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Concrete Steps to Improve the Nonproliferation Regime

Pierre Goldschmidt

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Summary

Today's nuclear nonproliferation regime is increasingly challenged by states that exploit ambiguity in rules and rifts in the international community to pursue nuclear weapon capabilities without fear of reprisal. At present, lax and inconsistent compliance practices threaten nonproliferation efforts by giving some states more leeway for evading rules than should be tolerable in an effective nonproliferation regime.

Observers differ on the political feasibility of persuading the world to adopt the necessary nonproliferation measures and comply with them. Pessimists believe that the necessary consensus will not be created—in the International Atomic Energy Agency's (IAEA) Board of Governors, in the Nuclear Suppliers Group, among parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) or in the United Nations Security Council (UNSC). Optimists refuse to give up trying. Yet all who think the nonproliferation regime is failing, or who agree that it is too valuable to let fail, would generally agree on steps that could be taken to strengthen it.

This paper offers specific policy recommendations in three areas.

First is the necessity for the IAEA to fully exercise its existing verification authority. In particular, the Agency should reassert and enforce its right to make "special inspections" at undeclared locations in non-nuclear-weapon states and its right to obtain and verify design information as soon as a state decides to construct a new nuclear facility.

Second, the IAEA should take steps to ensure that cases of noncompliance with safeguards agreements are detected and reported rapidly to the IAEA Board of Governors and thereafter to the UNSC. The Board should therefore adopt two resolutions, the first requiring member states to provide more information on past and future transfers of nuclear material and equipment, and the second recognizing that previous failures and breaches committed by South Korea and Egypt constituted cases of noncompliance with their safeguards agreements. This latter step, without seeking any punitive action, would reassert the fairness and universality of procedures for reporting noncompliance as envisioned in the IAEA Statute.

The third and most important category of measures is necessary to help prevent future proliferation crises. This category includes securing the irreversibility of safeguards on nuclear material and facilities even if a state withdraws from the NPT, and adopting generic, legally binding Security Council resolutions that would improve the response to cases of prolonged noncompliance and NPT withdrawal.

In addition, this paper makes the following recommendations:

- The IAEA Board of Governors should adopt a resolution determining that the information and access to specified locations made available by Syria are not adequate for the Agency to fulfil its responsibilities and requesting the Director General to undertake without delay the necessary “special inspections” in Syria, as provided under its safeguards agreement.
- The Board of Governors should adopt a resolution requiring all IAEA member states to provide, on a quarterly basis, certain information that would improve the IAEA’s ability to uncover undeclared nuclear activities.
- The Board of Governors should adopt a resolution requiring that all sensitive nuclear fuel cycle facilities under safeguards be covered by a “66-type” safeguards agreement with the IAEA, which, contrary to a comprehensive safeguards agreement (CSA),¹ would not lapse if the state were to withdraw from the Non-Proliferation Treaty.

The paper also recommends that the IAEA Secretariat be required by the Board of Governors to:

- Name, both in its annual report and in the published section of its annual Safeguards Implementation Report (SIR), those states with significant nuclear activities that have not yet signed or ratified an Additional Protocol.²
- Report more explicitly in the restricted section of the SIR on the difficulties encountered by the Agency in implementing its verification activities, and any finding that might raise proliferation concerns, including the names of states not fully cooperating with the Agency.
- Provide an evaluation of the effectiveness and necessary independence of State Systems of Accounting for and Control of Nuclear Material (SSAC), starting with those states that have previously been found to be in breach of their safeguards obligations.

This paper does not suggest how to produce the political will to motivate the IAEA Secretariat and Board of Governors, and the UN Security Council, to adopt these practical measures. Rather, it seeks to counter the view that the nonproliferation regime is terminally weak and could not be made more effective. The feasible steps recommended here would significantly strengthen the nonproliferation regime without requiring modification of the NPT or comprehensive safeguards agreements. They are straightforward procedural changes that would make a real difference in protecting against proliferation, if key governments decided to make this a priority.

Introduction

The withdrawal of North Korea from the NPT in 2003 and the enduring crisis over Iran's noncompliance with its nuclear nonproliferation obligations have led many officials and observers to conclude that the nonproliferation regime is doomed to failure. Some say that the regime worked exceptionally well for three decades, which is a great achievement, but has been eroded to the point of collapse by the tides of history. Others say that treaty-based nonproliferation was always a fool's errand, and the folly is finally being exposed. Such pessimism is premature, dangerous, and potentially self-fulfilling. Moreover, by castigating the "nonproliferation regime" or "inspections," the pessimists deflect attention from where the real problem lies: the weak political will and shortsighted nuclear policies of key states.

The greater the number of states possessing nuclear weapons, the greater the risk that one day, by design or accident, they will be used by a state or a nonstate actor with catastrophic consequences. The international community must therefore reject the recent tendency to accept the idea that, sooner or later, more countries will possess nuclear weapons, and that we can do nothing to stop it.

Those who think the nonproliferation regime is failing and those who think it is too valuable to let fail would generally agree on steps that could be taken to strengthen it. They differ more on the political feasibility of persuading the world to adopt necessary steps and comply with them. This points to the heart of the challenge: to motivate the governments—whose cooperation is needed to strengthen nonproliferation rules and their enforcement—to determine a reasonable "price" for their cooperation. The present paper does not attempt to say how to produce the political will to cooperate. Rather, it provides detailed examples of feasible steps that would significantly strengthen the nonproliferation regime without requiring modification of the NPT or comprehensive safeguards agreements: straightforward procedural changes that would make a real difference in protecting against proliferation, if key governments decided this was a priority.

There are practical steps that can be taken to "dissuade" and "deter" non-nuclear-weapon states from seeking nuclear weapons, if the international community—particularly the nuclear-weapon states—make this a higher priority other than in words.

"Dissuasion" entails persuading a state (both the leaders and the people) that it is not in that state's best interest to acquire a nuclear weapons capability. Dissuasion can mainly, if not exclusively, be achieved through bilateral and multilateral negotiations that seek, first of all, to provide appropriate security

guarantees. The most remarkable achievement in recent years has been the success of secret diplomacy in convincing Libya's leadership that abandoning its weapons of mass destruction and missile programs actually would increase the country's security and improve its economic development. As with Libya, to be most effective, efforts at persuasion should be undertaken well in advance of any anticipated crisis to be most effective.

"Deterrence" plays its role when a non-nuclear-weapon state cannot be persuaded that acquiring a nuclear weapons capability is not in its best interest. It is essential for any such state to know that any undeclared nuclear weapons program has a high probability of *early* detection and that negative consequences are not simply possible but *unavoidable*, unless the noncompliant state fully and proactively cooperates with the IAEA. Unfortunately, neither of these two deterrents (early detection, unavoidable consequences) is credibly in place today, making it essential to take the practical steps necessary to improve the situation.

The head of the IAEA, Mohamed ElBaradei, recently insisted that it is necessary to "give the International Atomic Energy Agency sufficient legal authority [...] to ensure that non-nuclear-weapon states use nuclear energy exclusively for peaceful purposes. The IAEA and the Security Council together must be able to effectively deter, detect and respond to possible proliferation cheats."³ The question is: how does one achieve these goals in practice? This analysis recommends urgent action by the IAEA and the Security Council before the next proliferation crisis takes place.

The recommended actions fall into three categories. First is the necessity for the IAEA to fully exercise its existing verification authority, in particular by reasserting and enforcing its right to make "special inspections" at undeclared locations in non-nuclear-weapon states and its right to obtain and verify design information as soon as the decision is made to construct a nuclear plant. Second, it is crucial that cases of noncompliance with safeguards agreements be detected and reported rapidly to the IAEA Board of Governors and thereafter to the Security Council. The Board should therefore adopt two resolutions, the first requiring member states to provide more information on past and future transfers of nuclear material and equipment, and a second unequivocally recognizing that previous failures and breaches committed by South Korea and Egypt constituted cases of noncompliance with their safeguards agreements. The third and most important category of measures is necessary to help prevent future proliferation crises. This category includes securing the irreversibility of safeguards on nuclear material and facilities, even if a state withdraws from the NPT, and adopting generic, legally binding UNSC resolutions that would improve the response to cases of prolonged noncompliance and NPT withdrawal.

Exercising Fully Existing IAEA Verification Authority

The International Atomic Energy Agency safeguards system is being implemented more effectively and efficiently than ever before.

Traditionally, the Agency focused on accounting for nuclear materials facility by facility in a state. This work was done only at declared facilities and was largely an audit. Over the last ten years, however, the Agency has stepped back and developed an analytical approach that asks not simply whether the declared numbers add up, but also, “What’s going on in this state’s nuclear program? Is *everything* really consistent?”

At the heart of this approach is the production and periodic update of State Evaluation Reports (SERs) and corresponding action plans. SERs combine the results of inspections in the field and environmental swipes with analyses of open-source information and satellite imagery. Reports analyze the history of all anomalies and inconsistencies recorded during previous inspections. They examine whether a state’s research and development program is internally consistent, corresponds with stated purposes, and points to a commitment to use nuclear technology exclusively for peaceful purposes. The SERs analyze export and import notifications regarding relevant nuclear material and equipment, and other information available to the IAEA. Every SER also includes a section that examines the most likely diversion scenarios, should the state under review seek to undertake undeclared nuclear activities for military purposes. These SERs are among the most confidential documents used by the IAEA Secretariat.

In parallel with these developments, the IAEA has replaced almost all analogue video cameras with digital surveillance cameras and is replacing older electronic seals with new sealing systems.

