Ecole Internationale de Droit Nucléaire
Université de Montpellier
Session 2007

Rule of Law, Politics and Nuclear Non-proliferation

P.GOLDSCHMIDT[1]

1. Introduction

Good afternoon, ladies and gentlemen,

It is an honor for me to have been invited by the International School of Nuclear Law to participate in this Closing Session of your two weeks seminar.

I am not, like most of you, a lawyer by training, I am not a politician, not even a diplomat, only a nuclear engineer who is deeply convinced that if the production of nuclear electricity is to expand worldwide as a competitive source of energy that does not contribute to the greenhouse effect and climate change, it is at least as important to strengthen the non-proliferation regime as it is to continuously improve safety and security of the nuclear power plants themselves.

For that to happen, one needs to draw lessons from previous nuclear crises and not look in the other direction because it is politically more convenient. In this regard, as we shall see, nuclear lawyers have an important role to play.

In my presentation I will review some non-proliferation issues showing that legal ambiguities and contractual loopholes usually serve the purpose of those who wish to evade their obligations while claiming that they are doing nothing illegal. It is therefore the task of legal professionals, not influenced by political considerations, to correct legal misinterpretations or misunderstandings.

I will focus on two major issues: withdrawal from the Treaty on the Non-proliferation of Nuclear Weapons (NPT), and non-compliance with an IAEA Safeguards Agreement, and suggest measures that should be taken in order to diminish the re-occurrence of crises similar to those experienced with the DPRK and Iran.

[1] Former Deputy Director General of the International Atomic Agency, Head o the Department of Safeguards and presently a non-resident scholar at the Carnegie Endowment for International Peace.

2. Withdrawal from the NPT

The DPRK, on 12 March 1993, gave notice of withdrawal from the NPT. Then, on 11 June 1993, one day before its notice was due to take effect the DPRK suspended the "effectuation" of its withdrawal.
In December 2002, the DPRK removed all IAEA seals and surveillance cameras and then expelled IAEA inspectors, and on 9 January 2003 the DPRK notified the termination of the suspension of its 1993 withdrawal notice and declared it would take full effect the next day. Whether such an extraordinary withdrawal notification process is legally valid or not should be made clear by the relevant body of the United Nations. Unfortunately, it was not.
As we shall see, DPRK's de facto withdrawal from the NPT also raises other legal questions.

Article X.1 of the NPT provides that "*each Party shall […] have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject-matter of this Treaty, have jeopardized the supreme interest of its country*". Although it is for the State Party to "decide" what constitutes such extraordinary events, many NPT Parties are of the view that the DPRK's withdrawal was not validly effected. In this regard, it is interesting to note that already in UN Security Council Resolution 825 (11 May 1993) it is mentioned that the three depositories of the NPT (the Russian Federation, the UK and the USA) question "*whether the DPRK's stated reasons for withdrawing from the Treaty, constitute extraordinary events* ***relating to the subject-matter of the Treaty***" (emphasis added).

Since then the international community has not decided whether, from a procedural and legal point of view, the DPRK has withdrawn from the NPT. Considering the DPRK's declaration in 2004 that it possessed nuclear weapons and its nuclear test in October 2006, this may sound like the discussion among religious scholars in 1453 on the sex of the angels while the Byzantine Empire was falling apart around them, but in actuality deciding whether the DPRK has or has not withdrawn from the NPT was, at the time and maybe still today, more than an academic question.

The fact that the United Nations Security Council (UNSC) in its resolution 1695 (15 July 2006) "*strongly urge the DPRK to return at an early date to the Treaty on Non-Proliferation of Nuclear Weapons*" is an indirect, a posteriori, recognition that the DPRK had indeed withdrawn from the NPT.

If such withdrawal had been officially acknowledged in January 2003, then the IAEA could have implemented a limited safeguards agreement (INFCIRC/252)[2] signed in July 1977 to verify a 5 MWth research reactor supplied by the Soviet Union. This safeguards agreement, unlike a Comprehensive Safeguards Agreement (INFCIRC/153-corrected) does not terminate when a State withdraws from the NPT[3]. What could have been verified there would of course have been very limited, but important as a matter of principle. A refusal by the DPRK to let the IAEA implement that agreement would have been a violation of an agreement not linked to the NPT. If, however, the DPRK had accepted to implement this limited safeguards agreement, it would have maintained at least a formal channel of communication between the IAEA and the DPRK.

