Safeguards Noncompliance: A Challenge for the IAEA and the UN Security Council

Compliance with safeguards obligations is a fundamental part of a country's participation in the global nuclear nonproliferation regime. The issue of compliance was central to the contentious discussions at the 2005 Nuclear Nonproliferation Treaty (NPT) Review Conference and is likely to play a similar role at the 2010 conference.

The main objective of the International Atomic Energy Agency (IAEA), as set out in its statute, is to promote “the contribution of atomic energy to peace, health, and prosperity throughout the world” while ensuring that nuclear material, equipment, facilities, and information are not used for any military purpose. The IAEA carries out the latter part of this mandate by establishing and implementing safeguards.

In fulfilling its nonproliferation mandate, the most important task of the IAEA is the prompt detection and reporting of unauthorized nuclear work in any non-nuclear-weapon state that is a party to the NPT. This unauthorized work may involve the diversion of nuclear material from declared facilities as well as undeclared nuclear material and activities.

IAEA inspections are designed to ensure that countries are complying with their commitments under their safeguards agreements. The UN Security Council indicated the importance of noncompliance by addressing it in the first operative paragraph of Resolution 1887, which the council adopted on September 24, 2009, during the United Nations’ summit on nonproliferation and disarmament.

Nevertheless, the international community must go beyond that resolution by adopting a refined and strengthened approach toward cases of safeguards noncompliance, which, as discussed below, has several elements. One element is how the IAEA Department of Safeguards should distinguish between cases of noncompliance that should be reported to the IAEA Board of Governors as “non-compliance” in accordance with Article XII.C of the IAEA statute and cases that constitute only technical or legal compliance failures and therefore need be reported only in the annual Safeguards Implementation Report, if at all. The board, when it finds that the agency is unable to resolve a case of noncompliance promptly, should not hesitate to request additional verification rights from the UN Security Council. The latter, in turn, should take steps to improve the likelihood of prompt and effective action when confronted with persistent cases of noncompliance or with withdrawal from the NPT.

The Safeguards Department's Role

In examining IAEA responsibilities, it is necessary to distinguish between the respective roles of the secretariat and the board. The IAEA Secretariat is the technical arm of the agency in charge of detecting any technical or legal noncompliance with the safeguards agreements concluded between the IAEA and a state. The secretariat is expected to perform this task in the most objective and nondiscriminatory way possible, without the influence of any political considerations.

The fact that there is no official definition of what constitutes noncompliance should not be used as an excuse by the secretariat for not reporting promptly, fully, and factually any significant or intentional failure or breach of safeguards undertakings, including those of agreed “subsidiary...
In judging whether a failure is intentional, the Department of Safeguards should, \textit{inter alia}, take into account whether any state organization, including the state system of accounting for and control of nuclear material, knew of undeclared nuclear material (whatever its quantity), facilities, or activities that should have been declared to the IAEA.

Denying access to a declared or suspected facility or location, as well as not allowing inspectors to take environmental samples as requested by the IAEA, is by definition intentional. If such a denial is prolonged, for example, more than a few days unless for legitimate safety reasons, it must be promptly reported by the Department of Safeguards to the director-general as a matter of concern. If the Department of Safeguards has the legal authority under the safeguards agreement to require such access, then the denial constitutes noncompliance.

Experience has taught that denial of prompt access to locations or refusal to take environmental samples has often been an indication of undeclared activities. This has been the case in Iran, North Korea, South Korea, and possibly Syria.

Denial of access to relevant persons and documents should also be taken seriously and reported explicitly either in the Safeguards Implementation Report or in a report to the board if the denial prevents the agency from promptly resolving questions or inconsistencies, particularly if it is not the first time that access has been denied or if it takes place in conjunction with other failures or breaches of safeguards obligations.

Evidence of intentional concealment measures or the “obstruction of the activities of IAEA inspectors, interference with the operation of safeguards equipment, or prevention of the IAEA from carrying out its verification activities”\cite{5} should be reported as noncompliance. Nuclear material that should have been declared and placed under safeguards but intentionally has not been also warrants a finding of noncompliance.

