

CHAPTER 10

THE U.S.-INDIA CIVIL NUCLEAR COOPERATION INITIATIVE: THE QUESTION OF SAFEGUARDS

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Since the public of announcement in 2004 by Indian Prime Minister Manmohan Singh and U.S. President George W. Bush of a civil nuclear cooperation initiative, the question of potential cooperation with India has been heavily debated. It has acted as an incentive for other major supplier states¹—essentially the nuclear weapons holders—to conclude or announce their intention to complete similar agreements.²

Voices from others suppliers have also declared that such cooperation will breach most of the international commitments they have contracted. In both cases, we have to admit that the U.S.-India agreement is not just a bilateral question but has become a multilateral one, and its impact on international export control regimes will have a major significance. This discussion will not be devoted to the content of the agreement itself but more on how an exception for India could be possible without breaching international export control regime(s). Furthermore, we will focus only on the conditions of supply and in particular on International Atomic Energy Agency (IAEA) safeguards as required by international export control regimes—mostly the Nuclear Non-Proliferation Treaty (NPT) and the Nuclear Suppliers Group (NSG). It should be noted that other safeguards mechanisms could be imposed on the recipient state. We could mention safeguards required by bilateral safeguards agreements between

suppliers and end users similar to the one offered by U.S. authorities in the early 1950s in the implementation of the Atoms for Peace plan. Secondly, there is the possibility that the IAEA could assume safeguards implementation on behalf of a bilateral agreement as defined by Article 12 of IAEA statutes. Finally, we have several potential bilateral fallback agreements in case of breach of the initial IAEA safeguards agreement.³

NPT Conditions of Supply for Nuclear Items.

The conditions of supply of nuclear items to non-NPT states are established by Article III.2 which 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.**”

Since the entry into force of the NPT, states have always argued on the category of safeguards to request of the recipient state before transferring the items. If it was clear from the reading of Article III.1 that it should be organised within the framework of the IAEA safeguard system, the content, and in particular its field of implementation, was not clearly defined, so for a majority of nuclear supplier states, safeguards requirements should only apply to transferred nuclear material and to nuclear material used by the transferred nuclear items (equipment or technology). Such safeguard requirements were in the line of the guidelines of the Zangger Committee, which was considered by a majority of NPT states as their informal interpretation body.⁴

Nevertheless, this approach was rather anachronistic considering that safeguards required from non-NPT state parties were less comprehensive than the one required from states that were parties to the NPT. The NPT ratification required that a non-nuclear-weapons state conclude with the IAEA a full scope safeguards agreement, which would apply to all its nuclear material use in all its peaceful activities and not only to the nuclear items transferred.⁵ This safeguards system is also known as the Comprehensive Safeguards Agreement (CSA).

This discriminatory approach has had a counterproductive effect due to the fact that it granted indirectly a privileged treatment to non-NPT states by conceding them less severe verification requirements.

So in 1995, the NPT Review Conference has reviewed this interpretation of Article III.2 to align it to safeguards applied to NPT non-nuclear-weapon states. In the document *Principles and objectives for nuclear non-proliferation and disarmament*, it is affirmed that

New supply arrangements for the transfer of source or special fissionable material or equipment or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear-weapon States should require, as a necessary precondition, acceptance of the Agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.⁶

Therefore, with this interpretation of Article III.2, transfers of nuclear material and equipment to a non-NPT state party like India will be ruled by a CSA agreement into force before the transfer could take place. So if before 1995, transfers to India could have occurred with a dedicated safeguards mechanism

defined by INFCIRC/66, presently a transfer to India could only be possible if India concludes a CSA agreement with the IAEA. Considering the U.S.-India Civil Nuclear Cooperation Initiative, a CSA agreement as defined by the INFCIR/153 could not be possible due to the fact that Indian nuclear activities submitted to IAEA safeguards will be defined in a list of civilian facilities established by the Indian authorities. Such a mechanism appears to be similar to the voluntary safeguards agreement taken by an NPT nuclear weapons state where the list of peaceful facilities submitted to IAEA safeguards is provided by the state.⁷ The objective to submit nuclear-weapons states to a verification mechanism is more to avoid the risk of unfair competition and balancing the administrative and commercial burden that non-nuclear-weapons states have to face rather than to control the risk of diversion of peaceful nuclear facilities. Therefore, such a voluntary mechanism could not be applied to India unless it were to consist of informally granting the status of an NPT nuclear weapons state. In this regard, the provision of Article IX of the NPT leaves no room for interpretation: only states which have manufactured and detonated a nuclear weapon prior to January 1, 1967, can hold such a status.

To conclude, the implementation of the U.S.-India Civil Nuclear Cooperation Initiative will not be possible without breaching safeguards requirements established by Article III.2 of the NPT as highlighted by NPT review conferences and the Zangger Committee.

Nuclear Suppliers Group Conditions of Supply for Nuclear Items.

