

IAEA Additional Protocol: Prospects and Challenges for Pakistan

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Introduction

Pakistan aspires to be mainstreamed in the global nuclear order because it believes it has the requisite credentials. This particular Pakistani assertion grew stronger after US led efforts succeeded in granting India the waiver by the Nuclear Suppliers group (NSG) in 2008. The exemption was followed by India specific safeguards agreement with the International Atomic Energy Agency (IAEA) and the conclusion of various civil nuclear agreements between India and the major nuclear powers.

The legitimization of nuclear trade with India resulted in its coming out of the isolation it has been facing at the international level and symbolizes its recognition as a nuclear power in the global nuclear order. Concerned at the country-specific waiver given to India, Pakistan has maintained that there should be criteria based approach for civil nuclear agreements with states outside the Treaty on Non-Proliferation of Nuclear Weapons (NPT) and no country should be discriminated against on political grounds.

According to a recent National Command Authority (NCA) statement “NCA noted with satisfaction that Pakistan has the requisite credentials that entitle it to become part of all multi-lateral export control regimes, including the Nuclear Suppliers Group, for which Pakistan seeks adoption of a non-discriminatory approach.”¹

There have been several reports published by some Western think tanks recently that outline a potential pathway for incorporating Pakistan in the global nuclear mainstream. Conditions include geopolitical tradeoffs, signing of Comprehensive Test Ban Treaty (CTBT), unblocking the negotiations on Fissile Material Cut-off Treaty (FMCT) at the United Nations (UN) Conference on Disarmament (CD), and reconsidering the existing nuclear force posture particularly the induction of battlefield nuclear weapons.

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Pakistani official reactions to such proposals and media reports of back channel negotiations with important international interlocutors have followed at least two consistent themes. One, Pakistan will not accept any limitations on its nuclear program and second, criteria based approach should be followed for mainstreaming Pakistan in the global nuclear order in general and admission into the NSG and other nuclear related export control cartels, in particular.

This paper aims to discuss the historical background of the IAEA safeguards, its relationship with Pakistan and assessment of a potential additional protocol agreement that Pakistan could adopt. The paper argues that by signing the country specific IAEA additional protocol, Pakistan can improve its credentials for mainstreaming that it seeks in the global nuclear order, though this outcome is not guaranteed.

Background

Since its inception, in 1957, the IAEA has aimed at regulating and monitoring the spread of nuclear technology. It is the dual nature of nuclear technology and the challenge of its regulation, monitoring and controls, that a body such as the IAEA was deemed necessary. The objective was to ensure that countries with access to nuclear technology do not engage in weaponization efforts. IAEA has established monitoring mechanisms and assists in setting up and reviewing safety measures in and around nuclear facilities in member countries.

After the discovery of loopholes in the monitoring process under safeguard agreements—which led to the undetected weaponization of Iraq’s nuclear program—the Additional Protocol (AP) was introduced as a measure which further strengthens the monitoring process.² The Additional Protocol is a voluntary agreement which is not legally binding till entry into force by the concerned state.³ While the Model Additional Protocol is the standard supplement to IAEA Safeguards, exceptions have been made for nuclear weapons states for reasons of their national security imperatives, to selectively adhere to the provisions.

For the purpose of this paper, the country-specific Additional Protocol of some of the known nuclear weapons states are taken as a case study to determine whether the adoption thereof has, in fact, strengthened or undermined the greater non-proliferation aims of the IAEA’s underlined objectives.

Country-Specific Additional Protocol

The Protocol Additional to the Safeguards Agreement with the IAEA aims to expand its sphere of influence and access to the nuclear facilities of member states. But it takes into consideration that Nuclear Weapon States would be contravening their national security imperatives by allowing complete access to their nuclear establishments and information on their nuclear facilities. For this reason, the NWS have the option of negotiating country-specific additional protocols with the IAEA.

The United States, in good faith, subjected its civilian facilities to inspections under the United States Additional Protocol (USAP). This step was taken to encourage greater access to IAEA while demonstrating that granting wider access to the Agency would not hinder or negatively affect commercial utility of civilian nuclear facilities.⁴ According to the testimony of then acting Assistant Secretary of State for Non-Proliferation and International Security, Susan Burke before the Senate Committee on Foreign Relations, the US had adopted a comprehensive Additional Protocol. However, the national security exclusion provided for restrictive access to facilities, and information of vital security to the United States.⁵ It is a clear example of the deviation from the Model Additional Protocol which applies to non-Nuclear Weapon States.

