

Critical Reflections on the Treaty on the Non-Proliferation of Nuclear Weapons

by Quentin Michel*

The announcement by American President G.W. Bush and Indian Prime Minister Singh on 18 July 2005 of an agreement on civil nuclear co-operation marked a fundamental change in three decades of American policy on trade in nuclear equipment and applied technology which brooked no exceptions.

Following the detonation of a nuclear device in 1974, described as “peaceful” by the Indian authorities, the United States imposed a particularly restrictive policy on its trade, both domestically, with the Nuclear Non-Proliferation Act of 1978, and abroad, with the creation of the Nuclear Suppliers Group (NSG). This trade policy was presented as the only policy consistent with the non-proliferation principles set out in the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Essentially, these principles meant a commitment by all States Parties not to transfer material, equipment or technology to any state unless the recipient state accepts in its territory the application of the so-called comprehensive system of safeguards. These safeguards, which are assumed contractually by the International Atomic Energy Agency (IAEA), seek to ensure, by regular on-site inspections, that all the state’s nuclear facilities are used exclusively for peaceful purposes.

In addition to the application of the NPT, in 2003 the United States also put forward a proposal aimed at restricting trade in certain applications related to the processing of civil nuclear fuel. This proposal, presented by the American President in his speech of 11 September announcing new measures to reduce the threat of weapons of mass destruction, invited the 40 nations of the NSG to refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants. More specifically, the American proposal consisted of limiting the transfer of facilities, equipment or technology for enrichment or reprocessing to only those states which, as of 1 December 2003, were parties to the NPT and possessed an enrichment or reprocessing facility, which had not been permanently shut down and which was subject to the IAEA safeguards. In other words, this would have had the effect of limiting trade to the five nuclear-weapon states within the meaning of the NPT (China, France, Russia, United Kingdom and United States), as regards reprocessing and enrichment, as well as Japan, and, for enrichment facilities only to Argentina, Brazil, Germany and the Netherlands.

Despite this background of constant reinforcement of the principles of non-proliferation, the announcement by the United States of potential collaboration in the field of civil nuclear applications with India, a state not party to the NPT, officially possessing nuclear weapons and not subject to a comprehensive system of safeguards, appeared to be a radical shift in the nuclear non-proliferation policy of the United States.

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The present contribution does not address the motives which led to the change of policy nor the domestic institutional process leading to the implementation of this agreement by the two states concerned, but focuses primarily on an analysis of certain commitments by the two states which impose conditions on the effective implementation of the co-operation agreement.

1. Commitments required for the implementation of the co-operation agreement

In a nutshell, the commitments entered into by the Indian authorities can be summarised as follows:

- identification and separation of its civil nuclear facilities from those facilities with a military purpose;
- conclusion of an agreement with the IAEA subjecting the identified civil facilities to a system of safeguards;
- maintenance and observance of a unilateral moratorium on nuclear tests;
- development of a national export control system in accordance with current international systems (NSG and MTCR);
- conclusion of a multilateral agreement to stop production of fissile material for military purposes (Fissile Material Cut-off Treaty);
- restriction of transfers of reprocessing and enrichment technology to states which do not possess such technology.

In return, the United States undertakes in particular, to:

- develop civil nuclear co-operation with India;
- adapt domestic policy and legislation to make such co-operation legally possible;
- actively support and promote the adoption of the necessary amendments to international export control arrangements to allow nuclear trade with India;
- consult its partners and allies to support India's participation in the ITER programme and the Generation IV International Forum.

The analysis of the commitments, in the co-operation agreement, raise two types of objections. First of all, there are objections regarding the principle of the compatibility of such an agreement with the commitments of the United States under various international non-proliferation arrangements, especially the NPT. Then, there are objections relating to the compatibility of the control measures and systems envisaged by the agreement with the rules established by international nuclear trade control arrangements.

