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The 2012 Seoul Nuclear Security Summit



A Critique

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Nuclear Security Programme (NSP)

Institute of Peace and Conflict Studies

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The 2012 Seoul Nuclear Security Summit: A Critique

Report Drafted by

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Summary of Recommendations

- Nuclear safety and nuclear security are not synonymous. Understanding the technical differences between the two is necessary for identifying and responding to the threats that arise from safety and security related issues. However, the concepts are linked and cannot be absolutely divorced from one another.
- The processes towards nuclear disarmament and nuclear security are not identical. Nuclear disarmament can be used only as an umbrella term to discuss nuclear security.
- There is a pressing need for independent regulatory authorities to regulate nuclear security, internationally and domestically.
- Research on technologies like manufacturing medical isotopes using LeU/ low concentrate HeU is worth encouragement.
- Methodologies and standard practices for nuclear materials accounting have to be specifically defined and devised.
- A conscious effort on the part of States is needed to stay

focused on the agenda of the Summit. The processes for nuclear disarmament, nuclear security and nonproliferation should not be mixed. Naming and shaming is unhelpful.

- The Nuclear Security Summit (NSS) is a forum of India's interest. A more proactive role is needed so as to influence decisions on nuclear security. India has shown leadership in the area of nuclear forensics.
- A substantial discourse on nuclear security needs to be built in India.
- The leadership and role of the US is unique for the success of the Summit.
- International summits do not solve grass root level problems. They should provide an ambience for governments to device policies that can flow down to the grass root level.



Amb. Arundhati Ghose

Former Indian Permanent Representative at the Conference on Disarmament

The Nuclear Security Summit: A New Regime

The concepts of nuclear safety and security are often, erroneously, confused with each other. Nuclear security is concerned with prevention of malicious intent like theft or sabotage. Nuclear safety is to do with preventive and protective actions associated with natural occurrences. The International Atomic Energy Agency (IAEA) has a fairly well established regime for nuclear safety. The Nuclear Security Summit (NSS) represents a movement towards a new nuclear security regime. The Seoul communiqué refers to a



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Global Nuclear Security Architecture.



India has its own paranoia about nuclear regimes. India's call for negotiations in the United Nations (UN) for a nuclear non proliferation regime in the 1960s (as a result of the fear that arose from the Chinese nuclear test and the domestic pressures for weaponisaton) eventually failed. But India participates actively at the Nuclear Security Summit; in fact India is member to almost every element that the Washington and Seoul Communiqués mention. All the guidelines that the communiqués refer to are voluntary and not binding, but they provide an outline for a regime.

Today, India participates in these regimes as a mainstream player and not as an outlier because of the importance that nuclear security holds for India's own security. In India's own neighbourhood, it is not clear how secure nuclear materials are, particularly in Pakistan's facilities, which adds a dimension of dangers of nuclear terrorism to the already existing nuclear threats that the country poses to India. Nuclear security the way the NSS and the US spells out is in sync with what India seeks. At Seoul, India announced a contribution of USD 1 million to the IAEA Nuclear Security Fund. The need for a new international nuclear security regime is in the fact that over the last 18 years, the IAEA has confirmed more than 2000 cases of illicit trafficking of nuclear materials (HeU, Pu and other radiological material). Moreover, as per the former IAEA Chief ElBaradei's statement, the cases of reported theft are not equal to (read lesser than) the actual cases of trafficking. This is a matter of concern.

At Seoul, Fukushima could not be ignored and nuclear safety became a part of the discussions and the communiqué. This slightly blurred the agenda of the Summit. But a further blurring was avoided by refraining to make the Summit into an NPT do and the focus was restored on nuclear security.

Overall the Seoul Summit has done well. Countries, including India, agreed to further minimize HeU usage and announced specific voluntary actions by the end of 2013. Unlike the NPT, the NSS approach is voluntary one. The communiqué includes safety of spent nuclear fuel and radioactive waste. It talks of national nuclear inventory management as well as accounting mechanisms. The

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communiqué has also included nuclear forensics although countries like Pakistan did not wish for it to be included. The proposals in the communiqué are hoped to fruition by the 2014 summit to be held in the Netherlands. Accountability is aimed at those countries whose reactors are not under IAEA's full scope safeguards. While the focus is on materiel from civilian facilities, accounting is likely to impact only the Nuclear Weapons States and India, Israel and Pakistan. Cyber threats have been recognized as part of information security. This is where India will have to work harder. We are not sure how prepared India is towards tackling threats to our nuclear security especially cyber attacks. Does India have a plan to counter these threats? Such questions need to be asked.



Dr Sheel Kant Sharma

Former Secretary-General of SAARC

The Nuclear Security Summit: A Learning Process

The international community is still learning what nuclear security comprises of. It was first in the 1970s that close attention was paid to the transportation aspect of nuclear security which was the focus of the Convention on Physical Protection of Nuclear Material (CPPNM). At this time everything was viewed through the lens of non proliferation. Post 1986 (Chernobyl disaster) the focus shifted towards nuclear safety. Nuclear security came into limelight again in the 1990s; the breakup of the Soviet Union caused fears of theft and smuggling of HeU and Pu from the former Soviet states. After the 1994 incident where a suitcase carrying large quantities of fissile material was found aboard a Lufthansa airline from Moscow to Germany, the idea of the illicit trafficking database was developed at the IAEA. But by the end 1990s this interest had tapered off. The 9/11 attacks launched a credible fear of nuclear terrorism and of an Al Qaeda nuclear bomb. This resulted in a paradigm shift of understanding of nuclear security.