Progress is also being made in the use of more advanced equipment, such as ground penetration radars and infrared imaging methods, to improve the Agency’s ability to verify that complex facilities conform to their official design. New high-resolution panchromatic satellite imagery and all-weather monitoring capabilities are now available to the Agency.

To be sure, there are still problems inherent in ensuring that even small amounts of nuclear material—a few kilograms among tons—are not diverted without timely warning, but the trend in the technical capability of the safeguards system is positive. Still, some states continue to resist the remote transmission of safeguards data to IAEA headquarters or the adoption of updated safeguards approaches for fuel cycle facilities.

One of the biggest problems, however, is that the IAEA has failed to exercise fully the verification authority it already has. Additionally, the international community has failed to strengthen the Agency’s authority without delay in

precisely the situations where it is most necessary, i.e., when a state has been found to be in noncompliance with its safeguards undertakings or is suspected of concealing nuclear material or activities.

Concerning the failure to fully use the IAEA's existing verification authority, two recent examples are worth analyzing:

- Syria's repeated refusal to allow the IAEA to visit a number of locations that could be related to undeclared nuclear activities, and the Board's unwillingness to require a "special inspection" as foreseen in Syria's safeguards agreement.
- Iran's unilateral decision not to provide to the IAEA early design information on new facilities and access to some of those under construction, and the Board's reluctance to declare that this constitutes noncompliance.

Requiring Special Inspections

The IAEA has the legal authority, under comprehensive safeguards agreements (CSA) "to conduct special inspections insofar as these relate to the verification of the existence or non-existence of undeclared activities."⁴ As then-IAEA Director General Hans Blix stated in January 1992, the Agency has "the authority, under the Statute and under comprehensive safeguards agreements concluded with it, to request special inspections at undeclared sites."⁵

In February 1992, the Board reaffirmed the Agency's right to undertake special inspections, when necessary and appropriate, as described in comprehensive safeguards agreements, and to ensure that all nuclear materials in peaceful nuclear activities are under safeguards.

The IAEA's record of invoking special inspections is minimal. It has done so twice. Once in 1992 at Romania's request, and, again, in 1993 to investigate inaccuracies in North Korea's initial report. North Korea refused, leading the IAEA to report the noncompliance to the Security Council.⁶

In November 2008, a report to the IAEA Board of Governors on the implementation of safeguards in Syria⁷ indicated that Syria denied the Agency access requested in early May 2008 to three locations as well as to relevant documentation and information. This noncooperation prevented the Agency from carrying out without delay its verification activities, including the determination of the origin of the manmade natural uranium particles found at the Dair Alzour site bombed by Israel in September 2007. Moreover, the report explains that "*analysis of satellite imagery taken of these locations indicates that landscaping activities and the removal of large containers took place shortly after the Agency's request for access,*" raising suspicion of large-scale concealment activities.

A new report on Syria, released on February 19, 2009,⁸ acknowledges that Syria continues to deny the access required by the Agency, that no progress

has been made by the Agency in determining whether the building destroyed at the Dair Alzour site was a nuclear facility under construction, nor in determining the origin of anthropogenic uranium particles “*of a type not included in Syria’s declared inventory of nuclear material.*”

Syria’s safeguards agreement provides that the Agency may make special inspections “*if the Agency considers that information made available by the State [...] is not adequate for the Agency to fulfil its responsibilities under the Agreement.*” It also provides that the Board may decide that an action by the state is essential and urgent and that the Board shall be able to call upon the state to take the required action without delay.

By not requiring a special inspection, the IAEA is undermining the future use of this fundamental verification tool and is unnecessarily eroding confidence in the effectiveness of Agency safeguards.

When a state repeatedly refuses Agency access to a suspected location, it is not enough to have the Director General urge the state to provide more transparency and to voluntarily allow visits to these locations. If the only consequence is that the Director General reports at each Board meeting that no progress has been made, this will encourage any noncompliant state to adopt similar obstructive tactics, preventing the IAEA from implementing effective safeguards verifications.

As James Acton has noted, “Syria is the textbook definition of a case in which a special inspection is merited. If the IAEA fails to ask for one, it will hand future states suspected of non-compliance an extraordinary powerful precedent to use in opposing a special inspection request.”⁹

Recommendations

The IAEA Board of Governors should adopt a resolution

- Determining, as foreseen in Article 73 of Syria’s Safeguards Agreement, that the information made available by Syria “*is not adequate for the Agency to fulfil its responsibilities under the Agreement*”;
- Expressing serious concern about Syria’s repeated refusal to provide the Agency with the requested information, documentation, and access to specified locations;
- Expressing further concern about the reported landscaping activities and the removal of large containers, which took place shortly after the Agency’s request for access, as well as concern about the presence, in environmental samples taken from the Dair Alzour site, of a significant number of anthropogenic uranium particles of a type not included in Syria’s declared inventory of nuclear material;

- Deciding, under Article 18 of Syria's Safeguards Agreement, that action by Syria is essential and urgent;
- Requesting the Director General to undertake without delay the necessary special inspections in Syria.

Obtaining and Verifying Early Design Information

A little-noticed but most important provision of comprehensive safeguards agreements is the obligation for the state to provide the IAEA with design information on all existing as well as new nuclear facilities, as specified in the "Subsidiary Arrangements."

Safeguards agreements provide that "*The Agency and the State shall make Subsidiary Arrangements which shall specify in detail, to the extent necessary to permit the Agency to fulfil its responsibilities under the Agreement in an effective and efficient manner, how the procedures laid down in the Agreement are to be applied*" (§39). In addition, "*Subsidiary Arrangements shall enter into force at the same time as, or as soon as possible after, the entry into force of the Agreement.*"

The 1976 version of the Subsidiary Arrangements General Part "Code 3.1" stipulates that the state should provide the Agency a completed design information questionnaire for new facilities "*normally no later than 180 days before the facility is scheduled to receive nuclear material for the first time.*" After the discovery of Iraq's undeclared nuclear program in 1991, it became clear and was acknowledged by the IAEA that "*Experience has shown that the provision of design information is needed much earlier.*"¹⁰ Therefore, the Secretariat recommended, inter alia, that parties to a CSA should "*provide the Agency with completed Design Information Questionnaires for new facilities based on preliminary construction plans as early as possible, and in any event not later than 180 days prior to the start of construction.*"

In February 1992, the Board endorsed these recommendations and "*requested the Secretariat and all parties to comprehensive safeguards agreements to adopt, where appropriate, the related Subsidiary Arrangements.*"

In February 2003, Iran became the last state with significant nuclear activities to adopt the revised Code 3.1 on the provision of early design information. This was done by an exchange of letters between Iran and the IAEA, which is the standard procedure. However, on March 29, 2007, Iran informed the Agency that it had "suspended" the implementation of the new Code 3.1 and reverted to the 1976 version. The Agency immediately asked Iran to reconsider its decision, explaining that "*In accordance with Article 39 of Iran's Safeguards Agreement, agreed Subsidiary Arrangements cannot be modified unilaterally.*"¹¹

Since then, the Director General has reported six times (August and November 2007 and February, May, September, and November 2008) that "*there has been no progress on this issue.*" This sentence did not appear anywhere in the February 2009 report, which reiterated, however, for the third time,

that in December 2007, the Agency requested preliminary design information for the nuclear power plant that Iran is to build in Darkhovin. Iran has not provided it.

To make things even worse and contrary to Article 48 of its safeguards agreement and past practice, Iran refused to allow the Agency to carry out in October 2008 the scheduled Design Information Verification (DIV) at the heavy water research reactor (IR-40) under construction in Arak. The Agency reiterated that its “*right to carry out DIV is a continuing right.*” Iran repeated its refusal in February 2009. This refusal “*could adversely impact the Agency’s ability to carry out effective safeguards at that facility, and has made it difficult for the Agency to report further on the construction of the reactor, as requested by the Security Council.*”¹²

This is not a small issue that the international community can let fade away with time because of weariness and lack of progress. Quite the contrary: the obligation to provide “design information as specified in the Subsidiary Arrangements General Part” is an integral part of CSAs. If a state unilaterally decides to “suspend” its implementation, this constitutes a breach of the safeguards agreement.

The fact is that without the obligation to provide early design information, Iran could construct an undeclared enrichment facility and hot cells suitable for reprocessing activities without having to inform the Agency until six months before introducing nuclear material.

Member States should be reminded that in May 2005 in a report to the Board on “Strengthening Safeguards Implementation in States with Small Quantities Protocols,” the Director General stated that “*in order to draw the required safeguards conclusions for States with CSAs, the Agency needs, inter alia, the authority: (a) to require the early submission of facility design information in accordance with the Board’s 1992 interpretation...*”¹³ In September 2005, the Board decided that, henceforth, it would approve only Small Quantities Protocols based on a revised standardized text that includes the obligation to provide early design information as mentioned above.¹⁴ How could the Board, today, permit without reaction a noncompliant state with significant nuclear activities to be exempted from this obligation?

Recommendations

The Board should adopt a resolution declaring that Iran’s multiple and continuous breaches of Article 48 of its safeguards agreement and of Code 3.1 of its Subsidiary Arrangements General Part constitute a case of noncompliance under Article XII.C of the IAEA Statute.

The purpose of such a resolution is not to increase penalties on Iran but to avoid establishing the wrong precedent.¹⁵

Detecting and Exposing Noncompliance

To better deter non–nuclear-weapon states from engaging in a nuclear weapons program, it is essential for any such state to know that undeclared nuclear activities have a high probability of early detection and that any case of non-compliance with their safeguards undertakings will be promptly reported to the IAEA Board of Governors. It is therefore necessary that the Agency be fully and systematically informed about international transfers of nuclear material and equipment as well as illicit procurement attempts and activities. It is also necessary, in order not to lower the standard for compliance, that the Board unequivocally recognize that previous failures and breaches committed by South Korea and Egypt constituted cases of noncompliance with their safeguards agreements.