2. Objections of principle

While the co-operation agreement between India and the United States in 2005 led in the following months to the adoption of similar co-operation agreements and declarations with the other

four nuclear-weapon states,¹ the fact remains that this determination to develop and intensify collaboration with a nuclear-weapon state outside the NPT is contrary to the very principles of that Treaty.

Indeed, Article I provides that

“Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.”

If the envisaged co-operation concerns only the transfer of material, equipment and technology for civil purposes, it should be considered to what extent such collaboration with a nuclear-weapon state, not party to the NPT, might not *in any way assist, encourage, or induce it* to develop its military nuclear programme. Thus, by authorising India to access the international market for nuclear fuel for its civil programme, is it not being allowed to reserve its domestic production of fissile material just for its military nuclear programme? Indeed, if the co-operation agreement is not implemented, faced with rapidly growing energy needs and the lack of domestic resources to satisfy them, the Indian authorities will have to make a choice between the fissile material needed for its military programmes (nuclear weapons and submarines) and those allocated to its civil nuclear energy programme.²

Given that Article I of the NPT states that the commitments of nuclear-weapon states concern transfers to a *non-nuclear-weapon state*, can India be included in that latter category? Objectively, by its actions, India has never ceased to demonstrate the contrary. Since the first test of a nuclear weapon in 1974, it has continued to develop its nuclear programme and, finally, after carrying out a series of tests in 1998, it officially announced that it possessed nuclear weapons and did not intend to give them up.

Although Article IX.3 of the NPT does not define non-nuclear-weapon states, it does define nuclear-weapon states. These are states which have manufactured and detonated a nuclear weapon or other nuclear explosive device prior to 1 January 1967, which automatically excludes India.

The NPT does not contemplate relations with nuclear-weapon states which are not covered by the above definition. The reasons are both historical and political. At the time of the negotiation of the NPT, there were no other states officially possessing nuclear weapons other than the five covered by the definition. It was the announcement of the Indian test that gave rise to a new category of state.

1. Prime Minister Tony Blair “warmly welcomes” the signing of the agreement. (<http://www.number-10.gov.uk/output/Page9124.asp>). French President Jacques Chirac and the Indian Prime Minister Singh in February 2006 adopted a joint declaration on a co-operation agreement in the field of civil nuclear co-operation.

<http://www.diplomatie.gouv.fr/actu/bulletin.asp?liste=20060220.html#Chapitre9>). In November 2006, China and India signed a similar co-operation agreement. Finally, in January 2007, Russian President Vladimir Putin also signed a co-operation agreement to strengthen civil nuclear co-operation with New Delhi (<http://www.washingtonpost.com/wp-dyn/content/article/2007/01/25/AR2007012500182.html>).

2. See on this point “Impact of the U.S.-Indian Nuclear Deal on India's Fissile Production Capacity” available on the Arms Control Association website. (http://www.armscontrol.org/pressroom/2006/20060726_India_House_Debate.asp).

Moreover, one of the essential aims of the NPT is to pursue effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament. It was therefore scarcely relevant to include specific provisions in the Treaty organising relations with future nuclear-weapon states not party to the NPT.

It should be noted, however, that this does not mean that the NPT does not envisage relations with states not party to the NPT but includes them in the more specific category of trade controls. Thus, Article III.2 states that:

“Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article.”

It can be inferred from the use of the word “any” in Article III.2 that it applies to transfers to non-nuclear-weapon states whether or not they are party to the NPT. By extension, it can be inferred that as the NPT clearly defines nuclear-weapon states, transfers to a nuclear-weapon state not party to the NPT is contrary to the spirit of the Treaty. It would be a travesty to rely on the absence of specific provisions to authorise the transfer.

It follows, therefore, that the co-operation agreement signed between the United States and India and also the planned co-operation envisaged by the other nuclear-weapon states parties to the NPT seem to conflict with the commitments undertaken by those same states under the NPT.

