

Strengthening the IAEA: How the Nuclear Watchdog Can Regain Its Bark

by Gregory L. Schulte

Key Points

The United States has a great interest in the success of the International Atomic Energy Agency (IAEA), given the important role it can play in reducing the risks of nuclear proliferation and nuclear terrorism.

Stalled investigations of Iran and Syria have put the credibility of the IAEA at stake. The agency detected neither Iran's hidden uranium enrichment facility near Qom nor the reactor being constructed by Syria near al Kibar. These examples underscore the importance of strengthening the agency's verification capability, by both increasing its authority and sharing more information.

The IAEA can also help shape the global growth of nuclear power, ensuring the highest levels of safety and security, while discouraging the spread of sensitive technologies that can be misused to build nuclear weapons. The IAEA Board of Governors' recent decision to establish a nuclear fuel bank in Russia is a step in the right direction.

Success requires a new "Spirit of Vienna"—a willingness of delegates to work toward consensus on even difficult topics—surrounding the agency's important role in nonproliferation. It also requires a conscious effort by the new Director General to remove the politics from IAEA business and return the agency to its technical mandate.

A New Chapter

Yukiya Amano recently became the new Director General of the International Atomic Energy Agency (IAEA), the world's nuclear watchdog. Amano, an experienced Japanese diplomat, faces a challenging agenda: stalled investigations into the clandestine nuclear activities of Iran and Syria, the need to ensure high levels of safety and security as more countries opt for nuclear power, the dangers associated with the spread of technologies readily diverted to build nuclear bombs, a threat of nuclear terrorism not taken seriously by all IAEA members, and a Board of Governors too often split between developed and developing countries.

The United States and the world have a great interest in the IAEA's success. President Barack Obama has placed the twin threats of nuclear proliferation and nuclear terrorism at the top of his administration's national security agenda. The IAEA can help counter these threats. It can also help to create conditions for the President's vision of a world without nuclear weapons. But the agency must be strengthened if it is to succeed in a world straddling renewed aspirations of nuclear disarmament and real risks of nuclear danger.

Strengthening the IAEA will require new investments by Member States—invest-

ments in political will, financial resources, and legal authority. It will require a new consensus on the agency's important role in nonproliferation. And it will also require that the agency concentrate on its technical mission without succumbing to political considerations. The IAEA is the world's nuclear watchdog, not the world's nuclear negotiator. Negotiators hedge; watchdogs bark.

The Challenge of Iran

In August 2005, technicians from Iran's Atomic Energy Organization broke the IAEA seals on the uranium conversion facility at Esfahan. Breaking the seals also broke an agreement that Iran had reached in November 2004 with Great Britain, France, and Germany, the so-called EU-3. The IAEA board convened and unanimously adopted a resolution proposed by Britain condemning Iran's action. With this resolution, the board made suspension of uranium enrichment and reprocessing a requirement for Iran to secure international confidence in the peaceful nature of its nuclear activities. The United Nations (UN) Security Council subsequently made the board's requirement legally binding.

This and subsequent board meetings on Iran contained several lessons. First, many countries did not at that time fully accept

Western concerns about Iran's nuclear program. When American officials shared U.S. assessments about Iran's nuclear program, many foreign colleagues politely recalled U.S. assessments about Iraq. Despite the many safeguards violations documented by the IAEA, not all were ready to dismiss Tehran's assertions that the program was purely civilian in nature. This changed over time as governments came to understand that Iran's program made little sense commercially and as they saw the leaders in Tehran refuse to address mounting international concern.

Second, even those countries with suspicions about Iran's program were often unwilling to voice their concerns. Technical assessments became political footballs for countries reluctant to take on Tehran. The IAEA had always been a technical agency, but an early sign of its politicization was the establishment in 2003 of a Vienna chapter of the so-called Non-Aligned Movement (NAM). The NAM became Iran's preferred means to seek, through persuasion and intimidation, the developing world's support for its position. Sadly, many countries—even important ones such as India and Indonesia—were unwilling to stand up to Iran in the NAM.