Uncovering Undeclared Nuclear Trade and Activities

As far back as May 1992, the IAEA Secretariat had recommended that the Board of Governors call on Member States to report, on a quarterly basis, all exports and imports of equipment and non-nuclear material listed in an attachment corresponding to what is today Annex II of the Additional Protocol (AP). It is very unfortunate that this universal reporting system was not endorsed by the Board of Governors when the recommendation was made in 1992.

The Secretariat, in August 2006, also recommended that Member States provide information on their *past* nuclear activities. As experience has demonstrated (in particular in Iran), it is important for the Agency not only to be systematically informed, by both exporting and recipient states, of future transfers of the items listed in Annex II of the AP, but also to be informed of all such transfers that have taken place at least *since the recipient state joined the NPT*.

As recommended by the Secretariat, the Board of Governors should also “*request all States to provide to the Agency relevant information on exports of specified equipment and non-nuclear material, procurement enquiries, export denials, and relevant information from commercial suppliers in order to improve the Agency’s ability to detect possible undeclared nuclear activities.*”¹⁶

For the same reason, the Board of Governors should also require all Member States to provide, on a quarterly basis, information regarding each *import* of specified equipment and non-nuclear material listed in Annex II of the AP. Providing such information is presently not obligatory and, even under the terms of the AP, requires a specific request from the Agency to a particular state.

Recommendations

The Board of Governors should approve and publish a list of information that Member States are expected to communicate to the Agency in accordance with Article VIII.A. of the IAEA Statute that states, “*Each member should make available such information as would, in the judgment of the member, be helpful to the Agency.*”

In the meantime, and as a first step, the IAEA Director General should issue an Information Circular to all Member States, drawing their attention to the fact that providing such information is most valuable for the Agency to fulfill its mandate and that the Secretariat expects all Member States to do so on a quarterly basis.

Exposing Noncompliance

Experience with North Korea and Iran has demonstrated that noncompliance must be addressed promptly and effectively. Iran has sought to exploit inconsistencies in how the IAEA reports violations, including its own case and that of Libya, as well as the less worrying but still significant cases of South Korea and Egypt. Clarifying the technical and statutory basis by which the IAEA exposes noncompliance is one immediate way the nonproliferation regime can be strengthened.

According to Article XII.C of the IAEA Statute, reporting a state to the Security Council for noncompliance with its safeguards undertakings can be seen as a process comprising the following steps, the last three of which can be taken in sequence or simultaneously:

1. Agency inspectors report any noncompliance to the Director General through the head of the Department of Safeguards.
2. The Director General transmits the report to the Board of Governors.
3. The Board makes a formal finding of noncompliance.
4. The Board calls upon the state in question “to remedy forthwith any non-compliance which it finds to have occurred.”
5. The Board reports the noncompliance to all members and to the Security Council and General Assembly of the United Nations.

Since 2003, the IAEA Secretariat has reported specific cases of noncompliance with safeguards agreements by Iran, Libya, South Korea, and Egypt to the Board (step 2). The actions taken by the Board in each case were not consistent and, if they go uncorrected, will create unfortunate precedents.

Whether or not the word “noncompliance” is used in the report transmitted to the Board in step 2 is irrelevant, as demonstrated by the case of Libya, which admitted to working on an undeclared nuclear weapons program for many years. This was an indisputable case of noncompliance with Libya’s NPT and safeguards undertakings. However, in the Director General’s report to the Board in February 2004, the word “noncompliance” was not used; rather, it was stated that “Libya was in breach of its obligation to comply with the provisions of the Safeguards Agreement,” which is synonymous.¹⁷ Certainly to be “in breach of one’s obligations to comply” and to be in “noncompliance” is a distinction without a difference.

The same language was used in the Director General's November 2003 report on Iran. The report stated that "in the past, Iran has concealed many aspects of its nuclear activities, with resultant breaches of its obligation to comply with the provisions of the Safeguards Agreement," which "has given rise to serious concerns."¹⁸

Instead of referring to "breaches of its obligation to comply" as the reports for Iran and Libya did, the reports on South Korea in November 2004¹⁹ and Egypt in February 2005²⁰ use the following language:

"The ROK [Republic of Korea] conducted experiments and activities involving uranium conversion, uranium enrichment and plutonium separation, which it *failed to report* to the Agency *in accordance with its obligation* under its Safeguards Agreement"; these failures were "a matter of serious concern."

In the case of Egypt, "the Agency has identified a number of *failures by Egypt to report* to the Agency *in accordance with its obligations* under its Safeguards Agreement"; and "the repeated failures by Egypt to report nuclear material and facilities to the Agency in a timely manner are *a matter of concern*." (emphasis added)

The question has therefore been raised about what exactly constitutes non-compliance under Article XII.C of the IAEA Statute. Clearly a failure to declare nuclear material and activities that should be subject to IAEA safeguards cannot be considered a small, technical reporting mistake.²¹ If such failures have taken place over an extended period of time or were deliberately concealed, or both, they must be categorized as noncompliance. If these activities had a plausible military purpose or involved military organizations, then they are of even greater concern. The same is true if the noncompliant state does not fully and proactively cooperate with the IAEA to remedy the situation.

As demonstrated in a previous analysis,²² the failures and breaches committed by South Korea and Egypt, which were reported to the Board in 2004 and 2005, respectively, should be unequivocally recognized to constitute cases of noncompliance with their comprehensive safeguards agreements and, as such, should be reported to the UN Security Council in accordance with Article XII.C of the IAEA Statute.²³ Such reports, by not recommending any further action or any sanction, would demonstrate that when states cooperate with the IAEA in ceasing and clarifying their problematic actions, the proper reporting procedures need not be controversial or troublemaking.

Recommendations

The Board should adopt a resolution acknowledging that the failure by South Korea to declare a number of experiments and activities involving nuclear material, as reported to the Board in November 2004, constitutes noncompliance with its safeguards agreement (in the context of Article XII.C of the Statute). Such a resolution also could commend South Korea for its subsequent cooperation with the Agency in providing access to information, documents, persons,

and locations, and welcome the fact that the Agency has concluded that *all* nuclear material in South Korea remained in peaceful activities. The IAEA Board should request the Director General to report this resolution and all reports and the Chairman's conclusions relating to South Korea to the Security Council for information purposes only.²⁴

Similarly, the Board should adopt a resolution acknowledging that Egypt's failure to report a number of nuclear materials and activities, as reported to the Board in February 2005, constitutes noncompliance with its safeguards agreement (in the context of Article XII.C of the Statute), and commend Egypt for its cooperation with the Agency. The resolution should underline the necessity for Egypt to sign and ratify the Additional Protocol promptly²⁵ and, in the meantime, to fully implement its provisions on a voluntary basis, at least until such time the IAEA Secretariat has concluded that Egypt's declarations are correct and complete.²⁶ The Board resolution should also request the Director General to report the resolution and all reports and the Chairman's conclusions relating to Egypt to the Security Council for information purposes only and to provide an updated report on its verification findings in Egypt.

To be clear, the purpose of such actions should not be to seek any punitive measures or anything more than conformity to the IAEA statutory requirement. This would establish an important and correct precedent, thereby avoiding any impression that the implementation of the IAEA Statute is selective. Failure to adopt such a resolution would result in a dangerous precedent that lowers the standards for compliance with the CSA and could seriously undermine the credibility of the safeguards regime.

Finally, the Board should request the Secretariat to report more explicitly on borderline cases in the annual Safeguards Implementation Report, with the names of the states concerned and a description of the difficulties faced in implementing its verification activities or any finding that may potentially raise proliferation concerns. Experience has shown that disclosure in this report of the names of states that are not fully cooperating with the Secretariat has often had a positive effect.²⁷ This practice should be continued and expanded. It would allow the Board, if it deems necessary, to request more information from the Secretariat on any specific case of possible proliferation concern.

Prevention and Deterrence

Ensuring enforcement is a major component of deterrence. If a state has been found to be in noncompliance with its safeguards undertakings and refuses to promptly, fully, and proactively cooperate with the Agency, it must trigger a number of well-defined and credible consequences agreed to by the Security Council. Actions are also necessary to assure the international community that if a state withdraws from the NPT, all nuclear material delivered to that state while and because it was a party to the treaty will irreversibly remain under IAEA safeguards and not be used for military purposes. These actions should include

adopting two generic, legally binding UNSC resolutions that would improve the response to cases of prolonged noncompliance and to NPT withdrawal.

Dealing Preventively With Noncompliance

Mohamed ElBaradei has recommended that the IAEA and the UN Security Council work together to, “effectively deter, detect and respond to possible proliferation cheats.”²⁸

Experience has taught us, in particular in the cases of North Korea and Iran, that when a state is found to have been in noncompliance with its safeguards agreements (or in breach of its obligation to comply with its safeguards agreements, which is synonymous) and does not show full transparency and cooperation in resolving questions and/or inconsistencies with regard to its nuclear program (both past and present), the Agency will temporarily need expanded verification authority. This expanded authority needs to go beyond that granted under a comprehensive safeguards agreement and the additional protocol. Greater authority will be necessary in these circumstances to provide *in a timely manner* an adequate level of assurance that there are no undeclared nuclear material and activities in that state and that no previously undeclared nuclear activities have been undertaken in furtherance of any military purpose.