Nuclear security has become a euphemism for talking about nuclear terrorism. The Nuclear Security Summit is premised on the fears that the Taliban is coming back to power. At the Washington Summit, Obama indicated that nuclear security was now primarily about fighting nuclear terrorism. Towards this end, security of fissile material especially HeU and converting reactors to LeU fuel are

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important processes. The theft of radioactive material can materialize towards making of the dirty bomb and therefore including such material into the nuclear security ambit has been necessary. More importantly a clear distinction needs to be made between safety and security.

Outside the IAEA the US and Russia have been involved in securing fissile material stockpiles from the former Soviet states for down-blending. This process still continues and the IAEA is kept informed as well as guided. The Nunn-Lugar effort is an important element in the nuclear disarmament process. The IAEA illicit trafficking of fissile material database project was initially opposed by US' allies in Europe (countries like France and Germany), but it came through because the US and IAEA successfully spread awareness about the issue. The Non Aligned Movement (NAM) countries and the Arab states have posed the strongest obstacles to the nuclear security processes in the IAEA. Differences in perception have caused disagreements on definitions. There is lack of understanding about the difference between nuclear security and disarmament. The Arab nations felt targeted in the name of fighting against nuclear terrorism. India senses a strong nuclear threat to its own security and supports international nuclear security efforts.

Summits have limitations. They have to be forward looking, include multiple elements, present concrete workable plans and involves as many countries as possible (despite their domestic bureaucratic hurdles) to sustain the process.

For India, there are three evolving strands on the Nuclear Security Summit. One, India had preferred to donate to the IAEA through DAE-run training and skill development programmes so far but its offer of USD 1 million is significant. Two, India's nuclear security involves matter of privacy and confidentiality. The transparency dimension is highly critical and a sober approach is needed towards it.



Three, on the aspect of cyber threats, as systems get interlinked, there is increased fear from hackers.

Prof PR Chari

Visiting Professor, Institute of Peace and Conflict Studies

The Nuclear Security Summit: Hits and Misses

The Nuclear Security Summit is an initiative primarily by the United States of America and personally by President Barack Obama. The idea for such a summit can be traced back to Obama's 2009 Prague Speech where he highlighted two issues - terrorists must be denied access to nuclear weapons and the need for international efforts to secure all nuclear materials within four years (by 2014). The Washington Nuclear Security Summit of 2010 provided the outlines for the summit in Seoul in 2012. In Seoul, President Obama reiterated the goal of securing all fissile material stocks around the world. He again expressed the fear of terrorists vying to get access to nuclear materials and nuclear weapons and the urgency to dissuade North Korea and Iran from building nuclear weapons. The 2012 Summit Communiqué stressed the importance of strengthening the IAEA's central role in ensuring nuclear security. Japan's Fukushima disaster could not be ignored. The nuclear safety dimension was also addressed by the Seoul Summit.

The Seoul Communiqué can be looked at as a legal document. The goal of eliminating HeU stockpiles is central to it. The communiqué hopes that by 2014 the 2005 Amendment to CPPNM would come into force after domestic approval by States. It urges states to protect sensitive information against theft and cyber attacks. Between the 2010 and 2012 Summits, the US and Russia brought into force the New START treaty and began reductions in their nuclear warheads. China is also believed to have expressed desire to reduce their nuclear arsenal.

On the downside, the 2012 Nuclear Security Summit failed to address several urgent issues and focused on matters outside its agenda. The North Korean satellite launch were planned right before the summit to disturb the agenda and this grasped attention of the summiteers. Iran's statement on peaceful uses of nuclear energy too generated discussion. Obama also took this opportunity to announce his government's policy on Af-Pak issues and to state that

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The possibility of terrorists using nuclear weapons is low. Besides the problems involved in fashioning fissile material into nuclear bombs are not trivial. The motivations of terrorists to create a nuclear catastrophe and loose public sympathy are also a deterrent for them to use this modus operandi."



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the US drone attacks were not responsible for too many civilian casualties in the region.



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The communiqué was full of exhortations; it did not impose any binding agreements. The absence of an Ombudsman in the form of an independent regulatory body for nuclear security is a critical weakness of the international nuclear safety and security regime. The need for reduction of HeU stockpiles can also be contested. The Summit does not define the methodologies for undertaking these reductions. India wishes to continue producing HeU for propelling its nuclear submarines and as startup fuel its breeder reactors. Stockpile accounting becomes difficult given that material which gets stuck in the miles of tubing can remain unaccounted for.

The focus on nuclear terrorism is also problematic. The possibility of terrorists using nuclear weapons is low. Besides the problems involved in fashioning fissile material into nuclear bombs are not trivial. The motivations of terrorists to create a nuclear catastrophe and loose public sympathy are also a deterrent for them to use this modus operandi. Terrorists are more likely to use radiological dispersal devices. Security of radiological sources and material is therefore very important.

The Nuclear Security Summit planned for 2014 in the Netherlands might be the last summit in this series. Intrasummit action on the communiqué is vital to display political will. Events and developments in 2013 will therefore affect the 2014 summit.