Third, many countries seemed less interested in preventing or punishing nuclear violations than in protecting abstract “nuclear rights” or future national options, commercial or otherwise. Brazil and Argentina, for example, were concerned that the requirement to suspend uranium enrichment and reprocessing could someday be applied to them. Even today, the two countries object to these technologies being labeled as “sensitive,” even though they can be readily diverted from civil purposes to the manufacture of nuclear weapons. Brazil and Argentina joined with Egypt in opposing language requiring Iran to apply the IAEA's Additional Protocol, a means for the inspectors to get additional information and access related to a country's nuclear activities. These countries—all nonsignatories of the Additional Protocol—feared that they too might someday be held to this standard.

Encouraging countries to support the IAEA investigation, and ultimately to report Iran's violations to the UN Security Council, required access to Member States' intelligence, effective traditional diplomacy, and public diplomacy.

In investigating Iran, IAEA inspectors were highly dependent upon information provided by Member States. Iran's cooperation was minimal at best—forced and partial, rather than fully forthcoming. For example, Tehran only admitted to its sensitive uranium conversion and enrichment sites at Esfahan and Natanz when they were revealed to the world by a dissident group.

The most sensitive aspects of Iran's program were its “possible military dimensions”—those activities that the IAEA inspectors assessed were relevant to the actual design and manufacture of nuclear weapons. Inspectors first raised concerns about these activities with Iran in late 2005. The information that the IAEA inspectors were able to gather on this subject from various member states played a key role in convincing governments to report Iran to the UN Security Council in 2006. It also kept the investigation going despite Tehran's determined effort to shut it down in 2007.

Good diplomacy was also imperative. To be successful, diplomacy had to go beyond reiterating well-known U.S. positions by explaining the reasons behind those positions and listening to the views and concerns of other countries. Through active diplomacy, briefings, and outreach to capitals, the U.S. Mission in Vienna explained why Iran's program made no sense from a civil perspective and how the IAEA's work could contribute to reaching a diplomatic solution. In the wake of the failure to find weapons of mass destruction (WMD) in Iraq, the mission explained why Iran's program and the U.S. response were quite distinct from the Iraq experience.

Good diplomacy needed to be backed by good public diplomacy, particularly as more and more governments became responsive to parliaments, pundits, and publics. The U.S.

Mission reinforced our diplomatic efforts with a global campaign of public diplomacy, targeting countries on the IAEA board and UN Security Council and with leadership roles in their regions. The mission reached out to some 50 countries, many multiple times, via visits, interviews, television programs, and digital video conferences with opinion leaders. A 3-minute live interview on al Jazeera by a senior U.S. official can have more impact on the position of many Arab governments than any number of diplomatic demarches.

In September 2005, following concerted efforts with the EU-3, Australia, Canada, Japan, and other like-minded countries, the IAEA board found Iran in noncompliance

to be successful, diplomacy had to go beyond reiterating well-known U.S. positions by explaining the reasons behind those positions and listening to the views and concerns of other countries

with its safeguards obligations, and 4 months later reported Iran's violations to the UN Security Council. This established the basis for a series of Security Council resolutions that made suspension an international legal requirement and that aimed a succession of targeted sanctions against Iran's nuclear and missile programs as well as the associated leaders and organizations.

Iran's nuclear file was forwarded to UN headquarters in New York, but the IAEA retained an important role. Under Security Council resolutions, IAEA inspectors were charged with monitoring Iran's compliance, including with the requirement to suspend uranium enrichment. Iran was also required to provide full cooperation with the IAEA's continuing investigations, including into activities with a possible military dimension. The regular meetings of the IAEA board were an opportunity to receive

Ambassador Gregory L. Schulte was the U.S. Permanent Representative to the International Atomic Energy Agency from July 2005 to June 2009. He is now a Senior Visiting Fellow in the Center for the Study of Weapons of Mass Destruction at the National Defense University.

International Atomic Energy Agency

The International Atomic Energy Agency (IAEA), the world's foremost forum for scientific and technical cooperation in the peaceful use of nuclear technology, was established as an independent organization under the United Nations (UN) in 1957. The agency's relationship with the UN is regulated by special agreement; it reports annually to the UN General Assembly and, when appropriate, to the Security Council regarding states' noncompliance with their safeguards obligations as well as on matters relating to international peace and security. As the world's "nuclear watchdog," the IAEA role is to "bark" when countries violate their safeguard obligations, but it is up to Member States and the UN Security Council to provide the subsequent "bite."

