

DISCUSSION PAPER: The IAEA's Nuclear Security Role

Trevor Findlay

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Trevor Findlay is a joint fellow with the International Security Program and Managing the Atom Project at the Harvard Kennedy School's Belfer Center for Science and International Affairs. He is also a professor at the Norman Paterson School of International Affairs at Carleton University in Ottawa, Canada. He is the author of *Unleashing the Nuclear Watchdog: Strengthening and Reform of the IAEA*, Centre for International Governance Innovation, www.cigionline.org, 2012.

Introduction

According to Director General Yukiya Amano, the International Atomic Energy Agency (IAEA) sees itself as the global “platform” for nuclear security efforts. On other occasions, it has been described as having a “central role.” The IAEA Medium Term Strategy, on the other hand, describes the Agency’s strategic objective in the nuclear security field as being “to establish and achieve global acceptance of an agreed international framework for nuclear security and support its application.”¹ Some argue that if the Nuclear Security Summit process ends, the IAEA should inherit its mantle. Still others argue that the IAEA is irreplaceable; performs an important role well; and should over time be given greater authorities and resources, although not necessarily take over all the functions of the nuclear security summits. Others question whether the IAEA could ever become the “platform” for nuclear security given the reluctance of key member states to provide it with the requisite authorities and resources. Another school of thought contends that an international organization comprised of states should not play a central role in nuclear security, but rather a supportive one, with governments, the nuclear industry, and non-governmental organizations remaining paramount.

This paper is intended to stimulate discussion on the proper role of the IAEA in global nuclear

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security. It begins by outlining the current role of the Agency and the shortcomings that are in evidence. It then considers how the Agency might be strengthened in the short to medium terms. Finally, it considers what action would be needed to make the Agency truly the nuclear security “platform,” especially in relation to gaps in the current global governance system that it could fill.

Understanding the IAEA’s Role in Nuclear Security

A Normative and Awareness-Raising Role

As a standing international organization with a deserved reputation for scientific and technical expertise in the nuclear field generally, the Agency plays a normative and awareness-raising role in enhancing nuclear security. The IAEA’s legitimacy derives in part from its close relationship with the United Nations (UN), its longevity (it is 57 years old), and its potential universality that other forums lack. Because of its broad nuclear mandate, it is able to seek complementarity between its various activities, notably nuclear security, nuclear safety, and safeguards,² despite resistance from some member states. The Agency is also helping inculcate norms and raise awareness among a new generation of nuclear security experts through the International Security Educators Network (INSEN), inaugurated in 2010.

However, membership of the Agency is not universal: currently, the IAEA has 159 member states, just 82 percent of the current UN membership of 193. Universality would be helpful in all areas of the Agency’s mandate, but could be particularly so in the case of nuclear security by exposing all states to its importance and the need for them to be engaged.³

A Multilateral Forum for Discussion and Debate

Despite lacking universality, the Agency engages a much larger number of states than any other forum that deals with nuclear security, especially in its General Conference and Board of Governors. It is well placed to convene special conferences on nuclear security writ large, such as the 2009 International Symposium on Nuclear Security, or on more specialized topics, such

as the 2011 International Conference on the Safe and Secure Transport of Radioactive Material. Subsidiary bodies such as the Advisory Group on Nuclear Security (AdSec), the annual Senior Regulators' Meetings and the Border Monitoring Working Group (BMWG) are also important forums for debate.

The Agency is gradually seeking to increase the stature of its nuclear security–related forums. It has just established a new Nuclear Security Guidance Committee (NSGC) to involve a wider group of member states in drafting IAEA nuclear security documents. In addition, the Agency is convening a full-scale International Conference on Nuclear Security to be held in July 2013. This will likely mostly involve Vienna-based delegations and their experts, as well as academics and civil society participants nominated by their governments, but several ministers have indicated they will attend. A significant role will be to provide input into the next Nuclear Security Plan (2014–2017) to be agreed by the Board of Governors later this year.

Facilitating Implementation of Treaties, Agreements, and Resolutions

The Agency has both secretariat and, in some cases, more substantive roles in facilitating implementation of various nuclear security–related conventions and resolutions, notably: the 1980 Convention on the Physical Protection of Nuclear Material (CPPNM) and ultimately its 2005 Amendment when it enters into force; the 1996 Code of Conduct on the Safety and Security of Radioactive Sources; and the 2012 Guidance on the Import and Export of Radioactive Sources. The Agency has a more limited role with respect to two additional legal instruments, the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) and UN Security Council Resolution 1540 (UNSCR 1540). The Agency actively promotes signature, ratification, and accession to treaties for which it is the depositary, particularly through regional workshops.⁴ Priority has been given to the CPPNM 2005 Amendment,⁵ but even so, progress is slow.⁶

Nuclear Security Guidance: Promulgation, Promotion, and Implementation

The Agency's longest-standing role in nuclear security is in preparing and issuing nuclear

security guidance documents and promoting and providing assistance in their implementation. The most important document is the Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225), a fifth revision of which was released in 2011. In March 2012, Director General Amano announced the establishment of the NSGC as a standing body of senior experts, open to all member states to make recommendations on the development and review of IAEA Nuclear Security Series publications. The aim is to “contribute to greater transparency, consensus, quality, coherence and consistency of both technical and policy content” by involving more member states in their development.⁷ It is hoped that the NSGC will also speed up the slow process of revising security documents to keep pace with developments in the field.

