Building International Confidence and Responsibility in Nuclear Security

Summary Report & Initial Policy Recommendations

June 2013

NSGEG

*This report is based on discussions of the Nuclear Security Governance Experts Group (NSGEG) at its **Workshop on Building International Confidence and Responsibility in Nuclear Security** held in November 2012 in Amman, Jordan. The workshop was sponsored by the Asan Institute for Policy Studies, Partnership for Global Security, and the Stanley Foundation with support from the Arab Institute for Security Studies. It is part of a continuing project on nuclear security governance. This report and its recommendations draw upon major strands of discussion developed at the workshop and in its papers, but do not necessarily reflect the views of individual NSGEG members or other workshop participants who neither reviewed nor approved this document.*

The Asan Institute for Policy Studies
ideas & praxis

Partnership for Global Security

The Stanley Foundation

Building International Confidence and Responsibility in Nuclear Security

Summary Report and Initial Policy Recommendations

The Nuclear Security Summit (NSS) process has helped begin a dialogue among more than 50 countries about strengthening the global nuclear security regime. The states' national responsibility for protecting the nuclear and radioactive materials on their territory has been continually emphasized in all summit documents. But there is also a global responsibility for the security of these materials.

Insecure nuclear and radioactive materials in any country present a grave risk to the international community. National measures are the first line of defense against theft, diversion, or misuse of nuclear and radioactive sources, but the consequences of their failure have significant international implications. Unfortunately, the international infrastructure for preventing unauthorized releases of radiation is underdeveloped. It is largely a voluntary patchwork of limited multilateral treaties and agreements. This system fails to adequately capture the responsibility that states have to one another and the global public to prevent nuclear and radiological terrorism.

Further, for existing international nuclear security structures to be most effective, states must fully implement them. However, compliance with the current regime is not clear or assured. Greater accountability and confirmed performance are necessary to build trust and confidence among all nuclear security stakeholders.

A significant challenge for the 2014 NSS is to build international confidence and responsibility in effective nuclear security. The 2014 summit will tie together the last four years of work within the NSS process, but it also must also set countries on the pathway toward developing a more comprehensive, forward-looking nuclear security agenda. The NSS process has proceeded largely without acknowledging the limitations of today's nuclear security regime. But in 2014 participants need to go beyond encouraging universalization of the current system and begin building one that is better suited to the 21st century global threat environment. To achieve this, NSS participants should endorse a long-term vision for the nuclear security regime and establish the leadership structures necessary for maintaining momentum for continued improvements beyond 2014.

Defining an End State for Nuclear Security

The end state of an improved nuclear security system is one in which states are actively engaged, information is shared, and the public is confident that stakeholders are working

well and effectively together. It has greater uniformity, incentivizes continuous improvement, and incentivizes greater information sharing. At its base, it draws upon the technical expertise of the International Atomic Energy Agency (IAEA). In such a system, the definition of nuclear security includes fissile materials, radiological sources, and the interface of nuclear safety and security at facilities. Prioritizing radiological sources and the safety-security interface alongside nuclear material provides a platform broad enough to appeal to the interests of non-nuclear weapon states whose participation is critical to the success of the overall improvement of the nuclear security regime.

The goal for governments, the nuclear industry, and nongovernmental experts alike should be to eliminate weak links in the international nuclear security system. Companies pursue this objective at the facility level, and states at the national level. Nongovernmental experts are increasingly pressing for these efforts to be woven together at the international level to protect the global community from the misuse of nuclear and radioactive materials. While the IAEA can encourage states to implement relevant international instruments, guidance, and recommendations, neither the IAEA nor any other entity can compel states to do so.

Universalizing the current nuclear security regime is a vital component in beginning to eradicate weak links. The focus of governmental discussions throughout the NSS process has largely been on accession to, and compliance with, existing treaties and relevant United Nations Security Council (UNSC) Resolutions. However, beyond the agreements there is a broader nuclear security regime that includes IAEA guidance and services and ad hoc mechanisms such as the Global Initiative to Combat Nuclear Terrorism (GICNT) and the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (Global Partnership). The participation in these mechanisms is not universal. In addition to universality, there also is a need for new assessment tools to judge compliance and implementation of the nuclear security regime's components.