Statute

The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose.

Departments

- *Technical Cooperation*: Technology transfer and sustainable development
- *Nuclear Energy*: Nuclear power, fuel cycle, and waste management
- *Nuclear Safety and Security*: Nuclear, radiation and waste safety, and nuclear security
- *Nuclear Sciences and Applications*: Uses of nuclear technology in health, agriculture, industry, and other fields
- *Safeguards*: Verification of peaceful uses of nuclear energy
- *Management*: Budget and finance, legal advice and administrative support, public information

Director General: Yukiya Amano

Member States (as of September 2008): 145

Safeguard Agreements: 160 states

Additional Protocol: 128 state signatories

Safeguard Activities: 900 facilities worldwide

Board of Governors: 35 members

Source: "IAEA Primer," available at <www.iaea.org/Publications/Factsheets/English/iaea-primer.pdf>.

reports on Iran by the Director General and to urge Iran to cooperate with the agency's inspectors and to comply with the Security Council's resolutions.

In these circumstances, the job of IAEA's leadership was to pursue the investigation of outstanding issues, verify Iran's compliance with international requirements, and report to the board. It is a nondiplomatic, nonpolitical function dictated by the agency's statute, which authorizes such technical functions as training scientists, supporting research, and administering safeguards. Unfortunately, the previous leadership sought to play a more

political role and, in doing so, undercut not only the agency's credibility, but also the requirements of the Security Council and the two-track strategy of the United States, EU-3, China, and Russia.

One example was the 2007 "work plan" that Director General Mohamad ElBaradei negotiated with Iran without consulting the board. The work plan was a transparent effort by Iran's authorities to avoid further sanctions and shut down the IAEA investigation. The work plan subverted the role of the board, glossed over concerns about possible military dimensions to Iran's program, and

ignored the requirement for suspension as a confidence-building measure. Strong opposition from a number of countries brought Dr. ElBaradei back in line with Security Council requirements and the IAEA's statute. And while the work plan caused Iran to provide some additional historic information to IAEA inspectors, its net effect was to remove pressure from Tehran.

With one exception, the IAEA's investigation of Iran's nuclear activities has stalled since summer 2008 due to Tehran's refusal to provide the necessary access to experts, information, and locations. Rather than giving a full accounting of its past weapons work, Iran has denounced as forgeries the incriminating documents obtained by the IAEA. In the meantime, Iran has continued to develop its capability for uranium enrichment, producing sufficient low-enriched uranium that, if further enriched, could supply enough material for one nuclear bomb. Iran has for the most part sidelined the IAEA, content to repeat its reports that no declared material has been diverted, but unwilling to support its investigation of past undeclared activities. Moreover, Iran has added to its violations by refusing to provide advance information on the construction of new nuclear facilities.

The one exception was Iran's acceptance of an IAEA inspection of a second enrichment facility revealed near Qom. As in the past, Iran only opened the facility once it was exposed to the world. Iran's efforts to hide the construction of the facility are reason for additional concern, particularly since its size is more appropriate for a covert weapons program than production of civil nuclear fuel. Inspectors were given full access to the once-secret facility but still came away with many questions about the chronology and purpose of its construction. In their report to the board, they also asked whether Tehran was hiding any other facilities. The IAEA board subsequently adopted a resolution expressing serious concern about Iran's failure to report the facility in advance and calling on Iran to suspend its construction immediately.

The IAEA's investigation is important not just for historical reasons. The 2007 National Intelligence Estimate assessed that Iran had halted weapons-related work in 2003,

at the same time that Iran suspended uranium enrichment in negotiations with the EU-3. Just as Iran broke its suspension of uranium enrichment, its leaders could decide to restart clandestine weapons work—and there is little assurance that the IAEA would know. Regardless of the progress and outcome of negotiations, Iran must be held to its responsibilities under its safeguards agreement and

regardless of the progress and outcome of negotiations, Iran must be held to its responsibilities under its safeguards agreement and Security Council resolutions

Security Council resolutions. The international community must guard against renewed Iranian efforts to close its file before all questions are answered and requirements met.