Although this initiative is welcome, the greatest drawbacks of the IAEA’s guidance documents are that they are non-binding;⁸ they are not considered to be the equivalent of the Agency’s nuclear safety standards (although those, too, are non-binding) and implementation is not subject to Agency monitoring (except at a state’s request). Critics such as Matt Bunn also charge that they are still not as specific or detailed as they should be.⁹

Information Collection and Analysis

The Agency plays an increasingly important role in collecting and sharing nuclear security information, bearing in mind the need for a balance between confidentiality and transparency. The Agency’s efforts include the Incident and Trafficking Database (ITDB), assistance to states in combating nuclear smuggling, and a Nuclear Trade and Technology Analysis (TTA) Unit in the Department of Safeguards. Currently, the ITDB not only collects information from 123 participating states but also checks information derived from open sources with non-participating states. The Secretariat also aims to establish a comprehensive platform for nuclear security information, including that derived from open sources, by developing its Nuclear Security Information Portal (NUSEC). However, the overall participation rate by member states is still too low, and the Agency struggles to increase it. Two additional states joined the ITDB in 2010–11, while three joined in 2011–12, the last being Sudan.¹⁰

Nuclear and Radiological Emergency Preparedness and Response Coordination

As the international organization deemed responsible for global nuclear emergency preparedness and response coordination,¹¹ the Agency has a role in preparing for and responding to a nuclear security disaster through its Emergency Preparedness Framework, 24-Hour Incident and Emergency Centre (triggered as soon as an incident occurs), Response Assistance Network, and International Nuclear and Radiological Event Scale.¹² The 2011 post-Fukushima Nuclear Safety Action Plan¹³ has multiple recommendations for improving the system, but there seems little awareness that emergency preparedness and response in case of a nuclear security incident will also benefit from the Plan. Stressing the multiple benefits of improved emergency preparedness and response may draw states further into the nuclear security regime more generally.

Research and Development

The Agency's nuclear security research and development program contracts out research projects that have reportedly "resulted in concrete improvements in detection methodology and equipment capabilities."¹⁴

The Nuclear Security Plans: Providing Advice and Assistance to Member States

The IAEA offers an impressive array of assistance to states in the nuclear security arena, most of it now grouped under its Four-Year Plan of Activities to Protect Against Nuclear Terrorism. The current 2010–13 Nuclear Security Plan, adopted in 2009, is the third in the series and is about to be completed. A new one is due to be adopted by the Board of Governors in September 2013.

The plans are designed to improve the security of nuclear and radioactive material worldwide by assisting states in implementing effective national security measures. Priorities are to provide advice concerning the implementation of international agreements and guidelines, review and assess the needs of member states, provide them with support in implementing

nuclear security fundamentals and guidance, and facilitate outreach and information exchange. Projects include capacity building, security reviews, and development of models for national implementation legislation, as required under UN Security Council Resolution (UNSCR) 1540. Activities include holding conferences, providing training, conducting peer reviews, and giving advice as well as providing equipment, upgrading physical protection, installing remote monitoring systems, and physically securing radioactive sources.¹⁵

The Agency is well placed to use its role in advising and assisting member states in the peaceful uses of nuclear energy, including technical cooperation projects, to encourage them to increase their attention to nuclear security. But more could be done. The Agency should be seeking to inject the nuclear security issue into all areas of its mandate and lever genuine interest in one area, such as peaceful uses, to stimulate interest in another, in this case nuclear security. Encouragingly, increasing numbers of developing states are taking advantage of the Agency's nuclear security offerings. But developed countries are also doing so, in part to encourage universal participation, but also because they are finding it helpful in improving their own nuclear security.

With regard to assessment of states' security needs, the Agency helps states develop Integrated Nuclear Security Support Plans (INSSPs), which consolidate the nuclear security needs of individual states into integrated plans for assistance as well as provide "customized frameworks for coordinating and implementing nuclear security activities by the state, the Agency and potential donors." These are becoming wildly popular with states, with 20 more signing up in 2012 after a "topical" meeting on lessons learned from the original 45 participants.¹⁶ The Agency has allocated additional resources to INSSPs this year and anticipates having about 80–100 drafted by the end of 2013 (they are, of course, subject to approval by the states concerned). The Agency has warned, however, that high demand means that governments in some cases could wait years to receive security assessments.¹⁷ In 2013, the Agency is scheduled to implement a Nuclear Security Information Management System (NUSIMS) to provide member states with a secure self-assessment tool to help identify their needs and possible assistance, which may relieve pressure for Agency assessments.

