Safety & Security Interface

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Presentation outlines

- Definitions & International Framework
- An Integrated Approach
- Responsibility, Involvement, Complementarity
- Ways to a Comprehensive Approach
- Organizational Structure at Competent Auth.
- Conclusions
Definitions & International Framework

Nuclear Security (IAEA Security Glossary): The prevention and detection of and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities.
Definitions & International Framework

- **Nuclear Safety (IAEA Safety Glossary):**
  The achievement of proper operating conditions, prevention of accidents and mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation risks.
Definitions & International Framework

- CPPNM and its Amendment 2005:
  Does not reflect explicitly on the interaction of nuclear safety and nuclear security.

- CNS (Art. 27):
  Denominates the confidentiality of information related to national security or to physical protection of nuclear materials or nuclear installations.
Definitions & International Framework

- Nuclear Security Series No.20; Fundamentals

(1.2) Nuclear security and nuclear safety have in common the aim of protecting persons, property, society and the environment. Security measures and safety measures have to be designed and implemented in an integrated manner to develop synergy between these two areas and also in a way that security measures do not compromise safety and safety measures do not compromise security.
Definitions & International Framework

- Nuclear Security Series No.20; Fundamentals
  E.E.12: … each competent authority and authorized person and other organizations with nuclear security responsibilities contribute to the sustainability … by:
  (a) Developing, implementing, and maintaining appropriate and effective integrated management systems including quality management systems;
  (b) ‘Demonstrating leadership in nuclear security matters at the highest levels; …
Definitions & International Framework

So, in this case …

*Just do it!*

But: While nuclear safety and security share a common objective, there are points of potential conflict between the measures taken in each area to accomplish that objective.
An Integrated Approach

- **At Legal Framework**
  - Usually both issues are addressed, but leave the implementation widely open

- **At Regulatory Requirements**
  - As in many regulatory frameworks, the challenge of integrating the two objectives have been addressed to operators

- **At Operational Level**
  - Almost all activities rely on that level of action
An Integrated Approach

Focusing on operational level actions

- Leverage existing programs, controls, and processes to manage both planned and emergent activities/conditions
  - Plant Operations Review Committee
  - Work planning and control
  - Design control and configuration management
  - Quality assurance and audit
  - etc.
An Integrated Approach

... is it enough?
Responsibility, Involvement, Complementarity

- IAEA
  - Under the lead of the IAEA, the Interface-Group was formed in June 2012.
  - Being composed by the Chairs of the five Safety Standards Committees and five members of the Nuclear Security Guidance Committee, it ensures on the level of Standards and Guidance a mutual consideration and comprehension.
Responsibility, Involvement, Complementarity

- The role of the competent authority
  - Fulfils the legal requirements
  - Establishes regulatory requirements
  - Verifies the fulfilment of legal and regulatory framework addressed to license holders
  - Follows international trends
  - Supervises operational modifications etc.

Do we also take part of how the things are done on a nuclear facility?
Responsibility, Involvement, Complementarity

- **Nuclear Safety Culture:**
  “That assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance.”

- **Nuclear Security Culture:**
  “The assembly of characteristics, attitudes, and **behaviour** of individuals, organizations, and institutions which serves as a means to support and enhance nuclear security.”
Responsibility, Involvement, Complementarity

Nuclear Security Culture:
- Is it only affected by the legal and regulatory framework and the requirements and guidelines of the competent authority, and
- Is it only the duty of the license holder?
- Or has the organizational culture of the competent authority also an influence?

Nuclear security culture goes further than the protected area.
Responsibility, Involvement, Complementarity

If this assumption is recognized, then the following fundamental position should be a leading factor over the competent authority and his way to work:

BELIEFS AND ATTITUDES
(a) Credible threat exists;
(b) Nuclear security is important
Ways to a Comprehensive Approach

- Share the beliefs & attitudes of safety culture and security culture throughout all involved organizations

and consequently:

- Let the beliefs & attitudes be a foundation for the work at the interface of safety and security at the competent authority
Organizational Structure at Competent Authority

- Separate Authorities for the two domains
  - Strict separation of safety and security items throughout the full process chain

Diagram:
- Operator
- Nuclear Safety Authority
- Nuclear Security Authority
Organizational Structure at Competent Authority

- Separate Authorities with collaboration
  - Strict separation of safety and security, but at least a common basis at solution level

Nuclear Safety Authority

Nuclear Security Authority

Operator
Organizational Structure at Competent Authority

- Combined Authority, separated departments
  - Now we have them «under-one-roof»
  - Are they also encouraged to cooperate?
Organizational Structure at Competent Authority

- Comprehensive Safety-Security-Approach
  - Liaison officers at Safety Teams ensure a well-balanced integration
Conclusions

- Interaction of safety and security finds answers to diverging goals
- Interaction of safety and security starts already during the making of regulations, guidelines and other documents
- Comprehensive approach in the interaction of safety and security at the competent authority is essential
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Nuklearsicherheitsinspektorat ENSI
Inspection fédérale de la sécurité nucléaire IFSN
Ispettorato federale della sicurezza nucleare IFSN
Swiss Federal Nuclear Safety Inspectorate ENSI

Swiss Confederation

Muchas gracias
Thank you
Merci beaucoup

Danke schön
Grazie