Safeguarding Against Further Nuclear Proliferation

Tehran's failure to cooperate fully with the IAEA sets a worrisome precedent for the verification work of the agency. Iran's approach has already been mimicked by Syria and could encourage others to conclude that IAEA safeguards are not to be taken seriously.

Like Iran, Syria failed to give the IAEA advance warning of a new nuclear facility. In this case, the facility was a nuclear reactor secretly being built in Syria's desert with North Korean aid. The reactor, destroyed by Israeli bombs in 2007, appeared to have been modeled on the North Korean reactor at Yongbyon, which produced the plutonium for that country's small arsenal of nuclear weapons. The IAEA investigation of the Syrian reactor began in 2008 and stalled shortly after one inspection at the former reactor site. This case illustrates several agency weak points that need to be remedied to avoid further cases of proliferation undetected and unhindered by the IAEA.

First, the Syrian case underscores a key lesson from the 1991 Gulf War when Iraq was found after the war to have progressed in its nuclear program more than anyone had previously understood. The lesson was that the IAEA needs to concentrate on detecting undeclared activities and sites and not just on the nondiversion of declared material at declared sites. Agency inspectors need access to a broader array of information and locations than provided under a standard Safeguards Agreement, which is the genesis of the Additional Protocol to safeguards agreements. Syria is one of the few countries with nuclear activities that have refused to sign the protocol. There is no guarantee that IAEA inspectors would have uncovered Syria's covert reactor were a protocol in place, but it would have increased the likelihood of detection and thus, one hopes, the disincentive to cheat.

Second, much like the revelation of Iran's second enrichment facility near Qom, the Syrian case highlights the agency's dependence on outside information. The Safeguards Department had little reason to suspect that Syria was building a covert reactor until the U.S. Mission was authorized to brief the inspectors in April 2008. Information shared by the United States and then other countries formed the basis for the inspector's initial inspection and requests. This dependence on outside information can be seen as a weakness compromising the independence of the IAEA. But the need for outside information is unavoidable, particularly in the case of a country such as Syria that refuses to provide full cooperation. Ultimately, the agency protects its independence by seeking information from multiple sources, including the country being inspected, then applying its own professional judgment. A strong IAEA must have a solid analytical capability but also an effective information network of open sources and Member States.

Third, the Syrian case shows that agency effectiveness depends not only on the competence of the inspectors but also on the backing of Member States. Having buried the reactor remains under meters of earth and a new building, Syrian authorities thought that they could hide any evidence from the inspectors. However, when the inspectors arrived in June 2008, they undertook a painstaking examination of the site and

asked difficult questions that the Syrians were not prepared to answer. When IAEA environmental samples detected uranium particles, the Syrian authorities concluded that one visit was enough and refused to allow more access to the site of the destroyed reactor or to other sites of interest. Whether Syria ultimately admits to the reactor and allows the IAEA to complete its inspection depends on whether Member States are prepared to keep Syria accountable, to make progress in bilateral relations contingent on Syria's cooperation with the IAEA, and, if necessary, to back an agency decision to exercise its right to special inspections. To discourage new nuclear violations in Syria or elsewhere, President Bashar al-Assad cannot be allowed to bury the IAEA investigation through noncooperation just as Syrian bulldozers buried the reactor.

Finally, the Syrian case shows the complexity of today's proliferation challenges. Not only was the covert reactor being built at an undeclared location, but it also was being built with technical assistance from a known proliferator: North Korea. Press reports have pointed to the possibility of assistance from Iran as well. Agency inspectors cannot merely be accountants, tracking the flow of nuclear material through declared facilities. They must be more like detectives, looking for indicators of suspect activities: patterns of dual-use procurements, work on technologies relevant to nuclear weapons design and development, investment in dual-use capabilities that make little sense from a civil perspective, and illicit or government-sanctioned networks for trafficking in nuclear technology and material. Analysis of information from multiple sources becomes key to detecting clandestine nuclear activities, whether by a government or a new A.Q. Khan network.

Shaping Nuclear Growth

Americans tend to see the IAEA as the world's "nuclear watchdog." However, the agency has a dual role: helping countries make peaceful use of nuclear technology while preventing its misuse for nuclear weapons.