This is clearly reflected in the IAEA’s report of September 2005 on Iran, where it is stated²⁹:

In view of the fact that the Agency is not yet in a position to clarify some important outstanding issues after two and a half years of intensive inspections and investigation, Iran’s full transparency is indispensable and overdue. Given Iran’s past concealment efforts over many years, such transparency measures should extend *beyond the formal requirements of the Safeguards Agreement and Additional Protocol* and include access to individuals, documentation related to procurement, dual use equipment, certain military owned workshops and research and development locations. Without such transparency measures, the Agency’s ability [...] to verify the correctness and completeness of the statements made by Iran will be restricted. (emphasis added)

The problem is that these additional “transparency measures” have not been defined in any precise way and when they are requested under an IAEA Board resolution (as was the case on February 4, 2006³⁰), they are not legally binding on the noncompliant state, unless backed by the Security Council.³¹

These broader access rights must not exclude military sites, since it would be likely for the military (or related actors) to be involved in nuclear activities associated with a weapons program, should one exist.³² At the same time, military sites may contain sensitive information that would not be relevant to the Agency’s investigation. Therefore the Agency’s activities on such sites may need to be conducted under “managed access” conditions, which protect such information while allowing the Agency to reach its objective.

Denial of, or unwarranted delays in, access should be reported by the Director General to the Board of Governors and, as appropriate, to the Security Council.

To give the IAEA the verification tools it needs in cases of noncompliance, the UNSC should adopt a *generic* resolution (under Chapter VII of the Charter),³³ stating independently of any specific case, if a state is found by the IAEA to be in noncompliance with its comprehensive safeguards agreement in accordance with Article XII.C of the IAEA Statute, *upon request by the Agency*, the UNSC would automatically adopt a *specific* resolution under Chapter VII requiring that state to grant to the Agency extended access rights. These rights, which are defined in the Temporary Complementary Protocol (TCP) annexed to the draft UNSC resolution in Annex I, would be used to resolve outstanding issues. These rights would be *terminated* as soon as the Agency's Secretariat and the Board of Governors have drawn the conclusion that there are no undeclared nuclear material and activities in the state and that its declarations to the IAEA are correct and complete.

Under the multi-stage process foreseen in the above UNSC generic resolution,³⁴ if the Director General of the IAEA were unable to report within 60 days of the adoption of the state-specific resolution that the noncompliant state is fully implementing the TCP, the UNSC shall adopt a second specific resolution requiring the state to immediately suspend all uranium and plutonium conversion and enrichment-related activities as well as all reprocessing-related activities.

If the noncompliant state further refused to fully implement the relevant UNSC resolutions, the Security Council shall adopt a third Chapter VII resolution calling on all states to forthwith suspend the supply of any military equipment and cooperation with the noncompliant state as long as it remains in noncompliance with Security Council and IAEA resolutions. It is indeed logical and legitimate for the Security Council to agree *a priori* that in these circumstances all military cooperation with that state would be suspended. This should constitute a strong disincentive for states to defy legally binding UNSC resolutions, but would in no way impact the well-being of their people.

Recommendation

As exemplified by the cases of North Korea and Iran, one of the greatest difficulties in deterring states from violating their nonproliferation undertakings and from ignoring legally binding UNSC resolutions is their hope that for geopolitical or economic reasons at least one of the five veto-wielding members of the UNSC will oppose the adoption of effective sanctions.

To guarantee a timely UNSC reaction in case of noncompliance with comprehensive safeguards agreements and to increase the likelihood of negative

consequences if the state does not comply with UNSC and IAEA resolutions, the Security Council should adopt a generic resolution, under Chapter VII of the UN Charter, based on the model contained in Annex I.³⁵

Dealing Preventively With NPT Withdrawal

A 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 treaty felt free to withdraw from it, develop nuclear weapons, and enjoy the fruits of their violation with impunity.

To address this issue the Security Council should adopt (under Chapter VII of the UN Charter) another *generic* and legally binding resolution, stating that if a state withdraws from the NPT (an undisputed right under its Article X.1) *after* being found by the IAEA to be in noncompliance with its safeguards undertakings, then such withdrawal constitutes a threat to international peace and security, as defined under Article 39 of the UN Charter. This generic resolution (see Annex II) 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 forthwith frozen and as soon as possible removed from that state under IAEA supervision and remain under the Agency's safeguards.

Recommendations

In order to better deter a state found to be in noncompliance with its comprehensive safeguards agreements from thereafter giving notice of its withdrawal from the NPT and to guarantee a timely and effective Security Council reaction in such a case, the Security Council should adopt a generic resolution, under Chapter VII of the UN Charter, based on the model contained in Annex II.

Securing Irreversible Safeguards

One of the greatest weaknesses of the model CSA is its Article 26, which stipulates that the Agreement is to “*remain in force as long as the State is party to the Treaty on the Non-Proliferation of Nuclear Weapons.*” Nothing is said about what would happen if the state withdraws from the NPT in conformity with its Article X.1, or if the CSA should become inoperative for any reason.

It would be logical to forbid a withdrawing state the free use—possibly for military purposes—of material and equipment delivered while and because it was a party to the NPT. It is therefore highly important to guarantee that such material and equipment remain under IAEA safeguards, even if a state withdraws from the NPT or otherwise unilaterally terminates any safeguards agreement.

Recommendations

To address this problem, the IAEA Board of Governors and the General Conference should adopt resolutions stating that it should become a norm that *all sensitive nuclear fuel cycle facilities*, such as enrichment and reprocessing plants under safeguards, including in states with a CSA in force, be covered also by what is known as a “66-type” safeguards agreement. Contrary to a CSA, 66-type safeguards do not lapse if the state withdraws from the NPT. Such a 66-type safeguards agreement would, by its terms, only become operative if a state withdrew from the NPT or if the CSA became inoperative for any reason.

The Nuclear Suppliers Group should adopt this requirement as an export condition, starting with all material and equipment related to sensitive nuclear fuel cycle facilities. The governments of the Netherlands, Germany, Japan, Brazil, and Argentina should lead by example and conclude with the IAEA such 66-type safeguards agreements for their enrichment and reprocessing facilities.

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 for exclusively peaceful purposes. By deterring states from seeking nuclear weapons, safeguards have the capability of preventing proliferation. Deterrence can only be effective however if states believe that noncompliance has a high chance of being detected *and* if it carries consequences.

Over the last ten years the IAEA has made great strides in enhancing the effectiveness of safeguards. In parallel to a host of technical improvements, the internal culture of the Department of Safeguards has changed radically: inspectors are increasingly thinking of themselves less like accountants and more like detectives. The next step should be for the Agency to use its *existing* legal authority to the full. In particular, it should make use of its right to conduct special inspections at undeclared locations when states are otherwise denying access. The Agency should also require states to provide data—particularly about exports and imports—that would help it fulfil efficiently its mandate. Recently the obligation of states to provide early design information about new facilities and the Agency’s right to verify it have been challenged by Iran’s refusal to comply with its undertakings. Where that occurs, it should be recognized for what it is: noncompliance. The Agency should not be complaisant toward states that are violating their obligations.

That said, the weakest link in the nonproliferation regime today is not the performance of the IAEA but that of the international community in responding to noncompliance. The burden here falls largely on the IAEA Board of Governors and the UN Security Council. In recent years, nonproliferation crises, particularly in North Korea and Iran, have been a cause for paralysis as

states have disagreed strongly over a course of action. Before the next crisis occurs generic procedures for responding to noncompliance should be discussed and agreed upon. With a “veil of ignorance” about which states might be involved, such discussions should be easier and less acrimonious than in the heat of a crisis. Moreover, agreement upon a set of standard responses to be applied even-handedly to any state found in noncompliance—regardless of its allies—would significantly enhance the credibility of the nonproliferation regime.

Against this background, a necessary first step is for the Board of Governors to acknowledge where it has acted inconsistently in the past. Recognizing that South Korea and Egypt were in noncompliance with their safeguards undertakings respectively in 2004 and 2005 would not be intended to lead to any punitive measures against either state but would correct damaging precedents.

Beyond this, the Security Council should develop a series of generic resolutions that would set out a “roadmap” for responding to noncompliance. In investigating safeguards violations, the IAEA needs, for some limited period of time, enhanced authority to conduct inspections in the state concerned. Moreover, there must be consequences, such as a ban on conducting sensitive fuel cycle activities and the cessation of military cooperation, for any state that refuses to cooperate with an IAEA investigation after having been found in noncompliance.

Finally, considering the North Korean precedent of 2003, it is necessary to plan for the possibility of another state withdrawing from the NPT. One important step would be for the Board of Governors to urge all states with enrichment or reprocessing facilities to conclude “back-up” safeguards agreements that would not terminate in case of NPT withdrawal. Most critical would be for the Security Council to adopt a resolution 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 here would significantly strengthen the nonproliferation regime and make a real difference in protecting against nuclear proliferation. It depends now on key governments to make this a priority.

