

#### LETTER FROM THE EXECUTIVE BOARD

# **Greetings Delegates!**

We feel privileged and honoured to welcome you all to the NPT Review Conference 2015.

We are looking forward to working with you all. We hope that this simulation proves fruitful to you and you take something valuable back from it. We also hope that you develop a good understanding of the MUN structure and ROPs by the end of this simulation.

This Background Guide is designed to be the beginning of your research process, and by no means should encompass the scope of your research. The agenda of the committee is open-ended but requires focused research in certain key aspects that have been listed in this guide. The delegates must research thoroughly and go deep into the technicalities associated with the agenda. If there is something we want to really stress on, then it is: Research well! That is the first step towards becoming a good MUNer.

We urge all members of the committee to take the time to read the background guide and use it as a starting point for their research. We urge every delegate to come to the conference with an open mind, ready to meet and work with new people, and not be afraid of speaking in front of the committee, drafting a working paper, or supporting or opposing a resolution.

Please remember, you the delegates will make the committee. The Executive Board is a mere facilitator. It shall be your prerogative to decide the direction in which you want to take this committee.

As your executive board, we want active participation from all the delegates, and we shall feel more than happy to clear any doubts that you may have, or any clarifications that you may seek. Please feel free to reach out.

Happy Researching! ©

#### **COMMITTEE DESCRIPTION**

The NPT is a landmark international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament. The Treaty represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States. Opened for signature in 1968, the Treaty entered into force in 1970. On 11 May 1995, the Treaty was extended indefinitely. A total of 190 parties have joined the Treaty, including the five nuclear-weapon States. More countries have ratified the NPT than any other arms limitation and disarmament agreement, a testament to the Treaty's significance.

The provisions of the Treaty, particularly article VIII, paragraph 3, envisage a review of the operation of the Treaty every five years, a provision which was reaffirmed by the States parties at the 1995 NPT Review and Extension Conference.

To further the goal of non-proliferation and as a confidence-building measure between States parties, the Treaty establishes a safeguards system under the responsibility of the International Atomic Energy Agency (IAEA). Safeguards are used to verify compliance with the Treaty through inspections conducted by the IAEA. The Treaty promotes cooperation in the field of peaceful nuclear technology and equal access to this technology for all States parties, while safeguards prevent the diversion of fissile material for weapons use.

Every five years, parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) meet to review its implementation. The Review Conference is expected to consider a number of issues, including: universality of the Treaty; nuclear disarmament, including specific practical measures; nuclear non-proliferation, including the promoting and strengthening of safeguards; measures to advance the peaceful use of nuclear energy, safety and security; regional disarmament and non-proliferation; implementation of the 1995 resolution on the Middle East; measures to address withdrawal from the Treaty; measures to further strengthen the review process; and ways to promote engagement with civil society in strengthening NPT norms and in promoting disarmament education

The 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) met at United Nations Headquarters in New York from 3 to 28 May 2010. A total of 172 States parties to the Treaty participated in the Conference. States parties agreed to a final document which included a review of the operation of the Treaty, reflecting the views of the President of the Conference, as well as agreed conclusions and recommendations for follow-on actions. The action plan contains measures to advance nuclear disarmament, nuclear non-proliferation, the peaceful uses of nuclear energy and regional issues, including the implementation of the 1995 Resolution on the Middle East.

#### **Text of the Treaty**

The text may be found at: http://www.un.org/en/conf/npt/2005/npttreaty.html

Opened for signature in 1968, the Treaty entered into force in 1970. On 11 May 1995, the Treaty was extended indefinitely. More countries have adhered to the NPT than any other arms limitation and disarmament agreement, a testament to the Treaty's significance A total of 191 states have joined the Treaty, though North Korea, which acceded to the NPT in 1985 but never

came into compliance, announced its withdrawal in 2003. Four UN member states have never joined the NPT: India, Israel, Pakistan and South Sudan.

# Agenda: <u>Improving the verification of compliance towards disarmament agreements under the NPT regime</u>

The process of determining noncompliance is an important aspect of the International Atomic Energy Agency (IAEA) safeguards system, as well as the only established mechanism for determining noncompliance with the nuclear Non-proliferation Treaty (NPT) itself. Noncompliance with an NPT safeguards agreement constitutes violation of Article III of the NPT, the obligation to accept safeguards on all nuclear material, and, depending on the circumstances, possibly a violation of Article II, the obligation not to acquire nuclear weapons.