---

[2] A so-called INFCIRC/66-type safeguards agreement which is limited to a particular project, arrangement, facility or activity in he field of nuclear energy such as those in force in non NPT States (India, Israel and Pakistan).
[3] Under Section 12 of INFCIRC/252 "*safeguards shall be terminated after the Agency has determined that the Reactor Facility is no longer usable for any nuclear activity relevant from the point of view of safeguards*".
This Safeguards Agreement was suspended on 10 April 1992 when a Comprehensive Safeguards Agreement (INFCIRC 403) entered into force. Article 23 of the latter Agreement stipulates that "*the application of Agency Safeguards in the DPRK under other safeguards agreements with the Agency shall be suspended* ***while this Agreement is in force***" which, under Article 26 is "*as long as the DPRK is a party to the Treaty*".

The ambiguity surrounding the safeguards status of the DPRK is also apparent from the IAEA "Safeguards Statement for 2006" where the DPRK is not included in the list of states with comprehensive safeguards agreements in force, not in the list of states without such agreement in force, nor in the list of those with INFCIRC/66-type safeguards agreements. As a consequence of this unique situation the IAEA could not draw any safeguards conclusion about DPRK's non-compliance.

All this may seem irrelevant in the present environment but questions such as these are setting bad precedents that could undermine the non-proliferation regime in the future.

Under Article X.1 of the NPT withdrawal is an indisputable right. However, the NPT requires that notice of withdrawal be given to the UNSC thereby making the withdrawal a matter for UNSC consideration.
In considering the matter the UNSC should recognize that **any** notice of withdrawal from the NPT constitutes a threat to international peace and security, and that for a State to withdraw **after** having been declared by the IAEA to be in non-compliance with its safeguards agreement is an aggravating factor. Indeed the most likely reason for such a withdrawal would be for that state to freely manufacture nuclear weapons without violating NPT obligations.

It should be a clear policy of the UNSC that it would meet **immediately** whenever it receives a notice of withdrawal and that, in accordance with the provision in the law of treaties, withdrawal from a treaty does not absolve a State from remedying treaty breaches which occurred before withdrawal[4].
It is also crucial that any withdrawing state continues to be bound by the peaceful use and safeguards commitments for all nuclear material and facilities existing and subject to safeguards at the time of withdrawal from the NPT.

One of the greatest weaknesses of Comprehensive Safeguards Agreement (INFCIRC 153/corrected) is its Article 26, which provides 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 happens if and when the State withdraws from the Treaty.

It would be logical to forbid withdrawing countries the free use -possibly for military purposes- of material and equipment delivered to them while and because they were a Party to the NPT.

It is therefore very 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. Quite remarkably, for historical reasons, this issue is properly addressed in the Comprehensive Safeguards Agreement concluded in 1988 between Albania and the IAEA (INFCIRC 359).

This agreement contains the following provisions:

Article11: "*Safeguards shall terminate:*

a) On nuclear material upon determination by the Agency that the material has been consumed, or has been diluted in such a way that it is no longer usable for any nuclear activity relevant from the point of view of safeguards, or has become practicably irrecoverable;

[4] Under Article 70.1 of the Vienna Convention on the Law of Treaties it is stated that "*unless the treaty otherwise provides or the parties otherwise agree, the termination of a treaty […] does not affect any right, obligation or legal situation of the parties created through the execution of the treaty prior to its termination*".

b) On any facility upon determination by the Agency that it is no longer usable for any nuclear activity relevant from the point of view of safeguards."

and Article 25(b)i, specifies that:

"*If this agreement is terminated for any reason: safeguards shall continue to apply with respect to nuclear material and facilities referred to in Article 1 which are subject to safeguards on the date of termination and any nuclear material produced, processed or used in or in connection with such nuclear material or facility after the termination of this Agreement, including subsequent generations of produced nuclear material*".

The Board of Directors of the IAEA and its General Conference should request all states with any type of safeguards agreement to include such provisions in their agreements with the IAEA.

