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Overview of the IAEA Activities on Occupational Radiation Protection

Pil-Soo Hahn

Director

Division of Radiation, Transport & Waste Safety

IAEA



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Implementation of Action Plan from Geneva Conference on ORP

➤ Output from Geneva Conference in 2002

- **Fourteen actions** covering **nine areas**
- **Approved** by the IAEA Board of Governors in September 2003
- **Implemented** by IAEA and ILO together with some other international organizations

➤ Implementation supervised by a Steering Committee

➤ Held Five Steering Committee Meetings

Nine Areas for the Proposed Action Plan

- ILO Convention 115
- ILO code of practice on “RP of workers”
- **Cooperation** between IAEA and ILO in reaching developing countries.
- Information exchange
- Education and awareness
- Exposure to enhanced **natural radiation in the workplace**
- Promotion of a **holistic approach to workplace safety**
- Formulation and application of standards for **the protection of pregnant workers** and their embryos/foetuses
- Probability of **causation of occupational harm from radiation exposure.**

Major Accomplishments of the Action Plan

- **ILO No 115 Convention** has been more broadly ratified and implemented.
- Occupational Radiation Protection Appraisal Services (**ORPAS**) developed and implemented for some member states.
- Relevant **standards and guidance documents** including guidance material were developed
- Three regional **ALARA networks**, one international network, **ISEMIR**, Webpage for Occupational Radiation Protection Network (**ORPNET**) were established
- Three **NORM symposia** were held, the proceedings published . Four safety reports, three TECDOC published.

Summary of the action plan

- The Action Plan has been an **effective strategy** for the improvement of ORP.
- During the course of the implementation of the Action Plan, the **collaboration** between the IAEA and ILO, and with other international organizations was successful.
- **Steering Committee** played an important role.
- **All of the 14 actions completed.**

Future Challenges for IAEA ORP programme

- **Development of SS and its guidance material, and their application.**
- **Updating and developing training packages.**
- **Development of guidance on NORM** including uranium mining and radon at workplaces.
- **Strengthening ALARA network activities.**
- **Providing services to MS: ORPAS, training, national/regional projects, etc.**
- **Knowledge transfer to NPP embarking countries.**

On-going Activities: **Development of Safety Standards**

➤ **Safety Guide on ORP**

- SG jointly developed with ILO, following the revised BSS,
- Comments from Member States (early 2014)
- **Final draft reported to RASSC** (Nov., 2014)

➤ **Safety Report on RP of Itinerant Workers**

- **Approved for publication**, focusing on mobile skilful workforce;
- Emphasis on
 - ✓ Cooperation of different parties,
 - ✓ Dose tracking and radiation protection optimization

On-going : RP on NORM

- Many **guidance documents** developed recently
 - **Rare earths** industry (SR68); **Titanium dioxide** industry (SR76); **phosphate** industry (SR78)
- **Training package** on radiation protection **in oil and gas industry** developed and utilized
- Four **international symposiums** on NORM were supported by the IAEA and their proceedings published
 - NORM IV, **Poland**, 2004; NORM V, **Spain**, 2007, NORM VI, **Morocco**, 2010 and NORM VII, **Beijing, China**, 2014

On-going : Information System on Occupational Exposure (ISOE)

- **A forum for experience exchange for occupational radiation protection in NPPs**
 - Created in 1992, IAEA joined in 1993, Jointly operated with OECD/NEA
- **IAEA Technical Center represents for non-OECD countries (9 MSs)**
 - Organized ISOE International Symposium: Vienna(2009), Rio de Janeiro(2015).
- **Encourage non-OECD, IAEA Member States to join ISOE**
 - Authorities or utilities

On-going : Enhancing ORP through networks

- **ISEMIR** (Information System on Occupational Exposure in Medicine, Industry and Research):
 - **Web based D/B on *interventional cardiology* : developed**
 - **Web based D/B on *industrial radiography* : under development**
- **UMEX** (Information on Uranium Mining Exposures): **initiated**
- **ORPNET webpage: created**
- Support **regional ALARA networks**
 - **ARAN: Asian** Region ALARA Network
 - **RECAN: Regional East European and Central Asian** ALARA Network
 - **ReProlan: Latin American** ALARA Networks
 - New Planned Network: **Middle East** and **Africa**

On-going : Occupational Radiation Protection Appraisal Services (ORPAS)

- **Objective:** to provide objective assessment of the provisions for ORP in MSs.
- **Targets:** Service providers and end users.
- Six ORPAS missions have been provided to the Member States.
- The guideline and the questionnaire for ORPAS have been updated
- Recent missions: Tanzania(Aug. 2014), Peru(Sep. 2014), Venezuela(Oct. 2014)

On-going : Services to MSs thru TC framework

- More than 50 on-going regional or national projects on occupational radiation protection
 - Fellowship, Scientific visit, expert mission, training course/workshop, equipment procurement, etc.
- More than 10 regional training courses and workshops every year
- The country profiles on ORP are reflected in the **RASIMS** (Radiation Safety Information Management System) of the IAEA

Thank you

