

## The US/India Civil Nuclear Cooperation Initiative: The Question of Safeguards

Since the public of announcement in 2004 by the Indian Prime Minister Singh and the US President G.W Bush of a civil nuclear cooperation initiative the question of a potential cooperation with India has been heavily debated. It has acted as an incentive for other major suppliers States<sup>1</sup> – essentially the nuclear weapons holders – to conclude or announce their intention to complete similar agreements<sup>2</sup>.

Voices from others suppliers have also declared that such cooperation will breach most of the international commitments they have contracted. In both case we have to admit that the US/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.

The present contribution 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 IAEA safeguards as required by international export control regimes (mostly NPT, NSG). It should be noted that other safeguards mechanisms could be imposed to the recipient State. We could mention safeguards required by bilateral safeguards agreement between supplier and end user similar to the one offered by the US Authorities in the early fifties in the implementation of the Atoms for peace plan. Secondly, there is the IAEA possibility to assume safeguards implementation on behalf of a bilateral Agreement as defined by article 12 of its Statutes. Finally, we have several potential bilateral fallback agreements in case of breach of the initial IAEA safeguards agreement<sup>3</sup>.

### I. 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 state 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.**”

---

<sup>1</sup> The British Prime Minister Tony Blair warmly welcomes the US/India nuclear deal. (<http://www.number-10.gov.uk/output/Page9124.asp>).

The French President Jacques Chirac and the Indian Prime Minister Singh has made a common declaration on a potential nuclear peaceful agreement in February 2006.

(<http://www.diplomatie.gouv.fr/actu/bulletin.asp?liste=20060220.html#Chapitre9>).

In November 2006, China and India have signed a civilian nuclear cooperation deal.

In January 2007, Russia's President Vladimir Putin has signed an agreement with New Delhi to reinforce their nuclear peaceful cooperation with India. (<http://www.washingtonpost.com/wp-dyn/content/article/2007/01/25/AR2007012500182.html>).

<sup>2</sup> Australian Prime Minister John Howard has recently joined the group by expressing its willingness to sell uranium to India provided New Delhi adheres to strict safeguards.

([http://www.khaleejtimes.com/DisplayArticleNew.asp?xfile=data/subcontinent/2007/April/subcontinent\\_April100.xml&section=subcontinent&col=](http://www.khaleejtimes.com/DisplayArticleNew.asp?xfile=data/subcontinent/2007/April/subcontinent_April100.xml&section=subcontinent&col=)).

<sup>3</sup> See for example the new formulation of article 4 (a) and 16 of the INFCIRC/254.Rev.8 Part.1 available on website of the IAEA ([www.iaea.org](http://www.iaea.org)).

Since the entry into force of the NPT, States have always argued on the category of safeguards to request to 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 Suppliers States safeguards requirement 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 Zangger Committee Guidelines, which was considered by a majority of NPT States as its informal interpretation body<sup>4</sup>.

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

This discriminatory approach has had a counter productive effect due to the fact that it granted indirectly a privilege treatment to non NPT State parties 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 called *Principles and objectives for nuclear non-proliferation and disarmament* it is affirmed that “new supply arrangement for the transfer of source or special fissionable material especially designed or prepared for the processing, use or production of special fissionable material in a 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 others nuclear explosive devices”<sup>6</sup>.

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 US/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 mechanism appears to be similar to the voluntary safeguards agreement taken by NPT Nuclear Weapons State where the list of peaceful facilities submitted to IAEA safeguards is provided by the State<sup>7</sup>. The objective to submit nuclear weapons States to a

---

<sup>4</sup> At the first Review Conference of the Nuclear Non-Proliferation Treaty (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".

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

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

<sup>7</sup> See for USA, United Kingdom, France, China and Russia respectively INFCIRC 288, INFCIRC 263, INFCIRC 290, INFCIRC 369 and INFCIRC327.

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 to control the risk of diversion of nuclear peaceful facilities. Therefore, such voluntary mechanism could not be applied to India unless it will consist in informally granting the status of NPT nuclear weapons States. In this regard the provision of Article IX of the NPT leaves no room for interpretation as far as only States which have manufactured and exploded a nuclear weapon prior to 1 January 1967 can hold such status.