The most important informal instrument regarding the control of nuclear trade is the Nuclear Suppliers

Group (NSG).⁸ Contrary to the Zangger Committee, the NSG is not informally linked to the NPT. The NSG does not establish an international nuclear export control regime, its main objective is in the definition of a common understanding of export control principles that each participating state will introduce in its national export control regime.

The NSG has adopted two groups of guidelines. The first set of guidelines (the trigger list)⁹ governs the export of items that are especially designed or prepared for nuclear use, and the second governs the export of nuclear-related dual-use items and technologies, that is, items that can make a major contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activity, but which also have non-nuclear uses, in the chemical industry for instance.¹⁰ Concerning potential transfers to India as defined by the U.S.-India Civil Nuclear Cooperation Initiative, only the NSG guidelines governing the transfer of nuclear items (the trigger list) will apply.

In conformity with paragraph 4 of the NSG trigger list guidelines, the supplier state should, before granting the export authorization, verify if the state end-user fulfils the different export conditions defined by the NSG guidelines. One of the main conditions of supply concerns the obligation of the end-user to have brought into force a CSA agreement with the IAEA requiring the application of safeguards on all sources and special fissionable material in its current and future peaceful activities.¹¹ It should also be noted that if the NSG considers “that the provisions of the IAEA model Additional Protocol¹² will strengthen the nuclear safeguards regime and facilitate the exchange of nuclear and nuclear related material in peaceful nuclear cooperation,”¹³ it does not require it yet as a

condition of supply. Although this question has been analyzed systematically by the subsequent plenary meetings, no consensus has been obtained between participating states. To resolve this ever-lasting discussion, an approach to bring about the potential entry into force of such a condition of supply has been proposed to the participating states, but the necessary consensus has not yet been reached.

The NSG trigger list Guidelines establish two exceptions to its CSA requirement for transfers of nuclear items to a non-nuclear-weapon state. The first is a classical “Grandfather” clause,¹⁴ which authorizes NSG supplier states not to require a CSA to agreements or contracts drawn up before their date of adherence. The second is the so-called “safety clause,” which authorizes NSG supplier states to transfer nuclear trigger list items to a non-nuclear-weapon state only in exceptional cases and if they are deemed essential for the safe operation of existing facilities and if dedicated safeguards are applied to those facilities. Moreover, before granting such authorization, suppliers should inform and, if appropriate, consult with the other NSG participating states in the event that they intend to authorize or to deny such transfers.

This exception has been used only twice by Russia to supply fissile material for a nuclear power plant to India in 2000 and 2006. For the first Russian fuel shipment to India, most of NSG members states expressed concern that such an exception could only be used when the assistance by an NSG member state is essential to prevent or correct an imminent radiological hazard that poses a significant danger to public health and safety. Such conditions were, for them, obviously not met in the export of Russian fuel to India. Therefore, a process was initiated to strengthen and obtain a commonly-agreed

interpretation of the safety clause and in particular on the terms “exceptional cases.” However, the NSG did not succeed in adopting a common interpretation. In 2006, when Russia announced its intention to again use the safety clause to export nuclear fuel to India, NSG member states appeared less concerned by the transfer. This rather consensual reaction could only be explained by the new NSG-India relationship initiated by the U.S.-India Civil Nuclear Cooperation Initiative and other similar declarations made by other nuclear weapons states.

Nevertheless, paragraph 4 of the NSG trigger list guidelines and, therefore the CSA condition, does not apply to transfer of nuclear items to nuclear-weapon states. The guidelines did not contain specific provisions on the category of guidelines to be required by the supplier when it intends to export trigger items to a nuclear-weapon state. Consequently, it is up to the supplier state to define the safeguards requirements it intends to impose on the recipient. For transfers to NPT nuclear weapons states, the situation is rather simple so long as all of them have signed a voluntary safeguards agreement with the IAEA including specific provisions implementing the additional protocol.

Considering that NSG Guidelines for Nuclear Transfers contain no reference to the NPT¹⁵ and, therefore, no reference to the NPT definition of a nuclear-weapons state, how does the NSG define a nuclear-weapons state? In other words, could it be possible that the NSG definition of a nuclear-weapons state will be broader than that of the NPT?

The absence of any reference to the NPT in the NSG guidelines is mostly due to historical reasons. In 1978, when the NSG was created, France was not a NPT member and set as a condition of its adherence to the

NSG that its guidelines contain no explicit reference to the NPT. Nevertheless, the lack of reference to the NPT has not been completed by a definition of non-nuclear and nuclear-weapons states in the guidelines. Moreover, nothing in the guidelines prohibited NSG participating states from adopting a definition of a nuclear-weapons state that could include India, Pakistan, or Israel. If we approve this assumption, what will be the safeguards required by the supplier to transfer nuclear items to a nuclear-weapons state? As in the case of the NPT nuclear-weapons states, the safeguards requirement will be defined on a national basis by the authorities of the supplier state. Nevertheless, if nuclear transfers to non-NPT nuclear-weapons states could in theory be envisaged, the current practice of the NSG does not work with such an interpretation. Most of the NSG participating states export authorization denials concern non-NPT nuclear-weapons states.

