Improving Nuclear Security Regime Cohesion

Summary Report & Initial Policy Recommendations

NSGEG

*This report is based on discussions of the Nuclear Security Governance Experts Group (NSGEG) at its **Workshop on Improving Nuclear Security Regime Cohesion** held July 2012 in Seoul, Republic of Korea, at the Asan Institute for Policy Studies. The workshop was sponsored by the Asan Institute, Partnership for Global Security, and the Stanley Foundation and is part of a continuing project on nuclear security. This report and its recommendations draw upon the major strands of discussion put forward 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

Improving Nuclear Security Regime Cohesion

NSGEG Summary Report & Initial Policy Recommendations

The 2010 and 2012 Nuclear Security Summits (NSS) have established global fissile material security as a top-level international objective and led many to consider whether today's nuclear material security regime is adequately adapted to the twenty-first century's globalized threat environment. While the regime has improved over the last decade, its development still lags behind other nuclear regimes for safety, safeguards, and arms control. The current nuclear security regime relies almost entirely on the national protection and control systems of countries that possess nuclear and radiological materials and facilities to protect the public from unintended releases of radiation. However, there is growing appreciation of the limitations of this approach and recognition that a more global, integrated, and comprehensive response is needed.

The lead up to the 2014 NSS in the Netherlands is a window of opportunity for global leaders, industry representatives, and nuclear experts to work together to develop new strategies and policies for improving global nuclear security. Seizing this opportunity will require defining an effective and obtainable end goal for improving nuclear security and identifying practical steps to reach that objective. This is a task that will necessitate creative thinking, better stakeholder integration, and political will among global leaders to break new ground.

Building a more robust, effective, and flexible nuclear security architecture will require an evolution of global nuclear governance. As the March 2011 Fukushima Daiichi nuclear power plant accident underscored, nuclear crises do not respect borders and the global system for addressing these challenges is largely unprepared to manage their implications. Improving nuclear governance structures will mean moving away from the status quo of incremental progress in favor of a more deliberate, holistic approach to address the range of nuclear challenges. The nuclear safety, security, and safeguards regimes should be brought into closer alignment, and national measures augmented by responsible international mechanisms. What is needed is a comprehensive, confidence-building nuclear governance architecture that cuts across all three "S"s, emphasizes demonstrated performance and accountability, and articulates the actions and commitments required to be considered a responsible global nuclear actor.

Regime Gaps: What are we trying to fix?

There is no uniformity in the nuclear security regime today and this creates vulnerabilities. The nuclear security regime is typically understood to comprise domestic laws and regulations that govern security within a country's territory; international agreements, institutions, and United Nations (UN) resolutions that supplement national laws; and ad hoc, cooperative measures in which countries voluntarily participate. This patchwork of agreements, resolutions, regulations, and guidelines was adopted in different forums, at different times, by different countries, and with different accountability measures.

Today's nuclear security regime is nationally-focused with weak international requirements. It was not developed strategically, but rather evolved over time in response to crises, including the collapse of the Soviet Union and the 9/11 terrorist attacks on the United States. This reactionary development path resulted in uneven protection across borders and difficulty identifying weak links in the international system. Balancing the principles of national sovereignty with international responsibility is key to improving the regime.

Several international nuclear security instruments currently exist, but each provides a limited amount of coverage and implementation of them has been slow. The Convention on the Physical Protection of Nuclear Materials (CPPNM) is the only legally binding international treaty for nuclear security and is only applicable to nuclear materials in international transport. In 2005, an amendment was passed to extend the treaty's protections to nuclear materials in domestic use and storage, but it has not gone into effect because an insufficient number of countries have ratified it. Further, none of the nuclear security regime's multilateral instruments, including the amended CPPNM, the International Convention on the Suppression of Acts of Nuclear Terrorism, and UN Security Council Resolutions (UNSCR) 1373 and 1540, provide the legal foundations for international cooperation and confirmed performance that are part of the nuclear safety and safeguards regimes.