Because of objections by countries that oppose nuclear power, such as Austria,

Ireland, and New Zealand, the IAEA had circumscribed its peaceful applications role. While the agency advised countries on specialized nuclear techniques for combating cancer and mutating crops, it stayed away from the more controversial topic of nuclear power other than helping to set standards for safety. With growing global interest in nuclear power, an informal group of “Friends of Nuclear Energy”—China, France, India, Russia, and the United States—was able to put the agency back into the business of helping countries interested in nuclear power.

The agency’s primary role in this area is to help countries assess national requirements for nuclear power, consider the steps needed to prepare the necessary infrastructure, and provide advice and assistance in taking those steps. Dale Klein, a recent chairman of the Nuclear Regulatory Commission, often warned that “nuclear energy is not for amateurs.” The IAEA’s job is to explain that point to countries interested in nuclear power, though in more technical terms. The goal was to make nuclear power an economic decision, based on a careful understanding of costs and benefits, not a political decision, based on ill-informed desire for national prestige.

Safety and security must be prerequisites for any country to pursue nuclear power. A nuclear incident anywhere has the potential to affect nuclear power everywhere. As a result, each Member State has a stake in maintaining high standards of safety and security. The IAEA is well positioned to help set those standards, assist Member States in meeting them, and provide independent assessments and recommendations. The IAEA has developed milestones that give individual countries a roadmap for decisions on and implementation of a nuclear power program.

Due to the world economic crisis, the “nuclear renaissance” may turn out to be a renaissance of ambition rather than of construction. However, it will be important that countries that choose to participate do not automatically contract with the “lowest bidder” and that industry is not tempted to bid low by sacrificing high standards. IAEA advice and guidelines can help to maintain high standards.

The international community must also ensure that an expansion of countries with

nuclear power does not put more countries on the brink of having nuclear weapons. As shown by Iran, countries with capabilities for uranium enrichment or spent fuel reprocessing can become “virtual weapon states.” The IAEA can help avoid the proliferation of such states by administering one or more international nuclear fuel banks to back up the international nuclear fuel market, which is already diverse and competitive. This encourages countries to rely on the market for nuclear fuel, as most countries with nuclear power already do, rather than developing their own capability to enrich uranium.

The IAEA board recently agreed to establish an IAEA-administered fuel reserve in

the IAEA cannot tackle the nuclear terrorist threat on its own, but it can be part of broader international efforts

Russia. This sets the stage for implementing other concepts, including an IAEA-owned fuel bank initially conceived by the Nuclear Threat Initiative. These concepts will neither add to IAEA regular budget requirements nor subtract from any countries’ right to the peaceful use of nuclear technology.

Preventing Nuclear Terrorism

President Obama, like President George W. Bush before him, has pointed to nuclear terrorism as a grave threat. Many other coun-

tries, particularly from the developing world, do not see nuclear terrorism in such cataclysmic terms and would prefer to direct IAEA attention and resources elsewhere. This divergent threat assessment is at the root of a dispute over whether preventing nuclear terrorism is a core mission of the IAEA.

The founders of the IAEA worried about the spread of nuclear weapons to nation-states. They were not worried about the acquisition of nuclear or radiological weapons by nonstate actors. That mindset has changed dramatically, particularly after 9/11 and indications that groups such as al Qaeda have sought WMD. The IAEA cannot tackle the nuclear terrorist threat on its own, but it can be part of broader international efforts encompassed in part by the U.S.-Russian Global Initiative to Combat Nuclear Terrorism. Specifically, the IAEA can help to set international standards, such as the Convention on Physical Protection of Nuclear Material, and then help countries reach and sustain those standards. Some countries are more receptive to guidelines and help from an international organization of which they are part than from an individual country.

IAEA work on nuclear security is funded largely by voluntary contributions from the United States, Canada, the European Union, and most recently Russia. With U.S. support, the IAEA secretariat has sought to “mainstream” nuclear security by increasing the share paid from the regular budget. A regular source of funding and acknowledgment of nuclear security as a core task would put the agency and its staff in a much stronger position to help set standards and build national capacity. But mainstreaming nuclear security

The mission of the Institute for National Strategic Studies is to conduct strategic studies for the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the combatant commanders, to support the national strategic components of the academic programs at the National Defense University, and to provide outreach to other U.S. Government agencies and to the broader national security community.