To warrant a report of noncompliance to the board, it is not necessary for the Department of Safeguards to demonstrate that the “intention” of not declaring nuclear material or activities was part of a nuclear weapons program; it is enough that the purpose was unknown.\cite{6}

The Department of Safeguards should adopt as a guideline the position stated by Director-General Mohamed ElBaradei in November 2002: “I believe that while differing circumstances may necessitate asymmetric responses, in the case of non-compliance with non-proliferation obligations, for the credibility of the regime, the approach in all cases should be one and the same: zero tolerance.”\cite{7} In accordance with that principle, the secretariat should have qualified the failures and breaches committed by South Korea and Egypt\cite{8} as cases of noncompliance.\cite{9}

By reporting in November 2003 that Iran was “in breach of its obligation to comply with the provisions of the Safeguards Agreements” instead of using the word “noncompliance,” the term that the IAEA statute uses, ElBaradei deliberately left to the board the sole responsibility for making a formal finding of noncompliance. This ambiguous language may have played a role in politicizing what should have remained the purely technical and factual work of the secretariat.\cite{10}

The assessment of Libya’s violations of its safeguards agreement reported to the board in February 2004 is even more unhelpful. Although, in addition to the reported violations, Libya admitted that it had received documentation related to nuclear weapons design and fabrication and more or less explicitly acknowledged that it had a nuclear weapons program, ElBaradei did not use the term “noncompliance.” This set a bad precedent and amounted to a contradiction of his 2002 statement cited above. Fortunately, the board found Libya in noncompliance and requested the director-general to “report the matter to the Security Council \textit{for information purposes only}, while commending [Libya] for the actions it has taken to date, and has agreed to take, to remedy the non-compliance.”\cite{11} The Security Council held a meeting on April 22, 2004, to consider the matter and, via its president, welcomed Libya’s active cooperation with the IAEA and its decision to abandon its weapons of mass destruction programs.
Finding a state in noncompliance with its safeguards agreement is not the only reason for the IAEA to submit reports to the Security Council. If, in the course of their duties, Department of Safeguards inspectors encounter “questions that are within the competence of the Security Council as the organ bearing the main responsibility for the maintenance of international peace and security,” the IAEA statute suggests that these questions should be reported to the board and then by the board to the Security Council.\(^{[12]}\) In addition,

Paragraph 19 of the Comprehensive Safeguards Agreement gives the Board the power to find a state in noncompliance if “the Agency is not able to verify that there has been no diversion of nuclear material.” In other words, a finding of noncompliance by the board does not require the Department of Safeguards to verify that there has been a diversion. Noncooperation by a state, thus preventing the Agency from verifying that no diversion has taken place can be sufficient grounds for noncompliance.\(^{[13]}\)

One nonproliferation official recently said that when it comes to unanswered questions, obstruction, or access denials, the same significance should be ascribed “to the inability of the Agency to conclude absence of undeclared activities as to a finding of non-compliance.”\(^{[14]}\) According to the official, “[T]he experience accumulated over the last 20 years clearly indicates that a ‘smoke screen’ usually is as telling and dangerous as a ‘smoking gun.’”\(^{[15]}\)

In summary, the IAEA statute requires the director-general to transmit to the board all noncompliance reports made by the Department of Safeguards. Unlike the board, the secretariat is expected to act as a technical and totally apolitical body in order to maintain its reputation of objectivity and impartiality.

It will be one of the main tasks of the new director-general, Yukiya Amano, to restore member states’ confidence that the IAEA Secretariat will promptly, fully, and factually report on safeguards noncompliance in accordance with the agency’s statute.

**Handling Noncompliance Reports**

The IAEA board, which is a political body, must decide whether the safeguards breaches and failures reported by the secretariat, whether or not the term “noncompliance” has been used, constitute noncompliance under the statute and, if so, when they must be reported to the UN Security Council. The statute does not specify the criteria that the board should use to arrive at a finding. Given the difference in roles, the criteria presumably will not necessarily be the same as those used by the secretariat in determining whether technical or legal noncompliance must be reported to the board.

The goal here is not to focus the debate on whether the board should have found South Korea and Egypt in noncompliance in 2004 and 2005, respectively, and thereafter reported the cases to the Security Council for information purposes only. In the case of South Korea, which had ratified an additional protocol and subsequently fully cooperated with the IAEA, there was no need for Security Council action. Thanks to South Korea’s cooperation, the agency was able to conclude in 2007 that the country did not have any undeclared nuclear material or activities and that all nuclear material remained in peaceful activities.