Introducing a nuclear security regime checklist is one non-intrusive method that could be instituted to help countries determine how well they are complying with the broader system. This voluntary self-assessment tool could list relevant treaties, resolutions, international agreements, IAEA documents and services, and other initiatives in which countries should be participating. It would not require a detailed report or impede national sovereignty. Checklists have been very effective for raising performance standards in complex fields and issues with voluminous amounts of information, such as aviation, construction, and health.

The real benefit of any assessment tool is how well it can help rectify the shortcomings that it identifies. So, a nuclear security checklist could also include information that can

help determine state capacity to implement relevant measures. At times, it is not that states disagree with an initiative's objectives; it is that they cannot implement it due to resource constraints. A nuclear security checklist could include information about personnel, agencies, and other capacity factors to provide context and help direct implementation assistance to where it is needed most.

The 1540 Committee has had positive results with its matrix for assessing implementation of UNSC Resolution 1540. The experts on the 1540 Committee present countries with a completed matrix illustrating the observable steps the country has taken to meet its obligations under the resolution. Some countries, once skeptical, have come to view this approach positively as it has played out in practice. They recognize that the blank boxes in their 1540 matrix signal gaps in their national security structures. Without coercion, many states have decided to take the actions necessary for completing additional boxes. Similar behavior could be encouraged with a nuclear security-focused checklist.

NSS participants should call for experts at the IAEA, or a new grouping similar to the 1540 Committee, to develop a checklist that provides a clear explanation of what steps countries should be taking to strengthen their nuclear security. When guidance and assessments come from independent experts, rather than individual states, the international community tends to have greater confidence in its objectivity. Even without making the checklist mandatory, the credibility that comes from expert endorsement could compel states to participate. This could have a positive impact on universalizing the regime and strengthening nuclear security culture.

Many of the issues with the nuclear security regime are more about political will and cultural challenges than technical impediments. The institution of a culture of continuous improvement also needs to become a part of the nuclear security regime's evolution. This refers to a process that involves assessment, improvement, reassessment, and additional improvement. This process is repeated as a means of remaining vigilant. It is widely used in the business world to move enterprises forward and keep ahead of competitors. Identifying, adapting, and applying lessons learned from other business sectors is important for advancement.

Voluntary regimes also can be an effective means of improving nuclear security. Companies in other industrial sectors often go above and beyond legal requirements for reputational benefit, to achieve accreditation, or to gain financial incentives. For example, hospitals in the United States are not accredited by the U.S. government, but by an independent organization that bases its standards on input from across medical disciplines and the federal government. Hospital accreditation gives patients, insurers,

and government agencies the information they need to be confident in the services being provided and allows hospitals to establish themselves as leaders in the field without direct legal mandates. The nuclear security regime has no comparable performance enhancing incentive system.

The nuclear energy industry has addressed cultural challenges with the nuclear safety regime in ways that should be instructive for nuclear security. The safety regime includes peer review, regularized assessments, information sharing, convention implementation reviews, and strong industry-financed organizations. While these structures have allowed nuclear safety to improve significantly overtime, the system is still imperfect and learning from its failures. This process could be equally as important to improving the nuclear security regime. For instance, the post-Fukushima reports published by the Tokyo Electric Power Company (TEPCO) and the European Commission (EC) provide examples of important problems with the nuclear safety system. The TEPCO report conveyed the company's fear that efforts to make safety improvement at the Fukushima facility would have confirmed some people's beliefs that nuclear power plants were not safe. This is a dangerous mentality that contributed to a culture of inaction. While the EC did not recommend that any nuclear plants that underwent its stress tests be shut down, it found that all facilities needed some type of safety upgrades. The EC report also noted the different approaches that facilities across the region were taking to nuclear safety and recommended greater harmonization and information sharing among the plants.

Harmonization also is an important issue for the nuclear security regime. The array of separate nuclear security initiatives that comprise today's regime has led to complaints about their drain on governments' budgets and staff times. To help identify overlaps and make the regime more efficient, a matrix could be developed that breaks its agreements, guidance, and initiatives down into functional categories. This visual may help begin discussions on how the current regime could be made less burdensome and more unified.