Supplier states should from now on include in their national law the requirement that nuclear material and specified equipments can only be delivered to a recipient state if they are used in facilities that are subject to IAEA safeguards agreements containing clauses similar to those quoted above. The Nuclear Supplier Group (NSG) should progressively make this a mandatory export condition[5].

A particularly threatening case for international peace and security is the withdrawal of a Non Nuclear Weapon State (NNWS) party to the NPT **after** having been found, by the IAEA, to be in breach of its obligation to comply with its safeguards agreements.
The UNSC convened and adopted a resolution on the DPRK more than three years after its withdrawal from the NPT and only three months before it tested a nuclear device.
We must by all means avoid a repetition of this unfortunate chain of events.

It is therefore essential for the international community to draw the lessons from previous crises and not to wait for Iran's withdrawal from the NPT[6], (a threat officially uttered on many occasions), without taking any preventive action. Therefore the UNSC should adopt (under Chapter VII of the UN Charter) a **generic** (i.e. not state specific) and legally binding resolution stating that if a state notifies its withdrawal from the NPT **after** being found by the IAEA to be in non-compliance with its safeguards undertakings, such withdrawal notice constitutes a threat to international peace and security as defined under Article 39 of the UN Charter. This generic resolution should also provide that under these circumstances, all materials and equipment made available to such a state or resulting from the assistance provided to it under a Comprehensive Safeguards Agreement would have to be forthwith removed from that state under IAEA supervision and remain under Agency Safeguards. And finally, the resolution should request that all military cooperation with the withdrawing state be automatically suspended, as is requested, in the case of the DPRK, under UNSC resolution 1718 (14 October 2006)[7].

Another possible measure to address the risk that a withdrawing state could use previously supplied nuclear material and equipment for military purposes, would be for all nuclear supplier states to include in their bilateral nuclear supply arrangements (and corresponding contracts) an

[5] possibly starting by making it an export requirement for all recipient states having sensitive nuclear fuel cycle facilities.
[6] … or similar actions such as denying or limiting IAEA inspectors access to its territory, facilities, or locations that would impede the effective implementation of IAEA's inspections and verifications.
[7] It makes little sense to declare that a state's behaviour constitutes a threat to international peace and security while supplying it with sophisticated military equipment. Suspending military cooperation and trade with a non-compliant or withdrawing state is a precautionary measure that doesn't harm that state's population but may influence its leadership.

obligation for the recipient state, upon request by the original supplier, to return such material and equipment in case of withdrawal from the NPT[8,9].

This is not a new concept. Under Article XII.A.7 of the IAEA Statute, the Agency has the right to "*withdraw any material or equipment made available by the Agency or a member*" in furtherance of an Agency project in the event of non-compliance and failure by the recipient state to take fully corrective action within a reasonable time.[10]

3. Non-Compliance

This brings us to the very important question of what constitutes non-compliance and when to report such non-compliance to the UN Security Council.
The case of Iran is particularly relevant in this regard.

A. Was reporting Iran to the UNSC illegal?

In his letter of 29 March 2007 to the Director General of the IAEA (GOV/INF/2007/8) Ambassador Soltanieh, states that "*Iran has been referred to the UNSC in contravention with the provision of the Statute of the IAEA and the NPT*" for the reason that "*the inspectors have not reached or concluded any "non- compliance" but instead they have confirmed non-diversion of nuclear activities to prohibited purposes".*

Already in September 2006, Iran's Vice President Reza Aghazadeh, in Iran's Statement to the IAEA General Conference, claimed that "*the decision taken by the Board of Governors to convey Iran's nuclear issue to the UN Security Council had no legal basis and contradicted the IAEA Statute and its practice*".

These statements are demonstrably incorrect.

The decision of the Board is in accordance to the IAEA Statute.

The decision of the Board of Governors (BoG) to report Iran to the UN Security Council (GOV/2005/77 on the 24th September 2005) was legally valid and justified by the terms of the IAEA Statute and the Safeguards Agreement:

- Iran was clearly in non-compliance through failure, over many years, to declare all nuclear material and activities that should have been subject to safeguards, in circumstances where a military purpose was plausible. This constituted non-compliance in terms of Article XII.C of the Statute;

- Further, the BoG was justified in notifying the Security Council under Article III.B.4 of the Statute, since questions had arisen that are within the competence of the Security Council, namely, the "*absence of confidence that Iran's nuclear programme is exclusively for peaceful purposes*" and therefore a threat or potential threat to international peace and security[11].

