

# BULLETIN

No. 34 (367) • March 30, 2012 • © PISM

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## Seoul Summit and Key Problems of Nuclear Security

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*The Nuclear Security Summit in Seoul (March 26–27) was dominated by controversies surrounding North Korea, but the meeting still succeeded in mobilising states to better coordinate their efforts to enhance the security of nuclear materials and to universalise protection standards. However, the role of the summits as components of the international nuclear security regime is limited. The third such meeting, planned for 2014, most probably will be the last.*

**Determinants.** The summit in Seoul was the second-ever meeting on the highest political level dedicated to nuclear security issues. The first summit took place in Washington in April 2010. Nuclear security focuses on the prevention, detection and reaction to theft or the smuggling of nuclear material that could be used in a terrorist attack. Particular attention is paid to so-called “vulnerable fissile materials”, i.e., civilian stocks of highly-enriched uranium (HEU) and plutonium, which are retrieved during nuclear reprocessing and can be used as a source of nuclear power generation. Given their physical composition, these materials can be used for assembling a nuclear device (HEU), or after additional processing, can become a potent chemical weapon (plutonium). When coupled with less stringent security standards than the ones applied to the stocks of nuclear warheads and other military-related nuclear material, civilian HEU and plutonium stocks are a likely target for terrorists or criminal organizations. Although the agenda of the Seoul summit did not directly address nuclear disarmament or issues related to the crises of nuclear proliferation caused by Iran and North Korea, the provocative move by the DPRK regime to prepare the launch of a long-range satellite-bearing rocket dominated media coverage about the meeting and the discussions of the world leaders in South Korea’s capital.

The urgency to respond to threats of nuclear terrorism increased after 9/11, as was borne out by an outcrop of new cooperation mechanisms under the aegis of the UN, the International Atomic Energy Agency (IAEA), the G8, and new initiatives such as the Global Initiative to Combat Nuclear Terrorism (GICNT) or the Proliferation Security Initiative (PSI). The launch of a so-called “Washington Process”, in turn, was driven by two factors. First, President Obama identified the need for strengthened nuclear security as a stepping stone towards the realization of the vision of a nuclear-free world, next to nuclear disarmament and countering the proliferation of nuclear weapons. Second, despite enhanced multilateral cooperation, the nuclear security regime remains fragmented and lacks a verification mechanism, thus making it far less effective than the non-proliferation regime, or the cooperation aimed at mitigating the effects of nuclear accidents, man-made or resulting from natural disasters. The direct participation of the heads of state and government in the process was intended as a means to eliminate these deficiencies.

The long-term goal set by the “Washington Process” was to gain greater cohesion in efforts within the context of various unilateral and multilateral initiatives based on a number of international agreements of varying legal status and scope. For instance, the Convention on the Physical Protection of Nuclear Material (CPPNM) from 1980, prepared under the auspices of the IAEA, was ratified by more than 140 states, but the Convention does not foresee uniform standards of protection, merely advising the parties to consider abiding by the relevant IAEA recommendations in this area. A similar arrangement is applied in the framework of the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT), drafted in the UN in 2007.

Participants in the Washington summit committed themselves to securing all vulnerable nuclear material within four years. The practical means deployed in order to meet this goal included, among others, the elimination of HEU stocks or their consolidation into smaller, but more thoroughly protected locations, the shutdown of research reactors running on HEU or converting them to use low-enriched uranium (LEU), which is not fit for nuclear weapons, and strengthening capabilities to thwart trafficking of nuclear materials. Other commitments consisted of acceding to existing international initiatives or compacts that address the threat of nuclear terrorism (GICNT, ICSANT), granting additional financial contributions to the IAEA budget, and enhancing domestic legal frameworks governing nuclear security matters.

An additional issue that impacted the preparations for the Seoul summit was the nuclear accident in Fukushima in March 2011, especially in the context of attempts to ensure an adequate safety level for radioactive materials stored at nuclear power plants. The link between these considerations and nuclear security is the threat of radiological terrorism, i.e., an attack on a nuclear facility that leads to a considerable release of radiation, or the theft of radioactive substances and construction of a “dirty bomb”. As a result, despite misgivings about blunting the focus of the “Washington Process”, the Seoul summit focused on the question of the safety of nuclear installations and other possible sources of radioactive material.

**Significance of the Seoul Summit.** The meeting in Seoul served as a venue for the review of commitments to lock up vulnerable nuclear materials and minimise the use of HEU for civilian purposes. The final communiqué underlines the political, and thus voluntary nature, of these commitments, as well as the coordinating role of the “Washington Process”. At the same time, the progress is obvious. Since 2010, large quantities of nuclear materials were removed from Poland, Serbia and Ukraine (a process coordinated by Russia and the United States), as well as from Canada and Chile (Canadian and Chilean HEU was transferred to the U.S.). Kazakhstan, Mexico and Poland are well advanced in converting their research reactors and Russia has fulfilled its pledge to end plutonium production.

A new element, absent from the conclusions of the Washington summit, was the recognition of the interplay between nuclear security and efforts to ensure the safety of civilian use of nuclear power. It was a clear attempt to restore public trust in nuclear power after the Fukushima accident. As for the main target set of the “Washington Process”, two commitments stand out. First, the joint declaration by Belgium, France, the Netherlands and the United States to phase out the use of HEU for the fabrication of medical radioisotopes. Second, the joint declaration by Belgium, France, South Korea and the United States to speed up work on research reactors fuelled by LEU.

**Conclusions and Outlook.** The format of cooperation on nuclear security inaugurated in Washington and followed up in Seoul, although successful as a means of mobilising state action, has limited potential. It will most likely be phased out after the next high-level meeting, scheduled to take place in 2014 in the Netherlands. By then, it is reasonable to expect further progress in securing vulnerable nuclear materials, in part thanks to the commitment to minimise the application of HEU by the 2013 timeframe. However, the fundamental weaknesses in the international nuclear security regime that spurred the launch of the “Washington Process”—the lack of uniform, externally enforced security standards or review mechanisms built into major international agreements (CPPNM, ICSANT) that add a degree of transparency to the activities of individual states—have not been dealt with adequately. Arguably, the key reason for this is the divergence in the assessments of the severity of threat posed by nuclear terrorism. States are thus reluctant to give up their current autonomy in setting priorities and implementing their own nuclear security policies. What is more, the goal set at the Washington summit runs counter to the economic interests of individual states. For example, India and Russia have not given up plans to use plutonium stocks for nuclear power generation.

Poland should stay the course with activities that contribute to the realisation of the purpose of the “Washington process”. Above all, Poland should ensure the timely conversion of its research reactor (planned for early 2014) and continue removing HEU from its territory in accordance with the timeline agreed upon with its partners—Russia and the United States. Extra attention and effort should be devoted to maintaining the intensity of regional cooperation, which is crucial in the context of preventing and interdicting trafficked nuclear and radioactive materials, and protecting the external borders of the EU from these threats.