Assessing evolving threats in a changing world

WINS Online WS CPPNM A/CPPNM

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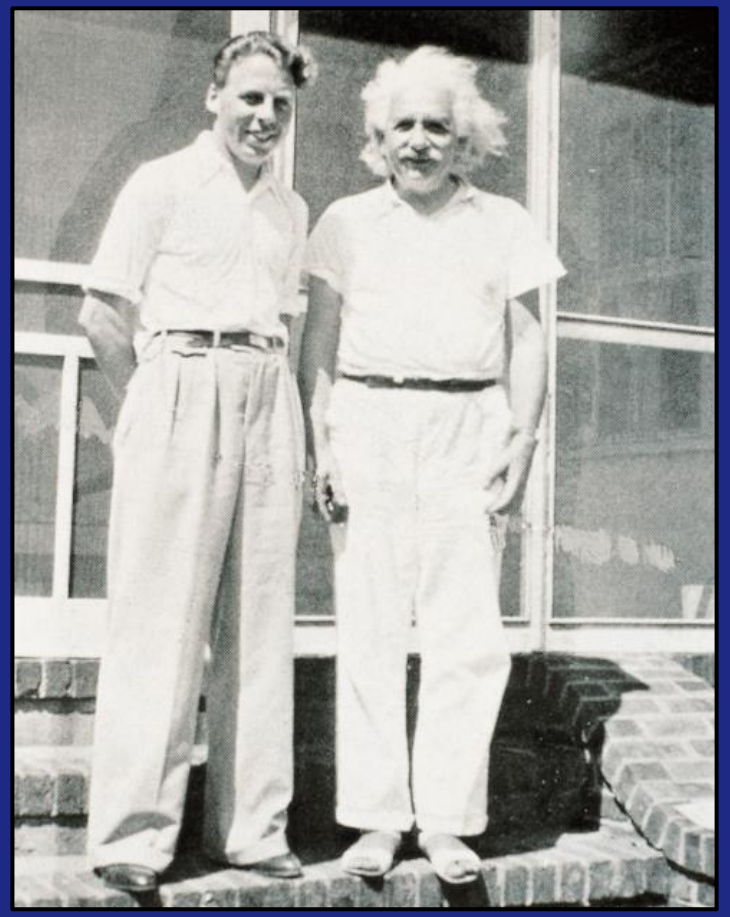
Table of contents

Institutt for Energy Technology

Established in 1948, atomic research and value creation



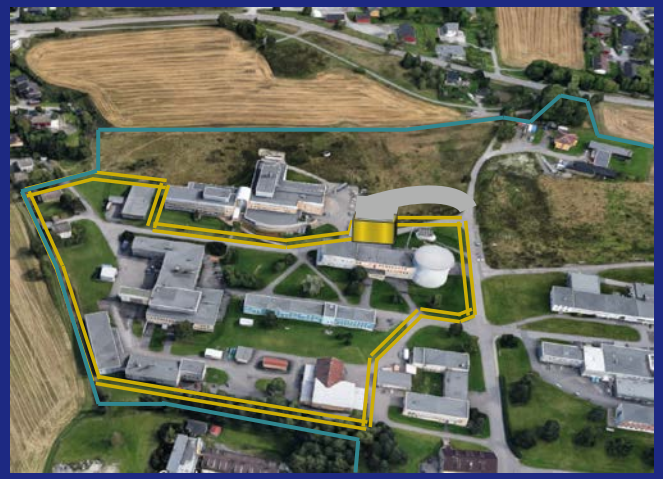
Activ societal contributer for national, regional and local development

Research, innovation and commersialization

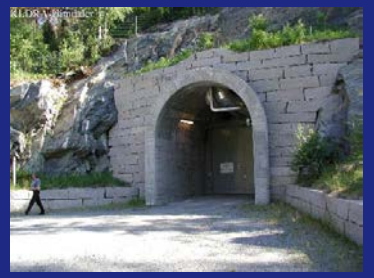
Development and production of cancer medicine