[8] The same provision could also apply when the recipient state fails to comply with its safeguards obligations, such as when it limits or denies IAEA inspectors access to facilities, or removes Agency's surveillance cameras or seals, even without formally withdrawing from the NPT.
[9] In case the withdrawing State has previously been found to be in non-compliance with its Safeguards or NPT obligations, the withdrawal of supplied nuclear material and equipment and material derived therefrom, should take place without any compensation for the withdrawing State.
[10] Article XII.C. of the Statute has a similar provision.
[11] NB: notification under Article III.B.4 does not necessarily require a safeguards breach.

Given what the Agency has reported by now, as I will more fully develop later on (cf. point B. below), the BoG would also be justified in reporting Iran to the Security Council since, as provided under Article 19 of the Safeguards Agreement, the Agency is *"… not able to verify that there has been no diversion of nuclear material required to be safeguarded…"*

The decision of the Board does not contradict IAEA practice.

One should remember that in his February 2004 report to the BoG (GOV/2004/12) the Director General stated that **Libya** was "*in breach of its obligation to comply with the provision of its Safeguards Agreement"*. Based on that report the Board adopted by consensus a resolution where it "*finds, under Article XII.C. of the Statute, that the past failures to meet the requirements of the relevant Safeguards Agreement identified by the Director General constituted non-compliance…and requests the Director General to report the matter to the Security Council for information purposes only*".

The consequence was a Statement in April 2004 by the President of the Security Council welcoming Libya's decision *"to abandon its programmes for developing weapons of mass destruction and their means of delivery*" and "*its active cooperation with the IAEA and the Organization for the Prohibition of Chemical weapons (OPCW)*".
Libya signed the Additional Protocol in March 2004 and ratified it in August 2006, in sharp contrast to the actions taken by Iran, since 2005, in the opposite direction.

The Director General does not need to use the words "non-compliance".

Under the IAEA Statute inspectors are to report non-compliance to the Director General *"who shall thereupon transmit the report to the Board of Governors"*.
But Article XII.C of the Statute does not require the Director General to explicitly use the words "non-compliance" in order to report non-compliance to the Board.

Inspectors should report facts which they consider constitute non-compliance. But in any case the Statute requires the BoG to reach its own conclusion since Article XII.C clearly states that *"The Board shall call upon the … State … to remedy forthwith any non-compliance* ***which it finds*** *to have occurred"* (emphasis added).

In his report to the BoG of November 2003 (GOV/2003/75) the Director General stated that "*In the past, Iran had concealed many aspects of its nuclear activities, with resultant breaches of its obligation to comply with the provisions of the Safeguards Agreement*".
These breaches were deliberate and undisputedly constitute "*non-compliance*" with Iran's Safeguards Agreement.

B. Has Iran diverted nuclear material?

As indicated above, in his letter of 29 March 2007, Iran's Ambassador claims that IAEA's inspectors "*have confirmed the non-diversion of nuclear activities to prohibited purposes*".

This is likely based on the Director General's report of November 2004 (GOV/2004/83) to the BoG, where it is stated that "*all the declared nuclear material in Iran has been accounted for, and therefore such material is not diverted to prohibited activities*", a statement which, taken out of context[12], may have

[12] The next sentence in the report states that "*The Agency is, however, not yet in a position to conclude that there are no undeclared nuclear materials or activities in Iran*".

been the source of a lot of misunderstanding among Member States and therefore needs to be clarified.

First of all one has to recall that, in 2004, some if not most of what was "*declared nuclear material in Iran*" had previously been "*undeclared*" until its existence was discovered by the Agency.

"Diversion" includes failure to declare nuclear material. Failure to declare importation of nuclear material, denying the import when questioned by the Agency and use of the material in undeclared nuclear activities clearly constitute diversion of nuclear material.

Secondly, Iran has "*carried out UF_4 conversion experiments … using depleted uranium which had been imported in 1977 and exempted from safeguards upon receipt, and which Iran had declared in 1998 (when the material was de-exempted) as having been lost during processing*"(GOV/2004/83-§14).
This is a clear case of diversion of declared nuclear material.