In the case of Egypt, the IAEA did not find any indication that the reported failures and breaches were part of concealment efforts or a deception strategy. As in the case of South Korea, there was no indication in Egypt of any military involvement in or connection with nuclear-related activities. Because Egypt does not have an additional protocol in force, however, the IAEA is not in a position to conclude that there are no undeclared nuclear material and activities in the state as a whole. Also, as reported in the 2008 Safeguards Implementation Report, the IAEA has so far been unable to identify the source of the highly enriched uranium and low-enriched uranium particles found in environmental samples taken at the Nuclear Research Center of Inshas. The fact that there are still open questions about Egypt’s nuclear activities almost five years after the failures and breaches were first reported to the board should be a cause of concern. Progress on these issues should be reported to the board separately from the Safeguards Implementation Report.

These long-standing open questions help demonstrate why the board should have at least adopted
resolutions expressing its concern, as ElBaradei did in his reports, about the failures and breaches discovered in South Korea and Egypt, even if the board found it unnecessary to make a finding of noncompliance under the statute.

In the case of Iran, the IAEA board adopted in September 2003 a resolution calling on that country to “suspend all further uranium enrichment-related activities, including the further introduction of nuclear material into [the] Natanz [enrichment plant]...pending provision by the Director General of the assurances required by Member States, and pending satisfactory application of the provisions of the additional protocol.”[16] The resolution also called on Iran to grant “unrestricted access, including environmental sampling, for the Agency to whatever locations the Agency deems necessary for the purposes of verification of the correctness and completeness of Iran’s declarations.”[17]

In the spring of 2004, it already had become apparent that Iran was not abiding by the September 2003 resolution. In a resolution adopted on June 18, 2004, the board acknowledged “the statement by the Director General on 14 June that it is essential for the integrity and credibility of the inspection process to bring these issues to a close within the next few months.”[18] Apparently, the international community subsequently lost sight of the importance of this time factor. Once a significant or deliberate breach of safeguards agreements has been identified or if a state obstructs or delays verification activities, as is presently the case also in Syria, action by the board and possibly by the UN Security Council becomes urgent.[19]

In its September 18, 2004, resolution, the board noted “with serious concern that...Iran has not heeded repeated calls from the Board to suspend, as a confidence building measure, all enrichment-related and reprocessing activities.”[20] It was clear by then that the IAEA needed legally binding verification rights extending beyond those provided under the Model Additional Protocol. Only the UN Security Council, by adopting a resolution under Chapter 7 of the UN Charter, which addresses threats to international peace and security, is in a position to provide those legal rights to the IAEA Secretariat; its board cannot.

It was only after Iran’s August 2005 breach of its November 2004 expanded commitment to suspend the conversion of uranium concentrates to uranium hexafluoride that the board found Iran to have been noncompliant. The vote on the September 24, 2005, resolution was 22-1, with 12 abstentions.

One good thing about the September 2005 resolution is that the board found “that Iran’s many failures and breaches of its obligation to comply with its NPT Safeguards Agreement, as detailed in [the November 10, 2003 report to the board] constitute non compliance in the context of Article XII.C” of the statute.[21] By confirming that the findings reported in November 2003 constituted noncompliance, the board mitigated the unhelpful precedent it had set at that time by refraining from a noncompliance finding. However, by the time the board, on February 4, 2006, finally decided to report the noncompliance to the Security Council,[22] and 10 months later the council adopted a resolution that legally required Iran to suspend its enrichment-related activities,[23] it was too late to stop Iran from disregarding these directives.

The Security Council’s Role

Under the statute, a country that the IAEA board finds to be in noncompliance must be referred to the Security Council. The board is not obliged to make this report immediately if it wishes to give the noncompliant state sufficient time to implement the necessary corrective actions. If the noncompliant state fully and proactively cooperates with the agency, the board will refer the case to the council for information purposes only, while likely praising the state for its constructive attitude, as it did in the case of Libya. If the noncompliant state uses delaying and deceptive tactics and does not provide prompt access to locations, equipment, documents, and relevant persons, the agency may temporarily need from the UN Security Council legally binding expanded verification rights.

