

IDSA

Special Feature

Membership Expansion in the Nuclear Suppliers Group

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June 22, 2016

S*ummary*

Formally adhering to NSG guidelines, India and Pakistan have applied to the current NSG Chair for membership in the group. Normally, under the Rules of Procedure, the NSG Chair would have informed the Participating Governments of the interest in membership of the government(s) concerned, of the Chair's views with regard to its merits and of the procedure to be followed, and would have sought the views of Participating Governments on the Chair's recommendations. The Chair would have then recommended either that an intersessional decision be taken on the government's request for Participating status or that the matter be referred to the next Plenary for consideration and/or decision.

Part 1: Rules for Admission of New Members

The Indian application for NSG membership, followed by that of Pakistan, has rekindled much interest in both official circles as well as among security analysts in India, Pakistan and elsewhere. Much of the writing on the subject of NSG expansion revolves around the NSG's Rules of Procedures and membership requirements.

During its initial period of existence, NSG did not have any fixed criteria for membership. Although the group was formed as early as 1974, its first formal plenary meeting was held only in 1992 in Warsaw. At that meeting, the 27 Participating governments took a consensus decision of requiring the application of fullscope IAEA safeguards to all current and future nuclear activities as a necessary condition for all significant and new nuclear exports to non-nuclear weapon states.

It was only at the 1993 Lucerne Plenary that the NSG adopted its first procedural Arrangement. According to this, the membership criteria were:

- a) Membership of the Nuclear-Suppliers Group initially consists of the countries adhering to the Nuclear Supplier Guidelines (INFCIRC/254/Rev. 1, Part 1 and 2) and fully participating in the Plenary Meeting in Lucerne in 1993.
- b) Countries other than those referred to in paragraph 1 (a) may be invited to join the NSG by a consensus decision of its members. Consensus may be achieved intersessionally by the Chair through regular channels.
- c) While it is understood that prospective members would, as a rule, adhere to INFCIRC/254/Rev. 1 in its entirety before being considered for membership, it would also be possible to invite adherents to part 1 of INFCIRC/254/Rev. 1 to participate in Plenary Meetings prior to their adherence to Part 2. Until these countries have adhered to Part 2, they will only take part as observers in Plenary Meeting discussions on issues related to Part 2.

Although at this time, the NSG had no NPT requirements, in view of the fact that it had adopted full-scope safeguards as a condition for nuclear exports by NSG members, from 1993 onwards the NSG had an unwritten requirement of full scope safeguards as a precondition for NSG membership. Thus Argentina, although it had acceded to NPT only in 1995, was nevertheless admitted as a member at the April 1994 Madrid Plenary as its quadripartite agreement, resulting in full scope safeguards in Argentina, had come into force in early March 1994.

Subsequently, in view of the increasing number of countries desiring to be members of the NSG, the 2000 Paris Plenary mandated the NSG Implementation Working Group (IMP) to elaborate a draft paper presented by them on how a restructured NSG might operate and make proposals to the Aspen Plenary.

At the 2001 Aspen Plenary the IMP presented their document 'Procedural Arrangement for the NSG', with a consensus recommendation that the Plenary endorse, adopt and implement it, with the exception of one reserve. Nevertheless, it was clarified that there was no intention behind this reserve to block restructuring or to prevent a final decision on the Procedural Arrangement document at the Plenary. Accordingly, the 2001 Aspen Plenary adopted by consensus the new "Rules of Procedure."

With respect to participation in the NSG, the Plenary adopted the following:

5. PARTICIPATION IN THE NSG

Participation in the NSG as of 11 May 2001 consists of those governments adhering to and having exchanged diplomatic notes of acceptance of the Guidelines for the Export of Nuclear Material, Equipment and Technology, and the Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Materials, Software and Related Technology (respectively comprising IAEA publications INFCIRC/254/Part 1 as amended and INFCIRC/254/Part 2 as amended, including their Annexes), and referred to in footnote 1 of this document. Governments other than those referred to in footnote 1 may be invited to join the NSG by a consensus decision of the NSG Participating Governments. Consensus may be achieved intersessionally by the Chair through regular channels.