Among the other nuclear services provided by the Agency are the following:

- Development and use of Design Basis Threat (DBT)
- International Security Advisory Service (INSServ)
- International Physical Protection Advisory Service (IPPAS)
- Technical missions focused on improving border monitoring
- Nuclear security education and training
- Support for establishment of national Nuclear Security Support Centers (or Centers of Excellence)
- Support for an International Network for Nuclear Security Training and Support Centers (agreement was reached in February 2012 to establish it)
- Support for the International Security Educators Network (INSEN), including development by the IAEA of a syllabus for a master's degree in security studies

The Agency also assists with physical upgrades and provision of equipment, including implementing physical protection upgrades, setting up remote monitoring at facilities, enhancing security at nuclear fuel cycle facilities, implementing nuclear material accounting and control relevant to nuclear security at facilities, and helping states establish effective border control.

The most important of these services is the IPPAS international peer review missions. Conducted only at the request of a state, each mission reviews the legal and regulatory structure of a state's physical protection regime for nuclear and radioactive materials and associated facilities, comparing them with the requirements of international legal instruments, such as INFCIRC/225¹⁸ and the IAEA Nuclear Security Series. A confidential mission report is intended to form the basis for remedial action, if necessary. The IAEA provides subsequent assistance such as training, technical support, more targeted assessments, and follow-up missions. Such missions could be the basis for a future mandatory nuclear security inspection regime, paralleling the IAEA safeguards inspection regime. As of 30 June 2012, the Agency had conducted a total of 55 IPPAS missions in 37 member States, including 14 follow-up IPPAS

missions to 13 member states.¹⁹ It has the capacity and resources to conduct 8 to 10 annually.

Finally, the Agency conducts a diverse range of activities that directly contribute to nuclear security, including helping secure radioactive sources, assisting in repatriation of highly enriched uranium (HEU), cooperating with states in planning nuclear security arrangements for major public events, improving radiological crime scene management, and developing nuclear forensics.

The Office of Nuclear Security

The Office of Nuclear Security (ONS) is housed in the Department of Nuclear Safety and Security, whose traditional focus has been nuclear safety. The staff of ONS remains small compared to the whole department, with approximately 60 personnel.²⁰ It is staffed with personnel experienced in dealing with states, national nuclear authorities, and regulators—not industry or the security community. As an intergovernmental organization, the IAEA interacts directly with and in service of member states. As is the case with all of the Agency's activities, this relationship structure carries over into how the IAEA interacts with nuclear industry because the member states are the primary points of contact.

It is difficult for an outside observer to assess the effectiveness or efficiency of ONS. It has, of course, been adopting the new management tools available to the Agency as a whole, including new accounting standards designed to improve efficiency. Performance indicators are included in the Nuclear Security Plans, but they are rather general and little transparency exists about their fulfillment. Every year, the ONS is subject, like all other parts of the IAEA, to a financial audit by the Agency's external auditor (appointed periodically from a different member state). In addition, the Office of Internal Oversight Services (OIOS) periodically reviews ONS operations using independent outside experts.

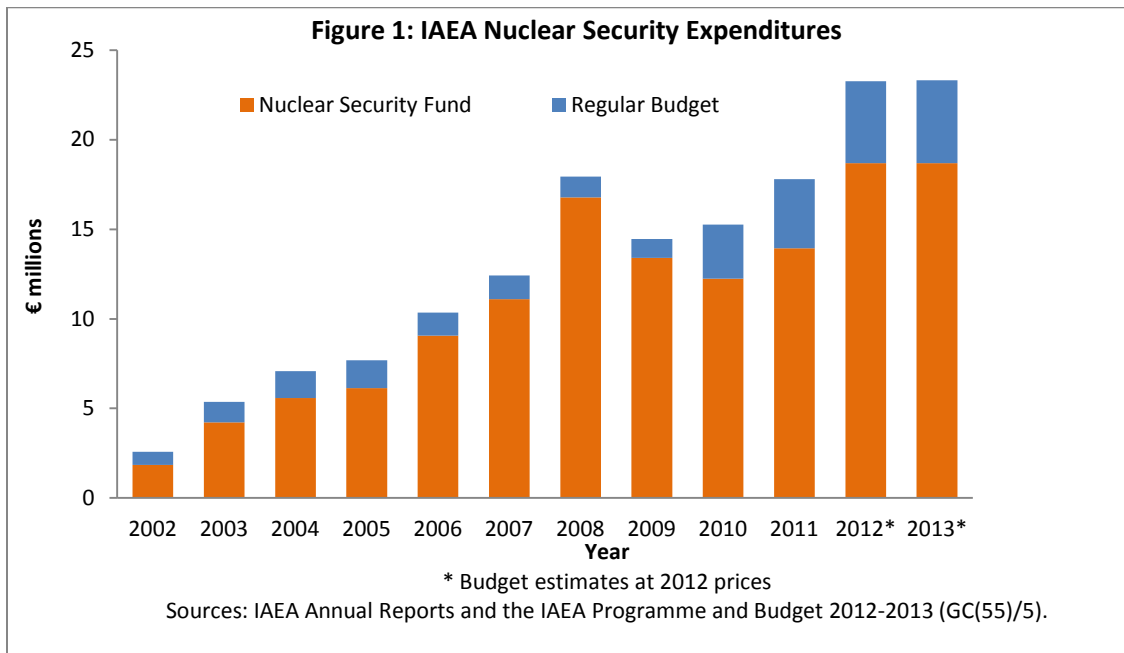
However, the IAEA fails to publish any meaningful public information about how it spends its budget on security, its performance measures, or even the roles of ONS personnel.²¹ For instance ONS reports that currently it has enough resources to increase the number of IPPAS

