European Regional Workshop on Lessons Learned in Applying the IAEA General Safety Requirements Part 3 (Cyprus 2019)

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Attendance

- Host: Department of Labour Inspection, Cyprus.
- 40 participants.
- 24 Member States: Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, Spain, Ukraine and Uzbekistan.
- Chair: Sigurður Magnússon, Island.
- Secretariat: Olga German and Tony Colgan, IAEA.
Layout

- General requirements of GSR Part 3
- Planned Exposure Situations - occupational exposure
- Planned exposure situations - public exposure
- Existing Exposure Situation - occupational exposure
- Existing Exposure Situations - public exposure
- Emergency Exposure Situations - occupational and public exposure.
General requirements

- Issues related to exemption and clearance include:
  - developing values for exemption
  - exemption on the basis of type approval
  - exemption of multiple sources and mixed-radionuclide sources
  - some national legislation does not allow for clearance
  - sometimes clearance levels differ between countries
  - practical application

- Establishing criteria for authorization by registration and licensing and managing undertakings where there are both licensed and registered sources

- Is radon exposure in wellness health spas justified?
Planned Exposures: Medical Exposures

• Detailed guidance is required on the development of Diagnostic Reference Levels (DRLs). These need to be developed based on national data – DRLs from other countries may not be appropriate.

• Greater clarity is required regarding nuclear medicine patients in relation to:
  - release criteria based on dose rates or administered activity
  - managing cadavers
  - managing patient waste
  - travel restrictions and return to work
  - return of patients treated abroad

• Education of doctors and high level administrators on justification of medical exposures, including safety culture and ‘defensive’ medicine

• Reporting on accidental and unintended exposures
Existing Exposure Situations

- Identification of situations
- Decision-making on justification
- Establishing and applying reference levels
- Regulatory body cooperation with other national agencies
- Stakeholder involvement
- Explaining actions and radiation protection terminology

- National and imported residues added to building materials
- New dose-conversion factors for radon
- Harmonization of radon strategies across borders
- Managing radon exposure in workplaces – a new issue
- Limits should not be set for natural radionuclides in food
Emergency Exposure Situations

- Protection of volunteers
- Transition to an existing/planned exposure situation
- Establishing optimized protection strategies
- Justification of individual protection strategies
- Harmonization of policies across borders
- Taking account of non-radiological consequences
- Interface between safety and security
- Training and maintaining national capabilities
- Small non-nuclear countries face particular challenges in EP in relation to NPPs in neighboring countries
- Managing generated waste
Other challenging Issues

• For smaller countries, there are challenges in developing and maintaining expertise (both for the regulatory body and operators) in areas such as
  - qualified experts
  - medical physicists
  - internal dosimetry

• Some States have contaminated items in storage, including stocks of disused industrial smoke detectors containing plutonium, air filters from storage areas for Ra-226 sources can be contaminated, filters from water treatment plants

• Monitoring/assessing doses to the lens of the eye
Other Challenging Issues

- The interface between safety and security
- Justification of non-medical human imaging
- Radiation protection in veterinary medicine
- Delays in establishing legislation
Thank You!