5.1 PARTICIPATION: FACTORS TO BE CONSIDERED

The following factors, among others, should be considered by Participating Governments when dealing with the possible acceptance of a government as a new Participating Government. A new Participating Government should:

- 5.1.1. be able to supply items (includes transit items) covered by the Annexes to Parts 1 and 2 of the Guidelines;
- 5.1.2. adhere to and act in accordance with the Guidelines;
- 5.1.3. have in force a legally-based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines;
- 5.1.4. be a party to the NPT, the Treaties of Pelindaba, Rarotonga, Tlatelolco or Bangkok or an equivalent international nuclear non-proliferation agreement, and in full compliance with the obligations of such agreement(s), and, as appropriate, have in force a full-scope safeguards agreement with the IAEA;
- 5.1.5. be supportive of international efforts towards non-proliferation of weapons of mass destruction and of their delivery vehicles.

5.2 PARTICIPATION: PROCEDURE

Adherence

5.2.1 To be eligible to become a new NSG Participating Government, a government must have adhered to the Guidelines for the Export of Nuclear Material, Equipment and Technology, and the Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Materials, Software and Related Technology.

Such adherence is accomplished by sending an official communication to the Director-General of the IAEA stating that the government will act in accordance with the Guidelines. This communication is to be intended for publication in the INFCIRC series.

Participation procedure

5.2.2 If the government concerned has adhered to the Guidelines and is interested in becoming a Participating Government of the NSG, it should indicate its desire to do so to the current NSG Chair directly or through the Point of Contact.

5.2.3 The NSG Chair will then inform the Participating Governments of the interest of the government concerned, of the Chair's views with regard to its merits and of the procedure to be followed, and will seek the views of Participating Governments on the Chair's recommendations.

5.2.4 The Chair may recommend either that an intersessional decision be taken on the government's request for Participating status or that the matter be referred to the next Plenary for consideration and/or decision.

5.2.5 If an intersessional decision is recommended by the Chair, the POC will, upon guidance from the Chair and by a specific date, seek acceptance by the Participating Governments of the specific government's request for Participating status. As a rule, the Chair's recommendation would contain as annexes the official communications concerning the request for Participating status, adherence to the Guidelines as well as any other relevant information, particularly concerning the requesting government's export control legislation and procedures.

5.2.6 If all Participating Governments accept the government's request for Participating status and so inform the POC in writing, the Chair will then inform the government concerned that it has been invited to become a Participating Government of the NSG.

5.2.7 Participation will become effective on the date set by the Chair for, and upon completion of, an exchange of notes of acceptance of the Part 1 and Part 2 Guidelines, and of the document "Procedural Arrangement for the Nuclear Suppliers Group" and its Annexes, including the Part 2 MOU⁴. The POC will provide model diplomatic notes: i) for the requesting

government to provide a note to each existing Participating Government, and ii) for existing Participating Governments each to provide a note to the government concerned, declaring that as of that date the government concerned is considered a Participating Government of the NSG.

5.2.8 If the decision on a request for Participating status is referred to the Plenary, the Plenary will decide on the matter taking into consideration the factors listed as relevant in this regard and the requirement set out under point 5.2.7 above. The Plenary will set a date for the exchange of notes required by point 5.2.7 above.”

There has been extensive discussion and debate on the phrase “Factors to be Considered” for Participation (See 5.1 above). The United States, in its “Food for Thought” paper submitted to the 2011 Plenary, had argued that the factors “should be considered by the Participating Governments” and are not mandatory criteria that must be met by any proposed candidate for NSG membership. The procedural Arrangement does not require that a candidate meet all of the stated criteria.

According to the IMP, it had considered whether a reference to ratification of an Additional Protocol with the IAEA should be added as a factor to be taken into account when considering future requests for participation in the NSG. As the IMP reported “A significant number strongly supported the idea and saw no difficulty in it, given *that it would be just one factor among many for consideration and that non-ratification would not necessarily preclude a government from achieving participation status*” [emphasis mine]. Part of the reason for the omission is, of course, the fact that some NSG Participating governments have not signed/ratified the Additional Protocol and are strongly opposed to such a move.

China’s Membership

How far has the NSG, as a group, followed its own rules? For instance, it has stated clearly that “If a government concerned has adhered to the Guidelines and is interested in becoming a Participating Government of the NSG, it should indicate its desire to do so to the current NSG Chair directly or through the Point of Contact.” It has also stated clearly that adherence requires that “a government *must have adhered* to the Guidelines for the Export of Nuclear Material, Equipment and Technology, and the Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Materials, Software and Related Technology” [emphasis mine]. And that “Such adherence is accomplished by sending an official communication to the Director-General of the IAEA stating that the government will act in accordance with the Guidelines. This communication is to be intended for publication in the INFCIRC series.”