missions that it undertakes, but provides no information on what resources would be required if the call for all states to undertake such mission eventuated. It is not even clear what one IPPAS mission costs. Such lack of transparency makes it difficult for supportive member states or external observers to advocate increased funding for Agency activities in this field. The Agency, as in other areas of its mandate, needs to make a much better public case for increased support from its “captive audience”. The next Nuclear Security Plan provides an opportunity for reforming the past approach.

As in other areas of the Agency’s work, such as the Technical Cooperation program, enhanced post-project evaluation of nuclear security projects and follow up are needed, especially to ensure sustainability of outcomes.

Funding—Regular Budget and Nuclear Security Fund

The nuclear security portion of the IAEA Regular Budget for 2012–13, funded by assessed contributions from all member states, is just €4.6 million, representing only 13.5 percent of the total departmental budget of about €34 million. It has gradually increased since 2009, as indicated in Figure 1.



Currently, approximately 80 percent of the IAEA’s nuclear security funding comes through voluntary contributions, notably to the Nuclear Security Fund (NSF).²² In its first decade, from its establishment in 2002 until the end of 2011, the NSF spent about US\$130 million on various nuclear security projects.²³ Funding for the four-year plans comes from donations from mostly Western states, but also from China, Japan, Russia, and South Korea. Some member states provide in-kind contributions, such as equipment, cost-free experts, use of facilities, and hosting of meetings and training activities. A major source of funding is the European Union Strategy against Proliferation of Weapons of Mass Destruction.

A major stumbling block to a more effective and efficient nuclear security program is that 90 percent of the donated funds come with conditions. These are primarily limitations on the geographic location of the project for which funds can be used or the purposes to which they may be applied, as well as restrictions relating to procurements and human resources. The Agency notes, delicately, that such restrictions make “setting overall programmatic priorities difficult.”²⁴ It also inhibits consideration of sustainability as a goal of technical assistance in this area.

Capacity Gaps of the IAEA in a Strengthened Global Nuclear Security System¹

With a better understanding of what the IAEA aims to do in service of its nuclear security mission, one must then ask what the IAEA’s role should be in a strengthened global nuclear security system. The following are relevant characteristics of such a system, developed through the NTI Global Dialogue on Nuclear Security Priorities, and their potential implications for the IAEA.

Comprehensiveness

The system should be comprehensive; it should cover all nuclear materials and facilities in which they might be present, at all times.

¹ This text was developed by the Nuclear Threat Initiative.

What steps could the IAEA take to encourage states that its guidance on securing, protecting, and accounting for nuclear materials encompassed in guidance documents, such as INFCIRC/225/Rev. 5, is being applied to materials in non-civilian use?

Consistent and Global International Standards and Best Practices

The system should employ international standards and best practices, consistently and globally.

How can the IAEA, by itself or coordinating with others, do more to ensure international standards and best practices are “consistently” and “globally” implemented?

Internal Assurances

At a national level, each state’s system should have internal assurance and accountability mechanisms.

For states with materials in civilian use, the IAEA through INFCIRC/153 and INFCIRC/66 (Safeguards Agreements) and their related requirements for the establishment of a State System of Accounting for and Control of Nuclear Material (SSAC) helps those states ensure appropriate accountancy for those materials. The IAEA’s advisory services provided through ONS provide assistance for states in both setting up and evaluating existing legal and regulatory systems within a state. Evaluations of the effectiveness of a state’s internal assurance and accountability should be done periodically. What resources would the IAEA require to fulfill this task more robustly?

International Assurances

Globally, the system should facilitate a state’s ability to provide international assurances that all nuclear materials and facilities are secure.

How can the IAEA facilitate states providing confidence to others about the

effectiveness of their nuclear security systems while protecting sensitive information? What resources would the IAEA require to fulfill this task? For instance, if peer review in the form of IPPAS missions took place on a periodic basis for all states, the IAEA would likely require increased human and financial resources to scale up the services it provides in assuring others that outside experts believe the security practices to be effective.

Reducing Risk through Minimizing and Eliminating Materials

The system should work to reduce risk through minimizing or, where feasible, eliminating weapons-usable material stocks and the number of locations where they are found.

