

The World Institute for Nuclear Security: Filling a Gap in the Global Nuclear Security Regime

In September 2008, a new international institution was born—the World Institute for Nuclear Security (WINS). Mohammed ElBaradei, then the director-general of the International Atomic Energy Agency (IAEA), said that “WINS fills an urgent gap in our need to strengthen the nuclear security system.” But the key question is, what is that gap?

Cast your mind back to April 26, 1986, and the accident at Chernobyl that shocked the world and all but stopped further expansion of and investment in nuclear power. After that accident, “nuclear operators world-wide realized that the consequences had an effect on every nuclear power plant and international cooperation was needed to ensure that such an accident can never happen again.” That statement is from the World Association of Nuclear Operators (WANO),¹ which was formed in May 1989 by nuclear operators worldwide to exchange operating experience and peer review so members could learn from one another’s experiences, challenges, and best practices, the ultimate goal being to improve plant safety, reliability, and performance.

But WANO only handles nuclear safety. WINS was established to pursue similar objectives in improving nuclear security. In a world facing a global terrorist threat, we cannot afford to wait for a “security Chernobyl” before we take collaborative action to improve security.

WINS is designed to complement, not compete with, existing efforts to improve nuclear security around the world.

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The United States and other donor countries have done a great deal to finance the installation of improved nuclear security and accounting systems, to expand training programs, to strengthen regulatory efforts and the like in the former Soviet Union and elsewhere. The Global Initiative to Combat Nuclear Terrorism is another effort that is entirely consistent with the WINS vision. Indeed, one of the Global Initiative's founding principles is the exchange of best practices in nuclear security, and WINS is designed to provide a forum for that exchange. The IAEA has a very successful security program, which drafts international recommendations and guidelines covering various aspects of nuclear security and organizes

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international reviews of particular elements of states' nuclear security approaches when states ask for such help. In November 2007, I had the honor to be asked by the IAEA to chair a review of its security program, looking back to 2002 when it first started and forward over the next few years. I concluded that the IAEA security team is doing a fantastic job.

But there is no doubt that the global nuclear security regime is not as developed as the global nuclear safety regime. Individual states establish nuclear security rules for operators under their jurisdiction, but there are no international agreements that specify what kinds of security states should require for nuclear warheads or the nuclear materials needed to make them. The pervasive secrecy surrounding nuclear security means that no global mechanism is in place to identify the worst security performers and help them come up to the level of the best performers. It is important to understand that IAEA "safeguards," despite the name, are not designed to provide either safety or guarding. Instead, safeguards involve international inspections—typically ranging from once a month to once a year, depending on the type of material and other state-level factors—to ensure that the inspected state has not diverted material for military use. Hence, the fact that material is under safeguards does not mean that it is adequately secure.

The WINS vision is to help secure all nuclear and radioactive materials so that they cannot be utilized for terrorist purposes. But WINS can only undertake part of that immense challenge and it cannot address all of the issues facing the global nuclear security regime. Indeed, given the secrecy that is an essential component of nuclear security, some aspects of the global nuclear security regime that differ from the picture for nuclear safety are not likely to change in the near term. WINS does not aspire to set regulatory standards, or to act politically, speak on behalf of the nuclear industry, or promote or discourage any aspect of the fuel cycle. But it does aspire to make a difference.

WINS aims to provide an international forum for security professionals to meet, discuss, and decide how to implement best practices. Some of the meetings

will be organized around international workshops to share best practices, others will be at the national level or among groups of individuals with common interests. There is no set or fixed approach; meetings will be driven by the needs of the members but with a focus on one thing: improving the implementation and performance of security. It really is time for the nuclear community to create more opportunities for the professional development of its security managers and staff, and to encourage the type of dialogue that is so taken for granted by our colleagues in the field of nuclear safety. We have a great deal to learn from their techniques of learning from experience, sustaining operational excellence, and promoting a strong safety culture.

WINS' focus is both broader and narrower than WANO's. It is broader in that WANO's members are predominantly operators of nuclear power reactors, while many other organizations, both nuclear and non-nuclear, contribute to nuclear security. While WANO is an industry organization, WINS must involve both security professionals from these organizations and the regulators who set the rules. In other words, WINS must be inclusive.

Its focus is narrower in that it does not presently plan to carry out international peer review of security practices as WANO does for safety practices. The IAEA peer-review program provides a good service for countries wanting such review; nevertheless, there would be advantages in expanding the scope of peer review to include the effectiveness of the managerial arrangements for overseeing and driving the performance of the security system. WINS may be better placed to do this than the IAEA.

WINS is particularly focused on ensuring that nuclear operating organizations take proper responsibility for security at all levels, up to and including the board of directors. We are keen to see nuclear organizations of all types embrace security as an issue of corporate governance in the same way they think about financial, safety, and environmental performance and risk management. Sound corporate governance and the right security culture are the keys to success, as demonstrated by improvements in nuclear safety and the reaction of industry leaders to Chernobyl. We have important things to learn from those working in nuclear safety and should be open to new ideas. We should begin to challenge whether all traditional aspects of security really need to be secret and isolated from mainstream corporate oversight. We should begin to unpack the "security box" to see what's inside and to determine what needs to stay inside to protect sensitive information.

In thinking about corporate governance, there are some basic questions to ask of boards of directors and other senior managers of both private and government organizations that have custody of and responsibility for the security of nuclear and radioactive materials. First, to what extent have the boards been briefed by their state authorities on the potential security threats to their operations—the so-called Design Basis Threat (DBT)? Some believe that discussing security and sharing details of the DBT could compromise security arrangements, but this has to be a false argument; how can operators trusted with day-to-day accountability for

nuclear security sensibly address the risks if they are unaware of the threats they are facing?