In his April 5 speech in Prague, President Barack Obama said one of the needed improvements in the NPT regime is to ensure "immediate consequences for countries caught breaking the rules." Noncompliance is also assuming importance within discussions regarding various fuel-supply assurance schemes. A state would not qualify for assured fuel supply if found in noncompliance with safeguards obligations.

Surprisingly, although the IAEA Board of Governors has determined on five occasions that a state was in noncompliance with its NPT safeguards agreement-Iraq (1991), Romania (1992), North Korea (1993), Libya (2004), and Iran (2006)-there remains no established definition of noncompliance. Lack of a definition may seem advantageous, allowing the board flexibility to deal with complex cases, but it comes at a cost. In this vitally important area, lack of clarity and consistency could have adverse consequences for the integrity and credibility of the IAEA safeguards system.

It is necessary to distinguish between safeguards breaches that have actual or potential proliferation significance and less serious breaches. For this reason, the Statute of the IAEA gives the board the responsibility to determine if a particular case constitutes noncompliance. A mechanistic, black-and-white approach would be inconsistent with the board's responsibility to exercise judgment and would risk unintended consequences (e.g., trivializing the concept of noncompliance by referring to the UN Security Council cases that have no implications for international peace and security). Setting the bar too high, however, so that clear cases of noncompliance are not identified as such, will irreparably damage confidence in the IAEA.

This article has its origins in suggestions made by Australia in 2004 during the board's deliberations on safeguards breaches in South Korea and Egypt. Many on the board were concerned with the handling of the Iranian case and felt that guidelines could assist all parties in understanding the issues and would be helpful to the board's deliberations in future cases. The board has not yet adopted guidelines, but informal consultations have continued among a number of board members. This article discusses the principals involved.

# **Legal Context**

# IAEA Statute

The term "noncompliance," in the safeguards context, was introduced in the IAEA's founding statute, which entered into effect in 1957, more than 12 years before the NPT. Article XII.A of the statute outlines the IAEA's rights and responsibilities in situations where parties request that the agency apply safeguards. Article XII.C provides that IAEA inspectors have "the responsibility

of...determining whether there is compliance with...conditions...prescribed in the agreement between the Agency and the State...concerned."

Article XII.C further provides that "[t]he inspectors shall report any non-compliance to the Director General who shall thereupon transmit the report to the Board of Governors." Article XII.C requires the board to report noncompliance to the Security Council.

# **Nuclear Non-proliferation Treaty**

The entry into force of the NPT in 1970 introduced a range of new obligations for non-nuclear-weapon states-parties, especially a requirement that they accept IAEA safeguards on all their nuclear material.

Under the NPT, a non-nuclear-weapon state undertakes the fundamental obligation "not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices." The fulfilment of this obligation must be verified through the state's obligation toaccept safeguards, as set forth in an agreement to be...concluded with the [IAEA]...and the Agency's safeguards system...with a view to preventing diversion of nuclear energy from peaceful purposes to nuclear weapons or other nuclear explosive devices. ... The safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.

These provisions contain several elements pertinent to the issue of compliance. The reference to "diversion of nuclear energy" is particularly interesting. Commonly, the term "diversion" is used in relation to nuclear material, but in the NPT, the term is given a much broader meaning. Here, the sense is the misuse of nuclear processes.

Also interesting is the reference to prevention, which underlines the timely-warning aspect of safeguards. Timely warning must be forward-looking, drawing inferences from known facts.

# **Comprehensive Safeguards Agreement**

The safeguards agreement required of non-nuclear-weapon states under the NPT, now termed a comprehensive safeguards agreement, [9] has been standardized through the model agreement published as IAEA document INFCIRC/153. In terms of the IAEA Statute, an NPT safeguards agreement is an "arrangement where the Agency is requested by the parties concerned to apply safeguards."

The basic obligation in an INFCIRC/153 agreement, reflecting the language of NPT Article III.1, is "to accept safeguards...on all source or special fissionable material...for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices." Also of fundamental importance is the obligation to cooperate with the IAEA in facilitating the implementation of safeguards pursuant to the safeguards agreement.

# **Determining Noncompliance**

# **Procedural Aspects**

A noncompliance finding may be reached through the process set out in Article XII.C of the IAEA Statute, outlined above, or through paragraph 19 of INFCIRC/153.

Paragraph 19 provides that if the IAEA board, "upon examination of relevant information reported to it by the Director General finds that the Agency is not able to verify that there has been no diversion of nuclear material...to nuclear weapons or other nuclear explosive devices," the board may make the reports provided for in Article XII.C of the statute.