The Chinese government, when it sent its adherence letter to the DG IAEA, hedged its bets by stating that “the Chinese Government has submitted its application for the membership of the Nuclear Suppliers Group (NSG). China *will, once admitted into NSG, act* in accordance with the NSG Guidelines” – a clear departure from the NSG Rules of procedure. Yet, the NSG overlooked this error.

China's second transgression from the established NSG rules is with reference to its continued nuclear cooperation with Pakistan. After the 2000 Paris Plenary, the IMP in carrying out its mandate had considered an amendment to the NSG Guidelines on "grandfathering" by establishing a policy of requesting applicants for membership to provide information of contracts or agreements, which it feels meets the exemption provisions of paragraph 4(c) of the Guidelines of Part 1. Although this was not formally recommended at that time in 2002, there is circumstantial evidence to suggest that it became a practice since then.

According to a November 2008 cable from the US Secretary of State,

"As part of joining the NSG in 2004, China disclosed its ongoing civil nuclear cooperation with Pakistan. Thus, that ongoing cooperation was grandfathered and is limited to construction of Chashma II Nuclear Power Plant for Pakistan; life-time support and fuel supply for the safeguarded Chashma I (construction completed in 1999) and II (construction likely completed by 2011) nuclear power plants; supply of heavy water and operational safety service to the safeguarded Karachi nuclear power plant; and supply of fuel and operational safety service to the two safeguarded research reactors at the Pakistan Institute of Nuclear Science and Technology (PINSTECH). *China's statement did not make any reference to other nuclear cooperation activities that it had committed to undertake in the future.* The ongoing work was grandfathered under the exception in Paragraph 4(c) of INFCIRC/254/Rev.9/Part 1 to the NSG Guidelines provision requiring full-scope safeguards as a condition of nuclear supply of trigger-list items. For countries, like China, that adhere to the NSG Guidelines after April 3, 1992, the exception in Paragraph 4(c) (for agreements or contracts drawn up prior to April 3, 1992) does not apply to agreements (to be) drawn up after their date of adherence."

Here again, the NSG could not take any action against China and hence overlooked the Chinese violation of its rules.

Thus, all in all, (i) the Guidelines and Rules of procedure were not iron clad requirements and (ii) some countries had wilfully violated these rules with impunity without any adverse consequence. Hence, the recent Chinese assertions that its policy is not anti-India but is only for a rule-based process does not and should not carry much weight. In any case, NSG members will themselves be aware of the Chinese undertakings at the time of its admission and if these had been violated.

Part II: Evaluation of the record of the applicants

Whatever be the final common criteria that is evolved for new membership, in the final analysis, given the objectives of NSG and NPT, new applicants will have to be judged by NSG members on the record of the applicants on the following items:

- i) Non-proliferation record in terms of
 - a. Their past history in contributing to the efforts of other states, especially non-nuclear weapon states to acquire unsafeguarded special nuclear material and missile systems; and
 - b. Their history in pursuing domestic nuclear and WMD related missile programmes with clandestinely imported materials, dual-use items and controlled items from other countries through illegal clandestine channels.
- ii) Their history of restraint in nuclear weapon and missile programmes;
- iii) The benefits the international community will by bringing some, if not all, of their unsafeguarded nuclear facilities, materials and technology under international supervision, if not international control. This can be done by way of separation of the nuclear facilities and materials under IAEA safeguards and placing under IAEA safeguards such facilities and materials that would otherwise remain unsafeguarded.

Now that both India and Pakistan have applied for NSG membership, how should NSG proceed in its consideration of these two applications?