Notes

- 1 IAEA INFCIRC/153 (corrected).
- 2 IAEA INFCIRC/540 (corrected).
- 3 “A Recipe for Survival,” *International Herald Tribune*, February 16, 2009.
- 4 IAEA, “*Strengthening of Agency Safeguards: Special Inspections*,” November 12, 1991, GOV/2554 Attachment 1, para. 4.
- 5 IAEA, Excerpts from statements made by the Director General under the agenda item “Strengthening of Agency Safeguards” at the Board’s December 1991 meetings, January 22, 1992, GOV/INF/646, Attachment 1, para. 139.
- 6 Fiona Simpson, “IAEA Special Inspections After Israel’s Raid on Syria,” *Bulletin of the Atomic Scientists*, February 10, 2008.
- 7 IAEA GOV/2008/60, <http://www.carnegieendowment.org/static/npp/reports/gov2008-60.pdf>.
- 8 IAEA GOV/2009/9, <http://www.carnegieendowment.org/static/npp/reports/gov2009-9.pdf>.
- 9 James Acton et al., “The IAEA Should Call for a Special Inspection in Syria,” Carnegie Endowment for International Peace, Proliferation Analysis, February 26, 2009, <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=22791&prog=zgp&proj=znpp>.
- 10 IAEA GOV/2554/Attachment 2/Rev. 2, para. 1.
- 11 IAEA GOV/2007/22 para. 14, <http://www.iaea.org/Publications/Documents/Board/2007/gov2007-22.pdf>.
- 12 IAEA GOV/2009/8 para. 8, <http://www.iaea.org/Publications/Documents/Board/2009/gov2009-8.pdf>.
- 13 IAEA, GOV/2005/33.
- 14 Regrettably in June 2005 the Board hastily authorized the Director General to conclude a Small Quantities Protocol (SQP) safeguards agreement with Saudi Arabia without requesting the incorporation of the new provisions recommended in May 2005 to the Board. Saudi Arabia’s old version of the SQP came into force unamended on January 13, 2009.

- 15 It is not enough to state, as the head of IAEA's Office of Legal Affairs recently did (<http://www.armscontrolwonk.com/2218/iaea-legal-adviser-on-arak-darkhovin#comment>), that "Iran's refusal to grant the Agency access to carry out DIV is inconsistent with its obligations under its Safeguards Agreement" without concluding that it does constitute "noncompliance." This is clearly a signal to potential cheaters that even if a state does not comply with binding agreements signed with the Agency, there will be no consequences.
- 16 IAEA Secretariat's Note 45, August 2006.
- 17 IAEA, "Implementation of the NPT Safeguards Agreement of the Socialist People's Libyan Arab Jamahiriya," Report by the Director General, February 20, 2004, GOV/2004/12, <http://www.iaea.org/Publications/Documents/Board/2004/gov2004-12.pdf>.
- 18 IAEA, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," Report by the Director General, November 10, 2003, GOV/2003/75, <http://www.iaea.org/Publications/Documents/Board/2003/gov2003-75.pdf>.
- 19 IAEA, GOV/2004/84, <http://www.carnegieendowment.org/static/npp/reports/gov2004-84.pdf>.
- 20 IAEA, GOV/2005/9, <http://www.carnegieendowment.org/static/npp/reports/gov2005-9.pdf>.
- 21 Including the failure to provide early design information as agreed with the IAEA in the General Part of Subsidiary Arrangements of CSAs.
- 22 Pierre Goldschmidt, "Exposing Nuclear Non-compliance," *Survival*, vol. 51 no. 1, February/March 2009, http://www.carnegieendowment.org/files/goldschmidt_survival20090201.pdf.
- 23 A more detailed analysis of these two cases can be found in the paper referred to in the above footnote.
- 24 The Secretariat concluded that all nuclear material in South Korea remained in peaceful activities after "the Agency was able to clarify all issues relating to past undeclared activities." IAEA, "Safeguards Statement for 2007," para. 33. How the Secretariat reached this important conclusion after the failures and breaches reported to the Board in November 2004 (IAEA, "Implementation of the NPT Safeguards Agreement in the Republic of Korea," GOV/2004/84), is described in Appendix I of the Safeguard Implementation Report for 2007. The latter is, unfortunately, not publicly available and should be made part of the reports transmitted to the Security Council.
- 25 In a resolution adopted on October 4, 2008, the IAEA General Conference "Requests all concerned States and other Parties to safeguards agreements, including nuclear-weapon States, that have not yet done so to promptly sign additional protocols and to bring them into force as soon as possible, in conformity with their national legislation," http://www.iaea.org/About/Policy/GC/GC52/GC52Resolutions/English/gc52res-13_en.pdf.

- 26 Egypt should consider the merit of spontaneously agreeing to implement on a voluntary basis the Additional Protocol until such time as the Secretariat has concluded that Egypt's declarations are correct and complete and that there is no undeclared nuclear material and activities in Egypt. Such a commitment, while not departing from Egypt's principal decision not to sign and ratify at this stage the Additional Protocol, would make it clear that its principal decision is in no way intended to prevent the Agency from drawing the necessary conclusion mentioned above, thereby distancing itself further from Iran's behavior.
- 27 For instance, the *Safeguard Implementation Report for 2000* reported that, by the end of that year, all states with facilities containing safeguarded nuclear material, except five which were named, had agreed to provide early design information on new facilities. One year later all had done so except Iran, which adapted its Subsidiary Arrangements accordingly in February 2003. The SIR for 2002 named four states that had not ratified their Additional Protocol more than five years after signature. Three of them did so within one year of the review of the report by the Board.
- 28 See footnote 3.
- 29 IAEA GOV/2005/67 para. 50, <http://www.iaea.org/Publications/Documents/Board/2005/gov2005-67.pdf>.
- 30 IAEA GOV/2006/14, <http://www.iaea.org/Publications/Documents/Board/2006/gov2006-14.pdf>.
- 31 By affirming that "Iran shall without further delay take the steps required" by the Board in GOV/2006/14, the UNSC Resolutions 1737, 1747 and 1803 provided a legal mandate for transparency measures but did not further spell them out.
- 32 As mentioned in the *Report of the Commission of Eminent Persons on the Future of the Agency*: "The IAEA's existing authorities should be interpreted to give the Agency the responsibility to inspect for indicators of nuclear weaponization activities" (GOV/2008/22, page 19).
- 33 Such as resolution 1373 (September 28, 2001) concerning acts of international terrorism, and resolution 1540 (April 28, 2004) concerning the acquisition of nuclear, chemical, or biological weapons and their means of delivery by nonstate actors.
- 34 As further detailed in Pierre Goldschmidt, "IAEA Safeguards: Dealing Preventively With Non-compliance," July 12, 2008, http://www.carnegieendowment.org/files/Goldschmidt_Dealing_Preventively_7-12-08.pdf.
- 35 If the generic resolution proposed in Annex I had been adopted before 2003, it is most likely that the IAEA Board of Governors would have reported Iran's non-compliance to the UNSC in November 2003 instead of February 2006, since full cooperation with the Agency and the suspension of sensitive fuel cycle activities would not have been a bargaining chip. At that time Iran had no operating UF₆ conversion plant, no operating centrifuge plant at Natanz, and was apparently ready to negotiate a broad cooperation agreement with Western countries.

Annex I

Draft UN Security Council Resolution on Noncompliance

The Security Council,

Affirming that proliferation of nuclear, [chemical and biological] weapons, as well as their means of delivery, constitutes a threat to international peace and security;

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on January 31, 1992 (S/23500), including the need for all Member States to fulfill their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction;

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability;

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, [chemical and biological] weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter;

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, [chemical or biological] weapons and the importance for all States parties to these treaties to implement them fully in order to promote international stability;

Affirming that prevention of proliferation of nuclear, [chemical and biological] weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation;

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, [chemical or biological] weapons and their means of delivery;

Affirming its commitment to the Treaty on the Non-Proliferation of Nuclear Weapons, and recalling the right of States Party, in conformity with Article I and II of that Treaty, to develop research, production and use of nuclear energy for peaceful purpose without discrimination;

Recalling that the IAEA General Conference in its resolution GC(49)/RES/13 of 30 September 2005 noted that “the Agency’s capability to detect undeclared nuclear material and activities should be increased,” and stressed “the continuing need for the Agency’s safeguards system to be equipped to respond to new challenges within its mandate”;

Determined to facilitate an effective response to global threats in the area of nuclear proliferation.

Acting under Chapter VII of the Charter of the United Nations:

1. *Decides that* if a State is reported by the IAEA to be in noncompliance with its NPT Safeguards Agreement(s), the Security Council shall forthwith adopt a specific resolution, under Article 41 of the Charter of the United Nations:
 - a. deciding that, upon request by the IAEA, the State in noncompliance shall provide the IAEA immediate access to locations, facilities, individuals, documents, and equipment as defined in the Model Temporary Complementary Protocol (TCP) attached in Annex to this resolution and any other access right specifically requested by the IAEA. The TCP shall remain in force until such time as the IAEA has drawn the conclusion that the State declarations under its Safeguards Agreements are correct and complete and that there is no undeclared nuclear material and activities in the State;
 - b. requesting the Director General of the IAEA to report within 60 days of the adoption of the specific resolution, and thereafter on a quarterly basis, on whether the State is fully implementing the provisions of its Safeguards Agreement(s) and the TCP and is fully and proactively cooperating with the IAEA;
2. *Decides that* if the Director General of the IAEA is unable to report within the timeframe defined in sub-paragraph 1.b, or at any time thereafter, that the State in noncompliance is fully implementing the provision of sub-paragraph 1.a. above, the Security Council shall forthwith adopt a specific resolution under Article 41 of the Charter:
 - a. requiring the State to immediately suspend all uranium and plutonium conversion and enrichment related activities and all reprocessing related activities, including theoretical and applied research and development and suspend any other activity specifically requested by the IAEA or the Security Council until such time as the IAEA has drawn the conclusion that the State declarations under its Safeguards Agreements (including the TCP) are correct and complete and that there is no undeclared nuclear material and activities in the State;

- b. requesting the Director General of the IAEA to report within 60 days of the adoption of this specific resolution on whether the State has fully complied with the provision of sub-paragraph 2.a.
3. *Decides that* if the reports referred to in sub-paragraphs 1.b and 2.b show that the State in noncompliance with its NPT Safeguards Agreement does not fully comply with the provision of sub-paragraphs 1.a and 2.a, the Security Council shall adopt a specific resolution under Article 41 of the UN Charter deciding that all States shall forthwith suspend the supply of any military equipment and cooperation with the noncompliant State as long as it remains in noncompliance with Security Council resolutions.