Current international nuclear security instruments do not include the monitoring and enforcement structures needed for ensuring accountability and providing confidence in the effective implementation of strong security measures across borders. Whereas regularized assessments of performance, information sharing, peer review, and reviews of convention implementation are embodied in the Convention on Nuclear Safety (CNS), they are missing from the international nuclear security regime. Their absence is notable because these are the regime elements that facilitate adaptation over time

and provide the flexibility to address dynamic threats. Therefore, it is vital to close the gaps in the current nuclear security system and bring the nuclear regimes into closer alignment to make the entire system work more efficiently.

Recommendation 1: Analyze and streamline the current nuclear security regime to identify specific and significant gaps and eliminate overlaps, duplications, and inefficiencies.

Recommendation 2: Identify and apply lessons learned from other nuclear regimes that can fill the gaps and begin bringing the global nuclear governance system into better alignment.

Regime Improvement: If the NSS ends in 2014, then what?

Though the NSS process has brought an unprecedented level of attention to nuclear material security and helped solidify international consensus around strengthening its structures, past summit organizers have stressed that the NSS was never meant to become a permanent international institution. Because it is not certain that additional summits will be convened after 2014, policymakers must consider how to maintain momentum and ensure that regime improvements are durable in the absence of heads-of-state level summits every two years.

One option is to transition the NSS agenda to the International Atomic Energy Agency (IAEA) after the 2014 Netherlands summit. The IAEA has begun preparing for this possibility by planning an international conference on enhancing global nuclear security efforts in July 2013. All NSS participants are IAEA members, and the Agency enjoys strong international legitimacy due to its near-universal membership and deep expertise. However, the IAEA's mandate on nuclear security is limited, and it is far from certain that its member states will agree to further empower the Agency on this issue. While the IAEA offers a useful array of guidance, recommendations, and services to assist countries with nuclear security, the documents are non-binding and services require states to request assistance, with no means of assuring that recommended actions are implemented.

Many of the challenges faced by today's nuclear security regime are political, rather than technical. In concept, the NSS model is one where quick and decisive action can be taken by leaders. The consensus model of decision making employed by the IAEA encourages long negotiations and lowest common denominator outcomes. Though

NSS communiqués are consensus-based documents that have also been criticized for their cautious incrementalism, many of the marquee advancements to come from the NSS process are a result of national commitments or pledged activities among small groups of committed nations. The NSS has used this dual track approach of consensus-building around regime priorities in a communiqué and breakthrough action by self-selected groups of dedicated countries to affect change. A similar dual track approach is theoretically available under the IAEA, if there was leadership to support it.

Political leadership from the IAEA Director General or UN Secretary General could be important for establishing this principle, if the NSS agenda is moved to the IAEA or another UN organization. Sec. Gen. Ban Ki Moon expressed interest in nuclear security, even convening a high-level nuclear safety and security meeting in September 2011. His continued involvement in the issue could help encourage the regime's different actors and factions to work together more harmoniously. However, the Sec. Gen.'s involvement in issues that have traditionally been the domain of the IAEA could lead to unproductive turf battles that further stall progress. Importantly, the IAEA's Nuclear Security Office faces significant budgetary limitations that would need to be addressed if its responsibilities were to increase. It is primarily funded by voluntary contributions, which inhibits long-term planning and limits its ability to respond quickly to all assistance requests.

In addition to the IAEA, a second post-2014 summit option is to continue the NSS' model of selective multilateralism at a lower level. A troika of past summit hosts or a wider steering committee of committed NSS countries could be formed to provide continued leadership after 2014. The Netherlands summit could empower such a group with a mandate to continue working on nuclear security governance issues through 2020 so that progress is preserved and sustainable leadership structures are built. New champions for the nuclear security agenda may be found among the middle power states participating in the NSS process. These states could form an informal nuclear security-focused grouping, similar to the G8 or G20, which could demonstrate new nuclear security governance policies and concepts. In some ways those nations participating in the NSS are already their own G-type alliance with the political, financial, and practical skills to move this agenda forward. But, a smaller "G"-like grouping could provide sustained leadership on this agenda. In this model, regular meetings could be done at the foreign minister level with the periodic involvement of heads-of-state.

