Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

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European Ad Hoc Group on Nuclear Security (AHGNS)

July 2011 - June 2012

Findings and Conclusions

2012, November 6th

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Origin of AHGNS

- Fukushima accident (2011, March 11)
  - March 25th, the EU Council decided the review of the safety of all EU nuclear power plants (NPPs) – « Stress tests »
  - Members State decided joint study to be conducted on security of the NPPs in EU (in relation to theft, sabotage, unauthorised access, unauthorised movement of nuclear material or other malicious act). - (COREPER decision, July 19th)

- Nuclear security is the responsibility of the State
  - Comes under the national State security strategy
  - Depends on national specificities (threat design to be adapted)
  - Is a highly confidential issue
  - Major role of IAEA
  - The EU Commission has no competence in this issue

Origin of AHGNS

- Setting of the Ad Hoc Group on Nuclear Security
  - Created 2012, July 19th,
  - Temporary dedicated group of the 27 Member States (nuclear and non-nuclear countries)
  - Work conducted July 2011-June 2012
  - Chair = the EU Presidency (Poland + Denmark)

- Reports
  - Interim report submitted to the European Council, 9 December 2011
  - Final report sent to the European Council, 6 June 2012

Mandate of AHGNS

- Overview of methodologies for evaluating nuclear security, taking preventive measures against malevolent actions and protecting NPPs
- Identifications of good practices and potential ways of improvements

- Discussions will cover only general considerations of nuclear security such as doctrine, organization of response
- Specific national issues not to be discussed
- Work should only cover NPPs

- Need to protect sensitive information
- Discussions to be put into perspective with IAEA recommendations

Methodology

- Questionnaire
  - Identification of good practices and synthesis

- More detailed work on 5 specific topics:
  - Computer Security/Cyber Security
  - IAEA's International Physical Protection Advisory Service (IPPAS) Missions
  - Intentional Aircraft Crash
  - Nuclear Emergency Planning: Synergies and consistency between Safety and Security
  - Exercises and Training

- National presentations on how these issues are addressed, discussions, identification of more detailed good practices (Austria, Belgium, Denmark, Sweden, Finland, France, Germany, Italy, Netherlands, United Kingdom)

10 key findings (1/3)

1. Strengthening of the global level of security requires international efforts, cooperation and exchange of good practices. In this respect:
   - the CPPNM, as amended in 2005, is the most important multilateral instrument that addresses nuclear security
   - the IAEA plays a central role (INFICR 225 rev5, Nuclear Security Series, IPPAS).

2. Coordination at State level is a major issue :
   - Ensuring interfaces between nuclear security and other legal and regulatory framework, *e.g.: nuclear security and safety measures should be designed, implemented and managed in NPPs in a coherent and synergistic manner*
   - For assessment, definition and evaluation of the threats to the NPPs.

3. Regular review of the nuclear security regime is a good practice :
   - to verify its efficiency and consistency with the international instruments, and integrate lessons learned,
   - IPPAS missions are considered as the reference for nuclear security evaluation for EU Member States with established or planned NPPs.

10 key findings (2/3)

4. Organising nuclear security control and implementing provisions as soon as possible is a good practice to be promoted :
   - Take into consideration the nuclear security requirements from the design stage of a NPP
   - Develop sufficient technical capacities to perform the assessment of the nuclear security measures at NPPs and perform inspections

5. Secured mechanisms to protect sensitive information

6. Comprehensive and strong management systems are essential to support nuclear security measures at a NPP

7. Coordination of actions between State and operators are needed (intelligence, response – beyond design basis threat)

8. Nuclear security culture should be promoted at all levels (operators and State)

10 key findings (3/3)

9. Intentional Aircraft Crash :
   - Security concern for aircraft attack against an NPP not covered by DBT lies first in countermeasures to prevent RENEGADE-aircraft crash: intelligence, aviation security regulations, air craft safety measures
   - Competent authorities should have a firm understanding of the potential consequences of an intentional aircraft crash on a NPP,
   - Measures and procedures for timely warning and alerting the NPPs in case of identification of a RENEGADE-aircraft potentially threatening NPPs should be considered at the national level.

10. Cyber security
   - Design good practices have been identified
   - Regular intrusion and vulnerability tests planning is encouraged as well as external audit (such as IPPAS) of technical and organisational provisions

6 key recommendations

The AHGNS :

- Urges all EU Member States to complete as soon as possible the internal process that would enable the ratification of the 2005 Amendment to the CPPNM
- Encourages the implementation of IAEA's publications of the Nuclear Security Series and the use of IAEA's services
- Highly encourages the use of IAEA's IPPAS missions in all EU Member States with NPPs
- Encourages the IAEA to share best practices identified through the IPPAS missions
- Encourages cooperation among EU Member States and between them and the EU's neighbouring countries
- **ENSRA** is considered as an important body for enhancing nuclear security at a EU level and should consider enlarging itself to neighbours countries

Conclusion of French Nuclear Security Authority

- Growing consideration of nuclear security issues at an international level, however nuclear security rests within each State
- International framework is robust and use of IAEA tools (including IPPAS missions) is to be highly encouraged
- Work within the AHGNS is beneficial wrt:
  - Interest of review of our own system and compare with different approaches
  - Exchange of good practises
- The AHGNS work highlights usefulness of bilateral and multilateral cooperation
- At a European level, the ENSRA club of regulators already provides for cooperation on high level and if needed on more technical issues.
- Enlargement to neighbouring countries would allow to enhance collaboration between EU members.

Conclusion of German Nuclear Security Authority

- General remarks:
  - restricted mandate and new issues on EU-level did not completely match the participants
  - The IAEA Nuclear Security Series is a good basis for a State's nuclear security regime without touching the prime responsibility of that State
- Discussions and conclusions of the AHGNS revealed:
  - European States plead for a preventive protection on high level
  - European States strongly want to cooperate and exchange best practises
  - Further improvements can be achieved especially regarding the intentional aircraft crash, cyber security and contingency planning
- The European Nuclear Security Regulators Association (ENSRA) is a established platform to increase the nuclear security level in Europe and to cooperate with neighbouring countries

Thank you for your attention