Although INFCIRC/153 does not use the term "noncompliance," the effect of the reference in paragraph 19 to Article XII.C is to bring the concept of noncompliance into INFCIRC/153. The cases mentioned at the beginning of this article demonstrate the firmly established practice of the board in reaching a specific finding of noncompliance with respect to INFCIRC/153 agreements.

One way to understand the relationship between Article XII.C and paragraph 19 is to see the former as applying to unambiguous noncompliance, such as detection of diversion or refusal to allow inspections. The "inability to verify" formulation of paragraph 19 could also apply to some such situations but, in addition, could apply to circumstances that are less clear-cut or where the IAEA's investigations are inconclusive.

Perhaps Article XII.C of the statute could have been drafted more clearly, but it is apparent that a noncompliance decision involves a two-step process. In the first instance, the inspectors report any noncompliance to the director-general, who is required to transmit the report to the board. A number of observations can be made here: The inspectors, not the director-general, decide if the facts warrant a noncompliance finding. The director-general is obliged to transmit the inspectors' report to the board. The report to the board should make clear whether the inspectors consider the facts to amount to noncompliance. Finally, serious safeguards breaches should also be reported to the board, even if the inspectors do not find noncompliance or remain undecided, so that the board is aware of the situation and has the opportunity to consider it. The board then shall call on the state to remedy any noncompliance "which it finds to have occurred," i.e., the board decides whether the facts constitute noncompliance.

#### Distinguishing Noncompliance from Less Serious Breaches

Once the IAEA inspectors have decided that a breach is sufficiently serious to report to the board, how does the board determine whether the breach is sufficiently serious to constitute noncompliance?

The language of Article XII.C ("compliance with...all...conditions of the...agreement") seems to indicate that noncompliance is a failure to observe any condition in a safeguards agreement. Nevertheless, clearly not every safeguards breach constitutes noncompliance. Otherwise, the agendas of the board and the Security Council would be taken up with safeguards cases. There is a need to distinguish serious from less serious breaches.

The IAEA Statute provides some guidance for distinguishing the severity of breaches, particularly if one reflects on the purpose behind its provisions for reporting to the Security Council. For example, from the indication in Article XII.A.1 that items under safeguards should not further any military purpose and from the close link between Article XII.C and Article III.B.4, which deals with "questions that are within the competence of the Security Council...as the organ bearing the main responsibility for the maintenance of international peace and security," one can infer that noncompliance involves safeguards breaches that have an actual or potential proliferation significance.

### Breaches of Actual or Potential Proliferation Significance

The judgment of actual or potential significance must depend on the facts of each case, but obvious considerations would include the following:

- Is there diversion of nuclear material to nuclear weapons, to purposes potentially related to production of nuclear weapons, or for unknown purposes (see below) that could include nuclear weapons?
- Where undeclared nuclear activities are discovered, do these involve fissile material or
  production of fissile material, i.e., enrichment or reprocessing? If so, could the quantities
  involved indicate an intention to produce nuclear weapons, or is there indication of an
  intention to scale up the undeclared activities to produce such quantities?
- What is the context of the safeguards breaches? Is there a systematic pattern of breaches?
   Are the nuclear materials and the activities involved of a nature that could be relevant to nuclear weapons? Might they be part of an overall program aimed at acquiring nuclear weapons?
- Is the IAEA being obstructed in carrying out its safeguards activities (inadequate cooperation with inspections, failure to produce records, interference with safeguards equipment, etc.) so that the IAEA is not able to exclude the existence of diversion or undeclared nuclear activities?
- What is the overall record of the state on performance of safeguards and non-proliferation commitments?

#### Diversion

Diversion has two elements: action and purpose. Regarding action, diversion typically means removal of nuclear material from safeguarded activities. More correctly, however, the term encompasses either removal of nuclear material from safeguards or failure to declare nuclear material for safeguards. The state's basic obligation is to accept safeguards and apply safeguards procedures on all nuclear material. Any significant departure from this obligation could indicate diversion.

The other element of diversion is purpose. Diversion is either "to nuclear weapons or other nuclear explosive devices" or to "purposes unknown." The reference to "purposes unknown" is critically important, indicating that the standard of proof is set at a practical level, not one that is unrealistically high. This point is discussed below.