While the IAEA chooses not to take positions on the use of any specific technology or material, it has a history of assisting member states that request help in removing, converting, or otherwise minimizing the use of HEU. What more can the IAEA do to address the risk posed by production, accumulation, and use of weapons-usable nuclear material?

Beyond the issues raised above, some reflection should also be given to whether any of the existing activities of the IAEA should be done at a different scale or if other organizations can assist the IAEA through coordinating activities or partnerships.

How Might the IAEA Be Strengthened?

Despite the Agency's achievements and extensive activity in the nuclear security area, plausibly describing the Agency as the "platform" for global governance in this field is still a stretch. Part of the problem is that the international community, including that influential sector represented at the Nuclear Security Summits, has not devolved sufficient authority to the Agency and given it commensurate resources. This is largely because member states have not

agreed to make the IAEA the centerpiece of the nuclear security regime. Until and unless member states agree on a strengthened or expanded role for the Agency, the IAEA cannot be expected to unilaterally assert greater authority on nuclear security issues.

This section considers how the IAEA might be strengthened in the area of nuclear security. Some changes could be stimulated from within the organization, but most can be initiated only from outside. The following framework (see Figure 2) seeks to capture some of the prominent ideas for strengthening global nuclear security, ranging from minor to major, matched with the likelihood of member state support for changes to the IAEA’s role and authorities.²⁵ This framework provides a useful way for evaluating other ideas and proposals for strengthening global nuclear security and their potential implications for the IAEA.

Figure 2: Proposals for Strengthening the IAEA’s Nuclear Security Mission

	MINOR Enhancement to Global Nuclear Security	MODERATE Enhancement to Global Nuclear Security	MAJOR Enhancement to Global Nuclear Security
EXISTING Authority / Low Member State Resistance	<ul style="list-style-type: none"> • Build consensus on Agency’s key role • Upgrade ONS to a Division • Create greater public transparency 	<ul style="list-style-type: none"> • Encourage states to communicate information via CPPNM Article 14.1 • Achieve entry into force of CPPNM 2005 Amendment 	
MINOR Change to Authority / Medium Member State Resistance	<ul style="list-style-type: none"> • Minimize stove-piping in the Agency • Upgrade ONS to a Department 		<ul style="list-style-type: none"> • Conduct nuclear security reviews during safeguards inspections
MAJOR Change to Authority / Significant Member State Resistance		<ul style="list-style-type: none"> • Make IPPAS mandatory • Significantly increase regular budget 	<ul style="list-style-type: none"> • Make nuclear security standards and recommendations mandatory

Building a Consensus on the Agency's Key Role in Nuclear Security

Several steps might be taken by the Agency to help build a consensus among member states about the importance of the Agency's role in nuclear security and the need to enhance it:

- The Agency and supportive member states should actively promote universality of IAEA membership: this would be necessary before any nuclear security system could be considered comprehensive.
- The Agency should make greater play of the interconnectedness between its various programs, including encouraging states to take a holistic view of their own nuclear enterprises in terms of governance, regulation, cultivation of best practice, and growth of a good “nuclear culture” in all three areas of safety, security, and safeguards (the “3 Ss”). However, despite the Secretariat's efforts, some member states object on the ground that each activity has a different legal basis, with nuclear security efforts being voluntary and nuclear safeguards being treaty-based and legally binding.²⁶
- The Secretariat needs to further attenuate the bureaucratic “stove-piping” that has traditionally affected the Agency's various programs and operations; while some of the stove-piping is a regular bureaucratic phenomenon that can be dealt with in-house, some is driven by member state opposition to or suspicion of greater integration.
- To assuage those states concerned about the issue of confidentiality, the Secretariat needs to redouble its efforts to demonstrably strengthen measures to protect the confidentiality of information.
- For those member states concerned that the Agency's increasing attention to nuclear security will detract from resources and funding for other aspects of the Agency's agenda, notably Technical Cooperation, a solution may lie in a budgetary grand bargain (see below for details), which can be encouraged by the Secretariat but which ultimately depends on key member states represented in the Board of Governors.

Enhancing the Agency's Role in Improving Transparency and Building Confidence

The reverse side of the need for confidentiality in the nuclear security area is the desirability of transparency and confidence building. The IAEA is well placed to nurture both, first by being more transparent about its own operations and role, and second in providing a platform for states to demonstrate their transparency and desire to build confidence about their commitment to nuclear security.

- As treaty depositary for the CPPNM, the IAEA is tasked under Article 14.1 with receiving and communicating information periodically to states party about how each of their laws and regulations are giving effect to the treaty; states parties are also obliged to inform the Agency of the outcome of criminal proceedings against individuals who violate their physical protection laws; however, the convention does not specify the mechanism, frequency, or other procedures for carrying out such functions. If states are willing to provide more comprehensive national reports on nuclear security (along the lines as states provide for the Convention on Nuclear Safety), the Agency could post them on its website or, at the very least, on its secure Nuclear Security Portal (NuSec).
- The Secretariat could initiate a study, through AdSec, as to how a comprehensive global materials security system—including procedures for international assurances—might be developed to ensure that all weapons-usable nuclear materials are secure from unauthorized access and theft.²⁷
- As to its own transparency, the IAEA Secretariat should take advantage of the captive audience represented by its member states by making easily digestible information readily available to them, especially to those represented by hard-pressed smaller delegations.²⁸ The Agency's public website could be improved significantly in terms of accessibility and timeliness (although it is impossible for an outside observer to assess the effectiveness of the Nuclear Security Portal).