One way to avoid the legitimacy issues that come with non-universal groupings of states working on a transnational issue is to act on a regional basis. Regional leaders from all around the world can be found among the participants of the NSS process. These states have the expertise, connections, and cultural understanding to work with their neighbors (who may not be engaged in this agenda) on improving nuclear security governance in their regions. Countries in Europe have successfully employed a regional model in working cooperatively on a range of nuclear issues through Euratom. The Euratom model encourages cooperation by setting directives that identify objectives that are directly applicable to how facilities operate, but then provides states with flexibility in how they implement the directives. National laws must implement the directives' objectives, and the European Union Commission can then follow-up with states to ensure that they are meeting their obligations. This regional model empowers all countries within defined geographic areas to individually demonstrate progress to their neighbors and enables them to learn from each other. Notably, nuclear security was originally outside of Euratom's scope which was focused on safety, but it was ultimately added as states became more comfortable and confident in the cooperative regional model.

In the end, if the NSS process does not continue beyond 2014, there may be value in having multiple mechanisms (as outlined above) succeed it, each with a specific but mutually reinforcing role and responsibility.

Recommendation 3: Evaluate the post-2014 NSS succession options and determine whether one institution or multiple mechanisms are best suited to replace the NSS process.

Regime Standards: Recommendations, best practices, and/or baseline requirements

The IAEA Department of Nuclear Safety and Security offers services and publishes documents that provide the international community with guidance on managing nuclear materials and facilities consistent with international law. While their services must be requested and their recommendations are non-binding, IAEA guidance has become a de facto international nuclear security standard. In particular, guidance from IAEA Information Circular 225 (INFCIRC/225) on the Physical Protection of Nuclear Materials and Nuclear Facilities is often incorporated into states' domestic laws and bilateral civil nuclear cooperation agreements. The fifth revision of INFCIRC/225 was published in January 2011 and NSS documents strongly encourage states to strengthen their laws in accordance with this newest version.

While many countries importing nuclear materials may be bound by INFCIRC/225/Rev5 through provisions in nuclear trade agreements, how each country interprets and implements IAEA guidance is not uniform. Trade agreements may include oversight and monitoring language to make partners answerable to each other for their handling of nuclear material, but such provisions are not regularly exercised. States are not required to report to the IAEA on how they are implementing its physical protection recommendations, and the Agency does not maintain even a voluntary reporting database on implementation, as it does for the illicit trafficking of nuclear and radiological materials. Even the IAEA International Physical Protection Advisory Service only checks if countries' laws and regulations are in line with IAEA guidance, not if they are being implemented effectively.

An innovation of the 2012 Seoul NSS was states voluntarily reporting on their nuclear security systems by describing their progress implementing the objectives contained in the 2010 Washington NSS Work Plan. Nearly every country in attendance submitted a report, despite not being legally required to do so. This high rate of reporting compliance is an example of how heads-of-state level involvement in the summit process has driven bureaucracies from around the world to act in ways that even legally binding agreements may fail to do. Progress reports are again expected from states at the 2014 NSS, and it is important to find a way to preserve this valuable reporting mechanism, even if the heads-of-state level summits come to an end.

Greater thought must be given to how to incentivize states to implement the highest nuclear security standards and share their experience with others. The World Institute for Nuclear Security (WINS) has worked with industry and governmental stakeholders to develop more than 30 best practices guides. WINS is now working to turn these guides into a curriculum that could be taught at nuclear security Centers of Excellence and eventually lead to accreditations in nuclear security. These Centers of Excellence or other regionally focused forums may also play a role in encouraging states to continue reporting on their nuclear security progress if the NSS process ends. States reporting in Seoul were encouraged to report on their progress as they saw fit, but a long-term reporting plan might benefit from additional structure. States might be asked to produce a categorized report on their implementation of INFCIRC/225/Rev5 as well as other nuclear security efforts involving fissile materials, high-intensity radiological materials, nuclear facilities, spent fuel and nuclear waste, illicit trafficking and transshipment, and crisis mitigation and emergency responses.

Recommendation 4: Incentivize states to share and implement global best practices

for nuclear security, including by looking to other professional and industrial sectors for successful voluntary incentive models.

Recommendation 5: Develop a long-term nuclear security reporting structure for countries that includes reporting on 1) fissile materials, 2) high-intensity radiological materials, 3) nuclear facilities, 4) spent fuel and nuclear waste, 5) illicit trafficking and transshipment, and 6) mitigation and emergency responses.

