

2012 Seoul Nuclear Security Symposium and Industry Summit

December 12-13, 2012

Prof. Bong-Geun Jun

Director, Center for Nonproliferation and
Nuclear Security, IFANS, Seoul

jun2030@gmail.com

Asan Leadership Forum
"Leadership for Nuclear Governance"

Contents

- Background
- Nuclear Security in Comparison
- 2010 Nuclear Security Summit
- 2012 Seoul Nuclear Security Summit
- Debates
- 2012 Seoul Nuclear Security Symposium and Nuclear Industry Summit

What is Nuclear Security? - definition

- Prevention, detection of and response
 - to theft, sabotage, unauthorized access, illegal transfer or other malicious acts,
 - involving nuclear material, other radiological substances or their associated facilities

Nuclear Security in Global Nuclear Governance

- **NPT's 3 Pillars**

- : Nuclear disarmament, nonproliferation, peaceful use of nuclear energy

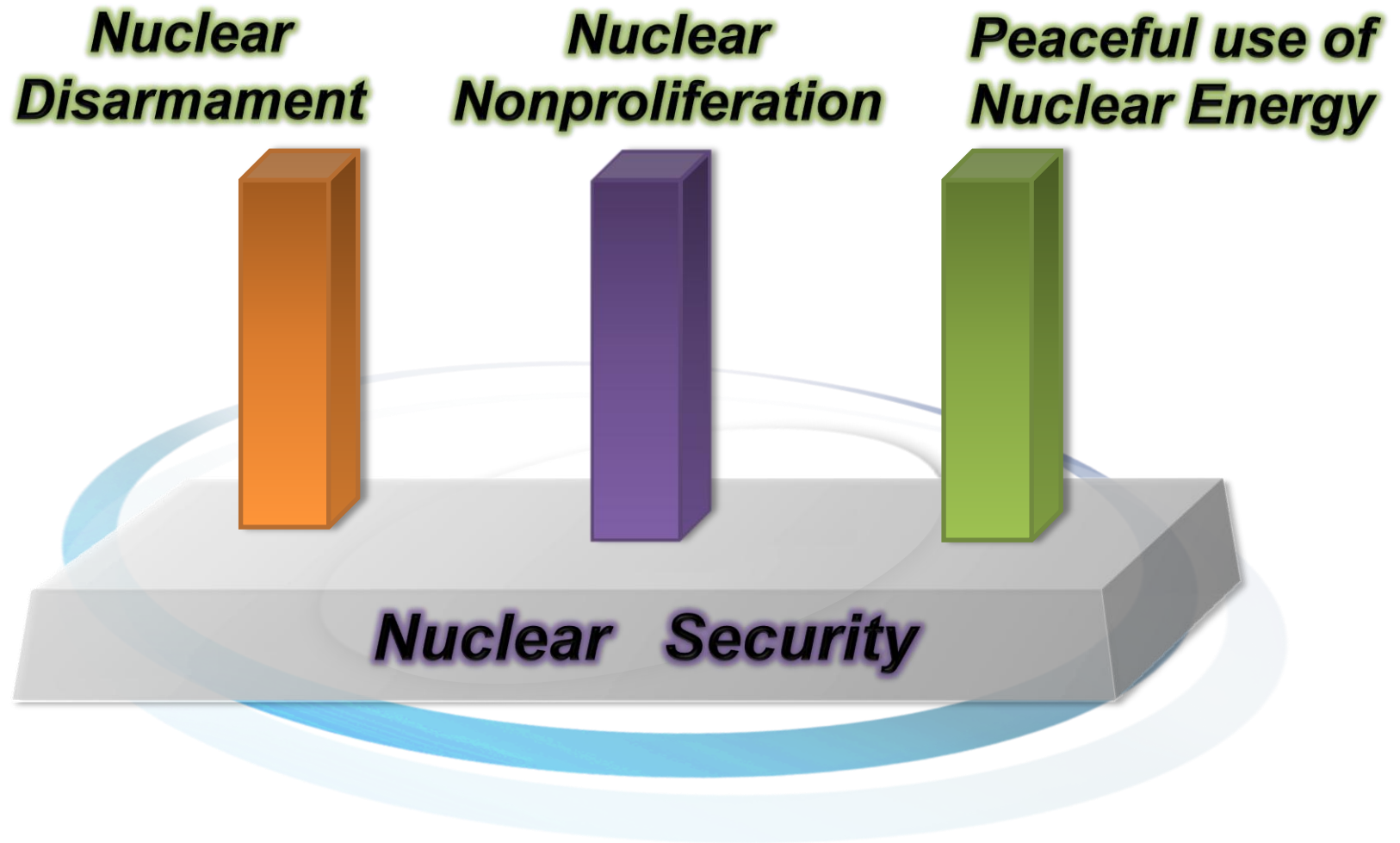
- **IAEA's 3S**

- : nuclear safeguards, safety, security

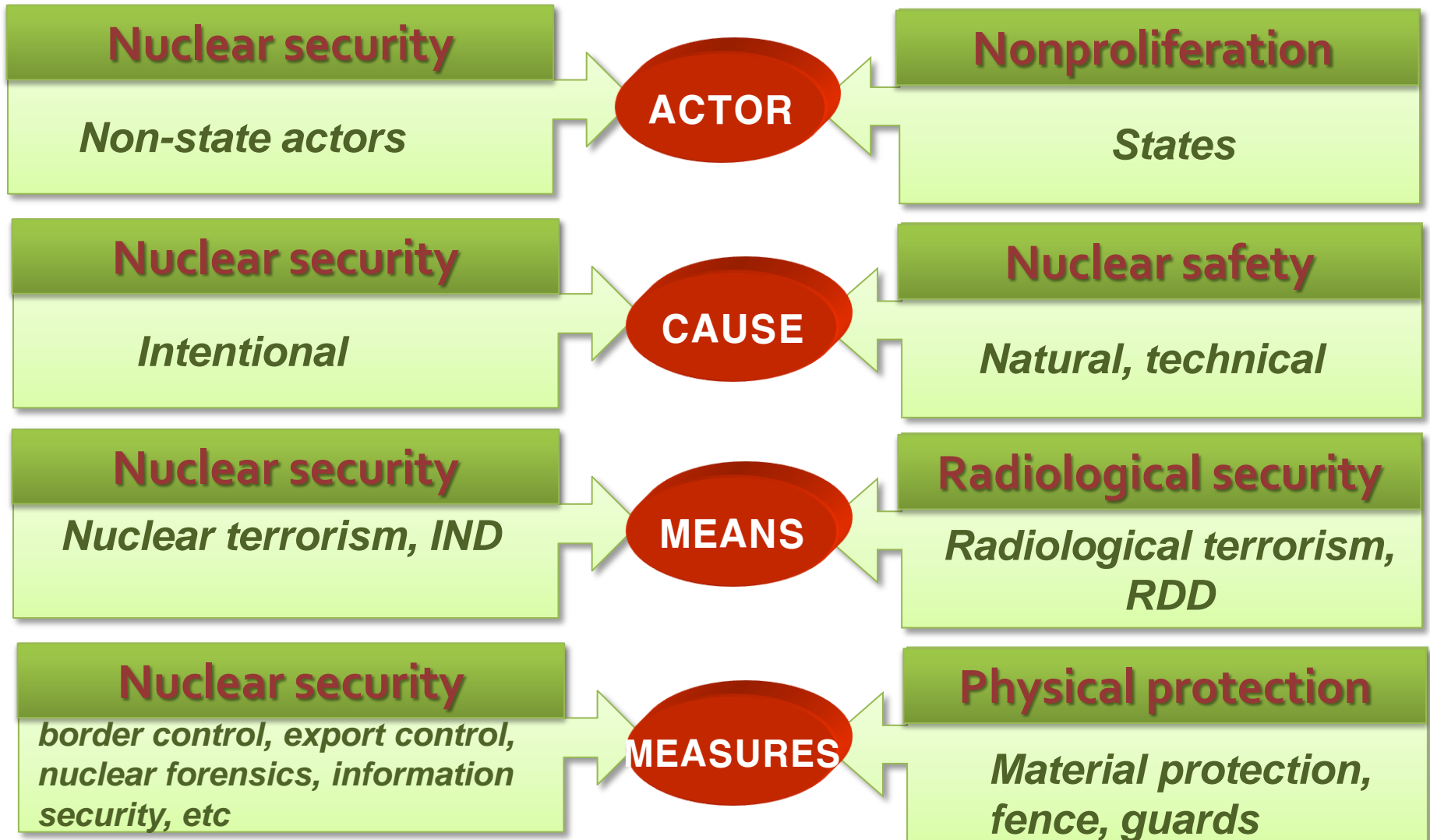
- **Obama's 4 pillars for nuclear-free world**

