical Protection
- Dosimetry / Occupational exposures
- ✓ NORM
- ✓ Decommissioning



Promotion of results



Ibero-American Knowledge Sharing Network (La RED) to facilitate and enhance knowledge sharing among its members, the staff from **other regulatory agencies** and public in general.

www.foroiberam.org

Sharing a common language, borders and history, regulators from the **Region** are invited as observers to FORO meetings and to exchange knowledge through La RED.



- Participation of IAEA's experts in FORO projects
- **Strategic partnership**: IAEA is FORO's technical reference organization
- FORO experts participate in TC workshops to share FORO results
- IAEA-FORO joint publications of FORO results.



Cooperation

IAEA

Strategic Partnership

- Participation of IAEA's experts in FORO's projects to transmit knowhow,
- Joint publications,
- Diffusion of FORO results though IAEA-TC's workshops,
- Interaction SEVRRA-SAFRON

WHO: Participation of PAHO expert in FORO project on RP to patients and joint publications

ICRP: FORO is an ICRP's Special Liaison Organisation and share yearly results

IRPA: FORO cooperates with IRPA in organising International and Regional conferences in Latin America

HERCA/WENRA: Mutual presentations in Board Meetings

ETSON: MoU

www.foroiberam.org

Conclusions

- FORO wants to continue developing relevant technical projects and activities, the sharing of experience and lessons learnt in radiation protection, nuclear safety and security with the aim at contributing to high levels of safety and security in all practices in the Ibero-America and beyond
- FORO has the intention to cover all the issues included in the competences of an average regulator
- FORO is planning to launch in 2020-2021 a first project on the security of transport of sealed sources.

Cooperation means trust and Security is a sensitive issue.

Thank you!



¡Muchas gracias! شکر اجزیلا

www.foroiberam.org