



# Improving the effectiveness of the nuclear safety framework

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# Improving the effectiveness of the nuclear safety framework

- **3 routes for improving the nuclear safety framework**
  - Nationally
  - Regionally (ie. Europe)
  - ➔ - Internationally





# Improving the existing international framework - **Actors**

## **1. Associations and programme of Regulatory Authorities**

- Voluntary joint initiatives and common programme of work (WENRA, INRA, MDEP, HERCA, etc.)

## **2. International organizations : IAEA, NEA, etc.**

- IAEA → Safety Standard production
- NEA → Coordination, limited number of member / associated states

## **3. Associations and programme of operators**

- Strengthening peer reviews carried out by WANO



## Improving the existing international framework

- **IAEA**
- **Other International Bodies / Associations**
- **Conclusions**





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# Improving the existing international framework – IAEA (1)

- **Objectives for the development of the Safety Standards**

- Setting a complete, coherent, integrated and user-friendly safety series consistent with Member States' needs and use
- Issuing a manageable number of publications with a clear scope and structure
- Reaching a consensus at the highest level on what constitutes a high level of safety and the related best practices
- Maintaining a sustainable continuous improvement system through effective feedback application of Safety Standards
- Being a global reference used worldwide by Member states





## Improving the existing international framework – IAEA (2)

- **Review and development of IAEA safety standards**
  - Reviewing systematically the whole collection of safety standards
  - Setting a first list of standards potentially questioned/affected dealing with : Site evaluation, NPP design, Severe accident management, Emergency preparedness and response, etc.
  - Reflecting the lessons learnt from the Fukushima accident in the IAEA Safety Standards as they are revised and issued
  - Ensuring their implementation nationally





## Improving the existing international framework – IAEA (3)

- **Establishing Peer Reviews on a transparent and periodic basis**
  - IRRS, OSART, etc.
- **New routes for the CSS working programme**
  - **Issues to be considered transversally in CSS work**
    - Safety objectives for new reactors
    - Improvement of transparency, independence and emergency situation management



## Improving the existing international framework – IAEA (4)

- **Specific initiatives to be considered**
  - Working on a large scope and long term programme on Fukushima lessons learnt, including special focus on major safety principles such as safety culture, continuous safety improvement, etc.
  - Encouraging safety assessment campaigns (“*Stress Tests*”) for all member states, working on specification harmonization and synthesizing facts and findings from safety assessments
  - Examining resource pooling to face accident situations



# Improving the existing international framework – IAEA (5)

- **Update / Revision of International Conventions**
  - Convention on Nuclear Safety, Joint Convention
    - Dispositions to be submitted for a greater independence of regulatory authorities, a greater transparency and for a strengthened nuclear safety framework
  - Convention on early notification of a nuclear accident
    - Enhancement of the IAEA role
  - Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency
    - Enhancement of the IAEA role





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## Improving the existing international framework – **Other international bodies**

- Sharing national experience feedback and practices both nationally and internationally
- Enhancing cooperation on national / regional approaches developed in response to Fukushima accident
- Developing a particular effort of coordination, interactions and consistency among all international bodies and organizations





# Improving the existing international framework – EU

- **Key-facts : 27 countries, 143 operating NPPs**
- **European Stress Tests**
- **European bodies and organizations**
  - Composed of regulators (ENSREG), regulatory authorities (WENRA, HERCA), TSO (ETSON)
  - Efficient expertise and policy networks
  - Able to promote concrete actions on nuclear safety
- **Common legal framework**
  - To be revised and enhanced according to priorities to be identified



**Transparent processes, results / outcomes to be shared internationally**





## Improving the existing international framework – NEA

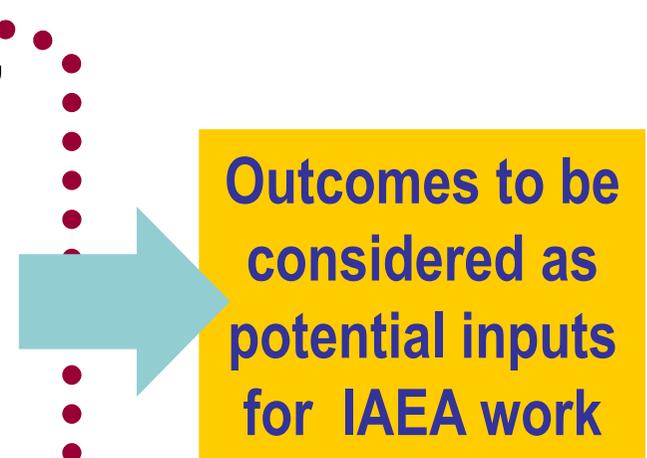
- **Key-Facts : 30 countries, 343 operating NPPs**
- **8 June 2011 - Regulators' Forum**
  - Conclusions considered as inputs for the IAEA Conference
- **Composed of permanent committees**
  - expert network, coordination between regulatory authorities
- **Able to create short term specific task groups**





# Improving the existing international framework – **Other international initiatives**

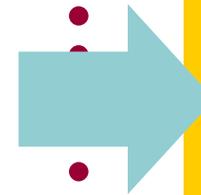
- **International Nuclear Regulators' Association – INRA**
- **Multinational Design Evaluation Programme - MDEP**
- **Etc.**





# Improving the existing international framework – **Operators' organizations**

- The prime responsibility for nuclear safety rests with the operator
- Operators have a key role to play in order to improve nuclear safety at the international level
- Organizations / Associations WANO, INPO, ENISS, WNA/CORDEL, etc. are encouraged to enhance cooperation between operators, nuclear industry key actors according to an effective transparency policy



**New routes for  
coordination  
and  
interactions to  
be developed**



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# Evolution of the existing international framework – **Conclusions (1)**

- **IAEA remains the appropriate organization for the nuclear safety improvement of operating and new nuclear installations, in particular in the light of Fukushima accident**
- **Member states expect an ambitious large-scope IAEA working programme stressing the need for enhanced consistency, new interactions and effective transparency in particular through :**
  - Changes in international Conventions
  - Improvement and larger use of IAEA safety standards
  - Strengthened IAEA instruments (IRRS, OSART, etc.)





## Evolution of the existing international framework – **Conclusions (2)**

- **Key role of existing associations and interactions of regulators**
  - European level : WENRA, ENSREG, HERCA
  - International level : MDEP, INRA, etc.
- **Operators commitment for an enhanced international cooperation and a proactive transparency policy**