Third, in his report of August 2006 (GOV/2006/53) the Director General stated that "*in April 2006, the movement of a 48X UF_6 cylinder* [capable of containing up to 9.5 tonnes of UF_6] *by the operator* [of the UCF conversion plant] *into and out of one of the withdrawal stations without prior notification to the Agency resulted in a loss of continuity of knowledge of nuclear material in the process*".
Considering the inevitable uncertainty on the result of the physical inventory verification (PIV) that took place thereafter at the UCF, the Agency cannot exclude the possibility that some nuclear material (say 200 to 400 kg UF_6, i.e. more than enough to test an undeclared centrifuge enrichment cascade) had been diverted from that facility.
It is true that "losing continuity of knowledge" happens sometimes in other NNWSs, but it is of far greater concern when it takes place in a state that has been deliberately in non-compliance for some two decades.

Therefore, for the Agency to repeat thereafter that "*all the nuclear material* ***declared*** *by Iran to the Agency is accounted for"* may be misleading and sounds more reassuring than it is, especially when it is disconnected from the other part of the Agency's statement explaining that because of the gaps in the Agency's knowledge, including the role of the military in Iran's nuclear programme, **the Agency is unable "*to provide assurances about the absence of undeclared nuclear material and activities in Iran or about the exclusively peaceful nature of that programme*"** (GOV/2007/8-22 February 2007-§29).

The essential conclusion is that "*The Director General finds that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded",* giving the Board the authority (under Article 19 of the Safeguards Agreement) to "*make the reports provided for in paragraph C of Article XII of the Statute*" which includes reporting the case to the Security Council.

C. Military purpose and the burden of proof.

In his report of November 2003 to the BoG, the Director General states that "*to date, there is no evidence that the previously undeclared nuclear material and activities referred to above were related to a nuclear weapons programme*".

This statement is troubling, in that it appears to be setting a standard of proof for the Agency that is too high. In practice inspectors are unlikely to find irrefutable proof of weaponisation: a state facing certain exposure because inspectors have sought access to a location where there will be such proof will simply refuse access, preferring to be reported for lack of cooperation rather

than a clear act of proliferation. As indicated in the IAEA November 2004 Report (GOV/2004/83-§113) "*absent some nexus to nuclear material, the Agency's legal authority to pursue the verification of possible nuclear weapons related activities is limited*".

A number of IAEA findings in Iran could be considered to be indication if not evidence that nuclear material and activities are or were related to a nuclear weapons program. These findings include alleged studies related "*to high explosive testing and to the design of a missile re-entry vehicle, all of which could have a military nuclear dimension*" (GOV/2006/27-§27), the involvement of individuals and companies associated with the Ministry of Defense in procuring nuclear and dual use equipment and materials, the presence of high enriched uranium particles e.g. on equipment said to have been used at a technical university in Tehran, and the possession of documents describing the procedures "*for the casting of enriched uranium metal into hemispheres related to the fabrication of nuclear weapons components*" (GOV/2006/15-§20). Requesting Iran to provide appropriate explanations to these and many other outstanding issues can in no way be considered to be asking Iran to prove the negative. Instead of persistently using all possible legal arguments to obstruct and delay IAEA verification efforts, Iran should provide full cooperation as requested by the IAEA and the UNSC.

In this regard, and in order to avoid any ambiguity it would be useful to spell out clearly and in detail what is expected from Iran when the IAEA requests "*full transparency that extends beyond the formal legal requirements of the Safeguards Agreement and Additional Protocol*" (GOV/2006/15-§54).

D. Is Iran in breach of the NPT?

As indicated in the resolution adopted by the BoG in February 2006 (GOV/2006/14), Iran has been found to have "*in its possession a document on the production of uranium metal hemispheres* [a process] *related to the fabrication of nuclear weapon components*".

The possession of this document is, stricto sensu[13], a breach of Article II of the NPT under which "*each non-nuclear-weapons State Party to the Treaty undertakes… not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices*".

Iran's continued refusal to release the document to the IAEA, taken with the overwhelming number of serious Safeguards breaches, warrants the international community drawing the conclusion that Iran's possession of this document was for a proscribed purpose, and that Iran has violated the NPT.