The long-term goal for nuclear security governance should be to bring today's fragmented regime into a coherent framework that explains exactly what the international system consists of and what countries should be implementing. A nuclear security checklist could provide a stepping stone toward universalization and defined responsibilities. A framework agreement could then be negotiated that codifies the requirements and grows more effective through actionable protocols. It could establish nuclear security conference reviews and peer review processes, similar to other transnational regimes. While setting the goal of a comprehensive instrument may seem ambitious, it would send a very clear message to states and the public about what the

panoply nuclear security initiatives are ultimately trying to achieve. The goal should be to have a framework agreement in place by 2020.

Recommendation 1: Develop a global nuclear security regime checklist that identifies the relevant treaties, resolutions, international agreements, IAEA recommendations, services and programs, and related institutions. The checklist should provide a clear explanation of what countries should be doing to fully implement the current nuclear security regime. Ask states to check off the items that they employ in their national nuclear security system. This will serve as a non-intrusive, self-assessment tool and provide a baseline of understanding about the utilization of the existing regime elements without any need to share sensitive information.

Recommendation 2: Institute a culture of continuous improvement in the nuclear security regime by learning from other sectors and using voluntary incentive programs to improve performance. The successes and failures of other fields' attempts to address cultural challenges should be investigated, as well as potential accreditation and reputational and financial benefits that could be adapted to the nuclear security regime to incentivize progress.

Recommendation 3: Create a matrix that breaks down the nuclear security regime into functional categories and initiatives as a first step toward identifying how best to streamline the current array of nuclear security programs. The objective is to make the international system more efficient, less burdensome, and more cohesive.

Recommendation 4: Raise the priority of radioactive source security in the global community. High-activity radioactive sources are found in virtually every nation and the threat of a terrorist act utilizing radioactive material is considered by many nations to be a higher probability than one utilizing fissile material. Raising the radiological profile can also help to expand the number of nations that become more involved in nuclear security improvements.

Balancing Sovereignty with Global Responsibility

The concept of sovereignty is very much emphasized in relation to nuclear security, however, single state solutions are not always able to adequately address global threats. Humanitarian concerns, pollution, international crime networks, and other complex security challenges have all come to rely on multilateral approaches. A shared sense of global responsibility to prevent and address certain threats does not mitigate the security responsibilities that individual nations have for activities within their borders. Global approaches are another vital layer in the system, not a replacement for national

structures. Globally-focused responsibility for the transnational challenge of nuclear security is needed, but it must be one that respects state obligations and limits.

Therefore, effective nuclear security governance strategies require a balance between global responsibility and national sovereignty. Today's nuclear security system is very state-centered, but it is slowly moving in a more international direction. Radiation does not respect national borders, as has been repeatedly demonstrated by nuclear accidents and illicit trafficking. Therefore, the reliance on national elements of nuclear security governance cannot be the sole response. Some states resist the notion of shared responsibility for nuclear security, and instead, they perceive only a residual responsibility or a reactionary role for them to play after another state's measures have failed. However, waiting for nuclear security failures to occur rather than taking steps to prevent breakdowns within globally-connected systems is a dangerous policy approach.

Nuclear security stakeholders should investigate what methods the international community is using to address other transnational threats. There are likely elements and mechanisms, such as protocols related to global health or organized crime networks, which could be relevant for nuclear security governance. Adapting tools that are already tested and familiar could help them gain broader acceptance more quickly.

International framework agreements are one method that states have used to address other transnational challenges. Countries enter into these agreements because they see more to be gained from acting together than alone. Concerns have been raised about nuclear security being too sensitive of an issue for a framework agreement, but countries have successfully negotiated international agreements on similarly sensitive issues, such as those related to military deployments and surveillance. Therefore, if states believe that there are national security benefits to be gained through international cooperation on nuclear security, a framework agreement can be feasible.

There will always be tension between international law and national sovereignty. The challenge in this field is to determine how to encourage international responsibility while respecting the nationally-controlled materials and systems. States are likely to accept international proposals that support their practical, national interests. Currently, not enough countries believe that additional international protections in nuclear security are critical to safeguarding their national interests.