There is reason to fear, however, that in the name of a certain political and economic pragmatism, the nuclear-weapon states will override the objections of principle and implement their agreement and proposed nuclear collaboration with the Indian authorities. In this sense, there is no shortage of arguments. India is increasingly seen as a major geo-strategic partner whose behaviour with respect to third countries in the nuclear field is not one of proliferation. Moreover, the development of the Indian electronuclear market offers not inconsiderable potential for these states.

3. Objections relating to the rules established by international arrangements for control of nuclear trade

In terms of formal control of nuclear trade, there is only the one international treaty, the Treaty on the Non-Proliferation of Nuclear Weapons, the essential principles of which were examined above.

As regards transfer conditions, the NPT requires that in order for a state to authorise the transfer of nuclear equipment and technology to a third state, whether or not a party to the Treaty, the material transferred or used by the transferred equipment must be subject to the safeguards required under Article III.

The system of safeguards contemplated in this article has always been a source of controversy. The IAEA instituted two systems of safeguards the scope of which differ fundamentally. First, there was the initial system established in 1965 aiming at certifying the non-diversion of certain materials in one or more given facilities; then the system was established pursuant to the NPT aiming at the application of safeguards to all nuclear activities of non-nuclear-weapon states parties to the NPT.

The initial system of safeguards was developed by the IAEA to exercise the control over the peaceful use of nuclear material and equipment attributed to it by states in the context of their nuclear

trade.³ This control, freely accepted by the recipient state, applies only to nuclear material supplied or used by equipment transferred under a bilateral or multilateral agreement between States Parties and non-parties to the NPT. In practice, this system is now only applied in three states, India, Israel and Pakistan.

The comprehensive system of safeguards (Second Safeguards Agreement), established in application of Article III.1 of the NPT, consolidates the commitment of non-nuclear-weapon states party to the Treaty to accept the application of safeguards 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. This system of safeguards has been supplemented in recent years by an additional protocol applicable to all non-nuclear-weapon states party to the NPT.⁴ Parallel to this, the nuclear-weapon states agreed on a voluntary basis to make their peaceful facilities subject to a broadly equivalent system of safeguards.⁵ The objective was to ensure a degree of parity between the two groups in the distribution of the industrial, administrative and financial costs imposed by IAEA inspections.

The controversy surrounding the interpretation of Article III focuses on whether transfers of nuclear material, equipment and technology to states not party to the NPT necessitate the supplier state requiring a comprehensive safeguards agreement between the recipient state and the IAEA along the lines of that imposed on States Parties, or a safeguards agreement between the IAEA and the recipient state applied only to the material transferred or used by the transferred equipment. In other words, is it acceptable for a state not party to the NPT to be subject to a less strict system of controls than States Parties themselves?

Although, Article III.2 is quite clear and refers to comprehensive safeguards, it has long been accepted by the majority of states that the application of safeguards only to the material transferred or used by the equipment transferred was consistent with the NPT. This approach was confirmed, in particular, by the Zangger Committee, an informal group on the interpretation of the provisions of the NPT comprising the principal nuclear states.⁶

At the 1975 NPT Review Conference, many delegations were in favour of a stricter interpretation, but came up against strong opposition from certain states. Nevertheless, the final declaration echoed this stricter interpretation by underlining that a considerable number of States Party to the Treaty consider that the safeguards required by Article III.2 should extend to all the peaceful nuclear activities of the importing state. The 1995 Review and Extension Conference on the NPT took a more formal position in favour of this interpretation by declaring that to obtain source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, non-nuclear-weapon states should require, as a necessary precondition,

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3. This standard model of the initial system of guarantees is published by the Agency under the reference INFCIRC/66.Rev 2.
 4. The model of comprehensive safeguards is published by the agency under the reference INFCIRC/153 (Corr.) and the model of the additional protocol in INFCIRC/540 (Corr.).
 5. These safeguards systems are published by the Agency under the following references: for the United States (INFCIRC 288), for the United Kingdom (INFCIRC 263), for France (INFCIRC 290), for China (INFCIRC 369) and for Russia (INFCIRC327).
 6. See paragraph 3.b of INFCIRC209 (corr.).