ANNEX to the Draft UN Security Council Resolution on Noncompliance

MODEL TEMPORARY COMPLEMENTARY PROTOCOL FOR THE APPLICATION OF IAEA SAFEGUARDS IN A NONCOMPLIANT STATE

Foreword

This document is a model complementary Protocol designed for States having been found by the Agency Board of Governors to be in noncompliance with Safeguards Agreement(s) concluded with the Agency, in order to enable the Agency to verify in a timely manner the absence of undeclared nuclear material, equipment and activities in such State, to verify the correctness and completeness of the declarations made by the State to the Agency (including those requested under this Protocol), and to determine whether or not previously undeclared nuclear material and activities have been undertaken in furtherance of a nuclear weapons program.

As requested by the Board of Governors and/or the UN Security Council the Director General shall use this Model Temporary Complementary Protocol as the minimum standard for verification activities that are to be implemented by States found to be in noncompliance with their Safeguards Agreement(s) in accordance with Article XII.C of the IAEA Statute. The provisions of this Protocol are consistent with Article XII.A.6 of the Statute.

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NB.: This is Annex II of INFCIRC/540 corr. amended to conform to the list in Annex B of INFCIRC/254/Rev.9/Part 1 or any subsequent amendment.	

MODEL TEMPORARY COMPLEMENTARY PROTOCOL FOR THE APPLICATION OF IAEA SAFEGUARDS IN A NONCOMPLIANT STATE

Preamble

WHEREAS (hereinafter referred to as “.....”) is a party to (an) Agreement(s) between and the International Atomic Energy Agency (hereinafter referred to as the “Agency”) for the application of safeguards [full title of the Agreement(s) to be inserted] (hereinafter referred to as the “Safeguards Agreement(s)”), which entered into force on

WHEREAS, in accordance with Article XII.C of the Agency’s Statute, has been found by the Agency to be in noncompliance* with its Safeguards Agreement(s) and the Board of Governors has reported the non-compliance to the UN Security Council;

AWARE OF the desire of the international community to further enhance nuclear nonproliferation by strengthening the effectiveness and improving the efficiency of the Agency’s safeguards system, in particular when a state has been found to be in noncompliance with its Safeguards Agreement(s);

RECALLING that the Agency must take into account in the implementation of safeguards the need to: respect health, safety, physical protection and other security provisions in force and the rights of individuals; and take every precaution to protect commercial, technological and industrial secrets as well as other confidential information coming to its knowledge;

CONSIDERING that, in order for the Agency to verify in a timely manner the absence of undeclared nuclear material and equipment (including equipment and non-nuclear material listed in Annex II) and activities (including those specified in Annex I) in, and the correctness and completeness of declarations, the provisions of this Protocol constitute the minimum required;

CONSIDERING UN Security Council Resolution [...] making mandatory for to provide the Agency, temporarily, the verification authority defined in this Protocol;

NOW THEREFORE the following shall apply in

* “In noncompliance” and “in breach of its obligation to comply” are to be considered as synonymous expressions for the purpose of this Protocol.

RELATIONSHIP BETWEEN THE PROTOCOL AND THE SAFEGUARDS AGREEMENT

Article 1

The provisions of the Safeguards Agreement shall apply to this Protocol to the extent that they are relevant to and compatible with the provisions of this Protocol. In case of conflict between the provisions of the Safeguards Agreement and those of this Protocol, the provisions of this Protocol shall apply.

PROVISION OF INFORMATION

Article 2

a. shall provide the Agency with a declaration containing:

- (i) A general description of and information specifying the location of *nuclear fuel cycle-related research and development activities*¹ involving and not involving *nuclear material* carried out anywhere that are (or have been) funded, specifically authorized or controlled by, or carried out on behalf of,
- (ii) Information identified by the Agency on the basis of expected gains in effectiveness or efficiency, on operational activities of safeguards relevance at *facilities* and at *locations outside facilities* where *nuclear material* is customarily used.
- (iii) A general description of each building on each *site*, including its use and, if not apparent from that description, its contents. The description shall include a map of the *site*.
- (iv) A description of the scale of operations for each location engaged in the activities specified in Annex I to this Protocol.
- (v) Information specifying the location, operational status and the estimated annual production capacity of uranium mines and concentration plants and thorium concentration plants, and the current annual production of such mines and concentration plants for as a whole as well as their cumulative production. shall provide, upon request by the Agency, the current annual production of an individual mine or concentration plant.

The provision of this information does not require detailed *nuclear material* accountancy.

- (vi) Information regarding source material which has not reached the composition and purity suitable for fuel fabrication or for being isotopically enriched, as follows:

¹ Terms in italics have specialized meanings, which are defined in Article 18 below.

- (a) The quantities, the chemical composition, the use or intended use of such material, whether in nuclear or non-nuclear use, for each location in at which the material is present in quantities exceeding ten metric tons of uranium and/or twenty metric tons of thorium, and for other locations with quantities of more than one metric ton, the aggregate for as a whole if the aggregate exceeds ten metric tons of uranium or twenty metric tons of thorium. The provision of this information does not require detailed nuclear *material* accountancy;
- (b) The quantities, the chemical composition and the destination of each export out of, of such material for specifically non-nuclear purposes in quantities exceeding:
 - (1) Ten metric tons of uranium, or for successive exports of uranium from to the same State, each of less than ten metric tons, but exceeding a total of ten metric tons for the year;
 - (2) Twenty metric tons of thorium, or for successive exports of thorium from to the same State, each of less than twenty metric tons, but exceeding a total of twenty metric tons for the year;
- (c) The quantities, chemical composition, current location and use or intended use of each import into of such material for specifically non-nuclear purposes in quantities exceeding:
 - (1) Ten metric tons of uranium, or for successive imports of uranium into each of less than ten metric tons, but exceeding a total of ten metric tons for the year;
 - (2) Twenty metric tons of thorium, or for successive imports of thorium into each of less than twenty metric tons, but exceeding a total of twenty metric tons for the year;

it being understood that there is no requirement to provide information on such material intended for a non-nuclear use once it is in its non-nuclear end-use form.

- (vii) (a) Information regarding the quantities, uses and locations of *nuclear material* exempted from safeguards pursuant to [paragraph 37 of INFCIRC/153];²
- (b) Information regarding the quantities (which may be in the form of estimates) and uses at each location, of *nuclear material* exempted from safeguards pursuant to

² The reference to the corresponding provision of the relevant Safeguards Agreement should be inserted where bracketed references to INFCIRC/153 are made.

[Paragraph 36(b) of INFCIRC/153] but not yet in a non-nuclear end-use form, in quantities exceeding those set out in [paragraph 37 of INFCIRC/153]. The provision of this information does not require detailed *nuclear material* accountancy;

- (c) Information regarding the quantities, uses and locations of *nuclear material* that have previously been exempted from safeguards but on which safeguards must be re-applied pursuant to [paragraph 38 of INFCIRC/153] because it is to be processed or stored together with safeguarded *nuclear material* or used in nuclear activities.
- (viii) Information regarding the location or further processing of intermediate or high-level waste containing plutonium, *high enriched uranium* or uranium-233 on which safeguards have been terminated pursuant to [paragraph 11 of INFCIRC/153]. For the purpose of this paragraph, “further processing” does not include repackaging of the waste or its further conditioning not involving the separation of elements, for storage or disposal.
- (ix) The following information regarding specified equipment and non-nuclear material listed in Annex II as well as separated Np, Am and Po-210:
 - (a) For each export out of of such equipment and material: the identity, quantity, location of intended use in the receiving State and date or, as appropriate, expected date, of export;
 - (b) For each import into of such equipment and material: the identity of the supplier, the quantity delivered, the location and date of import, and the present location;
 - (c) For all such equipment and material imported into, shall provide to the Agency within 30 days of the entry into force of this Protocol a list of all imports including the identity of the supplier, the quantity delivered, the location and date of import, and their present location.
 - (d) For all such equipment and material that have been domestically produced shall provide to the Agency within 30 days of the entry into force of this Protocol a list with the identity of the producer, the quantities produced, the location and date of production, and their present location.
- (x) General plans for the succeeding ten-year period relevant to the development of the nuclear fuel cycle (including planned *nuclear fuel cycle-related research and development activities*) when approved by the appropriate authorities in

- (xi) Information regarding the disposition of equipment listed in Annex II and components from *closed-down* and *decommissioned facilities* and *locations outside facilities*.
- b. shall provide the Agency with the following information:
- (i) A general description of and information specifying the location and the identity of the persons and/or entities carrying out or having carried out *nuclear fuel cycle-related research and development activities involving and not involving nuclear material* carried out anywhere in but which are not funded, specifically authorized or controlled by, or carried out on behalf of,
 - (ii) A general description of activities and the identity of the persons and/or entities carrying out such activities, at locations identified by the Agency outside a *site* which the Agency considers might be functionally related to the activities of that *site*. The provision of this information is subject to a specific request by the Agency. It shall be provided in consultation with the Agency and in a timely fashion not exceeding 15 days from the request;
 - (iii) Design information as soon as the decision to construct or to authorize construction of a new facility has been taken;
 - (iv) A comprehensive and accurate declaration of all documents, materials, activities, dual-use equipments (listed in INFCIRC/254/Rev. 7/Part 2) and facilities acquired, received or produced in related to the design, manufacturing and weaponization of nuclear weapons and their delivery systems, including a detailed account of the type, quantity, location, origin and date of acquisition of each item.
- c. Upon request by the Agency, shall provide amplifications or clarifications of any information it has provided under this Article, in so far as relevant for the Agency to complete its evaluation process.
- d. Upon request by the Agency, shall provide information on activities carried out at specific locations identified by the Agency as relevant to draw its conclusions or to conduct its evaluation process.