As exemplified by the cases of Iran and North Korea, one of the greatest difficulties in deterring states from violating their nonproliferation undertakings and from ignoring legally binding Security Council resolutions is their hope that, for geopolitical or economic reasons, at least one of the five veto-wielding members of the council will oppose the adoption of effective sanctions.
To guarantee a timely council reaction in cases of noncompliance with safeguards agreements and to increase the likelihood of negative consequences for a state that does not comply with council and IAEA resolutions, the council should adopt a generic—that is, not state-specific—resolution under Chapter 7 of the UN Charter. To give the IAEA the verification tools it needs in case a noncompliant state does not adequately cooperate with the agency to resolve pending issues, the resolution should provide that, “upon request by the agency,” the Security Council would automatically adopt a specific resolution under Chapter 7 requiring that the state grant the IAEA extended access rights, as set out in a “temporary complementary protocol.” These rights would be terminated as soon as the IAEA Secretariat and board have drawn the conclusion that the country has no undeclared nuclear material or activities and that its declarations to the IAEA are correct and complete.

Under the multistage process foreseen in this generic resolution, if the IAEA director-general were unable to report within 60 days of the adoption of the state-specific resolution that the noncompliant state was fully implementing the temporary complementary protocol, the Security Council would adopt a second specific resolution requiring the state to suspend immediately all enrichment- and reprocessing-related activities. If the noncompliant state further refused to implement the relevant Security Council resolutions fully, the Security Council would adopt a third Chapter 7 resolution calling on all states to suspend military cooperation, including the supply of equipment, with the noncompliant state as long as it remained in noncompliance with council and IAEA resolutions. A priori council agreement that all military cooperation with that state would be suspended in these circumstances should constitute a strong disincentive for states to defy legally binding council resolutions, but would in no way affect the well-being of ordinary citizens.

Had such a generic resolution existed before 2002, the foreign ministers of France, Germany, and the United Kingdom (the EU-3) would not have negotiated the October 2003 deal in Tehran. Under that deal, Iran agreed “voluntarily to suspend all enrichment activities as defined by the IAEA” while the September 2003 board resolution had called on Iran to suspend all further enrichment-related activities, a term that is much broader in scope. In exchange for this limited and nonbinding pledge to the EU-3, Iran received the tacit commitment of the three countries not to support an IAEA resolution referring Iran’s noncompliance to the Security Council. By failing to find Iran in noncompliance in November 2003, the IAEA board created a damaging precedent with far-reaching consequences that are still felt today.

### Withdrawing From the NPT

Another particularly threatening case for international peace and security is the withdrawal from the NPT of a non-nuclear-weapon state that has been found by the IAEA to be in noncompliance with its safeguards agreement. As has been stressed on many occasions, the great benefit that the NPT brings to the international community would be dangerously eroded if countries violating their safeguards agreements or the NPT felt free to withdraw from the treaty, develop nuclear weapons, and enjoy the fruits of their violation with impunity.

To address this issue, the Security Council should adopt under Chapter 7 of the UN Charter another generic and legally binding resolution, stating that a country’s withdrawal from the NPT (an undisputed right under the treaty’s Article X.1) after being found by the IAEA to be in noncompliance with its safeguards undertakings constitutes a threat to international peace and security, under Article 39 of the UN Charter. This generic resolution should also provide that, under these circumstances, all materials and equipment made available to such a state or resulting from the assistance provided to it under a comprehensive safeguards agreement would have to be sealed by the IAEA and, as soon as technically possible, removed from that state under IAEA supervision and remain under agency safeguards. If the state still refused to comply, then any military cooperation between that state and other UN member states would be suspended.

Another important preventive measure would be for the IAEA board to urge all states with enrichment or reprocessing facilities to conclude “back-up” safeguards agreements that would not
Conclusion

IAEA safeguards play a key role in the international community’s attempts to ensure that nuclear energy is used in non-nuclear-weapon states exclusively for peaceful purposes. By deterring states from seeking nuclear weapons, safeguards play a major role in preventing proliferation. Yet, deterrence can be effective only if states believe that noncompliance has a strong chance of being detected and if its detection has consequences.

President Barack Obama noted both elements in his 2009 Prague speech: “We need more resources and authority to strengthen international inspections. We need real and immediate consequences for countries caught breaking the rules or trying to leave the treaty without cause.”