However, better understanding the transnational economic impacts and liabilities of a nuclear or radiological incident could change the way countries think about this balance. An act of nuclear or radiological terrorism in any country would have a

dramatic impact on global supply chains. Export dependent countries in particular would suffer from fear induced border closures. The discourse on nuclear and radioactive material security needs to move beyond threat-based arguments to ones that highlight an incident's effects on interconnected financial markets, industries, and supply chains.

Approaching these issues from a global responsibility or global governance perspective has the benefit of not only dealing with governments but also involving other key stakeholders including the nuclear industry and expert nongovernmental organizations (NGOs). A trend of cross-sector collaboration in nuclear security has developed around the NSS process. Dialogues and events run by the industry and NGO communities related to the 2014 summit should be encouraged and thought given to how these collaborations can be made sustainable over the long-term.

The nuclear security centers of excellence (CoE) being developed as a result of the NSS process may also be able to contribute to a more inclusive approach to nuclear security. In particular, regionally-oriented centers could provide a stepping stone from the national to the international realm. They have the potential to help coordinate national efforts with regional initiatives that link back to international goals. However, there is no single definition of what a nuclear security CoE encompasses or what it should do. It is left to the center's leadership to devise its scope and function. Therefore, some new centers may emerge as purely technical while others may also incorporate policy questions and evaluation. But, all of these centers should be encouraged to include nuclear security policy as a focus on their work.

With so many centers emerging at once, dialogue among them will be necessary to ensure that they are complementary, not competitive. The IAEA is working to help integrate these centers. Notably, not all of the centers plan to focus strictly on nuclear security, for example there are EU Chemical, Biological, Nuclear, and Radiological centers and IAEA Nuclear Security Support Centers. Centers with a wider scope will be well-positioned to support broader global nuclear governance development by serving as information hubs and contributing to technology development, emergency response, media outreach, and public education on nuclear safety, security, and power. With all of these centers, the goal should be to shape them in a way that produces the greatest amount of benefits for all parties.

Recommendation 5: Analyze how the global community has addressed transnational challenges outside of nuclear terrorism. The focus should be on lessons that can be learned and approaches and mechanisms that can be applied in the nuclear security area.

Recommendation 6: Conduct an analysis of the economic impacts of radiological and nuclear terrorism. While the threat of nuclear terrorism is an abstract threat for many nations, the economic impacts and political reverberations will be global.

Recommendation 7: Encourage all nuclear security centers of excellence to include policy as a focus of their work. Regionally-focused centers with technical and policy elements can assist with the coordination of national efforts and regional initiatives and link them to international goals.

Nuclear Security Structures Beyond the 2014 NSS

The NSS process began with President Obama's four year goal to secure all vulnerable nuclear materials worldwide which was endorsed by leaders at the 2010 NSS. When they reconvene for a third summit in 2014, the four year goal will remain a work in progress. But this is not a surprise because nuclear security is an ongoing challenge, not a four year effort. While the NSS process has raised the international profile of nuclear security and generated new "house gifts" and "gift baskets," the weak links in the global nuclear security system largely remain.

The 2014 NSS may mark the end of the NSS process as it was originally conceived. It was never meant to become a permanent institution, according to U.S. organizers. However, the summits' raison d'être remains: high-level political support is needed to eliminate weak links from the global nuclear security system. New, creative policies and projects aimed at achieving this goal are needed to sustain progress and high-level attention after 2014. Accelerating the pace of nuclear security projects that have been moving through bureaucratic pipelines is not enough to justify continued heads-of-state attention. A post-2014 roadmap should already be on the minds of sherpas and sous sherpas planning for the Netherlands summit. Several options for evolving the NSS process after 2014 are being debated among the expert community.

One option is to maintain the current scope and structure of the NSS process, but to convene summits less frequently. Holding summits every three, four, or five years would retain the high-level participation and mitigate summit fatigue. The 2012 NSS' precedent of expanding the summit agenda beyond fissile materials to include radioactive source security and the interface of nuclear safety and security at facilities provides a strong base for broad international support and new actions moving forward particularly if governance issues are addressed in a more comprehensive manner.

Continuing the biennial summits, but downgrading political participation to the ministerial level is another option. While high-level involvement would be sustained,

top-level influence certainly would be sacrificed. It also would be difficult for some countries to determine who the appropriate minister or political surrogate is to send to the event – foreign minister or energy minister.