Evolving toward Mandatory Standards and Peer Review

The most valuable increase in IAEA powers and authorities would come from turning its nuclear security guidance into standards, giving them the same nomenclature as the IAEA's nuclear safety standards. Although this may be regarded as simply a terminological change, in fact, it would accord greater status to the documents. The next step would be to make the new standards and IAEA recommendations on nuclear security mandatory. A third important step would be to give the Agency the authority to assess compliance with nuclear security standards, notably through IPPAS. Given the likely opposition to this dramatic change if attempted outright, steps should be taken now to improve the current laissez-faire system with an eye to moving eventually to a mandatory system:

- The Secretariat and sympathetic member states should use the advent of the NSGC to attempt to establish baseline nuclear security “standards” with which all states will, at a minimum, be expected to comply.²⁹
- The Secretariat could initiate a two-step process similar to the one used for strengthening nuclear safeguards: (a) determine what the IAEA could do within its existing mandate and then (b) chart what is needed beyond that in terms of additional legal authority.
- The Secretariat should study the idea of having its safeguards inspectors trained to spot and report egregious security (and safety) lapses during their inspections. Currently, information obtained in the course of safeguards inspections is confidential and cannot be shared with safety and security personnel at headquarters. Member states are at present opposed to changing these rules.
- Alternatively, the IAEA should consider whether a cadre of nuclear security (and safety) specialists should be developed to accompany IAEA safeguards inspectors. However, member states have genuine fears about espionage by inspectors, and the Agency needs to put in place systems that will reassure them. Member states are also likely to reject this option.
- In the meantime, supportive member states should continue to increasingly avail

themselves, systematically, of IPPAS and other IAEA nuclear security services to make continuous improvement through follow-on missions the norm and to encourage all states to take advantage of them.

- The Agency and NSF donors should encourage the submission of Technical Assistance requests dedicated specifically to enhancing recipients' national nuclear security arrangements.³⁰
- The Secretariat should seek to link the provision of assistance under its Peaceful Uses of Nuclear Energy Program and Technical Cooperation program to undertakings by recipients to devise a national Integrated Nuclear Security Support Plan, to accept an INSServ and IPPAS mission and establish a national Nuclear Security Support Center.³¹

Bureaucratic Resources

At the March 2013 Board of Governors meeting, the Director General announced his intention to change ONS to a Division as part of the 2014–15 Programme and Budget process. Eventually, the Agency should establish a separate Department for Nuclear Security, giving nuclear security its own separate bureaucratic voice and marking it as a distinct Agency function. Care would have to be taken not to disrupt current efforts to ensure that nuclear safety and nuclear security are treated as complementary and synergistic.

ONS should, in the meantime, be authorized to recruit more staff with direct nuclear security experience to enhance its interaction with industry (plant owners and operators), strengthen its ability to assess nuclear security and nuclear terrorism threats, and interact more closely with police and intelligence agencies. Member states should provide additional funding for this purpose. Member states should also provide more resources and more skilled analysts for the Agency's illicit nuclear trafficking monitoring and analysis efforts.

The Agency should also lever its self-described role as a “platform” to increase interaction with all international bodies involved in nuclear security. An example of what might be done is the agreement by participants in the Global Initiative to Combat Nuclear Terrorism (GICNT) to

transmit documents to the Agency to assist in drafting IAEA Nuclear Security Series publications.³² Because the World Institute of Nuclear Security (WINS) views the challenge of nuclear security from the angle of nuclear plant operators, police, security firms, and security managers, rather than states, its activities (including training courses and best practice guides) are entirely compatible with the Agency's. The two bodies should work more closely together (they already meet formally several times a year). The Agency should also investigate whether its new relationship with the World Association of Nuclear Operators (WANO), forged in the wake of the Fukushima disaster, might be extended to include nuclear security. One way in which the IAEA does and could further engage with the entire UN membership is through deepening cooperation with the UN on implementation of UNSCR 1540. Recently the relationship has improved,³³ notably through the IAEA convening bi-annual information exchange meetings with all of the key international players, including the 1540 Committee, the Global Partnership and GICNT.