All nuclear weapon states recognized by the NPT, have concluded Additional Protocols with the IAEA in accord with their respective national security imperatives. Additionally, India also signed an Additional Protocol with reservations in 2009 which entered into force in 2014.⁶ India's nuclear weapons capabilities are an established fact, it still remains a non-signatory to the NPT, which should have demanded a strict adherence to the Model Additional Protocol, as closely as possible, ideally speaking. However, this was not the case.

The following table shows India's facilities already under safeguards along with the safeguards accepted under the AP, as well as facilities that currently remain unsafeguarded by the IAEA.

India's Nuclear Facilities

REACTOR	POWER (MWe)	START-UP DATE	YEAR OF SAFEGUARDS APPLICAITON	SAFEGUARDED/ UNSAFEGUARDED
Rajasthan-1	100	1973-12-16	1977	INFCIRC/66 type
Rajasthan-2	200	1981-04-01	1977	INFCIRC/66 type
Madras-1	170	1984-01-27		Not Safeguarded
Madras-2	220	1986-03-27		Not Safeguarded
Narora-1	220	1991-01-01	End of 2014	INFCIRC/754
Narora-2	220	1992-07-01	End of 2014	INFCIRC/ 754
Kakrapar-1	220	1993-05-06	2010	INFCIRC/ 754
Kakrapar-2	220	1995-09-01	2010	INFIRC/ 754
Kaiga-2	220	2000-03-16		Not Safeguarded
Rajasthan-3	220	2000-06-01	2010	INFCIRC/ 754
Kaiga-1	220	2000-11-16		Not Safeguarded
Rajasthan-4	220	2000-12-23	2010	INFCIRC/ 754
Tarapur-4	540	2005-09-12		Not Safeguarded
Tarapur-3	540	2006-08-18		Not Safeguarded
Kaiga-3	220	2007-05-06		Not Safeguarded
Rajasthan-5	220	2010-02-04	2009	INFCIRC/ 754
Rajasthan-6	220	2010-03-31	2009	INFCIRC/ 754
Kaiga-4	220	2011-01-20		Not Safeguarded

Source: International Panel on Fissile Materials⁷

M. V. Ramana writes in an article for the International Panel on Fissile Materials (IPFM), India's additional protocol fares worse—in facilitating access to IAEA inspectors and accepting additional obligations of nuclear safeguards—than Russia and China which, till then, had the least accommodating of additional protocols among the Nuclear Weapon States.⁸ He further adds that this creates a bad precedent for states with significant nuclear activity that have not yet adopted a Protocol Additional to the Safeguards Agreement.⁹ Needless to say, this situation may not bode well for the international non-proliferation efforts, as it provides little expansion of the IAEA's monitoring abilities in India, which was the prime purpose of the development of the Additional Protocol in the 1990s.

While India has undoubtedly placed certain nuclear facilities under the Additional Protocol, some of its higher capacity installations, Tarapur-3 and 4, still remain outside the arrangement (see fig1). A closer inspection of the Indian Additional Protocol (attached as annex to this paper) suggests that very few measures of significance have been agreed to by the Government of India which exceeds the scope of its existing safeguards agreement with the IAEA.

In contrast, Pakistan does not have an Additional Protocol in place but has safeguards on civilian facilities with the IAEA, which have received vote of confidence from international bodies like the Nuclear Threat Initiative.¹⁰ Pakistan, in the latest NTI report has scored 87 out of 100 points in domestic commitments and capacity, while India scored 47.¹¹ Pakistan may have abstained from committing to international agreements or expansions thereof—such as the IAEA AP—it has put domestic legislative measures in place, under the Pakistan Nuclear Regulatory Authority Ordinance of 2001,¹² while the same cannot be said for India which so far lacks even an independent nuclear regulatory authority.

Pakistan and the IAEA

Pakistan is a party to safeguards agreements with the IAEA for some time now, but has held strong apprehensions against treaties such as the NPT and refuses to negotiate on the FMCT, due to their discriminatory nature. While signing these treaties could provide an easy path for Pakistan's induction into the realm of "normal" nuclear states, their terms are in conflict with Pakistan's national security imperatives. This option, therefore, is not viable while the terms remain

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discriminatory. Although international norms, especially after the entry into force of the Treaty on Non-Proliferation of Nuclear Weapons, have deemed Pakistan as an outlier state among nuclear weapon states, there are prospects of a shift in this attitude.

