IPPAS Mission to Germany

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Run up to IPPAS

- Germany asked for an IPPAS mission on June 14th 2016
- Module 1: BMUB, NMU, GRS, KoSikern
- Module 2: NPP Emsland, Interim Storage Facility Lingen, Lingen Police
- Module 5: NPP Emsland, BMUB, NMU
- Prep meeting and IPPAS workshop in January 2017
- Working through IPPAS guide modules as preparation for the mission
- Regular video conferences between all relevant parties
German Nuclear Security Regime (1)

- Federal legislator
  - Basic Law Constitution
    - Acts
      - e.g. aCPPNM, Atomic Energy Act
    - Ordinances
      - e.g. Radiation Protection Ordinance, Nuclear Reliability Verification Ordinance
    - Guidelines
      - e.g. Design Basis Threat(s), Malicious Acts Guidelines
    - Other Rules
      - e.g. governmental letters, committee decisions, standards (DIN, ISO, KTA)

- Federal Government, Federal Council
- Federal Government, Land authorities
- Technical Experts

Ministry for Environment, Energy and Climate Protection of Lower Saxony
German Nuclear Security Regime (2)
IPPAS report

- 80+ pages
- 3 Recommendations
- 28 Suggestions
- 10 Good practises

Some of these will be introduced in the following slides
Recommendation:
When the Federal government revises the Act on Peaceful Utilisation of Atomic Energy and the Protection against its Hazards, they should consider introducing the most important principles and requirements for physical protection, which at the moment exist in legally based guidelines.
Suggestion Federal Level

Suggestion:
The Federal government may consider including the following provisions in legally binding legislation:

1. A provision stating primary responsibility for physical protection (with the exception of police responsibilities) rests with the holders of relevant licences, as only primary responsibility for nuclear safety is explicitly stated in the Act on Peaceful Utilisation of Atomic Energy and the Protection against its Hazards;

2. Provisions assigning the responsibility for development, maintenance and use of the design basis threat;

Suggestion
Federal Level

Suggestion:
The Federal government may consider developing additional regulations and (or) technical guidance in the following areas:

1. Inspection programme, including the development of an annual inspection plan, the methods to conduct performance tests specifically related to duties of personnel and implementation of procedures, establishment of inspection priorities, documentation of the findings, etc.;

2. Nuclear security culture;

3. Obligation for the operator to prepare plans for effectively countering the design basis threat through, *inter alia*, the actions of an emergency response force.

4. Protection of systems that are used to maintain nuclear material accounting records.
Good Practise Federal Level

The State’s existing model of nuclear security framework that results in a close collaborative relationship between the various organizations at the Federal, Länder, and the operator level, and their active engagement in several international organizations to sustain their nuclear security regime, is noteworthy.
Suggestions
Länder Level

- The State may consider promoting nuclear security culture and encouraging all organizations involved in nuclear security to establish and maintain one. The State may develop nuclear security culture guidelines applicable to all organizations and based upon existing practices at the operator level.

- The State may consider verifying that plans exist at the operator level to address management of human resources relevant to nuclear security as the country ceases nuclear power generation and continues decommissioning of its NPPs.
Good Practises
Länder Level

• The established organizational responsibility for management of the overall quality assurance programme is independent from both the System/equipment maintainer and operations.

• The process by which the competent authority ensures that the operator’s Computer Security Officer has the requisite expertise and authorization to access classified material to perform their important role.

• The Operator’s dedication to support and actively participate in national working groups on computer security ensures effective information exchange.
Conclusions

- Very positive experience
- German nuclear security regime fulfils the intention of the IAEA guidance
- Unique system that has evolved since the 1950s
- Basis for recommendations and suggestions is this evolution
- Recommendations and suggestions are helpful for sustainable nuclear security regime in the future