To conclude, the implementation of the US/India 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.

## **II. 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)<sup>8</sup>. 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 rules the export of items that are especially designed or prepared for nuclear use (trigger list)<sup>9</sup> 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 have as well non-nuclear uses, in chemical industry for instance<sup>10</sup>.

Concerning potential transfers to India as defined by the US/India Civil Nuclear Cooperation only the NSG Guidelines ruling the transfer of nuclear items (trigger list) will be concerned.

In conformity with paragraph 4 of the NSG trigger list Guidelines, the Supplier State should, before granting the export authorisation, 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 for the end-user to have brought into force an agreement with the IAEA requiring the application of safeguards on all sources and special fissionable material in its current and future peaceful activities (CSA)<sup>11</sup>. Complementary it should be

---

<sup>8</sup> Participating States to the NSG are Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, And United States. The European Commission participates as an observer. (<http://www.nsg-online.org/>)

<sup>9</sup> 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.

<sup>10</sup> The list of concerned items has been divided in six categories, which are: 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.

<sup>11</sup> Paragraph 4(a).

noted that if the NSG considers “that the provisions of the IAEA model Additional Protocol<sup>12</sup> will strengthen the nuclear safeguards regime and facilitate the exchange of nuclear and nuclear related material in peaceful nuclear cooperation”<sup>13</sup>, it does not require it yet as a condition of supply. Although this question has been analysed systematically by the following plenary meetings, no consensus has been obtained between Participating States. To find out an issue to this ever-lasting discussion an approach to organise the potential entry into force of such condition of supply has been proposed to Participating States but did not obtain the necessary consensus.

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 Grand Father clause<sup>14</sup>, which authorise NSG suppliers 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 suppliers 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 authorisation, suppliers should inform and, if appropriate, consult in the event that they intend to authorize or to deny such transfers, the others NSG participating states.

This exception have 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 have expressed their concerns on the fact that such clause could only be used when the assistance by an NSG member State is essential to prevent or correct a imminent radiological hazard which poses significant danger to public health and safety. Such conditions where 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 to adopt a common interpretation. In 2006 when Russia announced its intention to use again the safety clause to export nuclear fuel to India, NSG members States have appeared less concerned by the transfer. This rather consensual reaction could only be explained by the new approach of NSG/India relationship initiated by the US/India Civil Nuclear Cooperation 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 didn't 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 to the recipient. For transfers to NPT Nuclear weapons States, the situation is rather simple as long as all of them have signed a voluntary safeguards agreement with IAEA including specific provisions implementing the additional protocol.

Considering the fact that NSG Guidelines for Nuclear Transfers contain no reference to the NPT<sup>15</sup> and therefore no reference to the NPT definition of a nuclear weapons State

---

<sup>12</sup> See INFCIRC/540.

<sup>13</sup> See Press Statement of NSG Plenary Meeting (Paris, 22-23 June 2000) <http://www.nsg-online.org/PRESS/2000-Press.pdf>

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

<sup>15</sup> The second group of guidelines dedicated to the export of nuclear dual use items mention only twice the NPT in paragraph 4 dedicated to criteria that suppliers States has to consider to consider in the decision process to grant or not the export authorisation.

holder 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 the NPT one?

The absence of 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 to adopt a definition of a nuclear weapon State which 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 weapon State? Like for 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 be in theory envisaged, the current practice of the NSG does not work with such interpretation. Most of NSG participating States export authorisation denials concern non NPT nuclear weapons States.

Finally, all NSG participating States are presently NPT State party and nuclear transfers to non NPT nuclear weapons States like India could not be authorised 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 US/India nuclear peaceful cooperation agreement 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 which will control all civilian nuclear facilities in perpetuity, it does appear that such specific agreement will never be conform to the CSA required by both international export control regimes. The Indian commitment to adhere and sign an Additional Protocol does not change the situation due to the fact that, 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 be in difficulties to individually implement such exception due to their legally binding NPT commitment.

It remains to be seen if nuclear suppliers States are ready to embark in this new nuclear non proliferation approach initiated by the US/India agreement, based on the political cooperation strengthening between suppliers even if it will induce the infringement of their NPT commitment.