Funding

Developing states have argued that because nuclear security is not an original statutory function of the Agency, it should not be brought into the regular budget. This argument is disingenuous, because Board of Governors decisions have long endorsed nuclear security as an important new area of IAEA concern. Paradoxically, the West uses the same argument against bringing Technical Cooperation into the regular budget. A budgetary compromise could be envisaged that would bring both into the regular budget. Both would be funded by all states on the basis of an openly negotiated formula for allocating funds to particular programs that could be fixed for a set number of budgetary cycles. This approach would add greater certainty to funding of all areas of the Agency's work and avoid annual political wrangles over priorities.³⁴ Given that major contributors are arguing in favor of a zero notional budget for 2014–15 and that many governments are facing severe financial strictures, such a deal is not possible in the current or any single budgetary cycle but would require separate negotiation among member states. The issue also requires a holistic approach to the IAEA's budgetary needs, not nuclear security in isolation.

Whether the Agency should receive continually rising funding for nuclear security in the meantime is contentious. The Agency itself and some member states most concerned about nuclear terrorism argue that the threat remains urgent and that only the Agency can provide certain types of international public goods in this area, notably setting and promoting standards, identifying and assisting states' needs, and helping meet them. The Agency has identified rising demand from states for some services, such as IPPAS. Others argue that before increased budgets are agreed, the urgent needs are to map out the current expenditure by activity area and achievement, overlay efficiency measures, and then consider what the Agency should do and how much money it needs. Increases could then occur to support agreed activities, with effective oversight of how resources are being used. Without greater transparency about its nuclear security budget and spending, the IAEA cannot hope to convince skeptical states and outsiders of the value of its work or the need for greater resources. Contributors may be more willing to volunteer funds for the NSF and drop restrictions on the funds' use if they are convinced of the merits of the Agency's spending priorities.

For long-term and emergency finance needs, the Agency should consider the establishment of a contingency fund (using unspent funds that are otherwise credited to member states' subsequent annual assessed contributions), some of which could be used for nuclear security purposes. The IAEA's NSF can accept donations from individuals or foundations, and this fact should be publicized and marketed (the IAEA is one of the few UN-type organizations that does not have a "resource mobilization" (i.e., fundraising) strategy).³⁵

Making the IAEA a True Global Platform of Nuclear Security

An alternative to the IAEA in the current roles it plays is difficult to imagine. The Agency should thus be an important player in the nuclear security realm however it develops. Whether it can truly establish itself as a "platform" is open to question given the diverse views about its proper role among its member states, the relatively limited funding and other resources placed at its disposal, and its seeming reluctance to taking on a wider role given political sensitivities.

This situation has something of a catch-22 quality. Without improved performance in its nuclear security activities, the IAEA cannot convince skeptical member states and other stakeholders that it is able to play a more significant, strategic role. Yet without being given the opportunity to expand its role and the necessary funding and other resources to do so, the Agency will find it impossible to emerge as the true global platform of nuclear security. The Agency could and should, on its own initiative, act more like a platform by taking further initiatives to become the lead agency in generating cooperation and collaboration between the various players in nuclear security, including the UN and other international organizations, governments, regulators, security organizations, the nuclear industry, and nuclear security experts. It could, on its own initiative, lead sector-wide strategic planning, convene coordination conferences, and negotiate collaboration agreements with all relevant stakeholders.³⁶ The IAEA Department of Public Information and the ONS should meanwhile work together to greatly increase the amount of information available to the public, including by transferring non-sensitive information from the Nuclear Security Portal that is currently only accessible by member states. This would help build the case among supportive member states and in civil society, academia and industry for an enhanced IAEA role in nuclear security.

However, the IAEA cannot on its own transform itself into the leading international organization in the field. If its member states decide that it should become such an organization, they need to be committed to the IAEA having such a mission and must provide the appropriate authorities, funding, and other resources to sustain it. The Nuclear Security Summits can play a key role in helping bring this about.

¹ IAEA, "Nuclear Security Plan 2010–2013," Report by the Director General to the Board of Governors and General Conference, GOV/2009/54-GC(53)/18, August 17, 2009, 2.

² For example, through the Joint Advisory Group on Nuclear Security (AdSec)-Commission on Safety Standards Task Force.

³ Non-member states may receive IAEA assistance paid for by extra-budgetary funds but are not, of course, exposed to the totality of the Agency's activities.

⁴ Over the past 12 months, the Director General has written to all parties to the CPPNM to encourage them to adopt the 2005 Amendment. His letter was followed up by letters from the Director of the Office of Nuclear Security (ONS). The Agency has organized four regional workshops to promote entry into force of the amendment (Europe, Latin America, Africa, and China) with a further four planned for 2013 together with a number of national workshops. The Agency uses the General Conference to encourage ratification as well.