Regime Cohesion: Building a unified and durable international system

It is important to construct a more inclusive definition of "nuclear security" that extends beyond fissile material protection, emphasizes security culture, includes radiological sources, and recognizes the interrelation of stakeholders, initiatives, and all nuclear regimes. The IAEA maintains a narrow definition of nuclear security that focuses on preventing, detecting, and responding to the illicit transfer or theft of nuclear materials and sabotage of facilities. The 2010 NSS largely limited its agenda to the traditional definition's focus on protecting highly-enriched uranium and separated plutonium, but it also highlighted the significance of nuclear security culture and set important precedents for multi-sector engagement through the corollary expert and industry summits. The 2012 NSS went even further in creating a more comprehensive definition by including the nuclear safety and security interface and radiological security in the official NSS communiqué.

A more holistic understanding of nuclear security may facilitate the development of a durable and comprehensive international instrument to unify the nuclear security regime. Improved nuclear security governance will require actions beyond the regime's current mechanisms as well as international consensus.

A framework agreement on nuclear security could unify, clarify, and defragment the regime. It could help turn norms into standards and provide a structure for continuous regime advancement. Framework agreements for addressing transnational challenges have precedents in international law, including the Vienna Convention on control of fluorocarbons and the UN Framework Convention on Climate Change (UNFCCC). They offer important lessons-learned for negotiating a nuclear security convention. These include: involving industry from the outset, allowing domestic actions to precede discussion of binding international responsibilities, understanding that public fear can stimulate action, and recognizing that cost-benefit analyses must reflect favorably on an initiative for it to gain widespread support. The Vienna Convention in

particular has shown that limiting the number of initial negotiating parties tends to produce a stronger result, but it can also lead to questions of international legitimacy. However, that convention provides a successful example of a treaty's support growing from a small group of ratifying countries to near universality.

Pursuit of a nuclear security framework agreement will be controversial with some or many nations. However, it would set a clear vision for the regime and enable a systematic assessment of countries' responsibilities and commitment to implementation. Unlike the Nuclear Nonproliferation Treaty and UNFCCC's Kyoto Protocol, it should not create different classes of countries or demand actions from some but not others. Obligations might vary in degree but should not vary in kind. A Conference of Parties could be established to oversee the operation of the agreement and could be empowered to assess how well states are meeting their obligations. The CNS provides examples of peer and convention review mechanisms that could be adapted to a nuclear security framework agreement to increase regime transparency and accountability.

There are significant obstacles that need to be overcome in order to generate political support for a framework agreement. One challenge is the existence of other international instruments for nuclear security. While the shortcoming of these instruments is clear, their existence makes it more difficult to reconcile international requirements because framework agreements traditionally do not unify existing legal instruments but rather create the regime for issues where no international governance currently exists. Another challenge will be resistance to any new nuclear security obligations. A third challenge is how to treat the binding aspects of a framework agreement. Separately negotiating binding protocols after the overarching framework agreement is established can help blunt opposition, as could having the initial protocols focus on codifying well-established best practices and industry norms into international law.

Clearly, a framework agreement is a longer-term goal that will need serious political support from a group of committed countries. This grouping could most likely be found among NSS participants since the summit has identified those in the global community who are most willing to provide leadership on nuclear security.

In order to test the support for improving nuclear security governance, states should consider creating a nuclear security governance "gift basket" that could be presented at the Netherlands NSS. The gift basket could include a commitment by a handful of states to form a working group that would review gaps in the current regime, examine

new governance ideas and proposals for filling them, demonstrate transparency measures on a bilateral or multilateral basis, and take initial limited steps to bring key elements of the nuclear safety regime into the security arena.

Complementing their work, a group of independent nongovernmental experts could develop the draft text of a framework agreement and actionable protocols. The draft framework could be submitted to the 2014 NSS participants for review and consideration and possibly referenced as an ancillary document in the governance gift basket.

Recommendation 6: Assess the best methods for building a unified and durable nuclear governance regime including evaluating the proposal for a framework agreement on nuclear security supplemented with actionable protocols.