Article 3

- a. shall provide to the Agency the information identified in Article 2.a.(i), (iii), (iv), (v), (vi)(a), (vii) and (x) and Article 2.b.(i), (iii) within 60 days of the entry into force of this Protocol.
- b. shall provide to the Agency quarterly updates of the information referred to in paragraph a. above for the period covering the previous calendar quarter. If there has been no change to the information previously provided, shall so indicate.

- c. shall provide to the Agency, by 15 May of each year, the information identified in Article 2.a.(vi)(b) and (c) for the period covering the previous calendar year.
- d. shall provide to the Agency quarterly updates of the information identified in Article 2.a.(ix). This information shall be provided within 30 days of the end of each quarter.
- e. shall provide to the Agency the information identified in Article 2.a.(viii) 180 days before further processing is carried out and, by 15 May of each year, information on changes in location for the period covering the previous calendar year.
- f. shall provide to the Agency the information identified in Article 2.a.(ii) within 5 days of the request.
- g. shall provide to the Agency the information in Article 2.a.(ix)(b) on a quarterly basis. This information shall be provided within thirty days of the end of each quarter.
- h. shall provide to the Agency the information requested pursuant to Article 2.c and 2.d within 24 hours of the request.
- i. shall provide the information identified in Article 2.a.(i),(iv), (ix)(c) and 2.b.(i) for the period since became a party to the NPT.

COMPLEMENTARY ACCESS

Article 4

The following shall apply in connection with the implementation of complementary access under Article 5 of this Protocol:

- a. The Agency shall have access to:
 - (i) Any location referred to in Article 5.a. (i), (ii), (iv) and in Article 5.c in order to assure the absence of undeclared *nuclear material* and activities; and to any person and document referred to in Article 5.a.(v) and (vi);
 - (ii) Any location referred to in Article 5.b. or c. to resolve a question relating to the correctness and completeness of the information provided pursuant to Article 2 or to resolve an inconsistency relating to that information;
 - (iii) Any location referred to in Article 5.a.(iii) to the extent necessary for the Agency to confirm, for safeguards purposes,'s declaration of the decommissioned status of a *facility* or of a *location outside facilities* where *nuclear material* was customarily used.

- b. (i) Except as provided in paragraph (ii) below, shall provide the Agency access to the locations, persons and documents referred to in Article 5 within 24 hours of the advanced notice of access by the Agency;
- (ii) For access to any place, person or document on a *site* that is sought in conjunction with design information verification visits or ad hoc or routine inspections on that *site*, the period of advance notice shall, if the Agency so requests, be at least two hours but, in exceptional circumstances, it may be less than two hours.
- c. Advance notice shall be in writing and shall specify the reasons for access and the activities to be carried out during such access.
- d. In the case of a question or inconsistency, the Agency shall provide with an opportunity to clarify and facilitate the resolution of the question or inconsistency within 48 hours of the request, unless otherwise agreed with the Agency. Such an opportunity will be provided before a request for access, unless the Agency considers that delay in access would prejudice the purpose for which the access is sought. In any event, the Agency shall not draw any conclusions about the question or inconsistency until has been provided with such an opportunity.
- e. Access to any location, person or document shall only take place during regular working hours unless the Agency considers that delays on access would prejudice the purpose for which access is sought.
- f. shall have the right to have Agency inspectors accompanied during their access by representatives of, provided that the inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions.
- g. Access requested by the Agency during official holiday periods will not be delayed by more than 24 hours.
- h. Should access not be granted within the timeframe requested and the Agency considers that delay in access has prejudiced the purpose for which access was sought, the Agency's Board of Governors will be informed without delay.

Article 5

..... shall provide the Agency with access at all times to:

- a. (i) Any place on a *site*;
- (ii) Any location identified by under Article 2.a.(i), 2.a.(iv)-(ix), 2.b. or by the Agency under Article 2.d.;

- (iii) Any *decommissioned facility* or *decommissioned location outside facilities* where *nuclear material* was customarily used;
 - (iv) Any location where dismantled equipment specified in Annex II of this Protocol and previously located in *closed-down* or *decommissioned facilities* and in *closed-down* or *decommissioned location outside facilities* are stored or disposed of;
 - (v) Any person who by reason of his occupation deals with materials, equipment, or facilities which are required by the IAEA Statute to be safeguarded as necessary to determine whether there is compliance with the undertakings against use in furtherance of any military purpose. Access to such person shall be at its usual occupation location or at such other location requested by the Agency;
 - (vi) Any data and original document requested by the Agency at the location where they are normally used or stored. The Agency will have the right to make copies and take photos thereof, and to temporarily remove original documents if necessary for forensic analysis.
- b. Any location identified by other than those referred to in paragraph a.(i)-(iv) above, provided that if is unable to provide such access, shall make every reasonable effort to satisfy Agency requirements, without delay, through other means.
- c. Any location specified by the Agency, other than locations referred to in paragraphs a. and b. above, in order to verify the absence of undeclared nuclear material, equipment and activities.

Article 6

When implementing Article 5, the Agency may carry out the following activities as appropriate:

Visual observation; item counting of *nuclear material*; non-destructive measurements and sampling; collection of environmental samples; utilization of radiation detection and measurement devices; examination of records relevant to the quantities, origin and disposition of the material; examination of safeguards relevant production and shipping records; photography, photocopy, video and voice recording; location positioning measurement; application of seals and other identifying and tamper indicating devices and other measures deemed necessary by the Agency which are technically feasible.

Article 7

- a. Upon request by, the Agency and shall make arrangements for managed access under this Protocol in order to prevent the dissemination of proliferation sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Such arrangements shall not delay or preclude the Agency from conducting activities necessary to provide credible assurance of the absence of undeclared *nuclear material* and activities at the location in question, including the resolution of a question relating to the correctness and completeness of the information referred to in Article 2 or of an inconsistency relating to that information.
- b. may, when providing the information referred to in Article 2, inform the Agency of the places at a *site* or location at which managed access may be applicable.
- c. Pending the entry into force of any necessary Subsidiary Arrangements, may have recourse to managed access consistent with the provisions of paragraph a. above.

Article 8

Nothing in this Protocol shall preclude from offering the Agency access to locations in addition to those referred to in Articles 5 and 9 or from requesting the Agency to conduct verification activities at a particular location. The Agency shall, without delay, make every reasonable effort to act upon such a request.

Article 9

..... shall provide the Agency with access to locations specified by the Agency to carry out *wide-area environmental sampling*, provided that if is unable to provide such access for reasons acceptable to the Agency it shall make every reasonable effort to satisfy Agency requirements within 48 hours at alternative locations.

Article 10

The Agency shall inform of:

- a. The activities carried out under this Protocol, including those in respect of any questions or inconsistencies the Agency had brought to the attention of, within sixty days of the activities being carried out by the Agency.

- b. The results of activities in respect of any questions or inconsistencies the Agency had brought to the attention of, as soon as possible but in any case within 30 days of the results being established by the Agency.
- c. The conclusions it has drawn from its activities under this Protocol. The conclusions shall be provided annually.

DESIGNATION OF AGENCY INSPECTORS AND NOMINATION OF EXPERTS

Article 11

- a. (i) The Director General shall notify of the Board's approval of any Agency official as a safeguards inspector. Unless advises the Director General of its substantiated objection to the designation of such an official as an inspector for within fifteen days of receipt of notification of the Board's approval, the inspector so notified to shall be considered designated to
 - (ii) The Director General shall notify of the nomination of experts (including interpreters) who may be required to accompany Agency inspectors. Unless advises the Director General of its substantiated objection to the nomination of such an official as an expert for within fifteen days of receipt of notification, the expert so notified to shall be considered nominated to
 - (iii) The Director General, acting in response to a request by shall immediately inform whether the requested withdrawal of the designation of any official as an inspector or nomination as an expert for is accepted, taking into account the effectiveness and efficiency of the Agency's verification activities in
- b. A notification referred to in paragraph a. above shall be deemed to be received by seven days after the date of the transmission by registered mail of the notification by the Agency to or within 24 hours of handing it out against signature to its permanent mission in Vienna as the case may be.

VISAS

Article 12

..... shall, within fifteen days of the receipt of a request therefor, provide the designated inspector or the nominated expert specified in the request with appropriate multiple entry/exit and/or transit visas, where required, to enable the inspector or expert to enter and remain on the territory of for the purpose of carrying out his/her functions. Any visas required shall be valid for

at least one year and shall be automatically renewed, at least one month before their expiration date, as required to cover the duration of the inspector's designation or expert's nomination period to

SUBSIDIARY ARRANGEMENTS

Article 13

- a. Where or the Agency indicates that it is necessary to specify in Subsidiary Arrangements how measures laid down in this Protocol are to be applied, and the Agency shall agree on such Subsidiary Arrangements within fifteen days of the entry into force of this Protocol or, where the indication of the need for such Subsidiary Arrangements is made after the entry into force of this Protocol, within fifteen days of the date of such indication.
- b. Pending the entry into force of any necessary Subsidiary Arrangements, the Agency shall be entitled to apply the measures laid down in this Protocol.
- c. Subsidiary Arrangements agreed between and the Agency are an integral part of this Protocol and will be submitted to the Board of Governors for information.