acceptance of the agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.⁷

The choice of the conditional tense shows, despite everything, that this requirement did not achieve consensus among the States Party to the NPT. While the legal force of the NPT Review Conference documents is open to debate, it is hard now to accept that a transfer of nuclear material, equipment and technology can be considered consistent with the NPT if the recipient state does not have a comprehensive safeguards agreement. Insofar, as the nuclear co-operation agreement between India and the United States envisages applying the safeguards only to civil facilities, it cannot be likened to a comprehensive safeguards system. Indeed, by taking its inspiration, as would appear to be the case from the system of safeguards applied to nuclear-weapon states party to the NPT, in particular the unilateral preparation by the Indian authorities of a plan to identify and separate civil facilities from those used for military purposes, the purpose of such a system is not to meet the objectives of non-proliferation. It should be recalled that the system of safeguards applied to nuclear-weapon states party to the NPT is not to detect diversion of the nuclear material used but rather to preserve the conditions of competition *vis-à-vis* the non-nuclear-weapon states party to the NPT. Thus, by applying such a safeguards system, the co-operation agreement would indirectly recognise India as having the status of a nuclear-weapon state within the meaning of the NPT which is clearly not allowed by Article IX.

Complementing the rules of international law contained in the NPT, control of nuclear trade is also and primarily organised by informal instruments more commonly known by the term soft law. On the one hand, there is the Zangger Committee, mentioned above, which was given the task of interpreting the provisions of Article III of the NPT by means of guidelines⁸ and, on the other, the Nuclear Suppliers' Group, more commonly referred to by its acronym, NSG. It is especially the latter, comprising the majority of countries which export nuclear assets and technology, which determines the rules and conditions for international nuclear trade.⁹ To that end, two guidelines were adopted by the NSG, one for nuclear equipment and technology, the other for dual-use equipment and technology in the field of nuclear energy.

These guidelines consist of a unilateral undertaking by the states participating in the NSG which is published by sending a communication to the Director General of the IAEA and informing him of the intention of the exporting state to align its policy on nuclear equipment and technology with the attached guidelines and requesting him to inform all the Member States.¹⁰ It is chiefly under these guidelines that the United States has given undertakings to the Indian authorities to try and persuade the states participating in the informal group to adopt the necessary amendments to allow nuclear trade with India.

The majority of provisions determined by the NSG guidelines are evaluation criteria that the supplier state will have to consider when deciding whether or not to authorise the transfer. These

7. Paragraph 12 of the Principles and objectives for nuclear non-proliferation and disarmament on the following UN website: <http://disarmament2.un.org/wmd/npt/1995nptrevconf.html>.

8. For more detailed information, especially concerning the conditions and list of equipment and technology subject to export controls, see: <http://www.zanggercommittee.org/Zangger/default.htm>.

9. The NSG has a website which can be accessed at: <http://www.nsg-online.org/>.

10. These guidelines are published by the IAEA under the reference INFCIRC/254/Part I corr. for nuclear equipment and technology and INFCIRC/254/corr. Part II for dual-use equipment and technology.

criteria can sometimes be interpreted in different ways. This is the case of the principle of non-proliferation set out in Article 10 of the Guidelines for Nuclear Transfers which states that:

“suppliers should authorize transfer of items or related technology identified in the trigger list only when they are satisfied that the transfers would not contribute to the proliferation of nuclear weapons or other nuclear explosive devices or be diverted to acts of nuclear terrorism.”

It is clear that whether or not transfers to the Indian authorities are authorised depends on the approach adopted by the supplier state to evaluate the criteria.

It is more relevant to focus on the transfer conditions imposed by the guidelines which, in principle, offer little leeway to exporting states in making their assessments.

The chief condition imposed by the NSG is the obligation of the recipient state to conclude a comprehensive safeguards agreement with the IAEA along the lines of that imposed on non-nuclear-weapon states party to the NPT.¹¹ This agreement must be implemented for the transfers to be authorised by national authorities.