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- ⁵ Having new states party to the CPPNM is not desirable at present since it makes entry into force of the 2005 Amendment more difficult because it is dependent on two thirds of CPPNM parties ratifying the amendment.
- ⁶ IAEA, “Nuclear Security Report 2012,” Report by the Director General to the Board of Governors and General Conference, GOV/2012/41-GC(56)/15, July 31, 2012, 1–2.
- ⁷ IAEA, “Nuclear Security Report 2012,” 6.
- ⁸ A number of legally binding bilateral agreements between states reference INFCIRC/225, thereby giving the recommendations a significant status.
- ⁹ Matthew Bunn, *Securing the Bomb: Securing All Nuclear Materials in Four Years*, Project on Managing the Atom, Belfer Center for Science and International Affairs for NTI, 2010 (<http://www.nti.org/analysis/reports/securing-bomb-2010>).
- ¹⁰ IAEA, “Nuclear Security Report 2012,” 5.
- ¹¹ It is a moot point whether the 1986 Convention on Early Notification of a Nuclear Accident (CENNA) and the 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (CACNARE) are applicable to nuclear security incidents. The latter would appear to encompass any radiological emergency, such as the detonation of a Radiological Dispersal Device (RDD) or radiological weapon. In any case, it may not be immediately clear if a nuclear incident is due to an accident or a terrorist or other malicious act. States may want to trigger application of the convention without waiting for the cause to be determined. Unlike CENNA and CACNARE, the IAEA’s statutory role in nuclear emergencies is characterized so broadly as to encompass both accidents and nuclear terrorism emergencies, whether nuclear or radiological in character.
- ¹² For further detail and analysis, see Trevor Findlay, *Unleashing the Nuclear Watchdog: Strengthening and Reform of the IAEA* (Waterloo, Ontario: Centre for International Governance Innovation, 2012), 23–30, http://www.cigionline.org/sites/default/files/Unleashing_the_Nuclear_Watchdog.pdf.
- ¹³ IAEA, “Draft IAEA Action Plan on Nuclear Safety,” Report by the Director General to the Board of Governors and General Conference, GOV/2011/59-GC(55)/14, September 5, 2011.
- ¹⁴ The Agency has, for instance, recently completed a Coordinated Research Project on Development of Methodologies for Risk Assessment and State Management of Nuclear Security Regime. Jack Boureston and Andrew K. Semmel, “The IAEA and Nuclear Security: Trends and Prospects,” Policy Analysis Brief, The Stanley Foundation, Muscatine, IA, December 2010, 5.
- ¹⁵ IAEA, “Nuclear Security Report 2012.”
- ¹⁶ IAEA, “Nuclear Security Report 2012,” 6.
- ¹⁷ Chris Schneidmiller, “IAEA Security Official Seeks More Money to Prevent Nuclear Terrorism,” *Global Security Newswire*, NTI, August 20, 2012, <http://www.nti.org/gsn/article/iaea-security-chief-seeks-more-money-prevent-nuclear-terrorism/>.
- ¹⁸ IAEA, “Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities,” IAEA Nuclear Security Series No. 13, INFCIRC/225/Revision 5, January 2011.
- ¹⁹ IAEA, “Nuclear Security Report 2012,” 8.
- ²⁰ Chris Schneidmiller, “IAEA Security Official Seeks More Money to Prevent Nuclear Terrorism.”
- ²¹ Job descriptions for all IAEA staff are apparently available on the IAEA website, but this author was unable to find them.
- ²² IAEA, “Nuclear Security Report 2012,” 14.
- ²³ IAEA, “Nuclear Security Report 2011,” Report by the Director General to the Board of Governors and General Conference, GOV/2011/51-GC(55)/21, September 5, 2011, 13.
- ²⁴ IAEA, “Nuclear Security Report 2008: Measures to Protect against Nuclear Terrorism,” Report by the Director General to the Board of Governors and General Conference, GOV/2008/35-GC(52)/12, August 22, 2008, 2.
- ²⁵ Robert Floyd, Director General of the Australian Safeguards and Non-Proliferation Office, proposed this framework.
- ²⁶ One major member state is opposed to any work in security on nuclear material accountability and control on the grounds that it is a safeguards issue.
- ²⁷ George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, “Next Steps in Reducing Nuclear Risks: The Pace of Nonproliferation Work Today Doesn’t Match the Urgency of the Threat,” Op-ed, *Wall Street Journal*, March 5, 2013.
- ²⁸ For the purposes of this discussion paper, it proved impossible to find out how many personnel work in ONS and what they do.
- ²⁹ This could encompass the idea of a global DBT. See Matthew Bunn, Eben Harrell, and Martin B. Malin, “Progress on Securing Weapons and Materials: The Four-Year Effort and Beyond” (Cambridge, MA: Project on Managing the Atom, Harvard University, March 2012), 14.
- ³⁰ There is an agreement on the division of labor between Technical Cooperation and ONS.

³¹ Although this may be interpreted as contrary to Article III.C of the statute.

³² IAEA, "Nuclear Security Report 2012," 4.

³³ The Agency is, for instance, providing the Committee with a list of states with INSPPs.

³⁴ For further details, see "Recommendations: A Grand Budgetary Bargain?," in Trevor Findlay, *Unleashing the Nuclear Watchdog*, 121.

³⁵ See Findlay, *Unleashing the Nuclear Watchdog*.

³⁶ The Agency does convene information exchange meetings twice a year, but member states do not themselves necessarily allocate their resources for nuclear security to avoid duplication with the Agency's work.