Preparing safe and secure decommissioning of nuclear facilities and materials

Nuclear research facilities in Halden and Kjeller



Nuclear Research Facilites Kjeller



Combined Storage and Repository for Radioactive Waste (KLDRA) Himdalen

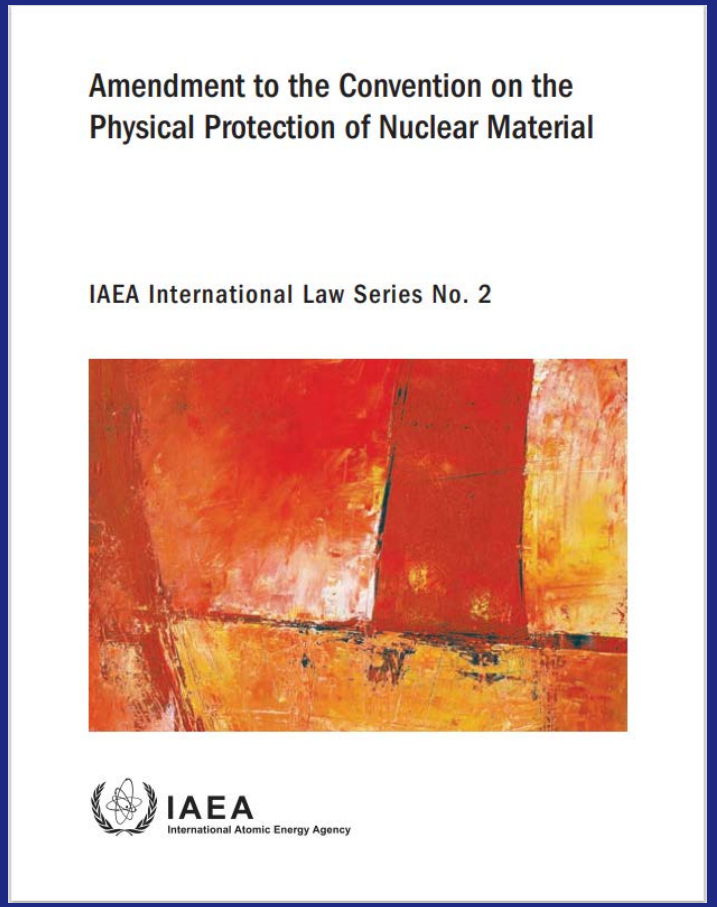
Nuclear Research Facility Halden (HBWR)

CPPNM and its Amendment

Fundamental Principle G

“The State’s physical protection should be based on the State’s current evaluation of the threat.”

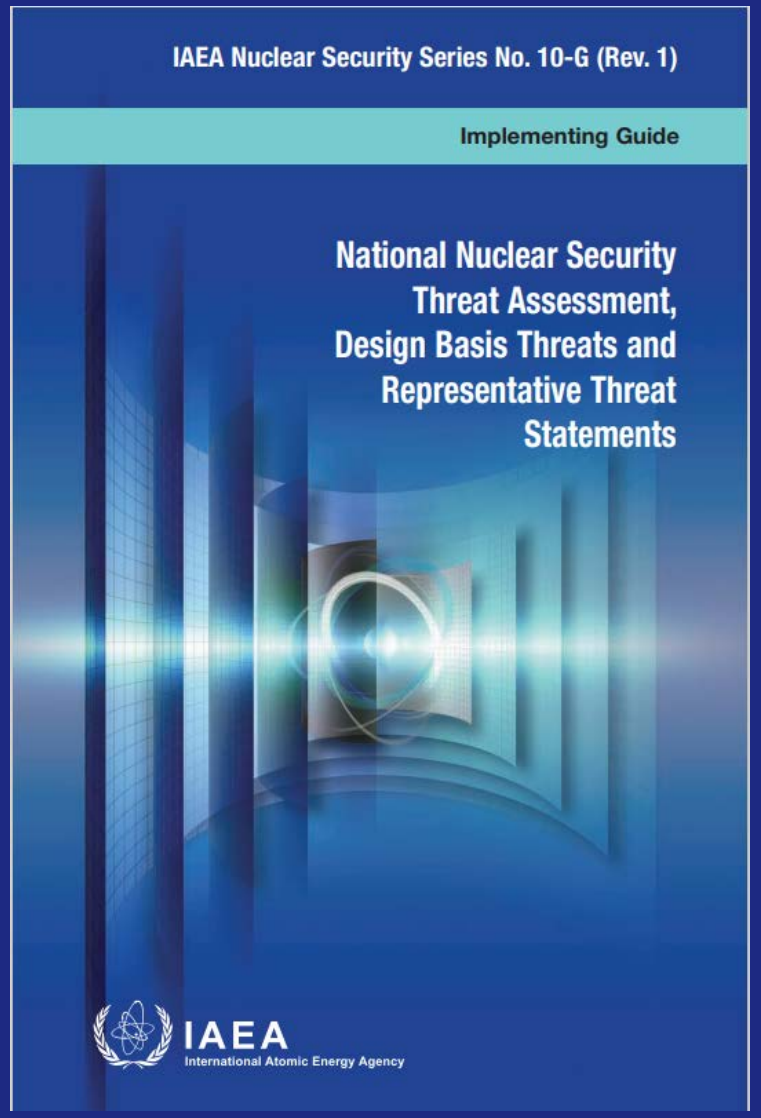
- States should apply a threat-based approach in establishing a nuclear security regime.
- Assessment of nuclear security threats should be kept up to date.
- The appropriate State authorities should define the threat and associated capabilities in the form of a threat assessment, and if appropriate, a design basis threat [NSS13].