As mentioned before, the Additional Protocol exists in two forms—the Model Protocol aimed at non-Nuclear Weapons States (NNWS), and the country-specific Protocol for Nuclear Weapons States (NWS). Until recently, the five NWS, as recognized by the NPT, were the only ones to have signed country-specific Additional Protocols. In 2006, however, India agreed to enter into negotiations on an Additional Protocol with the IAEA. This AP was ratified by India in 2014, making it the first non-NPT state to have negotiated and ratified a country-specific agreement.¹³ While India agreed to the signing of the AP as a condition of the US-India nuclear deal, it may be beneficial for Pakistan to explore the possibilities of signing the AP with IAEA regardless of a concrete reciprocal offer, the likes of which India has received in the form of a nuclear trade deal.

The argument here is that in the presence of a number of safeguards agreements¹⁴ between the IAEA and the Islamic Republic of Pakistan, the country is already adhering to many internationally recognized safeguards measures. Additionally, negotiating an AP has no restrictions of the kind that the NPT and other international agreements have which Pakistan has consistently opposed, terming as contrary to its national interest. Should Pakistan follow the Indian AP, it could meet an important criteria for engaging in trade relations with other nuclear powers through the Nuclear Suppliers Group, while maintaining its national security prerogatives under the provisions of the country-specific AP.

In order to fulfill the bare minimum of requirements, ala India, Pakistan would primarily have to accept reporting measure on exports of Uranium and Thorium should they exceed 10 and 20 tonnes respectively, per year. Groundwork for the separation of fuel cycle for military and civilian uses of nuclear technology, which in any case is a prudent step when the country has declared aspirations for engaging in nuclear trade with the NSG member states, could also be undertaken.

Existing IAEA Safeguards in Pakistan

Existing Safeguards agreements concluded by Pakistan are governed under INFCIRC/26 and INFCIRC/66/Rev.2. These safeguards are termed as facility specific safeguards which mean that they cover only specific civilian facilities and not all nuclear facilities. Likewise by signing specific provisions of additional protocol agreements, as suggested in next section, the new safeguards will cover only the civilian nuclear facilities. Pakistan has the prerogative to adopt whatever it deems necessary from the model additional protocol that serves its interests and without compromising the military side of its nuclear program.

A Potential Additional Protocol Agreement of IAEA Safeguards between Pakistan and the IAEA

As per the dictates of the Pakistan Nuclear Regulatory Authority (PNRA) Ordinance of 2001, Pakistan may:

...enter into co-operation with any other nuclear regulatory authority or international organization in respect of the peaceful uses of atomic energy pursuant to the express terms and conditions of any programme or agreement for co-operation to which such authority or organization is a party or pursuant to any other international arrangement made before or after the commencement of this Ordinance.¹⁵

It further provides for co-operative assistance in the provisions of Section 29 stating that an “officer of the Authority or any other person authorized in that behalf by the Authority, may, at all reasonable hours, enter any premises, vehicle, vessel or aircraft”. However, the Protocol provides the country to allow access to locations that may not contravene with the state’s national interest. Pakistan may also choose to share information as per Section 29.(c)¹⁶ on environmental testing carried out under the provisions of Section 39 of the PNRA Ordinance.¹⁷ It would be a boost to the credentials of Pakistan as a responsible nuclear state by sharing reports on the aforementioned, with the IAEA.

After careful assessment of Pakistan’s domestic legislations on nuclear safeguards, especially the PNRA Ordinance of 2001 which has already enacted some of these

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provisions into law, following are the provisions of additional protocol that Pakistan can consider to adopt.

PROVISION OF INFORMATION

The provision of information section lies at the foundation of the IAEA additional protocol as it lays down the level of information that the state will be willing to provide to IAEA about its civil nuclear facilities. The selected articles in this section will enable Pakistan to submit the information regarding only the description of each building on each site through map of the site. There are other articles in the model protocol in this section but acceding to them will be difficult for Pakistan.

Article 2

(iii) A general description of each building on each site, including its use and, if not apparent from that description, its contents. The description shall include a map of the site.