Past summit hosts also might consider forming a troika that takes responsibility for devising a plan to sustain high-level political attention on nuclear security after the 2014 NSS. They could work on tracking and reporting on countries' progress while maintaining a multinational, non-institutional structure. However, static leadership would not be ideal. A system of rotating leadership of committed, diverse states should be devised to inject new leaders and ideas into the troika concept in the absence of the additional summits.

Devising regional strategies for continuing the NSS agenda is another option. The original NSS participant list was carefully selected for regional representation, and some countries have already reached out to their neighbor states that are not part of the NSS process. State parties from a given region could agree to host events, make new commitments, and monitor and report on implementation. Regional spill-over benefits could accrue from extending invitations to other countries to participate in regionally-organized events and initiatives. The experiences of Euratom, Argentine-Brazilian Agency for Accounting and Control, nuclear weapon free zones, and regionally-based UN initiatives may offer models.

Some have suggested grafting the NSS agenda on to another international initiative, such as the Global Initiative to Combat Nuclear Terrorism (GINCT), G-8, or G-20. If made part of one of these initiatives, the nuclear security issues could be addressed at summits on a regular schedule. While this would keep the summitry alive, significant challenges would need to be overcome. For instance, the limitations of the G-8 for addressing 21st century global issues were made explicit by the decision to form the G-20. While the G-20 is a more representative forum, it is unlikely to expand its agenda beyond economic issues. The GICNT could be a good alternative. But the level of participation would need to be upgraded, if it was to host summits, and all of its members would need to accept the mission, including those that were not invited to the NSS.

The IAEA is a popular successor institution. The IAEA has international legitimacy, includes all NSS participants, and already provides nuclear security guidance and technical services to states. Taking over the NSS agenda could elevate the status of the Office of Nuclear Security within the agency, which would be positive. However, the IAEA lacks resources, personnel, the authority to mandate participation, and is governed by the will of its member states. This is unlikely to change. However, an important

test of the agency's ability to mobilize political momentum will be judged by the size and the composition of the ministerial participation at its July 2013 International Conference on Nuclear Security: Enhancing Global Efforts.

It is important not to overlook the future of the nuclear industry and experts summits after 2014. These summits have matured considerably since the NSS process was initiated and play a constructive role in linking all stakeholder communities with the nuclear security agenda. Continuing cross-sector collaboration and dialogue is a critical element of ensuring the nuclear security regime is capable of countering new and emerging threats. These initiatives need to survive the end of the NSS process.

Recommendation 8: If the 2014 NSS is the last, then an appropriate and effective replacement for the summit process needs to be instituted. Continuing high-level political focus on the nuclear security issue is vital for its further evolution. There needs to be a mechanism through which nations can continue to make unilateral and multilateral commitments to improve nuclear security similar to the "house gifts" and "gift baskets" that have been offered at the summits.

Recommendation 9: Encourage committed countries to take leadership roles by demonstrating improved nuclear security governance models, including at the regional level. Continue to support the NSS precedents and encourage regional leaders to commit to host events and work with like-minded states on ambitious nuclear security projects.

Recommendation 10: Encourage IAEA member states to provide greater funding and flexibility to the Agency to allow it to perform its nuclear security mission. Explore new sources and means of funding the NSF. In addition, encourage the IAEA to offer its advisory missions to a number of states each year, rather than waiting for them to be requested. States would be free to accept or decline the IAEA's services.

Messaging and Educating on the Importance of Nuclear Security

Media engagement on nuclear security is very sporadic and typically focused around events, such as the dissolution of the Soviet Union, the attacks on September 11, and the discovery of the A.Q. Khan network. Hundreds of journalists have covered the Washington and Seoul summits, but the media has paid little attention to the lead-up sherpa process, despite it being where actual decisions are made. Increasing media and public attention and scrutiny of the summit planning process can encourage stronger policy outcomes.

The expert community has an important role to play in educating the media and defining success at the 2014 NSS. This is not something that only can be done with a shotgun approach through social media or by talking to swarms of journalists on the ground at the event. There needs to be in-depth engagement early on with a relevant journalists and respected media outlets to raise expectations.