What is often misunderstood is that it is not in the IAEA's mandate to verify compliance with the provisions of the NPT but only with those of Safeguards Agreements approved by the IAEA Board of Governors. This does not mean, of course, that the IAEA should not inform the UNSC of findings indicating that a party is violating the NPT. Indeed, Article III B.4 of the IAEA Statute stipulates that the Agency shall submit reports "*when appropriate, to the Security Council if in connection with the activities of the Agency there should arise 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*…"
This shows clearly that the Agency does not necessarily need to find a state to be in non-compliance with its safeguards agreement to report some of its findings to the UNSC.

[13] even if "*according to Iran, the document was provided on the initiative of the intermediaries and not at the request of the Atomic Energy Organization of Iran*" (GOV/2006/15), a claim that is unverifiable and does not exclude the possibility that the document had been requested by another Iranian organization.

E. Suspension of sensitive fuel cycle activities

No Member State has disputed Iran's right to develop nuclear energy for peaceful purposes in conformity with the NPT. On the contrary, this right has been reaffirmed in all three UNSC resolutions concerning Iran[14].

But, considering the fact that Iran has deliberately been in breach of its safeguards undertakings over an extensive period of time, the international community is asking Iran to suspend its sensitive nuclear fuel cycle activities and in particular all uranium enrichment-related activities, in line with what Dr ElBaradei has called a "*probation period to build confidence again, before you can exercise your full rights"* (Newsweek, 23 January 2006).

This request is all the more justified by Article IV of the NPT, which states that it is "*the inalienable right of all the Parties to develop research, production and use of nuclear energy for peaceful purposes, without discrimination and* ***in conformity with Articles I and II of this Treaty"*** (emphasis added)**.** By violating Article II of the NPT Iran has deprived itself of the right granted under Article IV, and in particular to pursue sensitive fuel cycle activities such as uranium enrichment.

Some diplomats, think tanks and NGO experts have suggested that in order to unlock the present stalemate with Iran, one should allow Iran to operate a small scale uranium enrichment cascade under tight IAEA supervision.
Without going into the technical reasons for why this would be a bad idea, let me just say that permitting Iran to operate any level of uranium activity would undermine not only the effectiveness but also the logic of the request for full suspension. In addition, such activity would require a new UNSC resolution specifying the maximum allowed capacity and the corresponding authorized enrichment-related activities, and one need only state the nature of the resolution to raise the specter of controversy, delay and argument that would ensue before any such resolution became a reality, if it ever did. Finally, one must recognize that, without the full suspension requested under Chapter VII of the UNSC, nothing would make it illegal for Iran to produce weapons grade high enriched uranium even if there is no apparent civilian use for it[15].

F. Dealing preventively with Non-compliance

Experience with both North Korea and Iran has shown that, in order to conclude in a timely manner that there are no undeclared nuclear material or activities in a state as a whole, **after** a state has been found by the IAEA to be **deliberately in non-compliance** with its safeguards undertakings, the Agency needs verification rights extending beyond those of the Comprehensive Safeguards Agreement and Additional Protocol.
Some commentators have indicated a belief that the Additional Protocol provides the IAEA the authority to inspect without delay any location where undeclared nuclear activities might be going on. Unfortunately, this is not the case. The Additional Protocol does not allow, as requested by the IAEA Statute (Article XII.A.6), Agency's inspectors to "*have access at all times to all places and data and to any person*…".

Acknowledging this, the Director General, in his report of 2 September 2005 to the BoG (GOV/2005/67) has made very clear that (§50 of the report): "*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*

[14] Resolutions 1696 (31 July 2006), 1737 (27 December 2006), and 1747 (24 March 2007).

[15] Iran could for instance claim, against all logic, that this is a convenient way to constitute a strategic reserve to supply the Bushehr reactor, after down blending with natural uranium.

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 reconstruct, in particular, the chronology of enrichment research and development, which is essential for the Agency to verify the correctness and completeness of the statements made by Iran, will be restricted".

Under Article 18 of a Comprehensive Safeguards Agreement, "*if the Board, upon report of the Director General,* ***decides*** *that an action by the State is essential and urgent in order to ensure verification that nuclear material subject to safeguards under the Agreement is not diverted to nuclear weapons or other explosive devices the Board shall be able to call upon the State to take the required action without delay...*"

On this basis, in a resolution adopted on 24 September 2005 the IAEA BoG "***urges Iran*** *to implement transparency measures, as requested by the Director General in his report, which extend beyond the formal requirements of the Safeguards Agreement and Additional Protocol…*" as a means to more efficiently determine the peaceful nature of its program.