COMMUNICATIONS SYSTEMS, REGIONAL OFFICE AND TRANSPORTATION

Article 14

- a. shall permit and protect free communications by the Agency for official purposes between Agency inspectors in and Agency Headquarters and/or Regional Offices, including attended and unattended transmission of information generated by Agency containment and/or surveillance or measurement devices. The Agency shall have the right to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication, not in use in At the request of or the Agency, details of the implementation of this paragraph with respect to the attended or unattended transmission of information generated by Agency containment and/or surveillance or measurement devices shall be specified in the Subsidiary Arrangements.
- b. Communication and transmission of information as provided for in paragraph a. above shall take due account of the need to protect proprietary or commercially sensitive information or design information which regards as being of particular sensitivity.
- c. shall permit the Agency to open Regional Offices and the permanent presence of designated inspectors and nominated experts.

- d. shall permit designated inspectors and nominated experts to have their own transportation means and to circulate freely to and between any location where access is authorized under this Protocol.

PROTECTION OF CONFIDENTIAL INFORMATION

Article 15

- a. The Agency shall maintain a stringent regime to ensure effective protection against disclosure of commercial, technological and industrial secrets and other confidential information coming to its knowledge, including such information coming to the Agency's knowledge in the implementation of this Protocol.
- b. The regime referred to in paragraph a. above shall include, among others, provisions relating to:
 - (i) General principles and associated measures for the handling of confidential information;
 - (ii) Conditions of staff employment relating to the protection of confidential information;
 - (iii) Procedures in cases of breaches or alleged breaches of confidentiality.
- c. The regime referred to in paragraph a. above shall be approved and periodically reviewed by the Board.

ANNEXES

Article 16

- a. The Annexes to this Protocol shall be an integral part thereof. Except for the purposes of amendment of the Annexes, the term "Protocol" as used in this instrument means the Protocol and the Annexes together.
- b. The list of activities specified in Annex I, and the list of equipment and material specified in Annex II, as applicable to, may be amended by the Board upon the advice of the Director General. Any such amendment shall take effect fifteen days after its adoption by the Board.

ENTRY INTO FORCE AND TERMINATION

Article 17

- a. This Protocol shall enter into force on the date on which the Agency receives from written notification that’s statutory and/or constitutional requirements for entry into force have been met.

OR³

upon signature by the representatives of and the Agency.

OR

upon the adoption of a resolution by the UN Security Council under Chapter VII of the UN Charter instructing to implement the provisions of this Protocol.

- b. may, at any date before this Protocol enters into force, declare that it will apply this Protocol provisionally.
- c. The Director General shall promptly inform all Member States of the Agency of any declaration of provisional application of, and of the entry into force of, this Protocol.
- d. This Protocol shall remain in force until the IAEA Board of Governors concludes that the issues requiring the entry into force of this Protocol and any issues resulting from its implementation have been resolved, that there is no undeclared *nuclear material*, equipment (including those listed in Annex II), *facilities*, and activities (including those listed in Annex I to this Protocol) in, and that’s declarations are correct and complete.

DEFINITIONS

Article 18

For the purpose of this Protocol:

- a. *Nuclear fuel cycle-related research and development activities* means those activities which are specifically related to any process or system development aspect of any of the following:
 - conversion of *nuclear material*,
 - enrichment of *nuclear material*,
 - nuclear fuel fabrication,
 - reactors,
 - critical facilities,
 - reprocessing of nuclear fuel,
 - processing (not including repackaging or conditioning not involving the separation of elements, for storage or disposal) of intermediate or high-level waste containing plutonium, *high enriched uranium* or uranium-233,

³ The choice of alternative depends on the preference of the State concerned according to its internal legal requirements.

but not including activities related to theoretical or basic scientific research or to research and development on industrial radioisotope applications, medical, hydrological and agricultural applications, health and environmental effects and improved maintenance.

- b. *Site* means that area delimited by in the relevant design information for a *facility*, including a *closed-down facility*, and in the relevant information on a *location outside facilities* where *nuclear material* is customarily used, including a *closed-down location outside facilities* where *nuclear material* was customarily used (this is limited to locations with hot cells or where activities related to conversion, enrichment, fuel fabrication or reprocessing were carried out). It shall also include all installations, co-located with the *facility* or location, for the provision or use of essential services, including: hot cells for processing irradiated materials not containing *nuclear material*; installations for the treatment, storage and disposal of waste; and buildings associated with specified activities identified by under Article 2.a.(iv) above.
- c. *Decommissioned facility* or *decommissioned location outside facilities* means an installation or location at which residual structures and equipment essential for its use have been removed or rendered inoperable so that it is not used to store and can no longer be used to handle, process or utilize *nuclear material*.
- d. *Closed-down facility* or *closed-down location outside facilities* means an installation or location where operations have been stopped and the *nuclear material* removed but which has not been decommissioned.
- e. *High enriched uranium* means uranium containing 20 percent or more of the isotope uranium-235.
- f. *Location-specific environmental sampling* means the collection of environmental samples (e.g., air, water, vegetation, soil, smears) at, and in the immediate vicinity of, a location specified by the Agency for the purpose of assisting the Agency to draw conclusions about the absence of undeclared *nuclear material* or nuclear activities at the specified location.
- g. *Wide-area environmental sampling* means the collection of environmental samples (e.g., air, water, vegetation, soil, smears) at a set of locations specified by the Agency for the purpose of assisting the Agency to draw conclusions about the absence of undeclared *nuclear material*, non-nuclear material and equipment listed in Annex II, or nuclear-related activities over a wide area.
- h. *Nuclear material* means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or ore residue. Any determination by the Board

under Article XX of the Statute of the Agency after the entry into force of this Protocol which adds to the materials considered to be source material or special fissionable material shall have effect under this Protocol only upon acceptance by

i. *Facility* means:

- (i) A reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant or a separate storage installation; or
- (ii) Any location where *nuclear material* in amounts greater than one effective kilogram is customarily used.

j. *Location outside facilities* means any installation or location, which is not a *facility*, where *nuclear material* is customarily used or stored in amounts of one effective kilogram or less.

ANNEX I

LIST OF ACTIVITIES REFERRED TO IN ARTICLE 2.a (iv) OF THE PROTOCOL

To be added

ANNEX II

LIST OF SPECIFIED EQUIPMENT AND NON-NUCLEAR MATERIAL FOR THE REPORTING OF EXPORTS AND IMPORTS ACCORDING TO ARTICLE 2.a. (ix)

To be added

Annex II

Draft UN Security Council Resolution on NPT Withdrawal

The Security Council,

Affirming that proliferation of nuclear, [chemical and biological] weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on January 31, 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, [chemical and biological] weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, [chemical or biological] weapons and the importance for all States parties to these treaties to implement them fully in order to promote international stability,

Affirming that prevention of proliferation of nuclear, [chemical and biological] weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation,

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, [chemical or biological] weapons and their means of delivery,

Affirming that any State party to the NPT has the right to withdraw from the Treaty in accordance with its Article X.1,

Recognizing the threat posed to international peace and security by a state withdrawing from the NPT after having been found by the IAEA in noncompliance with its NPT Safeguards Agreements,

Affirming that withdrawal from a Treaty does not absolve a State of any violation of that Treaty as committed while the State was still a party to the Treaty,

Affirming the principle that any material, equipment and facility subject to IAEA safeguards must irreversibly remain under IAEA safeguards,

Determined to facilitate an effective response to global threats in the area of nuclear non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

1. *Decides that* if a State is reported by the IAEA to be in noncompliance [in the context of Article XII.C. of the IAEA Statute] with its NPT Safeguards Agreement and thereafter notify its withdrawal from the NPT under its Article X.1, before the IAEA has concluded that the State declarations [under its Safeguards Agreement] are correct and complete and that there is no undeclared nuclear material and activities in that State, this notification of withdrawal constitutes a threat to international peace and security under Article 39 of the Charter of the United Nations.
2. *Decides that* if a State notifies its withdrawal from the NPT under Article X.1 of the Treaty, the Security Council shall forthwith adopt a specific resolution under Article 41 of the Charter, requiring that any materials and equipment made available to the withdrawing State, or resulting from the assistance provided to that State, under a Comprehensive Safeguards Agreement (INFCIRC/153-Corrected) with the IAEA, shall immediately be sealed by the IAEA and as soon as technically possible, be removed from that State under IAEA supervision, and thereafter remain under IAEA Safeguards.
3. *Decides that* in the circumstances defined under point 2 above the Director General of the IAEA shall report quarterly to the Security Council on the implementation of this decision until all relevant material and equipment have been removed from the withdrawing State.
4. *Decides that* if the reports referred to in point 3 above show that the withdrawing State does not fully comply with the provision of point 2, the Security Council shall adopt a specific resolution under Article 41 of the UN Charter deciding that all States shall forthwith suspend the supply of any military equipment to, and cooperation with, the noncompliant State as long as it remains in noncompliance with Security Council resolutions.
5. *Decides that*, if the IAEA informs the Security Council that action by a State makes it impossible for the IAEA to implement the provisions of a Comprehensive Safeguards Agreement concluded with the IAEA, such action shall be considered, for the purpose of this resolution, as equivalent to a notification of withdrawal from the NPT.

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