# **Undeclared Nuclear Material or Activities**

Although the NPT and INFCIRC/153 express the obligation to accept safeguards in terms of nuclear material, INFCIRC/153 also obliges a state to declare nuclear facilities. In addition, INFCIRC/153 requires reports on the processing of nuclear material, which necessarily involves reporting of relevant activities. The Model Additional Protocol (INFCIRC/540) also requires reporting on and provision of complementary access to specified nuclear-related activities even if nuclear material is not present, on the basis that knowledge of such activities will assist the IAEA in drawing conclusions concerning nuclear material.

The discovery of undeclared nuclear material or activities does not necessarily indicate an intention to produce nuclear weapons. Judgment must be based on implications and significance, such as an inadvertent failure to declare, and the possible consequences if the failure had remained undetected (e.g., how the material in question might be used).

In assessing whether particular failures are inadvertent, relevant factors might include the following:

- whether there is evidence of deliberate falsehoods or concealment efforts, indicating that the failures were intentional rather than inadvertent;
- the nature of the nuclear material involved, particularly whether it is fissile material; and
- The nature of the nuclear activities involved, whether these are related to production of fissile material, i.e., enrichment or reprocessing, or to other processes that could be relevant to nuclear weapons.

#### **Standard of Proof**

Whether governments have confidence that a state's nuclear program is exclusively peaceful is a judgment based not on certainty but on the balance of probabilities. A judgment on noncompliance cannot wait until the state has succeeded in acquiring nuclear weapons. If the standard of proof is set too high, the IAEA is bound to fail in its responsibility to provide the international community with timely warning.

To prove the existence of a nuclear weapons program is unrealistic. A state having a nuclear weapon or nuclear weapons components or conducting weaponization experiments with nuclear material is unlikely to be caught red-handed. More likely, a state facing obvious exposure would deny inspectors access to the location concerned, preferring to argue whether lack of cooperation constitutes noncompliance, maintaining some ambiguity about its actions.

Depending on the circumstances, the existence of undeclared nuclear material or activities should be enough to raise a presumption of diversion, especially if enrichment, reprocessing, or use of fissile material is involved. The NPT requires acceptance of safeguards on all nuclear material for verifying the fulfilment of obligations assumed under the treaty, namely, not to produce nuclear weapons. When the board determines that a state has intentionally not declared nuclear material, it must initially presume that the material was not intended for peaceful purposes. The smoking gun is the failure to declare nuclear material.

If the inspectors find undeclared nuclear material or activities, an immediate challenge is establishing whether further undeclared nuclear material or activities exist. The IAEA Secretariat's ability to do this might depend on having a noncompliance finding from the board, including authorization to carry out additional verification activities.

The amount of additional information gathered by the IAEA is crucial and will help the board judge whether a weapons purpose is plausible under the circumstances. Detection of apparent weaponization activities could be very important, and the IAEA needs to investigate such activities to the extent it is able. Discovery of weaponization activities, however, is not essential to support a finding of diversion or noncompliance.

The drafters of INFCIRC/153 recognized the importance of avoiding an unrealistically high standard of proof. The use of qualitative language-"purposes unknown" and "not able to verify"-allows the application of judgment to deal with ambiguous or inconclusive situations.

INFCIRC/153 takes a practical approach, making it sufficient for the IAEA to show that

• nuclear material or a nuclear activity has not been declared or that nuclear material has been removed from safeguards;

- the failure is considered to be significant (e.g., because of the nature of the nuclear material or activity); and
- The purpose of the use of the nuclear material or the nuclear activity is not clearly exclusively peaceful, that it could be military or uncertain, i.e., "unknown."

In these circumstances, the onus is then on the state to show that no peaceful purposes are not intended. It can attempt to do this through full cooperation with and transparency to the IAEA.

# Remedying Noncompliance

As discussed above, a noncompliance situation may well be one of ambiguity rather than conclusive evidence. Once inspectors find that they are unable to verify there has been no diversion to nuclear weapons or that there has been diversion to purposes that are uncertain or unknown, the board and governments must consider the implications and what is necessary to rebuild confidence.

Article XII.C provides that the board "shall call upon the...State to remedy forthwith any non-compliance which it finds to have occurred," and paragraph 18 of INFCIRC/153 provides that where the board "decides that an action by the State is essential and urgent in order to ensure verification that nuclear material...is not diverted to nuclear weapons...the Board shall be able to call upon the State to take the required action without delay."