Recommendation 7: A small group of committed countries should develop a nuclear security governance gift basket for the 2014 NSS and begin demonstrating new nuclear governance concepts.

Recommendation 8: Government and international institutions should support an initiative by independent nongovernmental experts to make recommendations on improvements in nuclear security governance and to create a draft framework agreement model for consideration at the 2014 NSS.

Nuclear Security Governance Experts Group
Workshop on Improving Nuclear Security Regime Cohesion

July 18-19, 2012

Agenda

Day 1

9:00 ~ 9:10	Welcoming Remarks	
	Chaibong Hahm, The Asan Institute for Policy Studies	
9:10 ~ 9:30	Administrative and Organizational Issues	
	Ken Luongo, The Partnership for Global Security	
	Chang-Hoon Shin, The Asan Institute for Policy Studies	
	Jennifer Smyser, The Stanley Foundation	
9:30 ~ 11:00	Session I	Assessing the Current Nuclear Security Regime
	Discussion Leader	Bong-Geun Jun, Korea National Diplomatic Academy
	• The scope: nuclear material, radiological source and facility security • Identifying the strong points and benefits of the current regime • Identifying regime gaps that need to be addressed • Enhanced security value of universalizing the current regime elements	
11:00 ~ 11:15	Coffee Break	
11:15 ~ 12:45	Session II	Applicability of Existing Institutions for Regime Improvement
	Discussion Leader	Trevor Findlay, Belfer Center for Science and International Affairs
	• How can existing nuclear governance practices, preconceptions, and institutions most effectively and efficiently evolve to keep pace with the change? • What role can and should the nuclear safety regime play as a template for nuclear security? • Can civil nuclear cooperation agreements and/or Euratom be models for instituting peer reviews and transparency?	
12:45 ~ 13:45	Lunch	
13:45 ~ 15:30	Session III	Ideas and Innovations for Regime Improvement -Baseline Standard
	Discussion Leader	Sharon Squassoni, Center for Strategic and International Studies

	• Is there value in creating a “standard” or “baseline” that countries should recognize and implement in protecting their nuclear and radiological materials and facilities? • What could or should be the elements of this baseline (technical and policy)? • What is the most effective use/deployment of INFCIRC 225 Rev. 5, the radiological source code of conduct, and other IAEA recommendations? • How could a baseline be implemented (universally or voluntarily) and could there be deviation in the implementation to account for national concerns and differences in facilities and operations? • What transparency measures or other assurances of implementation could or should accompany a baseline standard? • How can nations be incentivized to participate in the baseline standard?	
15:30 ~ 15:45	Coffee Break	
15:45 ~ 17:30	Session IV	Ideas and Innovations for Regime Improvement -Framework Agreement
	Discussion Leader	Ken Brill, Former United States Ambassador to the IAEA
	• What are the benefits for the nuclear security regime of developing a framework convention on nuclear security? • What are the components of the framework convention and its subsequent protocols? • What is the most effective path toward this goal? • How to overcome or minimize opposition to the framework proposal?	
18:00 ~ 20:00	Dinner	

Day 2

9:30 ~ 11:00	Session V	Value of Institutionalizing Nuclear Security
	Discussion Leader	John Bernhard, Former Ambassador of Denmark to the IAEA
	• Opportunities in the Netherlands NSS and strategies to capitalize on them • Options for institutionalizing the NSS objectives beyond 2014 • Can or should nuclear security become a counterweight to NPT gridlock? • Key issues, recommendations, agreements and disagreements, and issues for further consideration from all the sessions	
11:15 ~ 13:00	Session VI	Looking Ahead – NSGEG Future Plans
	Ken Luongo, The Partnership for Global Security	
	Chang-Hoon Shin, The Asan Institute for Policy Studies	
	Jennifer Smyser, The Stanley Foundation	
13:00 ~ 14:30	Lunch	

