Essential Elements for implementing a Nuclear Security Regime

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 - Preliminary comparison of Essential Elements & International Instruments
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Historical Overview

Starting point: Adoption of 2005 Amendment to Convention on Physical Protection of Nuclear Material

- Incorporated "physical protection fundamentals" that were derived in large measure from INFCIRC/225/Rev.4
- Physical protection principles were to be taken into account insofar as reasonable and practicable by States in developing, implementing and maintaining regimes governing physical protection of nuclear material and nuclear facilities aimed at meeting physical protection objective.
- Initial Effort: Extend "physical protection fundamentals" to cover nuclear security
 - Working definition of nuclear security: "the prevention and detection of and response to theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances and associated facilities".
 - Initial effort done in series of consultants meetings through mid-2007 produce a draft Nuclear Security Fundamentals document.

Historical Overview

Mid-2007: Time for a "fresh look"

- International instruments related to nuclear security were continuing to:
 - expand nuclear security functions and mandates,
 - create new State-level obligations,
 - identify new State-level responsibilities.
- Need for systematic analyses of these international instruments to provide basis for ensuring that draft "Nuclear Security Fundamentals" document comprehensively reflected these new developments
- Legal consultants engaged to carry out analyses and examine draft (late 2007 through early 2008).

Nuclear Security-related International Instruments

Legally Binding International Instruments Developed under IAEA Auspices

- 1980 Convention on the Physical Protection of Nuclear Material (CPPNM)
- 2005 Amendment to the CPPNM (Amendment)
- 1986 Convention on Early Notification of a Nuclear Accident (ENC)
- 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (AC)
- Legally Binding International Instruments Developed under UN General Assembly Auspices
 - 1997 International Convention for the Suppression of Terrorist Bombings (TBC)
 - 2005 International Convention for the Suppression of Acts of Nuclear Terrorism (NTC)
- Legally Binding International Instruments Developed under UN Security Council Auspices
 - 2001 UN Security Council Resolution 1373 (UNSCR 1373)
 - 2003 UN Security Council Resolution 1456 (UNSCR 1456)
 - 2004 UN Security Council Resolution 1540 (UNSCR 1540)
 - 2006 UN Security Council Resolution 1673 (UNSCR 1673)

Nuclear Security-related International Instruments

- Legally Binding International Instruments Developed under International Maritime Organization (IMO) Auspices
 - The Protocol of 2005 to 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (2005 SUA Protocol)
 - The Protocol of 2005 to the 1988 Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf (2005 Fixed Platforms Protocol)
- Non-Binding Internationally Accepted Recommendations Developed under IAEA Auspices
 - 1999 INFCIRC/225/Rev. 4 (corr.), "The Physical Protection of Nuclear Material and Nuclear Facilities", and its predecessor documents (INFCIRC/225)
 - 2004 Code of Conduct on the Safety and Security of Radioactive Sources (Code)
 - 2005 Guidance on the Import and Export of Radioactive Sources (Guidance)
- Non-Binding Internationally Accepted Recommendations of the UN General Assembly
 - 2005 A United Nations Global Counter-Terrorism Strategy (UNGCTS)

Current Status of Essential Elements Overall Nuclear Security Objective

- Prevent malicious acts involving or directed at nuclear material, other radioactive material, associated facilities or associated activities from occurring, and
- When they do occur, recover material that has fallen out of regulatory control and mitigate or minimize the harm to persons, property and the environment from such acts.

Current Status of Essential Elements Aims of a State's nuclear security regime

- Taking into account overall nuclear security objective, States establish, implement and maintain an appropriate nuclear security regime aimed at achieving:
 - Protection against theft and other unlawful taking of nuclear material and other radioactive material in use and storage, and during transport;
 - Ensuring implementation of rapid and comprehensive measures to detect, locate and recover, as appropriate, nuclear material and other radioactive material which is missing or stolen or otherwise not under regulatory control;
 - Protection of nuclear material and other radioactive material and associated facilities against sabotage and the criminal or other unauthorized use of such material;
 - Ensuring implementation of rapid and comprehensive measures to mitigate or minimize the harm to persons, property and the environment from sabotage and the criminal and other unauthorized use of nuclear material and other radioactive material.

Current Status of Essential Elements

of an appropriate & effective nuclear security regime

Titles of Essential Elements (descriptions not included)

- State sovereignty
- Assignment of nuclear security responsibilities throughout a nuclear security regime
- Legislative and regulatory framework and administrative measures to govern nuclear security regimes
- Target identification and assessment of potential consequences
- Nuclear security threat identification
- Sustaining nuclear security regime effectiveness
- Detection, assessment, notification of breaches or potential breaches of nuclear security
- Contingency and emergency planning, preparedness and response
- Nuclear security management
- International cooperation

Preliminary comparison of Essential Elements & International Instruments

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- CPPNM, Amendment
- CPPNM, Amendment, NTC, UNSCR 1540, Code
- CPPNM, Amendment, Code, Guidance, NTC, TBC, UNSCR 1373, UNSCR 1540, UNGCTS
- Amendment, INFCIRC/225, Code
- Amendment, Code, INFCIRC/225
- Amendment, INFCIRC/225
- Best Practices
- CPPNM, Amendment, NTC, Code, UNGCTS
- CPPNM, Amendment, Code
- CPPNM, Amendment, NTC, Code, UNGCTS, UNSCR1373, UNSCR 1540, ENC, AC

Next Steps

- 2 Consultants Meetings to consider Essential Elements Approach (9/08 & 01/09)
- Emerging consensus in January about each component of Nuclear Security Fundamentals overall objective, aims, essential elements
- 3rd Consultants Meeting expected to be held in late Spring with aim of achieving consensus that document is ready for presentation to a Technical Meeting later in 2009.