In its resolution adopted on 4 February 2006 (GOV/2006/14) the BoG "***deems it necessary for Iran to*** *implement transparency measures, as requested by the Director General…*"

One could argue that, by using the expressions "*urges Iran to implement*" and "*deems it necessary for Iran to implement*" instead of "**d*ecides*** *that Iran shall implement…*" the two Board resolutions are merely requests for voluntary action on the part of Iran, and do not provide the Agency with the necessary additional legally binding verification authority. Whether using the word "*decides*" would have solved the legal issue remains an open question that should be addressed.

Therefore, drawing the lesson from this experience it is suggested that the most effective, unbiased, and feasible way to establish a legal basis for the necessary verification measures in circumstances of non-compliance is for the UNSC to adopt (under Chapter VII of the UN Charter) a **generic** and legally binding resolution stating that if a state is reported by the IAEA to be in non-compliance**,** the following three actions would result.

First, the non-compliant state would have to suspend all sensitive nuclear fuel cycle activities for a specified period of time[16] but, under some conditions, it could continue to produce electricity from nuclear power plants.

Second, if requested by the IAEA, the UNSC would automatically adopt a specific resolution (under Article 41 of the UN Charter) making it mandatory for the non-compliant state to provide the Agency with the necessary additional verification authority. Areas in which the verification authority should increase would include assurance of prompt access to persons, broader and prompter access to locations, in situ access to original documents and copies thereof, broader and faster access to information, and the lifting of other types of restrictions which experience has shown are employed as obstructive tactics by non-compliant states (for example, limitations on the use of Agency equipment and on the recording of meetings, limitations on the number of designated inspectors, withholding or delaying visas for inspectors, etc...). Such authority would last until the Agency concludes that there is no undeclared nuclear material and activities in the state and that its declarations to the Agency are correct and complete.

[16] at least as long as the IAEA has not drawn the conclusion that the state declaration is correct and complete, and possibly longer.

Third and finally, no nuclear material would henceforth be delivered to that state without the guarantee that all nuclear material, equipment and facilities declared to the IAEA would remain under Agency Safeguards, even if, as indicated above, the state withdraws from the NPT.

4. Conclusion

Treaties and international conventions and agreements are always the result of political compromises.
In order to reach such compromise politicians can be very creative in the way the texts are formulated and in the choice of the words used, in order to bridge, if not hide, differences of opinion. Sooner or later these ambiguous provisions will raise difficult interpretation problems when it comes to their implementation.
It is the role and the duty of knowledgeable and impartial lawyers to draw the attention of all parties concerned to loopholes and ambiguities contained in agreements preferably before their conclusion.
As mentioned earlier, these loopholes and ambiguities will most of the time be used to the advantage of those who don't want to comply with the spirit of the treaty or agreement.
Lawyers -in particular those of the UN and the IAEA- also have an important role to play in correcting official statements made on behalf of a state which contain misinterpretation or misunderstanding about the provisions of the NPT and Safeguards Agreements because remaining silent could be interpreted by others as being an agreement (in French we say "*qui ne dit mot consent*").

Coming back to the central issue of nuclear non-proliferation, what is most important is to make constructive and politically acceptable proposals to correct, one way or the other, the anachronistic limitations and the loopholes contained in the NPT and Safeguards Agreements. In the present political environment any attempt to amend the NPT or Comprehensive Safeguards Agreement or the Additional Protocol would be doomed to failure and most likely counter-productive. One should indeed expect many NNWSs to be irritated and perceive these attempted changes as intensifying discrimination against the nuclear have-nots. For that reason, one should avoid any measure that could be seen as penalizing states in good standing with their safeguards undertakings because a couple of states has violated their commitments. This is why the proposed generic UNSC resolutions deal exclusively with the case of NNWSs that have been in non-compliance and those that are withdrawing from the NPT. A rule-based regime defeats itself if it does not embrace reasonable enforcement measures such as these.

Politicians will always have the final say, but I would hope, only after taking due account of cogent, rational and apolitical legal advice.

August 23, 2007