Papers and Authors

- The Value of Universalizing the Current Regime
    - Author – John Bernhard
- Current Regime Inadequacies, the Urgency of More Comprehensive Action, and the Elements of an Improved Regime
    - Author - Ken Luongo
- The development of the Supporting Infrastructure for Improved Nuclear and Radiological Material Security
    - Author –Steven Lee
- Nuclear Safety Concepts, Requirements, and Principles Applicable to Nuclear Security
    - Author – Sharon Squassoni
- Nuclear Safeguards Concepts, Requirements, and Principles Applicable to Nuclear Security
    - Author –Kenji Murakami
- Value of Using Nuclear Cooperation Agreements and Euratom as Vehicles for Instituting Peer Reviews and Uniform Security Standards
    - Author - Caroline Jorant
- Case Studies of Relevant Framework Agreements: The Vienna Convention and U.N. Convention on Climate Change
    - Author – Ken Brill
- Need for a Framework Convention on Nuclear Security to Cope with Disadvantages from the Fragmentation of the Relevant International Rules
    - Author – Chang-Hoon Shin
- Improving the IAEA's Role in Nuclear Security Governance
    - Author – Trevor Findlay

Participant List
(in alphabetical order)

1. Irma Arguello
   Founder and Chair, Nonproliferation for Global Security (NPSGlobal), Argentina
2. John Bernhard
   Former Ambassador of Denmark to the IAEA & Permanent Representative to the CTBTO
3. Kenneth Brill
   Former United States Ambassador to the IAEA; Member of the Board, Stimson Center
4. Michelle Cann
   Senior Budget and Policy Analyst, The Partnership for Global Security
5. Trevor Findlay
   Research Fellow, Belfer Center for Science and International Affairs, Harvard University; Senior Fellow, The Centre for International Governance Innovation, Canada
6. Chaibong Hahm
   President, The Asan Institute for Policy Studies
7. Choong-Hee Hahn
   Director General, Cultural Affairs Bureau, Ministry of Foreign Affairs and Trade, Republic of Korea
8. Yong-Sup Han
   Vice President and Professor, Korea National Defense University
9. Caroline Jorant
   President, SDRI Consulting
10. Bong-Geun Jun
    Professor, Korea National Diplomatic Academy, Institute of Foreign Affairs and National Security, Republic of Korea
11. Dong Hwi Lee
    Professor, Institute of Foreign Affairs and National Security, Ministry of Foreign Affairs and Trade, Republic of Korea
12. Steven Lee
    Head of International Affairs, World Institute for Nuclear Security
13. Sang-Beom Lim
    Director, Disarmament and Nonproliferation Division, Ministry of Foreign Affairs and Trade, Republic of Korea

14. Kenneth Luongo
    President, The Partnership for Global Security
15. Kenji Murakami
    Visiting Professor of Nuclear Safety Engineering, Tokyo City University
16. Chang-Hoon Shin
    Director, Asan Nuclear Policy & Technology Center and International Law & Conflict Resolution Program, The Asan Institute for Policy Studies
17. Jennifer Smyser
    Program Officer, The Stanley Foundation
18. Sharon Squassoni
    Director and Senior Fellow, Proliferation Prevention Program, Center for Strategic and International Studies
19. Joel Wit
    Visiting Scholar, U.S.-Korea Institute, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University
20. Ho-sik Yoo
    Director, Nuclear Security Planning Division, Korea Institute of Nuclear Nonproliferation and Control (KINAC)

Nuclear Security Governance Experts Group (NSGEG)
Members

- Rodrigo Alvarez – Global Consortium on Security Transformation (Chile)
- Irma Arguello – The NPS Global Foundation (Argentina)
- John Bernhard – Former Ambassador to the IAEA (Denmark)
- Kenneth Brill – Former Ambassador to the IAEA (U.S.)
- Bart Dal – Ministry for Infrastructure and the Environment (Netherlands)
- Trevor Findlay – Center for International Governance Innovation (Canada)
- Yong-Sup Han – Korea National Defense University (South Korea)
- Roger Howsley – World Institute for Nuclear Security (Austria)
- Caroline Jorant – SDRI Consulting (France)
- Bong-geun Jun – Korea National Diplomatic Academy (South Korea)
- Togzhan Kassenova – Carnegie Endowment for International Peace (U.S.)
- Kenneth Luongo – Partnership for Global Security (U.S.)
- Dong Hwi Lee – Korea National Diplomatic Academy (South Korea)
- 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.)
- Chang-Hoon Shin – 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.)
- Hosik Yoo – 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