# Accomplishments and Future Suggestions of 2012 Seoul Nuclear Security Summit

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#### 1. Introduction

The second Seoul Nuclear Security Summit was held in Seoul, March 26~27, 2012. It was a very big political event for nuclear security. National and International organization leaders had a time to discuss in-depth issues about nuclear security; nuclear terrorism, illicit trafficking of nuclear /radiological materials, sabotages for nuclear facilities, etc. Why did many national leaders still take part in the second nuclear security summit compared to Washington summit and what is the importance of nuclear security? This paper will be the answer from those questions and handle the background, outcomes and future tasks of nuclear security summit. And suggestions for the next summits were considered in the conclusion part.

## 2. Backgrounds of Nuclear Security Summit

The definition of nuclear security is the prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear or other radioactive substances or their associated facilities. (IAEA Advisory Group on Nuclear Security)

Nuclear security became more important than before because the influence of nuclear terror is the most extreme form of threat which no country is immune and the possibility of nuclear terror existed everywhere. In fact, the threat of nuclear security has occurred increasingly all around the world. Continuously, terrorists and non-state actors are seeking the nuclear materials and components for utilizing the terror purpose. 1) al Qaeda(2006), Khan network and other non-state actor like Japanese terror cult Aum Shinrikyo (1990s), 2) June 2002, U.S. citizen Jose Padilla was arrested for planning a radiological attack in Chicago 3) 8 Nov. 2007, South African nuclear research institute, Pelindaba was attacked for HEU by two armed teams 4) Illicit trafficking attempt of HEU(89.4%, 18g) was caught in Georgia ,2010.

Meanwhile, after 911 terrors, there were causing extreme interest for securing the nuclear security, especially in US. In the early phase of Obama administration, they got the big concerns for security issue for defending all kinds of threat in their territory.

Therefore, the first nuclear security summit was proposed by President Obama. In April 2009 speech in Prague, he called international efforts to secure all

vulnerable nuclear material around the world within four years.

The efforts for nuclear security are not the short term tasks but it needs the ongoing, long-term challenge that will require international/domestic collaborations to confront evolving threats and prevent nuclear terrorism. It is the reason to be held the nuclear security summit every two year.

After the 1<sup>st</sup> Nuclear Security Summit, the interests of nuclear security increased more among interested nations. And Fukushima accident promoted awareness that similar consequence can take place by nuclear terrorism, as well.

### 3. Accomplishments of Nuclear Security Summit

Nuclear Security Summit is the first summit level meeting on nuclear security that recognized threat perception on nuclear terrorism and relevant issues among national/international leaders.

### 3.1 2010 Washington Nuclear Security Summit

In April 2010, the leaders of 47 nations and 3 international organizations (IAEA, UN and EU) gathered in Washington, D.C. for the first nuclear security summit. This summit underscored that nuclear terrorism is among the top global security challenges and that strong nuclear material security measures are the most effective way to prevent it. [1]

During this summit, Washington Communiqué (political declaration) and Work Plan (50 measures in 11 areas) were adopted. And national commitments were announced by around 30 countries. (HEU return or elimination, ratification of CPPNM / ICSANT, joining GICNT, establishing Center of Excellence for training, and contributing more to the IAEA Nuclear Security Fund)

#### 3.2 2012 Seoul Nuclear Security Summit

In March 2012, the leaders of 53 nations and 4 international organizations (IAEA, UN, EU and INTERPOL) attended in Seoul. Just before the Seoul Summit, the Seoul Nuclear Security Symposium was held by KINAC/KNDA as a pre-Summit event.

In the Seoul Nuclear Security Summit, they reviewed and checked the progress took follow-up measures since the Washington Summit and assured the principles and objects of the Washington Summit.

And in the final session, Seoul Communiqué was drawn by the national readers which is political declaration to implement the nuclear security measures, practically.

The main achievements of the Seoul NSS are summarized like these.

- Practical Minimizing and Securing Nuclear Materials
- Converting Research Reactors and Medical Isotope production Facilities from using HEU fuel to LEU fuel
- Strengthening the Global Nuclear Security Architecture
- Emphasizing the central role of IAEA
- Strengthening the Management of Radiological Materials to Prevent Radiological Terrorism
- Addressing Nuclear Security and Safety in a Coherent and Synergistic Way
- Preventing the Illicit Trafficking of Nuclear Materials
- Fostering a Nuclear Security Culture

Particularly, in this Seoul summit, national leaders discussed the additional subjects such as the nexus between nuclear security and safety, protection of radiological sources, strengthening measures against nuclear smuggling, need for improved information and cyber security, etc.

And the Korean commitments in Seoul NSS were presented by president in the NSS main session.

- Ratification of the amended CPPNM and the ICSANT (Approval from the National Assembly in December 2011)
- Plan to receive a IPPAS mission in the latter half of 2013
- Groundbreaking of the Center for Excellence (International Nuclear Security Academy) in March 2012 and its opening by 2014
- Commit to contribute \$ 1 million to the IAEA Nuclear Security Fund
- ROK-US-France-Belgium joint project on high density LEU
- ROK-Vietnam-IAEA project on "Radiation Source Location Tracking System," a GPS-based real-time tracking system for radiological materials

# 4. Future Suggestions of Nuclear Security Summit

From previous two numbers of nuclear security summit, participating state's leaders recognized the object and real threat of nuclear security. And they discussed the various measures to confront nuclear terrorism. But it is very modest steps because practical domestic measures might be preceded very slowly depend on their situation. Strong action is needed to effectively counter the threat of nuclear security and the process of binding several key steps should be taken prior to the next Netherlands Summit in 2014.

Without the tangible effects, nuclear security summit will be a high level talk party for nuclear security, and it will become more fatigable.

Now, although the IAEA provides detailed technical recommendations for the securing of nuclear facilities and international conventions provide norms for nuclear material protection, individual states develop and approve their own domestic regulations and each country protects its nuclear materials differently, and no universal standard exists for securing nuclear materials and weapons. This system is not commensurate with either the risk or consequences of nuclear terrorism. So, consistent standards, transparency to promote international confidence and national accountability are additions to the regime that are urgently needed. [2]

And it is desirable to check the each nation's nuclear security measures periodically through IAEA meeting (or IAEA materials like nuclear security implementation report), the ministerial level meeting and working level talks, etc. before the summit.

Or in case, one nation faithfully and voluntarily performs the nuclear security measures, the additional incentives are needed based on the international organization. Now the practical incentives for advanced nuclear security action are very insufficient to meet each nation. By doing that, nation will take the upper position for nuclear security.

#### 5. Conclusions

It is the fact that the nuclear security summit is the good catalyst for understanding the importance of nuclear security among the national leaders. And Seoul nuclear security summit contributed to lead to major nuclear security progress on the ground.

In the following two years before 3<sup>rd</sup> nuclear security summit, participating states have to make an effort to Implementing National Commitments, Joint Statement and Agreed Measures in the Seoul Communiqué. And continuous outreach activities with IAEA/UN/regional institutes are needed to strengthen universality in nuclear security. In addition, the central role of IAEA is indispensable to enhance the promotion of global nuclear security.

### REFERENCES

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