Second, we need to ask if the board takes an active interest in assessing security by reviewing data on how well the security system is actually performing day-to-day. The boards of nuclear organizations likely have subcommittees that review safety, financial, and environmental performance, so why not security performance? The best companies conduct such reviews, but there may be gaps, and it is right and important that the best companies share their practices with those that are still developing their security approach. Security reports to boards should follow the same structure as those for other corporate functions, and include information on safety and environment; identify leading and lagging performance metrics that test program effectiveness; identify risks and actions to manage and mitigate the risks; provide a review of independent regulatory attitudes on corporate performance; and seek board approval for the overall policy of managing the security risk.

And, finally, it is increasingly common for companies to publish reports on corporate social responsibility that detail oversight and achievements relating to safety and environmental performance. Shouldn't they also publish information on how their boards oversee security arrangements? I am not suggesting that sensitive information should be published, but it cannot be considered sensitive to confirm publicly that the board receives reports on security performance. This information would provide an opportunity for companies to discuss and assess whether their security arrangements are sufficiently robust and able to protect the organization's assets and minimize its liabilities—duties that most boards have a legal responsibility to discharge. We must strive to achieve a situation where all boards feel confident that they have sufficient opportunities to oversee security risk so that they do not feel ignored by regulators, unaware of threats, or shocked by the poor performance of their security system if attacked.

WINS was founded in partnership with some of the key international players in nuclear security, including the U.S. National Nuclear Security Administration, which is responsible for securing a huge array of nuclear assets and provides more international nuclear security assistance than any other organization in the world; the Institute for Nuclear Materials Management, the leading professional society for experts in nuclear safeguards and security; the Nuclear Threat Initiative, the private philanthropic group making the most substantial contribution to nuclear security, led by former Senator Sam Nunn; and the IAEA. WINS is also supported by the Norwegian and Canadian governments, which pledged financial support, and is establishing new partnerships with nuclear and non-nuclear organizations that want to help promote effective security and address some of the key questions.

But WINS still faces significant challenges, which we have to confront head-on, in cooperation with our members and partners.

One challenge is countering the impression that individual states are solely responsible for all aspects of nuclear security. Of course, individual states are responsible for establishing policy in relation to international guidelines and rec-

ommendations, setting regulatory standards, and conducting associated inspection and verification arrangements. What role is there for an international non-governmental organization such as WINS? There can be little doubt that helping operators find the most effective approaches to meeting state requirements is a useful role, one that goes beyond the responsibility of individual states.

In particular, unless those accountable for the management of the nuclear and radioactive materials in their custody feel fully involved in that process and understand their responsibilities, there will be a potentially serious gap that must be filled. Therefore, in planning its future activities, WINS will be focusing initially on corporate governance and associated assurance methodologies; how to promote security culture; how to learn from the lessons of nuclear safety and operational best practices; how to learn from other industries; and how to encourage members to share their best practices in facilitated workshops of likeminded people from across the world who want to make a difference and fill the gap. WINS has already held its first workshop in the U.K., which included policymakers, regulators, operators, and security specialists. This exercise demonstrated the value of holding facilitated workshops to discuss security issues; other activities are planned through 2010.

A second challenge is addressing the impression that everything about nuclear security ought to remain secret and that discussing best practices in itself compromises secrecy and risks breaches of security. Theoretically, there may be a risk, but as John F. Kennedy said, "There are risks and costs to a program of action, but they are far less than the long-range risks and costs of comfortable inaction."

We need to remember that international bilateral meetings have taken place for many years to discuss security issues. I have taken part in many such meetings. But, in general, I have not found them to be the most effective or efficient method for identifying sustained improvements to security.

While I was working with British Nuclear Fuels (BNFL), we conducted a national stakeholder dialogue over a six-year period from 1999 to 2005 that addressed many aspects of our operations. Some of the participants wanted a dedicated working group on nuclear security and we agreed to form one. The group, which included people with strongly held antinuclear views, met over a period of nearly two years. The resulting published report, which was a consensus of everyone involved in the group, included some 60 recommendations. As the executive responsible for BNFL security at the time, I can affirm that BNFL changed some of its security arrangements in response to these recommendations and that security at BNFL improved as a result. Despite the profoundly different positions held by members of the group, this provided clear evidence that properly facilitated meetings can be very productive and need not compromise security in any way.

A third challenge is building the sense of urgency and commitment to nuclear security within the nuclear industry. Employees in the nuclear industry are trained to focus on safety from the first day of their careers. Organizations like WANO are successful because the industry recognizes that a major accident anywhere would be devastating for the entire industry, which gives all participants an overwhelm-

ing interest in helping the worst performers come up to the level of the best performers. Exactly the same can be said of security. Therefore, a key mission for WINS will be spreading that message and convincing the industry to take action before something terrible occurs. We want to provide industry with the practical tools and techniques to help them act, including some straightforward questions to help organizations understand more about their security programs: What do you spend on security? How much of that is discretionary and how much is required by regulations or other requirements? How much of your security program is subject to performance measures to establish its effectiveness?

Achieving the WINS vision of providing security for all nuclear and radiological materials, so that they cannot be utilized for terrorist purposes is an immense challenge. Success will require commitment and leadership from governments, operators, nongovernmental organizations, philanthropists, and others across the world. WINS offers a potentially important new forum in that struggle.

1 World Association of Nuclear Operators, "What is WANO?" Rev. August 5, 2008, at http://www.wano.org.uk/WANO_Documents/What_is_Wano.asp (accessed September 30, 2009).