This condition is currently the chief obstacle to nuclear trade with India, but it suffers from two exceptions.

The first is a classic *grandfather clause* which consists of the non-application of this condition to transfer agreements concluded before 3 April 1992 or to new states participating in the NSG after the date of their joining.¹² The latter was invoked by certain states participating in the NSG to complete the execution of contracts concluded with the Indian authorities.

The second, known as the *safety clause* authorises states, participating in the NSG, to transfer nuclear equipment and technology to a non-nuclear-weapon state which does not have a safeguards agreement only in exceptional cases when they are deemed essential for the safe operation of existing facilities and if safeguards are applied to those facilities.¹³

The exact scope of this exception clause has been the subject of keen debate between the states participating in the NSG, especially the effect of the words *essential for the safe operation*. Some considered that this exception clause was not intended to ensure the safe operation of a nuclear facility but only as a precaution against any risk of failure. For these, if the facility was or could be stopped without risk, there was no need to resort to the exception clause. In 1999, Belgium contemplated and finally decided not to resort to this safety clause to authorise the limited export of material to the KANUPP nuclear power plant in Pakistan.

Other participating states take a broader view of this clause, especially Russia, which used it in 2000 and 2006 to transfer nuclear fuel to the Indian Tarapur reactor. The use of this exception procedure by Russia in 2000 was considered inappropriate and was unanimously condemned by most of the states participating in the NSG and more particularly the United States. Conversely, the announcement of the second delivery of Russian fuel in 2006 aroused markedly less controversy.

11. Paragraph 3(a) of INFCIRC/254/Rev.8/Part 1.

12. Paragraph 4(c) INFCIRC254/Rev.8/Part 1.

13. Paragraph 4(b) INFCIRC254/Rev.8/Part 1.

Once again, the interpretation which states give to this exception clause is more a case of political than legal assessment and, following Russia's example, some of the transfers of nuclear equipment and technology to existing Indian facilities could be invoked by the United States itself even though this interpretation is inappropriate.

Insofar, as the requirement for a comprehensive safeguards agreement applies only to non-nuclear-weapon states, one might also wonder if the concept of nuclear-weapon state is the same for the NSG as in the NPT. It should be recalled that the creation of the NSG in 1976 was intended as a response to the Indian nuclear explosion, but also to encourage France, at that time not a party to the NPT, to follow a concerted policy of export controls. For that reason, the guidelines on nuclear equipment and technology do not contain any reference to the NPT. Neither do they define what they mean by a nuclear-weapon state. Could it therefore be conceded that for the NSG it is up to participating states to define unilaterally the states which would enjoy that status? Granting India that status would spare it from the requirement for a comprehensive system of safeguards and allow co-operation. The question has not been discussed but NSG practice would tend to suggest the opposite to the extent that even the states traditionally most favourable to co-operation with the Indian authorities have so far always resorted to the exception clause.

Conclusion

In this analysis, it has been attempted, on the basis of a few aspects, to show that the formal and informal rules on the organisation of nuclear trade controls raise a number of difficulties concerning the implementation of the co-operation agreement between India and the United States and also, in all likelihood, the agreements envisaged by the other nuclear-weapon states. Indeed, to allow such co-operation, both the Treaty on the Non-Proliferation of Nuclear Weapons and the informal instruments which interpret it, such as the Zangger Committee or complement it, such as the NSG, would need not just mere modifications of a temporary nature but rather a number of structural adjustments. Such adjustments should be seen not merely as allowing collaboration with a non-party state but more generally as challenging one of the fundamental principles of non-proliferation, namely the clear division between states which can legally possess nuclear weapons and those which possess them but which are outside the rules with which collaboration can only rarely be envisaged. Allowing and organising collaboration with the latter inevitably means shaking the foundations of the international non-proliferation system based on the principle that only five states may possess such a weapon. This principle is considered universal and of indefinite duration by all the UN Member States with the exception of the principals concerned, namely India, Israel, North Korea and Pakistan.