



# HEU Minimization and the 2012 Seoul Nuclear Security Summit

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# I. Background : Significance of Nuclear Security Summit Process

- First summit level meeting on ‘nuclear security’  
→ highest political impetus; limitation of the existing processes and initiatives
- Shared threat perception on nuclear terrorism among 50 leaders
- Uniqueness of the composition of members: three non-NPT states
- A rare success story on non-proliferation agenda: Confidence Building Measures (CBM) on nuclear-related issue among 50 leaders
- Not intended to compete or replace with existing processes and initiatives



# I. Background : Agenda and Issues of the 2012 Seoul NSS (1)



- HEU/Pu management and minimization
- IAEA's essential role in implementing nuclear security objectives
- Illicit trafficking detection and border control: smuggling control, nuclear forensics, information exchanges, share best practices, INTERPOL
- Securing sensitive information: information security
- Enhance international and regional cooperation, while continue to emphasize national responsibilities

# I. Background : Agenda and Issues of the 2012 Seoul NSS (2)



- **Synergy and Interface between nuclear safety and nuclear security**
  - Nuclear security will be the main theme; nuclear safety will be complementary: how and to what extent safety has implication on security and can help reinforce security goals? The necessity to address both safety and security aspects from design & construction to operation & management phases of nuclear power plant in the future.
- **Radiological security: widely used & easily accessible, more vulnerable than nuclear materials**
- **Encourage and secure new sets of voluntary national commitments**

# II. HEU issues in the context of nuclear security

- Two elements of HEU Security
  - Secure management of HEU
  - HEU minimization : focus of this symposium
- Major international documents addressing HEU issues before 2010
  - INFCIRC/549 (Mar. 1998) : The IAEA document on “policies regarding the management of plutonium” encouraged the efforts to take security measures in the management of HEU as well
  - Final Documents of the NPT RewCon (2000, 2010) “encouraged the States concerned to consider similar policies for the management of HEU used for peaceful purposes
  - UNSCR 1887 (Sep. 2009) called on all States “to manage responsibly and minimize to the greatest extent that is technically and economically feasible the use of HEU for civilian purposes including by working to convert research reactors and radioisotope production processes to the use of low enriched uranium fuels and targets

# III. HEU Minimization in Washington NSS



## ● Communiqué

- HEU, Separated Pu require special precautions and agree to promote measures to secure, account for, and consolidate these materials
- Encourage the conversion of reactors from HEU to LEU fuel and minimization of use of HEU, where technically and economically feasible

## ● Work Plan

- converting HEU fueled research reactors, and other nuclear facilities using HEU to use LEU, where technically and economically feasible
- collaborating R&D new technologies that require neither HEU fuels for reactor operation nor HEU targets for producing medical or other isotopes, and will encourage the use of LEU and other proliferation-resistant technologies

# VI. Progress since Washington NSS

- Removing and Securing HEU
  - Chile, Ukraine, Kazakhstan, Mexico, Canada, Vietnam, US, Poland
  - GTRI program: removed all of the HEU from 6 countries (Serbia, Chile, Romania, Libya, Taiwan, Turkey) since April 5, 2009
- Reactor Conversions or Shut Downs
  - Russia, Vietnam, Kazakhstan, Mexico, US

# V. Tasks for HEU minimization in Seoul NSS

- More HEU removals
  - Number of states having HEU/Pu : 32 (NTI index)
- Encouraging reactor conversions
- Encouraging development of new technologies which do not need HEU
  - Fuel and Target conversion technology
- Developing guiding principles on HEU management within the IAEA framework

# VI. 2012 Seoul Security Summit Preparation

## **SUMMIT PROGRAMS**

**March 26, 2012**

- Official Welcoming Reception
- Leader's Working Dinner

**March 27, 2012**

- Plenary Session I
- Leader's Working Lunch
- Plenary Session II
- Chair's Press Conference

# VI. 2012 Seoul Security Summit

## Preparation

### **SPECIAL PARALLEL EVENTS**

- **Pre-Summit conferences by nuclear security stakeholders**
- Nuclear Industry Summit [Seoul, March 23-24, 2012]
  - Around 150 nuclear industry CEOs are participating
  - Host: Korea Hydro & Nuclear Power (KHNP)
- Nuclear Security Experts Symposium [Seoul, March 23, 2012]
  - 200 International nuclear security experts are participating
  - Host: Institute of Foreign Affairs and National Security (IFANS), Korea Institute of Nuclear Nonproliferation and Control (KINAC)

# VI. 2012 Seoul Security Summit Preparation (outreach)

- South America Regional Seminar (Santiago, Chile, June 20)
- ASEAN Regional Conference on Security, Safety, and Safeguards in Nuclear Energy (Bangkok, Thailand, Sept. 1-2)
- All members of IAEA (General Conference Outreach, Vienna, Austria, Sept. 21)
- West Africa (ECOWAS) Outreach (Vienna, Austria, Sept. 22)
- UN 1<sup>st</sup> Committee Outreach (New York, USA, Oct. 7)
- African Continent Regional Seminar on the NSS and the GICNT (Rabat, Morocco, Nov. 21-22)



## VI. 2012 Seoul Security Summit Preparation (proactive media/public engagement)

- Newspaper Contributions (DG Amano)
- Use of Major Broadcasters (KBS, MBC)
- Official Websites, logo, theme song, etc..
- Post-Summit Events

# VI. 2012 Seoul Security Summit Preparation



The 'S' shaped line stands for Seoul, Security, and Summit.

The line is curved to reflect the circular movement in an atom, and also the international community's will and hope to promote nuclear security through global cooperation.

The colors red and blue come from the 'Taegeuk' (yin-yang symbol) which symbolizes Korea, the host for the upcoming summit.

## Official Slogan

**“ Beyond Security Towards Peace ”**

# VI. 2012 Seoul Security Summit

Official Website: <http://www.seoulNSS.go.kr>

<http://www.thenuclearsecuritysummit.org>



## 2012 Seoul Nuclear Security Summit

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Media

2012 Seoul NSS



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### Updates

- Sous-Sherpas for the 2012 Seoul Nuclear...** June 28, 2011  
The Sous-Sherpa Meeting in preparation for the 2012 Seoul Nuclear Security Summit (NSS) is ...
- Seoul nuclear summit to discuss nuclear...** June 27, 2011  
SEOUL, June 27 (Xinhua) - South Korean Foreign Minister Kim Sung-hwan said Monday that next...
- The 2012 Seoul Nuclear Security Summit...** May 24, 2011  
The 2012 Seoul Nuclear Security Summit Preparatory Secretariat, headed by Foreign...

### References

- Communiqué and other final documents
- Related international agreements and initiatives
- Contributions, speeches and remarks
- Other publications

# VI. 2012 Seoul Security Summit Preparation

## Official Theme Song: “Peace Song”

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∴ Singer: Lena (Jung-hyun) Park

- Popular Korean-American singer
- PR Ambassador for the Seoul Summit

∴ **“Peace Song” shows Korea’s willingness to create  
a world free of nuclear terrorism and promote world peace**



The background features a light blue gradient with a subtle grid of small circles. Darker blue curved lines sweep across the top and right sides of the frame. The text 'Thank You' is centered in a bold, blue, sans-serif font with a slight drop shadow.

**Thank You**