Threat assessment

"An evaluation of the threats — based on available intelligence, law enforcement and open source information — that describes the motivations, intentions and capabilities of these threats."

- Threat Assessment is an important first step towards establishment of a sustainable nuclear security system and measures.
- The Operator must make sure key security roles are enabled with updated threat assessment skillset and training.
- Communication between the Operator and the appropriate State authorities.



Some recent examples of increased security at IFE

- New licensing requirements in 2019 and 2021, together with a new State Act (2019).

- New requirements for security of IFEs facilities in accordance to the State Act.

- The dividing of IFEs areas into «nuclear» and «non-nuclear».

- New inner perimeter and physical protection measures around the nuclear facilities.

-- Enhanced security measures, guards and emergency prepardness planning.

- Organizing security management, more security roles and resources.

- Intensified dialogue with the appropriate State authorities and also other proffesional environments.

Uncertainty and challenging times

"The national nuclear security threat assessment documentation should be periodically reviewed to assess whether the assessment still represents a comprehensive and balanced view of the credible threats to nuclear security in the State, and the assessment should be revised if necessary."

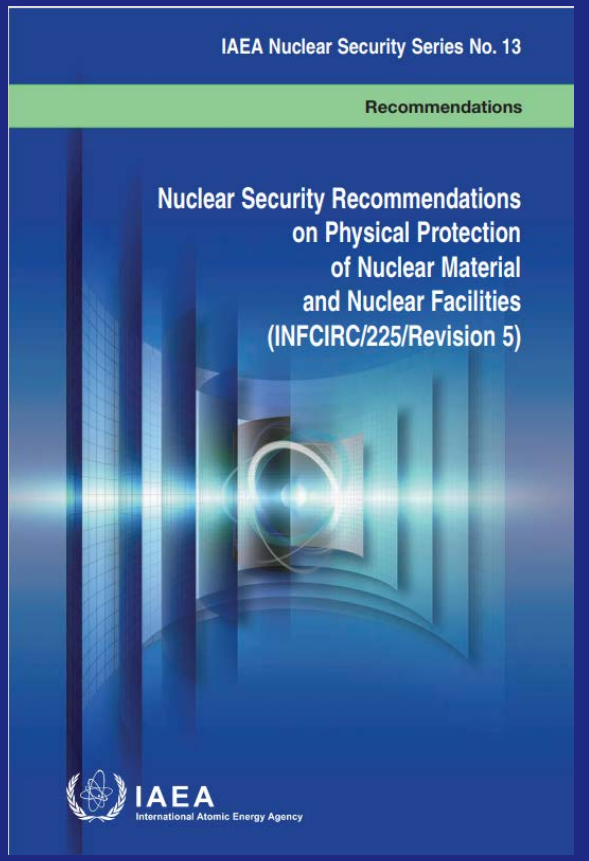
"Norway is facing a more serious threat environment now than it has in decades."
The Norwegian Intelligence Service's annual report Focus, 2024.

- The development ahead is uncertain, being able to respond to new and emerging threats are important.
- Maintenance of the validity and review of the national nuclear security threat assessment is vital for the Operators role in implementing and updating PPS.
- Strive for an integrated approach to safety, security and safeguards.
- Invest in a strong security culture.

Operators practice

"In nuclear security, the assessment of risk includes the consideration of threats, the likelihood that malicious acts could be successfully carried out by those threats and the potential consequences of such acts."

- State Act highlights an enhanced role of operators in national nuclear security.
- Develop coordination mechanisms.
- Insider threat mitigation.
- Give due priority to the development, maintenance, and implementation of the security culture within the organization.