Finally, all NSG participating states are presently parties to the NPT, and nuclear transfers to non-NPT nuclear-weapons states like India could not be authorized, considering the different commitments they have taken with their NPT ratification.

Conclusion.

Considering the safeguards condition of supply of the two main formal and informal international nuclear export control instruments, we do not see how the U.S.-India Civil Nuclear Cooperation Initiative will be implemented by the supplier state without breaching their safeguards commitments. Even if the cooperation is submitted to the entry into force of an India-specific safeguards agreement negotiated with the IAEA that will control all civilian nuclear facilities in perpetuity,

it does appear that such a specific agreement will never conform to the CSA required by both international export control regimes. The Indian commitment to adhere to and sign an additional protocol does not change the situation because, once more, it will concern only Indian civilian facilities as listed by India.

It should be recalled that if the NSG could in the medium term, by its absence of reference in its guidelines to the NPT, adopt an exception to allow nuclear transfer to India, its participating states will find it difficult to individually implement such exceptions due to their legally binding NPT commitment.

It remains to be seen if nuclear supplier states are ready to embark in this new nuclear nonproliferation approach initiated by the U.S.-India agreement based on the political cooperation strengthening between suppliers, even if it will induce the infringement of their NPT commitment.

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1. British Prime Minister Tony Blair warmly welcomes the U.S.-India nuclear deal, available from www.number-10.gov.uk/output/Page9124.asp. French President Jacques Chirac and Indian Prime Minister Singh made a common declaration on a potential nuclear peaceful agreement in February 2006, available from www.diplomatie.gouv.fr/actu/bulletin.asp?liste=20060220.html#Chapitre9; in November 2006, China and India signed a civilian nuclear cooperation deal. In January 2007, Russian President Vladimir Putin signed an agreement with New Delhi to reinforce Russia's nuclear peaceful cooperation with India, available from www.washingtonpost.com/wp-dyn/content/article/2007/01/25/AR2007012500182.html.

2. Australian Prime Minister John Howard has recently joined the group by expressing Australia's willingness to sell uranium to India provided New Delhi adheres to strict safeguards, available from www.khaleejtimes.com/DisplayArticleNew.

asp?xfile=data/subcontinent/2007/April/subcontinent_April100.xml§ion=subcontinent&col=.

3. See for example the new formulation of Articles 4 (a) and 16 of the INFCIRC/254.Rev.8 Part.1, available from *www.iaea.org*.

4. At the first Review Conference of the NPT in 1975, a brief paragraph in the final document mentioned the work of the Zangger Committee by referencing the IAEA document publishing its guidelines. This paragraph stated:

With regard to the implementation of article III, paragraph 2 of the Treaty, the Conference notes that a number of States suppliers of material or equipment have adopted certain minimum, standard requirements for IAEA safeguards in connection with their exports of certain such items to non-nuclear-weapon States not party to the Treaty (IAEA document INFCIRC/209/Rev.2). The Conference attaches particular importance to the condition established by those States, of an undertaking of non-diversion to nuclear weapons or other nuclear explosive devices, as included in the said requirements.

5. A model of such safeguards agreement has been established by IAEA under the reference INFCIRC/153.

6. Paragraph 12 of Decision 2 (NPT/CONF.1995/32(Part I) Annex).

7. See for the United States, United Kingdom, France, China, and Russia, respectively, INFCIRC 288, INFCIRC 263, INFCIRC 290, INFCIRC 369, and INFCIRC327.

8. Participating NSG States are Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, the Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States.

The European Commission participates as an observer. Available from www.nsg-online.org/.

9. The list contains the following categories: nuclear material; nuclear reactors and equipment therefore; non-nuclear material for reactors; plant and equipment for the reprocessing, enrichment, and conversion of nuclear material and for fuel fabrication and heavy water production; and technology associated with each of the above items. The guidelines have been published by the IAEA under the reference INFCIRC/254Part.1.

10. The list of concerned items has been divided into six categories: industrial equipment, materials, uranium isotope separation equipment and components, heavy water production plant related equipment, test and measurement equipment for the development of nuclear explosive devices, and components for nuclear explosive devices. The guidelines have been published by the IAEA under the reference INFCIRC/254Part.2.

11. Paragraph 4(a).

12. See INFCIRC/540.

13. See Press Statement of NSG Plenary Meeting, Paris, June 22-23, 2000, available from www.nsg-online.org/PRESS/2000-Press.pdf.

14. INFCIRC/254/Rev.6/Part 1, Paragraph 4(c).

15. The second group of guidelines dedicated to the export of nuclear dual-use items mentions only twice the NPT in paragraph 4, which is dedicated to criteria that supplier states have to consider in the decision process to grant or not grant the export authorization.