INITIATIVE ON NUCLEAR SECURITY, GOVERNANCE AND GEOPOLITICS (INSG)

NUCLEAR SECURITY AND EMERGING TECHNOLOGIES: THE IMPACT OF CYBER AND ARTIFICIAL INTELLIGENCE & SECURITY AGAINST EMP

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Hoam Faculty House
Seoul National University
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Ken Luongo
President, Partnership for Global Security
What is the INSG?

Initiative that brings together multinational experts from key countries to effectively address the critical and evolving nuclear challenges of the 21st Century.

It’s key goals are to:

▪ Strengthen the overall nuclear governance system
▪ Assess the international security and geopolitical implications of global nuclear technology trends and related developments
▪ Sustain and further build the vital relationship between governments, the nuclear industry and the expert community that is necessary to achieve progress
The Evolution of INSG

The INGS is an evolution of the Nuclear Security Governance Experts Group (NSGEG), an influential international NGO group that provided realistic solutions to address weaknesses and gaps in the global nuclear security system. It was an instrument that:

- Expanded the Nuclear Security Summit’s scope to embrace nuclear governance as a core issue.
- Helped create the NSS’ Nuclear Security Implementation Initiative, INFCIRC/869
- Developed more than 50 recommendations for improving nuclear security and supported the creation of 5 Priorities for the Global Nuclear Security.
- Engaged actively with the Centers of Excellence of Japan and South Korea, government officials and NSS Sherpas, and the nuclear industry.
INSG Objectives

Strengthen Nuclear Governance

- Improve nuclear security transparency, information sharing, peer review, and related confidence building activities
- Create common international nuclear security standards
- Generate additional support for IAEA INFCIRC/869
- Promote and further develop activities to strengthen and close gap between the nuclear security and safeguards regimes

Respond to the Challenges Posed by Emerging Disruptive Technologies

- Identify policy responses and collaborations to address new stresses created by emerging disruptive technologies such as cyber, AI, materials science and 3D printing, EMP, bio-nano, and robotics on nuclear infrastructure and governance.
INSG Objectives

Improve Nuclear Geopolitics in the 21st Century

- Understand how a new era of great power rivalry impacts the evolution of nuclear power and global security - politically, technologically, and economically.

- Evaluate how the evolution of new nuclear suppliers, particularly China and Russia, impacts non-proliferation, nuclear security, and global security objectives.

- Identify a role for traditional nuclear suppliers including ROK in ensuring the maintenance and expansion of strong security and non-proliferation standards in response to new challenges.

- Develop new relationships and coalitions that focus on the serious implications of nuclear geopolitics and strengthen leadership and collaboration among key governments and institutions to effectively respond to them.

- Propose policies that promote safe, secure and safeguarded nuclear energy to meet climate goals and global security objectives.
Nuclear Governance and Emerging Technologies: Workshop Objectives

- Discuss the challenges posed by cyber technologies and the emergence of artificial intelligence for civil nuclear facilities and their security
- Address new stresses created by these emerging disruptive technologies on the existing governance regime
- Identify a path forward for continued engagement and understanding of the nuclear policy responses that may be needed to address the challenges posed by the global technology evolution
- Assess the threat posed by EMP and response to it