



Session 1: Achievement and assessment



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# **ENSREG Work on Improving Nuclear**Safety

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- Foundation Stone of Sustained High Standards Continuous Improvement
- Applies as much to Nuclear Safety Regulator as to Nuclear Operations
- Needs Questioning Attitude and Passion for Learning from Others
- Never Complacent
- Outward-looking/Learning Organisation/Industry
- Not tied down in detailed prescriptive approach that is staid and addresses yesterday's issues
- Outcome Sustained Excellence



#### **ENSREG** considers that:

- striving for continuous improvement is a vital safeguard against any sense of complacency in the operation of a nuclear facility and nuclear regulatory arrangements; and
- must be at the heart of any organisation's safety culture
- it is a continuous leadership challenge



The Working Group on Nuclear Safety initially established sub-groups to:

- maximise the nuclear safety improvement benefits of the Convention on Nuclear Safety
- seek continuous improvement of nuclear safety regulation in all EU Member States
- provide a compilation of the pros and cons of options for an EC Directive or other Instrument on Nuclear Safety



#### **Convention on Nuclear Safety (CNS)**

#### **ENSREG** recommended that:

- in each CNS cycle, all EU Member States agree on common lessons learned to be taken forward at national level, their progress against which would be monitored through ENSREG
- a trial run to be undertaken before the next review meeting (spring 2011) using the outcomes of the review meetings held to date to develop a procedure for mutual learning



#### **IAEA Integrated Regulatory Review Service**

To facilitate continuing improvements in national arrangements for nuclear safety regulation, ENSREG determined that it would instigate a structured approach to regulatory peer review through making full use of IAEA Integrated Regulatory Review Service (IRRS) peer review missions, carried out against IAEA safety standards



#### **Discussion of possible EU instruments**

Five options for an EC directive or other instrument on nuclear safety were considered:

- no new instrument
- general directive with elements from the Convention on Nuclear Safety
- general directive with a provision to develop detailed safety standards
- detailed directive including detailed safety standards
- non-binding instrument (detailed or not)

The balance of pros and cons varies for different actors involved in the EU legislation process, depending on different interests in the process and its outcomes



#### Ten Regulatory Principles agreed (including EC)

- 1. Maintain and seek to continuously improve nuclear safety and its regulation, and add value
- 2. Just as every Member State has the right to decide to use nuclear power or not, so every Member State has the right to impose more stringent nuclear safety requirements than those commonly applied
- 3. Allow flexibility and not fundamentally change a Member State's national nuclear regulatory approach
- 4. Seek to enhance, not reduce, the power, roles, responsibilities or capability of the national nuclear regulatory body



- Do not expand the role of the Commission in regulatory decision-making or activities or introduce other bodies
- Do not divert resources away from national nuclear regulatory responsibilities or international nuclear safety cooperation
- 7. Be compliant with the principles/obligations of the Convention on Nuclear Safety
- 8. Any proposals should be non-discriminatory towards those who use or do not use nuclear power.
- 9. Seek to improve the transparency of nuclear safety and its regulation
- 10. Be clear on the roles and responsibilities of any organisations involved



#### **Nuclear Safety Directive**

- On 25 June 2009 the Council of the European Union adopted a new Directive establishing a Community framework for the nuclear safety of nuclear installations.
- The objective of the Directive is to maintain and promote the continuous improvement of nuclear safety
- The Directive includes:
  - the requirement for reporting on the implementation of its provisions every three years
  - and for periodic self-assessments of MS national framework and competent regulatory authorities at least every ten years and to invite an international peer review



The Working Group on Nuclear Safety subsequently established sub-groups to take account of the Directive and develop:

- Format and Guidance for MS Reports under Article
   9.1
- Self-assessment Guidance prior to Peer Review
- Scheduling and resourcing of self-assessments and peer reviews



Best approach agreed by ENSREG for the MS Reports under Article 9.1:

- newly written and concise, address the specific obligations of the Articles of the Directive and their implementation
- self-standing while drawing information from existing sources
- written to make it comprehensible for an informed non-expert audience
- consistent across Member States
   Development of this Guidance is expected to be completed by June 2012



#### ENSREG agreed that:

- no need to modify the IAEA self-assessment guidance in order to use it for the European programme
- common learning from the Convention on Nuclear Safety review process and from IAEA IRRS missions to other Member States is an important task for ENSREG
- practical testing start in April 2011 (CNS) and will be continued in July 2011 with subsequent evaluation by WGNS by 2012



- ENSREG agreed a Memorandum of Understanding with IAEA on the European programme of IAEA IRRS missions - to ensure the availability of an international peer review for MS every 10 years
- ENSREG agreed that the EU regulatory bodies should provide a pool of experts and a network of regulatory contact points to support the IRRS programme, both in Europe and worldwide
- Even more important and appropriate post Fukushima



#### Way forward

- progress, in the context of continuous improvement, lessons learnt from Fukushima incident – initially through 'stress tests' agreed by ENSREG
- develop the implementation of the Nuclear Safety Directive, particularly the self-assessments and peer reviews
- enhance nuclear safety and its regulation whilst preserving national responsibilities and encourage the necessary regulatory authority resourcing and independence
- encourage safety improvements whilst accommodating different technologies, legal systems and industrial infrastructures
- Adhere to 10 Regulatory Principles and IAEA
   Fundamental Safety Principles, particularly Principles 1, 2 and 3



### **Basis**

- Independent regulation
- Passion for Continuous Improvement (not detailed prescription set in the past) – foundation stone of Sustained Nuclear Safety
- Adhere in regulation, design, operation, etc to basic principles:
  - Multi-independent barriers
  - Diversity of approach and barriers, segregation of barriers.
- Reflect on Fukushima



















