

# **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

**André-Claude LACOSTE**  
**President of the 6<sup>th</sup> review meeting  
of the Convention on nuclear safety**

**International Conference on Topical Issues  
in Nuclear Installation Safety: Defence in Depth  
Advances and Challenges for Nuclear Installation Safety  
21 – 24 October 2013 - Vienna**

## **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

- **The 6th Review Meeting** of the Convention on Nuclear Safety (CNS) : 24 March to 4 April 2014
- **76 Contracting Parties** ( CPs)
- Probably more than 600 participants, mainly from Nuclear Regulatory bodies.

**What can be expected  
from such a large meeting?**

## **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

- **Almost exactly 3 years** after the accident at the Fukushima Daiichi nuclear power plant
- **Focus on the consequences and the lessons learnt from that accident.**
- **To ensure the follow-up of the 2nd Extraordinary Meeting of the CNS** (27 to 31 August 2012 ) which was totally devoted to the Fukushima Daiichi accident with two tasks:
  - **Review the effectiveness of the provisions of the CNS**
  - **Review and discuss lessons learnt from the accident;**

## **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

- Decision to establish the” **Effectiveness and Transparency Working Group (E&T WG) ”**, open to all CPs, with the task of reporting to the 6<sup>th</sup> Review Meeting :
  - on a list of actions to strengthen the CNS and
  - on proposals to amend, where necessary, the Convention.
- **Chair of this group : Patrick Majerus (LUX)**
- **Vice-Chair of this group : René McTaggart(UK).**

## **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

- **3 three-day meetings of the E&T WG .**
- **The 4th and last one : 4 - 6 November 2013.**
- **The E&T WG has already identified 5 tools:**
  - Amendments to the CNS;
  - New or Amended Guidance documents;
  - Authoritative interpretation;
  - Voluntary measures;
  - Recommendation for action to another body.

## CNS orientations, safety objectives and implementation of the Defence in Depth concept

- **Possible future actions such as:**
  - **Safety Requirements taken into account when preparing the National Reports;**
  - **National Programme for inviting peer-review missions;**
  - **Posting National Reports on the CNS Public web.**
- **After the last meeting of the E&T WG** it will be the **responsibility of the CPs** to decide what **actions** they want to support and what **tools** they want to use.
- **The global discussion** will be organised during the Review Meeting in the framework of **the Open Ended Working Group (OEWG) meetings**

# CNS orientations, safety objectives and implementation of the Defence in Depth concept

## A major Conclusion of the 2nd Extraordinary Meeting of the CNS:

Conclusion 17 says:

*“The displacement of people and the land contamination after the Fukushima Daiichi accident calls for all national regulators to identify provisions to prevent and mitigate the potential for severe accidents with off-site consequences. Nuclear power plants should be **designed, constructed and operated with the objectives of preventing accidents and, should an accident occur, mitigating its effects and avoiding off-site contamination.** The Contracting Parties also noted that regulatory authorities should ensure that **these objectives are applied in order to identify and implement appropriate safety improvements at existing plants.**”*

## **CNS orientations, safety objectives and implementation of the Defence in Depth concept**

- Conclusion 17 is dedicated **both to new built reactors and existing plants**
- The wording **can and must be improved and clarified.**
- **But the issue of off-site contamination and consequences of an accident remains fundamental.**
  - **The improvement of the definition and the implementation of the Defence in Depth Concept should be a way forward to achieve such safety objectives**

**From my point of view,  
this is certainly one of the main issues  
of this Conference.**



# CNS orientations, safety objectives and implementation of the Defence in Depth concept

## Some examples of questions about Defence in Depth

- What equilibrium between **prevention and mitigation** ?
- What treatment of **low probability/large consequences** situations?
- Are we conservative enough when dealing with **external and internal hazards**?
- Should **robustness of installations** be more explicitly taken into account in their safety assessment?
- How far should the **backfitting of existing installations** go?
- Are the **drills** performed for emergency preparedness **realistic** enough?

**CNS orientations, safety objectives and  
implementation of the Defence in Depth concept**

**A final concern in my capacity of  
President of the 6th Review Meeting**

In light of the Fukushima Daiichi accident,  
**how to improve international processes  
in order to contribute efficiently to  
avoiding such an accident ?**