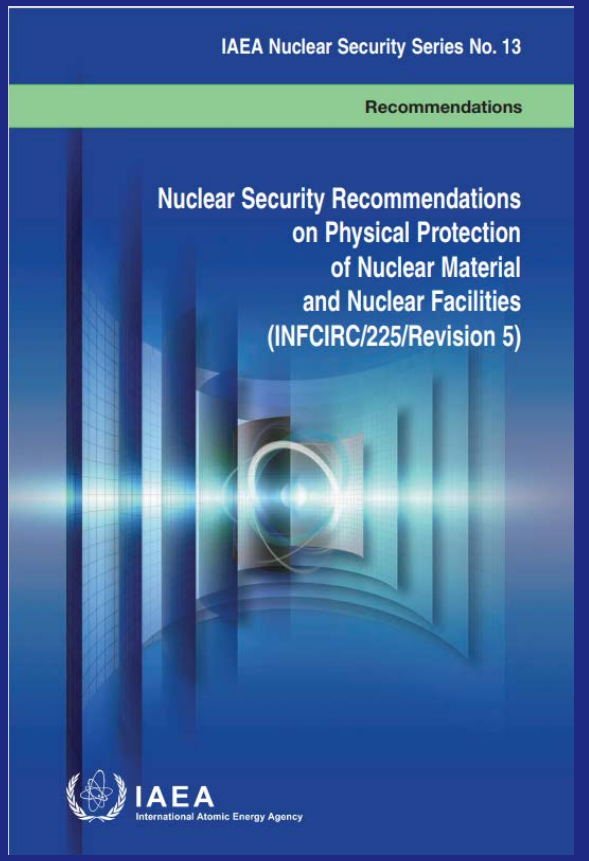


Operators practice cont.

"Design basis threats. The attributes and characteristics of potential insider and/or external adversaries who might attempt unauthorized removal or sabotage, against which a physical protection system is designed and evaluated."

- Contingency planning (also consider security threats "beyond the design basis".

"When considering the threat, due attention should be paid to insiders. They could take advantage of their access rights, complemented by their authority and knowledge, to bypass dedicated physical protection elements or other provisions, such as safety procedures."

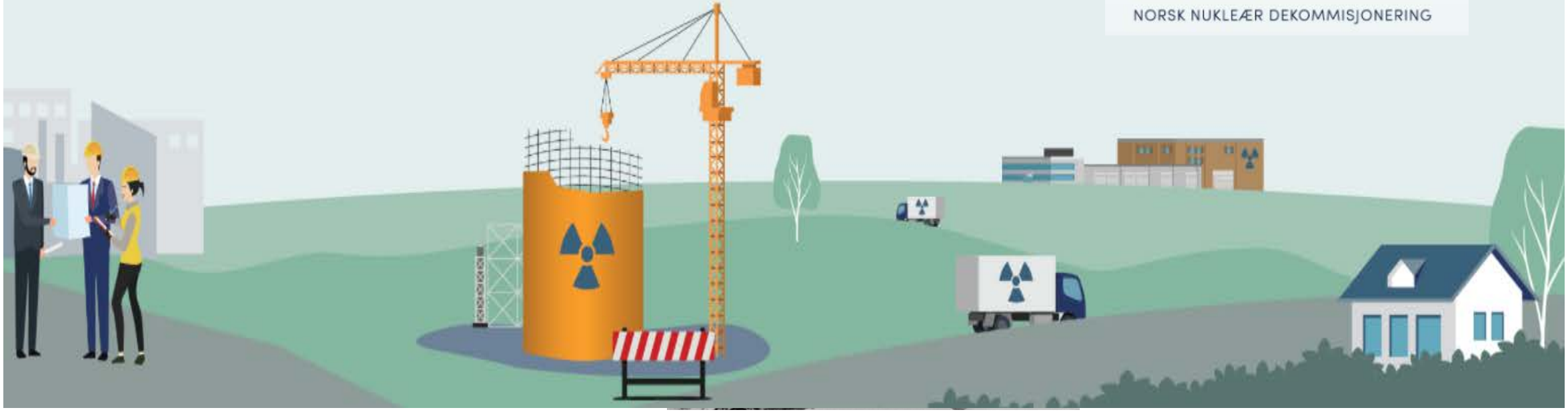


A National Strategy as foundation for the establishment of IFE

"Norwegian Nuclear Decommissioning"

- New facilities for the decommissioning and storage
- Transport (international/ national)
- New possibilities for design, plan and implement 3S "*by design*"

NND
NORSK NUKLEÆR DEKOMMISJONERING



Conclusions

Operators assessing evolving threats in a changing world

- A valid threat assessment is fundamental and the key starting point
- Identify and understand what are the existing vulnerabilities
- Plan ahead and plan for uncertainties
- Pay attention to improved technological capabilities, look ahead to see what type of emerging technologies are coming out
- Invest in competence and training, organize key security roles and responsibility
- Be in active dialogue with the appropriate State authorities. How to assess the threat environment as the operator considering recent global events?
- Understand the benefits from CPPNM and A/CPPNM obligations especially in the dynamic threat and risk environment
- Participate in global discussions, contribute to knowledge sharing and international cooperation