- : nuclear disarmament, nonproliferation, peaceful use of nuclear energy, nuclear security or basis for 3 Pillars

Nuclear Security as Basis of 3 NPT Pillars



Nuclear Security in Comparison



On Nuclear Terrorism and Nuclear Security

IAEA Director-General Mohamed ElBaradei

“Nuclear terrorism is No. 1. security threat right now. If they get it, they will use it.
(2008 IAEA Annual Conference)

UNSC Resolution 1540(2004)

“Gravely concerned by the threat of terrorism and the risk that non-State actors ... may acquire , develop, traffic in or use nuclear, ...,weapons and their means of delivery,

Recognizing the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, ...,weapons and their means of delivery.”

2010 Washington NSS Communiqué

“Nuclear terrorism is one of the most challenging threats to international security, and strong nuclear security measures are the most effective means.”

NSS: Background

The era of political instability and mass-killing terrorism

- about 30 cases of terrorism with over 100 deaths since 2010

Terrorists seeking nuclear materials and weapons

Over 2,000 tons of global fissile material stock (IPFM Report)

- HEU 25 kg or Pu 8 kg Per Nuclear Explosive Device
- Hundreds cases of losses or thefts of radiological Material, over 20 cases of losses or thefts of HEU/Pu since the 90s
- 130 HEU reactor

President Obama's call for NSS (2009.4.5)

- To secure all vulnerable nuclear material in 4 years
- To hold Global Summit on Nuclear Security in 2010
- Endorsed by UNSC Res. 1887(2009.9)

Fukushima Nuclear Accident(2011.3)

NSS: Significance

- ***The first and only summit forum on Nuclear Security***

- highest-level political attention

- ***Participation of all stake-holders***

- India, Pakistan, Israel, nuclear energy states

- ***Comprehensive 'Governance' approach***

- multiple norms, actors and issues
- Partnership: states, IOs, business, NGO ...

- ***National voluntary commitments***

Achievements of the 2010 Summit

- 50 leaders sharing threats perception, agreeing on nuclear security actions
- HEU/PU elimination: Chile, Kazakhstan, Russia, Ukraine, etc.; Shut-down or conversion of HEU reactors: Russia, Kazakhstan, Mexico, Vietnam
- Ratification of CPPNM 2005 Amendment and ICSANT
- Extension of the UNSC Res. 1540 Committee, G8 Global Partnership program; membership increase of GICNT:
- Strengthening IAEA NS function: IAEA Nuclear Security Fund, IAEA INFCIRC 225/rev.5(physical protection guideline document)
- Establishment of nuclear security training centers of excellences

Background: Fukushima Accident

- nuclear safety accident
- nuclear security consequences:
“Fukushima radiological terrorism” will be a high probability and high consequence event and could be replicated by terrorists and criminals.
- Big cities with 20km radius off-the-limit evacuation zone (Fukushima), 30km radius exclusion zone (Chernobyl)?