An essential issue for the IAEA to determine is the range of verification activities needed for effective investigation of the noncompliant state's nuclear activities. It is most unlikely that verification under the INFCIRC/153 agreement alone will suffice. At the least, the IAEA is likely to require access and information in accordance with the Model Additional Protocol. If the state does not have such a protocol in place, the board may need to require equivalent measures. Indeed, there are arguments as to whether the standard additional protocol is sufficient to deal with noncompliance. Some observers say the IAEA may need further measures, what has been termed "the Additional Protocol plus," possibly under authority from the Security Council.

# **Resolution of Noncompliance**

A key question is what the board requires before it can conclude that noncompliance has been fully remedied. It is not simply a matter of making good the specific safeguards violations that have been discovered. Discovery of acts of noncompliance raises the possibility that the state has additional undiscovered safeguards violations. A substantial ongoing program of verification, requiring continuing cooperation by the state, may be required before there can be confidence that there are no other instances of noncompliance and that noncompliance is not likely to recur. It could be some time before the board is able to reach a positive conclusion and before there can be confidence on the part of the international community.

#### Conclusion

The table 1 includes indicative cases to date. In addition, the IAEA is currently investigating apparent, serious safeguards breaches by Syria, including the construction of an undeclared reactor and the failure to declare nuclear material. At the time of writing, Syria has refused to cooperate with IAEA requests for access to investigate a number of suspect locations. Members of the board and other readers may benefit from analyzing the Syrian case using the factors discussed in this article.

Reinforcing confidence in and commitment to the non-proliferation regime depends not only on proficient verification, but also, where necessary, on effective action to uphold treaty compliance. Well-functioning procedures for determining noncompliance are essential for this to occur.

It is inappropriate to apply a rigid approach to determinations of noncompliance. The facts are likely to be complex, and a case-by-case approach is required. The terms of Article XII.C of the IAEA Statute and paragraph 19 of INFCIRC/153 provide the board with appropriate scope for the exercise of judgment. Yet, the board's discretion should not be unlimited. Consistency and predictability are essential if the board's decisions are to be credible and maintain confidence in the integrity of the IAEA's processes. It is essential that member states understand and accept the approach taken by the board.

Clarification of the issues involved in noncompliance determinations is important for all parties: states, the IAEA Secretariat, and the board. The development of guidelines to assist the board and, indeed, the secretariat could be very helpful in this regard.

# Table 1: Factors in Determining Noncompliance

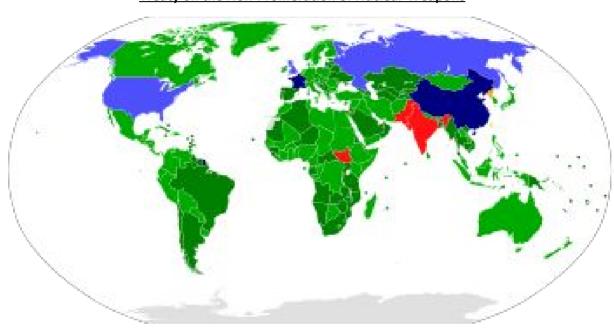
In recent years, the International Atomic Energy Agency Board of Governors has found five states to be in noncompliance with their agency safeguards agreements. In another two recent decisions on serious safeguards breaches, involving South Korea (2004) and Egypt (2005), the board did not find the states in noncompliance. The board weighed several factors in making its determination.

	Romania	Iraq	North Korea	Libya	Iran	South Korea	Egypt
Diversion, evidence of nuclear weapons purpose	yes	yes	yes	yes	under investigat ion	no	no
Nuclear program with possible weapons-related elements	planned	yes	yes	yes	yes	no	no
Undeclared production of fissile material	yes	yes	yes	yes	yes	yes	yes*
Intention to scale up fissile material production	yes	yes	yes	yes	yes	no	no
Safeguards implementation obstructed (e.g., after detection of breaches)	no	yes	yes	no	yes	no	no

<sup>\*</sup>Egypt irradiated and dissolved very small quantities of uranium and thorium but did not separate any plutonium or uranium-233.

Source: John Carlson, based on IAEA reports

# **Treaty on the Non-Proliferation of Nuclear Weapons**



Participation in the Nuclear Non-Proliferation Treaty

Recognized nuclear
weapon state ratifiers
Other ratifiers
Withdrawn (North Korea)
Unrecognized state,
abiding by treaty (Taiwan)
Recognized
weapon stat
Other acce
succeeders
Non-signat

Recognized nuclear weapon state acceders
Other acceders or succeeders
Non-signatory (India, Israel, Pakistan, South Sudan)