A concise message is needed that is simple but positive. For instance, experts could explain that leaders are taking the nuclear terrorism threat seriously by focusing on improving global nuclear security through the NSS process. However, there is more to be done, and they have a responsibility to continue this work beyond 2014. Experts can further elaborate that nuclear security is uneven among countries, and the objective of international engagement is to smooth out those differences so that all radioactive materials are secure.

Another way to frame these issues is in terms of risk, threat, and responsibility. While the threat issue should not be overemphasized, it can be important for catching journalists' attention. Too much fear-mongering can lead to unintended policy outcomes or cause journalists to become dismissive. The experts need to provide content for thoughtful coverage and calibrated policy responses. Offering examples of non-state actors attempting to traffic illicit radioactive materials can help demonstrate that the threat is real and something that law enforcement officials are already combatting. Political leaders can help in this fight by strengthening nuclear security policies and programs to limit availability and prevent misuse around the globe. Media pressure can help drive states to act responsibly.

It can be difficult to grab the attention of journalists on nuclear security issues even at the summits because more sensational stories often drive the headlines. This happened at the Seoul NSS. But rather than just pitching stories to reporters, experts should explain why this issue is important. Educating journalists on the subject will have a much longer term impact than any single story ever could. Audiences want nuclear security issues boiled down so that they can understand the public safety and personal impacts of the status quo and proposed policy solutions.

The media is a channel for reaching both the public and policymakers, but experts must be clear about their target audiences. They must prioritize and have clear goals for engagement with each group. What may resonate with the public may be very different from what gets through to policymakers. It is important to give thought to both how one engages and why with each group.

CoEs could also play a useful role in disseminating information about nuclear security, particularly around the summit. Some have already had success in doing so. For example,

a center in Pakistan ran workshops for the media before the first NSS to answer questions about why the country was participating. The center explained to journalists that international nuclear security cooperation supports national security objectives, and if any actor is allowed to undermine Pakistan's nuclear security, they have compromised the country's national security. This message resonated with the journalists. More CoEs around the globe could do this.

Japan's CoE has been very active in hosting conferences and directing media attention to nuclear security issues. They have built relationships with Japan's largest broadcaster, NHK, who is now considering doing a special after the IAEA conference in July 2013 on lessons learned from Fukushima and how they are being integrated in Japan in terms of nuclear security.

In preparation for the 2012 NSS, the South Korean government took creative steps to reach out to the public and media. It commissioned a K-pop theme song for the summit and created a nationwide high school essay contest on the meaning of nuclear security. Students were asked to explain why South Korea was hosting the nuclear security summit to emphasize the notion of global responsibility for nuclear security to their youth.

Social media can also be an effective tool to raise awareness and build broad bases of support. Twitter in particular is an important route to journalists. Experts can use new media tools to get "fans" and supply regular content to hold their attention, such as commentary on current events or distilled versions of their research. Once a support base of followers has been established on Facebook, Twitter, and/or one's website, the outreach campaign can be ratcheted up to a higher level. Movements like Global Zero have conducted successful social media campaigns that engage youth and build awareness about their issue.

Recommendation 11: Define success in achieving significant global nuclear security improvement to the media and explain to them whether the NSS process has accomplished these objectives. If the 2014 summit is the last, participant countries should be prepared to describe the concrete achievements and structural changes that make additional summits unnecessary.

Recommendation 12: Engage early and frequently with media and provide the context necessary for them to raise awareness in the public about the importance of nuclear security. Use nuclear security-related exercises, workshops, and meetings to demonstrate nuclear security principles in action and to promote understanding.

Nuclear Security Governance Experts Group Workshop on Building International Confidence and Responsibility in Nuclear Security

November 14, 2012

Agenda

Day 1

9:00 ~ 9:15	**Opening Remarks**	
	Kenneth Luongo, The Partnership for Global Security	
	Shin Chang-Hoon, The Asan Institute for Policy Studies	
	Jennifer Smyser, The Stanley Foundation	
9:15 ~ 10:45	**Session I**	**Defining an End State for Nuclear Security**
	Discussion Leader	**Kenneth Luongo**, The Partnership for Global Security
	• What is the nuclear security end state that we want to achieve? What is the scope of this objective? How should the goal of "no weak links/states" be articulated to policymakers, industry, and the public? How do these objectives fit with the NSS process and its commitments? • What is the political process for mapping a path toward the desired end state? What are the technical impediments? What is the timeline that reflects the urgency of the need to address the threat? • What are the benefits and drawbacks of the threat and responsibility arguments to motivate action? Is the issue of "fairness" between NWS and NNWS still relevant when the impacts of nuclear terrorism are so high? • What types of benchmarks should be met to improve international confidence in nuclear security practices in the lead up to the 2014 NSS? Before 2020?	
10:45 ~ 11:00	**Coffee Break**	