Article 3

a. shall provide to the Agency the information identified in Article 2.a.(i), (iii), (iv), (v), (vi)(a), (vii) and (x) and Article 2.b.(i) within 180 days of the entry into force of this Protocol.

b. shall provide to the Agency, by 15 May of each year, updates of the information referred to in paragraph a. above for the period covering the previous calendar year. If there has been no change to the information previously provided, shall so indicate

COMPLEMENTARY ACCESS

Article 4

This article lays out the protocols through which IAEA will only verify the information provided under the article 2 of the provision of information. The verification rules proposed as under do not diverge significantly from the existing rules agreed by Pakistan under the IAEA safe guard agreement.

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The following shall apply in connection with the implementation of complementary access under Article 5 of this Protocol:

- a. The Agency shall not mechanistically or systematically seek to verify the information referred to in Article 2; however, the Agency shall have access to:
 - (i) Any location referred to in Article 5.a.(i) or (iii) on a selective basis in order to assure the absence of undeclared nuclear material and activities;
- c. Advance notice shall be in writing and shall specify the reasons for access and the activities to be carried out during such access.
- d. In the case of a question or inconsistency, the Agency shall provide with an opportunity to clarify and facilitate the resolution of the question or inconsistency. Such an opportunity will be provided before a request for access, unless the Agency considers that delay in access would prejudice the purpose for which the access is sought. In any event, the Agency shall not draw any conclusions about the question or inconsistency until has been provided with such an opportunity.
- e. Unless otherwise agreed to by, access shall only take place during regular working hours.
- f. shall have the right to have Agency inspectors accompanied during their access by representatives of, provided that the inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions.

Article 5

This article is related to the access IAEA will be provided to the information of facilities provided in the provision of information. Since we have highlighted in the previous section about the specific information provided therefore we can select the below given text under this article from the model IAEA additional protocol.

..... shall provide the Agency with access to:

- a. (i) Any place on a site;

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(iii) Any decommissioned facility or decommissioned location outside facilities where nuclear material was customarily used.

Article 6

This article describes the exact activities IAEA will take in order to verify the information. These activities will be strictly related to the sites declared in provision of information and their environmental samples. No general environmental sample can be allowed under the proposed agreement.

When implementing Article 5, the Agency may carry out the following activities:

- a. For access in accordance with Article 5.a.(i) or (iii): visual observation; collection of environmental samples; utilization of radiation detection and measurement devices; application of seals and other identifying and tamper indicating devices specified in Subsidiary Arrangements; and other objective measures which have been demonstrated to be technically feasible and the use of which has been agreed by the Board of Governors (hereinafter referred to as the "Board") and following consultations between the Agency and

Article 7

a. Upon request by, the Agency and shall make arrangements for managed access under this Protocol in order to prevent the dissemination of proliferation sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Such arrangements shall not preclude the Agency from conducting activities necessary to provide credible assurance of the absence of undeclared nuclear material and activities at the location in question, including the resolution of a question relating to the correctness and completeness of the information referred to in Article 2 or of an inconsistency relating to that information.

b. may, when providing the information referred to in Article 2, inform the Agency of the places at a site or location at which managed access may be applicable.

Article 10

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This article increases the stakes of a state and allows it to monitor the overall inspection activities while providing the forum of identifying and resolving inconsistencies regarding the information.

The Agency shall inform of:

- a. The activities carried out under this Protocol, including those in respect of any questions or inconsistencies the Agency had brought to the attention of, within sixty days of the activities being carried out by the Agency.
- b. The results of activities in respect of any questions or inconsistencies the Agency had brought to the attention of, as soon as possible but in any case within thirty days of the results being established by the Agency.
- c. The conclusions it has drawn from its activities under this Protocol. The conclusions shall be provided annually.

DESIGNATION OF AGENCY INSPECTORS

The state has the right under the following proposed articles to jointly control the designation of IAEA inspectors' process. This is common amongst the agreements with IAEA concluded by other states.

Article 11

- a. (i) The Director General shall notify of the Board's approval of any Agency official as a safeguards inspector. Unless 10 advises the Director General of its rejection of such an official as an inspector for within three months of receipt of notification of the Board's approval, the inspector so notified to shall be considered designated to;
(ii) The Director General, acting in response to a request by or on his own initiative, shall immediately inform of the withdrawal of the designation of any official as an inspector for
- b. A notification referred to in paragraph a. above shall be deemed to be received by seven days after the date of the transmission by registered mail of the notification by the Agency to