The IAEA should not be complacent toward states violating their nonproliferation undertakings. That said, the weakest link in the nonproliferation regime today is not the performance of the IAEA Department of Safeguards but that of the international community in responding to noncompliance. The burden here falls largely on the IAEA board and the UN Security Council.

The adoption of UN Security Council Resolution 1887, which emphasizes that noncompliance with nonproliferation obligations must be brought to the attention of the Security Council, is a significant but insufficient step in the right direction. It is a call for states to strengthen the NPT and to comply fully with all their obligations, to ratify the Comprehensive Test Ban Treaty, to adopt stricter national controls for the export of sensitive nuclear fuel-cycle technologies, and more. However, states are not obliged to follow the recommendations contained in the resolution.

Therefore, states should discuss and agree on legally binding generic procedures for responding to noncompliance. Because members of the Security Council would not know which states might be involved in the future, such discussions should be easier and less acrimonious than they would be during the heat of a crisis. An agreement on a set of standard responses to be applied evenhandedly to any state found in noncompliance, regardless of its allies, would significantly enhance the credibility of the nonproliferation regime.

Finally, considering the precedent that North Korea set in 2003, it is necessary to plan for the possibility of another state withdrawing from the NPT. The most critical step would be for the Security Council to adopt a resolution, under Chapter 7 of the UN Charter, deciding that the withdrawal of a noncompliant state from the NPT would be considered a threat to international peace and security.

If adopted, the concrete measures recommended in this article would make a real difference in protecting against nuclear proliferation; but all countries, not only the five permanent members of the Security Council, will first need to acknowledge that these measures should be adopted now in order to mitigate the consequences of the next potential proliferation crisis. Protecting against that dangerous prospect is in everyone’s best security interest.


3. The Safeguards Implementation Report, submitted every year to the board, provides a description and analysis of the agency’s safeguards operations during the previous year, including a summary of the problems encountered and the secretariat’s findings and conclusions.

4. Article 39 of comprehensive safeguards agreements provides that “the Agency and the State shall make Subsidiary Arrangements which shall specify in detail...how the procedures laid down in the Agreement are to be applied.”


10. IAEA, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran: Report by the Director General,” GOV/2005/75, November 10, 2003, www.iaea.org/Publications/Documents/Board/2003/gov2003-75.pdf. Another factor was that the report on Iran stated that, “[t]o date, there is no evidence that the previously undeclared nuclear material and activities referred to above were related to a nuclear weapons programme.” This formulation set the bar too high for the agency by suggesting that evidence of a nuclear weapons program was required for a finding of noncompliance.


12. IAEA Statute, art. III.B.4. These questions would cover areas such as nuclear weaponization-related activities.

13. James Acton, e-mail communication with author, October 23, 2009.

14. Nonproliferation official, e-mail communication with author, November 28, 2009.

15. Ibid.

17. Ibid., para. 4(ii).


19. As John Carlson recently wrote,

A judgment on noncompliance cannot wait until the state has succeeded in acquiring nuclear weapons. If the standard of proof is set too high, the IAEA is bound to fail in its responsibility to provide the international community with timely warning. To prove the existence of a nuclear weapons program is unrealistic. A state having a nuclear weapon or nuclear weapons components or conducting weaponization experiments with nuclear material is unlikely to be caught red-handed. More likely, a state facing obvious exposure would deny inspectors access to the location concerned, preferring to argue whether lack of cooperation constitutes noncompliance, maintaining some ambiguity about its actions. When the board determines that a state has intentionally not declared nuclear material, it must initially presume that the material was not intended for peaceful purposes. The smoking gun is the failure to declare nuclear material.


22. Cuba, Syria, and Venezuela voted against the resolution, and five states (Algeria, Belarus, Libya, Indonesia, and South Africa) abstained.


25. Ibid., pp. 27-43.


27. See generally Goldschmidt, “Concrete Steps to Improve the Nonproliferation Regime.” See Annex II for the proposed model resolution.

28. A Comprehensive Safeguards Agreement (INFCIRC/153 corrected) remains in force only for so long as the state remains party to the NPT, whereas under an INFCIRC/66-type agreement, all nuclear material supplied or produced under that agreement would remain under safeguards, even if the state withdraws from the NPT, until such time as the IAEA has determined that such material is no longer subject to safeguards.