11:15 ~ 12:45	**Session II**	**Balancing Sovereignty with Global Responsibility**
	Discussion Leader	**Dong-Hwi Lee**, Korea National Diplomatic Academy
	• How can we balance the legitimate sovereign rights of states to control their nuclear infrastructure and materials with the need to protect the international community from the impact of a nuclear incident? • How can policymakers and facility operators better address the transnational nature of nuclear incidents, whether accidental or intentional? How have the nuclear safety and safeguards regimes dealt with this issue? Are there other transnational regime models to learn from? • What are voluntary measures that could be undertaken as steps toward a more complete and comprehensive regime? • What role, including undertaking studies and assessments, can the Centers of Excellence play in facilitating nuclear security improvement?	
12:30 ~ 14:00	**Lunch**	
14:00 ~ 15:15	**Session III**	**Nuclear Security Structures Beyond the 2014**
	Discussion Leader	**Andy Semmel**, A.K.S Consulting
	• How can the benefits of the NSS process be preserved, and the agenda advanced, if the summits themselves do not continue? • What role can and should existing institutions play in advancing nuclear security improvement, including the IAEA, and other ad hoc initiatives? Should these initiatives be streamlined, and if so, how? • Are new groupings, processes, or mechanisms needed? Could a troika secretariat of NSS hosts play a role? • What are the benefits and limitations of pursuing progress on a regional basis?	
15:15 ~ 15:30	**Coffee Break**	

15:30 ~ 16:45	**Session IV**	**Messaging and Educating on the Importance of Nuclear Security**
	Discussion Leader	**Jennifer Smyser**, The Stanley Foundation
	• If you were the news director at a major media outlet, what would you tell your reporters they should cover leading into the next NSS? What didn't get enough coverage at this year's summit? • What media engagement strategies and tactics should be employed by the NSGEG prior to the 2014 NSS to draw attention to its recommendations and the importance of the issue? • What can be achieved through or what value is there in greater public engagement on the social, security, and economic dangers posed by nuclear terrorism and the importance of strengthening the international nuclear security system? How can the global public be more engaged and educated? Is there a role for tools like this one?: http://www.cubanmissilecrisis.org/for-educators/tools-for-teachers/ • How can our group, through media and public engagement, sustain attention and keep pressure on political leaders before and after the summit?	
17:45 ~ 18:00	**Closing Remarks**	

Participant List
(in alphabetical order)

1. Irma Arguello
   Founder and Chair, Nonproliferation for Global Security (NPSGlobal) Foundation, Argentina

2. John Bernhard
   Former Ambassador of Denmark to the IAEA & Permanent Representative to the CTBTO

3. Michelle Cann
   Senior Budget and Policy Analyst, The Partnership for Global Security, United States

4. Lisa Collins
   Program Officer, International Law and Conflict Resolution Program, Asan Institute for Policy Studies

4. Piet de Klerk
   Netherlands Ambassador to Jordan; Netherlands Sherpa for the 2014 Nuclear Security Summit

5. Han Yong-Sup
   Vice President and Professor, Korea National Defense University

7. Majd Hawwari
   Jordan Nuclear Regulatory Commission

8. Jonathan Herbach
   Lecturer in Public International Law, Utrecht University and Researcher, Centre for Conflict and Security Law

9. Jang Ji-Hyang
   Research Fellow and Director, Middle East and North Africa (MENA) Center, Asan Institute for Policy Studies, Republic of Korea