VISAS

Article 12

..... shall, within one month of the receipt of a request therefor, provide the designated inspector specified in the request with appropriate multiple entry/exit and/or transit visas, where required, to enable the inspector to enter and remain on the territory of for the purpose of carrying out his/her functions. Any visas required shall be valid for at least one year and shall be renewed, as required, to cover the duration of the inspector's designation to

COMMUNICATIONS SYSTEMS

Article 14

- a. shall permit and protect free communications by the Agency for official purposes between Agency inspectors in and Agency Headquarters and/or Regional Offices, including attended and unattended transmission of information generated by Agency containment and/or surveillance or measurement devices. The Agency shall have, in consultation with, the right to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication, not in use in
- b. Communication and transmission of information as provided for in paragraph a. above shall take due account of the need to protect proprietary or commercially sensitive information or design information which regards as being of particular sensitivity.

PROTECTION OF CONFIDENTIAL INFORMATION

Article 15

- a. The Agency shall maintain a stringent regime to ensure effective protection against disclosure of commercial, technological and industrial secrets and other

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confidential information coming to its knowledge, including such information coming to the Agency's knowledge in the implementation of this Protocol.

- b. The regime referred to in paragraph a. above shall include, among others, provisions relating to: (i) General principles and associated measures for the handling of confidential information; (ii) Conditions of staff employment relating to the protection of confidential information; 12 (iii) Procedures in cases of breaches or alleged breaches of confidentiality.
- c. The regime referred to in paragraph a. above shall be approved and periodically reviewed by the Board.

Conclusion

Pakistan as a responsible nuclear weapon state has strived hard to support the global objectives of nuclear non-proliferation, nuclear safety and security. This responsible nuclear stewardship has contributed in improving international image and positive relationships in the global nuclear order especially with the IAEA. Significant obstacles remain though in achieving a mainstreamed relationship in the nuclear order including the membership of the NSG whereas India has been granted an exemption from NSG and its efforts for full membership has been renewed.

Consistent with its official stance of criteria based approach for inclusion in the nuclear export control regimes, Pakistan would have to comply with legal commitments associated with them sooner or later. In this context, it would be prudent for Pakistan to accelerate its efforts for mainstreaming by signing the country specific additional protocol for its civilian nuclear facilities. As noted in the introduction, signing the country specific additional protocol alone may not be sufficient for nuclear mainstreaming but it will be helpful in establishing Pakistan's credentials for entry into the NSG and other export control arrangements.

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Endnotes

- ¹ ISPR Press Release No. No PR64/2016-ISPR. Dated February 24, 2016. https://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=3211#pr_link3211
- ² "Fact Sheets & Briefs." The 1997 IAEA Additional Protocol At a Glance. Accessed March 12, 2016. <https://www.armscontrol.org/factsheets/IAEAProtoco>.
- ³ "Additional Protocol." International Atomic Energy Agency. Accessed April 10, 2016. <https://www.iaea.org/safeguards/safeguards-legal-framework/additional-protocol>.
- ⁴ Susan Burke, Testimony Before the Senate Committee on Foreign Relations, U.S.-IAEA Additional Protocol. Accessed March 12, 2016. <http://2001-2009.state.gov/t/isn/rls/rm/29249.htm>.
- ⁵ Ibid.
- ⁶ Aabha Dixit, "India's Additional Protocol Enters Into Force." IAEA Office of Public Information and Communication. Accessed March 12, 2016. <https://www.iaea.org/newscenter/news/indias-additional-protocol-enters-force>.
- ⁷ M. V. Ramana, "India Ratifies an Additional Protocol and Will Safeguard Two More Nuclear Power Reactors." International Panel on Fissile Materials. July 1, 2014. Accessed March 14, 2016. http://fissilematerials.org/blog/2014/07/india_ratifies_an_additio.html.
- ⁸ Ibid.
- ⁹ Ibid.
- ¹⁰ "NTI Nuclear Materials Security Index." Nuclear Threat Initiative Most Improved Countries Comments. Accessed April 10, 2016. <http://ntiindex.org/progress-challenges/most-improved-countries/>.
- ¹¹ *NTI Nuclear Security Index Building a Framework for Assurance, Accountability, and Action*. Report. Nuclear Threat Initiative, 2016. 31. Accessed March 14, 2016. http://ntiindex.org/wp-content/uploads/2016/02/NTI_2016-Index_021116.pdf.
- ¹² "Pakistan Nuclear Regulatory Authority Ordinance of 2001." *The Gazette of Pakistan*. January 22, 2001. Accessed April 12, 2016. [http://www.pnra.org/legal_basis/Ordinance_2001\(Amennded\).pdf](http://www.pnra.org/legal_basis/Ordinance_2001(Amennded).pdf).
- ¹³ "Decision on Additional Protocol Signal of Commitment: Government." *Economic times*. June 23, 2014. Accessed March 21, 2016. http://articles.economictimes.indiatimes.com/2014-06-23/news/50798298_1_civilian-nuclear-facilities-protocol-iaea.
- ¹⁴ "Pakistan; Country Details : Office of Legal Affairs.", IAEA. Accessed March 23, 2016. <https://ola.iaea.org/ola/FactSheets/CountryDetails.asp?country=PK>.
- ¹⁵ Model protocol additional to the agreement(s) between state(s) and the international atomic energy agency for the application of safeguards <https://www.iaea.org/sites/default/files/infirc540.pdf>
- ¹⁶ Article (c) of Section 29 of the PNRA Ordinance allows authorized inspectors to "examine designs, drawings, records, memoranda, reports or documents pertaining to the use, operation, maintenance or storage of any radiation generator or, as the case may be, nuclear substances or radioactive materials;"
- ¹⁷ Text of the Section reads as: "The Authority shall ensure, implement and co-ordinate national programme of environmental surveillance to check any build-up of environmental radioactivity that might affect public. Such programme shall be carried out in collaboration with various governmental, public or private bodies concerned."