Debates

- **IAEA Int’l Nuclear Safety Group Report “The Interface b/n Safety and Security at Nuclear Power Plants”(2010)**
 - Needs for a joint management of these two traditionally disparate functions through communication, consultation and coordination
- **UN Secretary-General Ban Ki-Moon (April 2011, Kiev)**
 - A nuclear power plant that is safer for its community is also more secure for our world.
- **2012 NSS Preparations**
 - Dilution of nuclear security focus vs. reinforcing
 - cautions against more regulations
 - agreed both to maintain nuclear security focus and to discuss synergy between nuclear security and safety

2 New Issues for the 2012 NSS

- **Radiological Security**

- Radiological sources are more widely used and dispersed, thus more vulnerable to malign acts
- Stronger radiological security enables a wider, safer and more beneficial use for medical, agricultural industrial and research purposes
- 2010 NSS Communiqué: “(We) Recognize that measures contributing to nuclear material security have value in relation to the security of radioactive substances and encourage efforts to security these material as well.”

- **Synergy/Interface between Nuclear Security and Safety**

- mutually reinforcing and complementary
- Managing conflicting principles such as transparency, access vs. confidentiality, access control

'Global Governance' Approach

- Limits of traditional state-centered approach
- Diversification of Norms: treaties/ conventions, initiatives, national laws/regulations, codes of conduct, best practices, principles
- Multiplication of actors: states, GIO, NGIO, NGOs, companies, labs, schools, individuals,
- Complexity and interrelation of issues
 - 3 pillars of NPT, 3S/2S, development, economics, culture, sovereignty, globalization
 - International/domestic coordination and cooperation

2012 Seoul Nuclear Security Summit and Parallel Events

2012 Seoul NSS

- March 26(M)~27(T), 2012, Seoul
- 47 Heads of States + plus
- 4 Representatives of IOs (UN, IAEA, EU, INTERPOL)

2012 Seoul Nuclear Security Symposium

- March 23(F), 2012
- Hosted by KINAC and IFANS
- Approx. 200 participants, (including over 130 foreign guests)
- Nuclear security policy, technical issues
- Technical exhibition

Seoul 2012 Nuclear Industry Summit

- March 23(F)~24(S), 2012
- Hosted by KHNP
- Technical Tour; Nuclear construction site, Heavy equipment facility or Research facility

2012 Seoul Nuclear Security Symposium

[Subtitle] **Innovating Global Nuclear Security Governance**

[Program]

1. Nuclear Terrorism Threats and Nuclear Security Status

- IPFM, NTI, FMWG, INTERPOL/IAEA, UN

2. Key Nuclear Security Challenges and Solutions

- HEU, Illicit Trafficking, IAEA's Role, Radiological Security, Forensics, Culture etc.

3. Interface between Nuclear Security and Safety

4. Global Nuclear Security Governance Innovation and Beyond 2012

- 2020 Global NS Governance: Vision and Goals
- Coordination and Consolidation of NS Framework
- Coordination and Cooperation among NS Actors
- Principles of NS Governance

Seoul 2012 Nuclear Industry Summit

[Subtitle] The role of the nuclear industry in enhancing nuclear security & safety

[Program]

March 23, 7:30-8:30	Networking Breakfast & Registration
8:30-12:20	Opening Ceremony (KHNP, KAIF, Korean Prime Minister) Keynote Address Presentations <ul style="list-style-type: none">- International Organization Activities related to Nuclear Security- Nuclear Security Best Practices- Topical Presentations from Working Groups
12:20-14:00	Luncheon (hosted by Korean Minister of Knowledge Economy)
14:00-16:00	Panel Discussion Adoption of Communique (CEO, KHNP) Closing Remarks (President, KAERI)
18:00-20:00	Dinner (hosted by Korean Prime Minister)
March 24, 8-21	Technical Tour