

**IAEA Member State Board of Governor's
Nuclear Safety Briefing**
03 March 2011

Denis Flory
Deputy Director General
Department of Nuclear Safety and Security
International Atomic Energy Agency



IAEA

International Atomic Energy Agency

Agenda Item 2 – March BoG

Nuclear Safety Review for the Year 2010

GOV/2011/4: Measures to Strengthen International Cooperation in Nuclear, Radiation, Transport and Waste Safety

Reports Supporting the Nuclear Safety Review 2010

- **2011/Note 2:** Safety related events and activities worldwide during 2010
- **2011/Note 3:** The IAEA Safety Standards: Activities during 2010



Global “Big Picture” — Trends in 2010

- Increased safety performance
- Strove towards improving Member States’ Emergency Preparedness
- Improved international cooperation for emerging, embarking, expanding and extending NPPs
- Increased annual per capita dose due to increasing medical exposure
- Improved safety and security synergies



Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies

- Providing a framework for strengthening the international emergency preparedness and response system
- Resulting in identification important activities for successful and meaningful implementation and long-term sustainability
- Suggested path forward (for example):
 - ❑ Identification and implementation of emergency preparedness and response initiatives
 - ❑ Provision of continuous feedback and improvement
 - ❑ Establishment of a sustainable infrastructure including financial and human resources

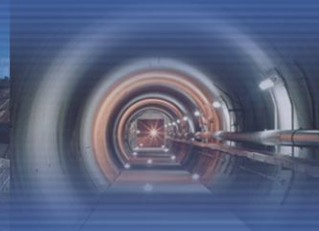


Safety of Nuclear Installations

Emerging, Embarking, Expanding and Extending

Emerging & Embarking New Comers

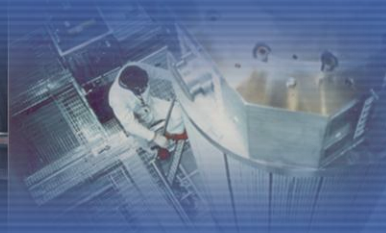
- ✓ Must assist States in developing and strengthening their safety, infrastructure and regulatory capacity in advance of NPP development
- ✓ Development of science-based safety culture and infrastructure
 - Self-assessment Methodology
 - DS 424: Providing a Roadmap for implementing safety standards, using a phased approach contained in 11 modules
 - Regulatory Cooperation Forum



Safety of Nuclear Installations

Emerging, Embarking, Expanding and Extending

- Harmonizing safety today and in the future
 - NUSSC approved: revision of Safety of Nuclear Power Plants: Design (Safety Standards Series No. NS-R-1)
 - WENRA Statement on Safety Objectives for New Nuclear Power Plants: *“more effective implementation of the defence in depth concept in the design of NPPs...”*
- ✓ Reactor “generation gaps”



Radiation and Transport Safety

- ✓ Denials and delays of shipment of radioactive materials continue to occur in all parts of the world
 - **Call to action** urging Member States to fully comply with the IAEA's Regulations for the Safe Transport of Radioactive Material, No. TS-R-1 to resolve these variations in transport regulations.
- ✓ Increased annual per capita dose due to increasing medical exposure
 - Approved revised BSS



Management of Radioactive Waste

- ✓ As States embarking on/expanding existing NPPs increased, so did the need to develop spent fuel and waste disposal programmes
- ✓ Delays in decisions on spent fuel disposition, growing volume of spent fuel discharged requiring storage, and increasing numbers of NPPs exceeding spent fuel pool capacities – a problematic trend
- European Commission proposal for a Directive on the management of spent fuel and radioactive waste
- Launched International Working Forum on Regulatory Supervision of Legacy Sites (RSLs)



Exploring Synergies in Nuclear Safety & Security

- GC(RES)53/10: AdSec Joint Task Force studying the feasibility of one set of safety and security standards, final report by 2011
- INSAG 24: The Interface between Safety and Security at Nuclear Power Plants. Highlights the importance of a coordinated approach to nuclear safety and security.
- International Conference on Challenges Faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety and Security conference, Tokyo, Oct. 2010



Conclusions

- Board is recommended to consider and take note of the draft Nuclear Safety Review (NSR) for 2010
- NSR final version will be prepared in light of the discussions in the Board of Governors and the information received before 15 April 2011.

Thank you for your attention