ANNEX-I

**INFCIRC/754/Add.6 Annex PROTOCOL ADDITIONAL TO THE
AGREEMENT BETWEEN THE GOVERNMENT OF INDIA AND THE
INTERNATIONAL ATOMIC ENERGY AGENCY FOR THE APPLICATION
OF SAFEGUARDS TO CIVILIAN NUCLEAR FACILITIES**

WHEREAS the Government of India (hereinafter referred to as "India") and the International Atomic Energy Agency (hereinafter referred to as the "Agency") are parties to an Agreement for the Application of Safeguards to Civilian Nuclear Facilities (hereinafter referred to as the "Safeguards Agreement"), which entered into force on 11 May 2009;

AWARE OF the desire of the international community to further enhance nuclear non-proliferation by strengthening the effectiveness and improving the efficiency of the Agency's safeguards system;

RECOGNIZING that India, in the exercise of its sovereign rights, is prepared to cooperate with the Agency in further development of peaceful uses of nuclear energy;

WHEREAS India, a State with advanced nuclear technology, wishes to expand civil nuclear cooperation for its national development;

RECALLING that the Agency must take into account in the implementation of safeguards the need to: avoid hampering the economic and technological development of India or international co-operation in the field of peaceful nuclear activities; respect health, safety, physical protection and other security provisions in force and the rights of individuals; and take every precaution to protect commercial, technological and industrial secrets as well as other confidential information coming to its knowledge;

WHEREAS the frequency and intensity of activities described in this Protocol shall be kept to the minimum consistent with the objective of strengthening the effectiveness and improving the efficiency of Agency safeguards;

NOW THEREFORE India and the Agency have agreed as follows:

RELATIONSHIP BETWEEN THE PROTOCOL AND THE SAFEGUARDS AGREEMENT

Article 1

- a. The provisions of the Safeguards Agreement shall apply to this Protocol to the extent that they are relevant to and compatible with the provisions of this Protocol. In case of conflict between the provisions of the Safeguards Agreement and those of this Protocol, the provisions of this Protocol shall apply.
- b. The Protocol shall be implemented in a manner designed to avoid hampering India's economic or technological development and not to hinder or otherwise interfere with any activities involving the use by India of nuclear material, non-nuclear material, equipment, components, information or technology produced, acquired or developed by India outside the scope of the Safeguards Agreement for its own purposes.