10. Caroline Jorant
    President, SDRI Consulting, France

11. Mohammad Kamran Akhtar
    Director Science and Technology, Organization of the Islamic Conference, Saudi Arabia

12. Togzhan Kassenova
    Associate, Nuclear Policy Program, Carnegie Endowment and a Stanton Nuclear Security Fellow

13. Ayman Khalil
Director, Arab Institute for Security Studies (ACSIS), Jordan

14. Lee Dong Hwi
Professor, Institute of Foreign Affairs and National Security (IFANS), the Korea National Diplomatic Academy, Republic of Korea

15. Peter Lee
Program Officer, Middle East and North Africa (MENA) Center, Asan Institute for Policy Studies, Republic of Korea

16. Kenneth Luongo
President, The Partnership for Global Security, United States

17. Yosuke Naoi
Deputy Director, Integrated Support Center for Nuclear Nonproliferation and Nuclear Security, Japanese Atomic Energy Agency, Japan

18. Mahmoud Nasreddine
Secretary General, MENA Strategic Studies Center, Lebanon

19. Park Jiyoung
Research Fellow and Deputy Director, Asan Nuclear Policy & Technology Center, Asan Institute for Policy Studies, Republic of Korea

20. Remki Merzak
Director of Cooperation, Algerian Atomic Energy Commission

21. Andy Semmel
Head, AKS Consulting, United States

22. Shin Chang-Hoon
Director, Asan Nuclear Policy & Technology Center and International Law & Conflict Resolution Program, The Asan Institute for Policy Studies

23. Jennifer Smyser
Program Officer, The Stanley Foundation

24. Sharon Squassoni
Director and Senior Fellow, Proliferation Prevention Program, Center for Strategic and International Studies

25. Yim Man-Sung
Professor and Head of Department, Nuclear and Quantum Engineering, Korea Advanced Institute of Science and Technology (KAIST)

26. Ammar Zabbat
Member of the Regulatory Body of the Algerian Atomic Energy Commission

Workshop Papers and Authors

- Global Governance as a Way of Balancing Sovereignty with Global Responsibility
    - Author – Dong Hwi Lee
- Addressing the Transnational Nature of Nuclear Incidents
    - Author – Togzhan Kassenova
- An Assessment of the Nuclear Security Centers of Excellence
    - Author – Alan Heyes
- Media and Public Engagement Around the Nuclear Security Summits
    - Author – Jennifer Smyser
- Defining the End State of Nuclear Security
    - Author – Kenneth Luongo

Nuclear Security Governance Experts Group (NSGEG) Members

Rodrigo Álvarez – Global Consortium on Security Transformation (Chile)
Irma Arguello – The NPSGlobal Foundation (Argentina)
John Bernhard – Former Ambassador to IAEA (Denmark)
Kenneth Brill – Former Ambassador to IAEA (U.S.)
Bart Dal — Ministry for Infrastructure and the Environment (Netherlands)
Trevor Findlay – Canadian Centre for Treaty Compliance, Carleton University (Canada)
Han Yong-Sup – Korea National Defense University (South Korea)
Roger Howsley – World Institute for Nuclear Security (Austria)
Caroline Jorant – SDRI Consulting (France)
Jun Bong-geun – Korea National Diplomatic Academy (South Korea)
Togzhan Kassenova – Carnegie Endowment for International Peace (U.S.)
Lee Dong Hwi – Institute of Foreign Affairs and National Security (South Korea)
Kenneth Luongo – Partnership for Global Security (U.S.)
Kenji Murakami – Tokyo City University (Japan)
Yosuke Naoi – Japanese Atomic Energy Agency, Integrated Support Center (Japan)
Anita Nilsson – AN & Associates, LLC (Sweden)
Everett Redmond – Nuclear Energy Institute (U.S.)
Andrew Semmel – A.K.S. Consulting (U.S.)
Shin Chang-Hoon – The Asan Institute for Policy Studies (South Korea)
Jennifer Smyser – The Stanley Foundation (U.S.)
Sharon Squassoni – Center for Strategic and International Studies (U.S.)
Page Stoutland – Nuclear Threat Initiative (U.S.)
Yoo Hosik – Korea Institute of Nuclear Nonproliferation and Control (South Korea)

Nuclear Security Governance Experts Group (NSGEG)

The NSGEG is a globally diverse group of experts assessing the current state of nuclear security governance and developing a realistic and comprehensive set of policy recommendations intended to facilitate the evolution and improvement of the nuclear security regime.

NSGEG