INSS
INSTITUTE FOR NATIONAL
STRATEGIC STUDIES



The Strategic Forum series presents original research by members of NDU as well as other scholars and specialists in national security affairs from this country and abroad. The opinions, conclusions, and recommendations expressed or implied within are those of the contributors and do not necessarily reflect the views of the Department of Defense or any other agency of the Federal Government. Visit NDU Press online at www.ndupress.edu.

INSTITUTE FOR NATIONAL STRATEGIC STUDIES

Christopher J. Lamb
Interim Director

Phillip C. Saunders
Interim Director of Research

means that more countries need to see nuclear terrorism as a mainstream threat. They must understand that the use of a nuclear weapon or radiological device anywhere would have global repercussions.

President Obama is convening a Nuclear Security Summit in April 2010, which will provide an important opportunity to build international consensus with respect to the danger of nuclear terrorism, to give renewed impetus to the Global Initiative, and to agree on the IAEA's role.

Regaining Its Bark

IAEA Member States long sought to insulate the technical work of the agency from the divisive UN politics of New York and Geneva. Instead, the IAEA sought to operate on the basis of the "Spirit of Vienna"—a common search for consensus on even the most difficult issues. In finding Iran in noncompliance and then reporting it to the Security Council, the IAEA Board was forced to vote because of the opposition of Cuba, Syria, and Venezuela, 3 of its 35 members. The Spirit of Vienna became a victim of

Iran's nuclear violations and remains under assault by Iran and its allies.

Now, whether confronting nuclear terrorism, examining nuclear fuel banks, or even electing a new Director General, IAEA Member States are too often divided between the developing and developed world. These divisions are both a symptom and a cause of the agency's politicization. They reflect differences in priorities, with developed countries valuing the agency primarily for its nonproliferation role, and developing countries seeing it more as a development agency.

President Obama has created an opportunity to bridge the divide. His speech in Prague, with its renewed emphasis on nuclear arms control and a vision of a world with no nuclear weapons, was well received in Vienna. In the context of multilateral diplomacy, the President's vision strengthens the hand of advocates of a more robust nonproliferation regime.

But the President himself admits that the vision is distant, whereas the challenge posed by countries such as Iran and groups like al Qaeda is immediate. For the IAEA to

contribute to a world without nuclear weapons, it must shine a bright spotlight on proliferators such as Iran and Syria. It must be able to help detect and prevent clandestine programs, nuclear terrorism, and illicit trafficking of nuclear materials. It must act to stem the spread of bombmaking technologies. This is a tall order for an agency that has been studying fuel banks for 50 years but that only recently agreed to activate one.

The President's vision in Prague lays the groundwork for working toward a renewed consensus behind the agency's role and how it must evolve to tackle new challenges. But a new consensus will be meaningless without political backing and an agency that concentrates on its mission. The IAEA is not in charge of nuclear disarmament or global security. It is a technical agency concerned with the benefits and risks of nuclear technology.

Yukiya Amano has a challenging agenda. To succeed, he must strengthen the IAEA's effectiveness and credibility, rebuild consensus, and return the agency to its technical mandate. The nuclear watchdog must regain its bark.

Other titles from **NDU Press**

For on-line access to **NDU Press publications**, go to: ndupress.ndu.edu

Avoiding a Crisis of Confidence in the U.S. Nuclear Deterrent

John P. Caves, Jr.

(Strategic Forum No. 252, December 2009)

STAR-TIDES and Starfish Networks: Supporting Stressed Populations with Distributed Talent

Linton Wells II, Walker Hardy, Vinay Gupta, and Daniel Noon

(Center for Technology and National Security Policy, Defense Horizons 70, December 2009)

Navies versus Coast Guards: Defining the Roles of African Maritime Security Forces

Augustus Vogel

(Africa Center for Strategic Studies, Africa Security Brief 2, December 2009)

To Build Resilience: Leader Influence on Mental Hardiness

Paul T. Bartone, Charles L. Barry, and Robert E. Armstrong

(Center for Technology and National Security Policy, Defense Horizons 69, November 2009)