PROVISION OF INFORMATION

Article 2

- a. India shall provide the Agency with a declaration under this Protocol containing:
 - (i) The quantities, the chemical composition and the destination of each export out of India of source material which has not reached the composition and purity suitable for fuel fabrication or for being isotopically enriched, as follows:
 - (a) Ten metric tons of uranium, or for successive exports of uranium from India to the same State, each of less than ten metric tons, but exceeding a total of ten metric tons for the year;
 - (b) Twenty metric tons of thorium, or for successive exports of thorium from India to the same State, each of less than twenty metric tons, but exceeding a total of twenty metric tons for the year; it being understood that there is no requirement to provide information on such material once it is in its non-nuclear end-use form.
 - (ii) The following information regarding specified equipment and non-nuclear material listed in the Annex hereto: For each export out of India of such equipment and material: the identity, quantity, location of intended use in the receiving State and date or, as appropriate, expected date, of export. b. Upon request by the Agency, India shall provide

amplifications or clarifications of any information it has provided under this Article, in so far as relevant for the purpose of safeguards in a State that has accepted comprehensive safeguards. 3 Article 3 a. Without prejudice to any other reporting requirements contained in the Safeguards Agreement, India shall provide to the Agency, by 15 May of each year, the information identified in Article 2.a.(i) for the period covering the previous calendar year.

- b. Without prejudice to any other reporting requirements contained in the Safeguards Agreement, India shall provide to the Agency on a quarterly basis the information identified in Article 2.a.(ii). This information shall be provided within sixty days of the end of each quarter.

DESIGNATION OF AGENCY INSPECTORS

Article 4

a.
(i) The Director General shall notify India of the Board's approval of any Agency official as a safeguards inspector. Unless India advises the Director General of its rejection of such an official as an inspector for India within three months of receipt of notification of the Board's approval, the inspector so notified to India shall be considered designated to India.

(ii) The Director General, acting in response to a request by India or on his own initiative, shall immediately inform India of the withdrawal of the designation of any official as an inspector for India.

b. A notification referred to in paragraph a. above shall be deemed to be received by India seven days after the date of the transmission by registered mail of the notification by the Agency to India.

VISAS

Article 5

India shall, within one month of the receipt of a request therefor, provide the designated inspector specified in the request with appropriate multiple entry/exit and/or transit visas, where required, to enable the inspector to enter and remain on the territory of India for the purpose of carrying out his/her functions. Any visas required shall be valid for at least one year and shall be renewed, as required, to cover the duration of the inspector's designation to India.

COMMUNICATIONS SYSTEMS

Article 6

- a. India shall permit and protect free communications by the Agency for official purposes between Agency inspectors in India and Agency Headquarters and/or Regional Offices, 4 including attended and unattended transmission of information generated by Agency containment and/or surveillance or measurement devices. The Agency shall have, in consultation with India, the right to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication, not in use in India. At the request of India or the Agency, details of the implementation of this paragraph with respect to the attended or unattended transmission of information generated by Agency containment and/or surveillance or measurement devices shall be specified in the Subsidiary Arrangements.
- b. Communication and transmission of information as provided for in paragraph a. above shall take due account of the need to protect proprietary or commercially sensitive information or design information which India regards as being of particular sensitivity.

PROTECTION OF CONFIDENTIAL INFORMATION

Article 7

- a. The Agency shall maintain a stringent regime to ensure effective protection against disclosure of commercial, technological and industrial secrets and other confidential information coming to its knowledge, including such information coming to the Agency's knowledge in the implementation of this Protocol.
- b. The regime referred to in paragraph a. above shall include, among others, provisions relating to: (i) General principles and associated measures for the handling of confidential information; (ii) Conditions of staff employment relating to the protection of confidential information; (iii) Procedures in cases of breaches or alleged breaches of confidentiality.
- c. The regime referred to in paragraph a. above shall be approved and periodically reviewed by the Board.

ANNEX

Article 8

- a. The Annex to this Protocol shall be an integral part thereof. Except for the purposes of amendment of the Annex, the term "Protocol" as used in this instrument means the Protocol and the Annex together. 5
- b. The list of equipment and material specified in the Annex may be amended by the Board upon the advice of an open-ended working group of experts established by the Board. Any such amendment shall take effect four months after its adoption by the Board.

ENTRY INTO FORCE

Article 9

- a. This Protocol shall enter into force on the date on which the Agency receives from India written notification that India's statutory and/or constitutional requirements for entry into force have been met.
- b. India may, at any date before this Protocol enters into force, declare that it will apply this Protocol provisionally.
- c. The Director General shall promptly inform all Member States of the Agency of any declaration of provisional application of, and of the entry into force of, this Protocol.

DONE in Vienna on the 15th day of May 2009, in duplicate, in the English language. For the GOVERNMENT OF INDIA: For the INTERNATIONAL ATOMIC ENERGY AGENCY: (signed) (signed) Saurabh Kumar Mohamed El-Baradei Ambassador Director General