NSG is an autonomous private club with its own rules. It arrives at decisions through a consensus process. In the final analysis, its decisions are not subject to any review. While considering the admission of new members, its decisions are taken on purely political grounds. While the NSG's decisions or the process by which it arrives at decisions cannot be dictated or decided by either India or Pakistan, it is certainly open to discussion. The following are some of the factors that need to be taken into account by NSG members is formulating the requirements for membership and evaluating the two applications:

1) Separation of civil and military nuclear facilities

In 2008, at the time it was granted the NSG exemption, India had undertaken (INFCIRC/731) to: (a) identify and separate civilian and military nuclear facilities and programmes in a phased manner; and, (b) voluntarily place its civilian nuclear facilities under IAEA safeguards. At that time, India had 23 power reactors (with a capacity of 24,024 MWth) under operation/construction, of which only six (capacity of 8,099 MWth) were under IAEA safeguards due to treaty obligations. The other 17 reactors (capacity of 15,925 MWth) were all indigenously designed and constructed without any obligation of placing them under IAEA safeguards. As a result of the

separation plan, India decided to voluntarily place under IAEA safeguards eight of these unsafeguarded reactors (Capacity 6408 MWth). More such indigenous reactors will be placed under IAEA safeguards as time progresses and India's civil nuclear programme expands its capacity.

Pakistan today has six power reactors under operation/construction (capacity of 7393 MWth), all of which are under IAEA safeguards due to treaty obligations. It has no civilian reactor facility of its own design/construction. Hence the number of nuclear reactors not under safeguards and not required to be under safeguards that it can voluntarily offer to place under IAEA safeguards is zero (capacity of 0 MWth). Nor is it likely, in fact extremely unlikely, that Pakistan can ever, in the short/medium and possibly long terms, hope to offer any such unsafeguarded reactor facility for IAEA safeguards as a result of any separation plan. Its domestic civil nuclear industry is in its infancy, as is evident from the very high degree of imported systems, components and materials used in the construction of imported power reactors from Chashma I – the contract for which was signed in December 1991 – to the latest power reactor K-2 for which the contract was signed in 2015. In the intervening quarter century, the Pakistani civilian nuclear industry had shown minimal advancement and growth. As a matter of fact, all of Pakistan's unsafeguarded nuclear facilities, including reactors, are geared towards nuclear weapons production and the number of such facilities as discussed below is increasing progressively.

Therefore, unlike the Indian case which involved bringing under the IAEA safeguards system a large number of unsafeguarded reactors and material with much more to follow in the coming years, Pakistan will not bring to the table any unsafeguarded facility or material either now or in the foreseeable future.

2) Vertical Proliferation: Restraint in the production of fissile material for nuclear explosive purposes as well as nuclear explosive devices

In their statement on Civil Nuclear Cooperation with India, the NSG members had affirmed their wish to: (i) “pursue mechanisms to affect positively the nonproliferation commitments and actions of all states”; and, (ii) “seek to promote the fundamental principles of safeguards and export controls for nuclear transfers for peaceful purposes.”

With regard to the first of these goals, at the time of its 1998 nuclear tests, India had two plutonium production reactors (CIRUS and Dhruva). Subsequently, India permanently shut down CIRUS, leaving only one plutonium production reactor operational. Nor has it enlarged or built any new reprocessing plant to separate plutonium. Sec 104(g)(2)(H)(iii) of the Hyde Act (“Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006”) required that “annually the President shall submit to the appropriate congressional committees a report including an estimate of the rate of production in India of (I) fissile material for nuclear explosive devices; and (II) nuclear explosive devices;” So far, US presidents

have submitted seven or more such annual reports. Although these reports are classified, there has been *no suggestion so far*, from any leaked report of these Presidential annual reports, *that India has been increasing the rate of production of either fissile material for nuclear explosive devices or nuclear explosive devices.*

Pakistan's record since 1998, when it also conducted its nuclear tests, has been quite the reverse. At the time of its nuclear tests in 1998, Pakistan had one plutonium production reactor at Khushab with a reported capacity of 50-100 MWth. In fact, in April 1998, Pakistan had announced that it had commissioned an unsafeguarded 50 to 70 megawatt (MW) nuclear reactor. Satellite imagery of the Khushab nuclear site has shown construction activities occurring at an accelerated pace. The Khushab nuclear site now has four reactors dedicated to the production of plutonium for nuclear weapons. As stated earlier, in the 1990s, the site consisted only of one heavy water reactor with an estimated power of 50 megawatt-thermal (MWth) and an associated heavy water production plant. Pakistan has, however, subsequently expanded its plutonium production capability for weapon purposes by constructing a second heavy water reactor between the year 2000 and 2002, a third one in 2006, and a fourth one in 2011. In addition, it has expanded its reprocessing capabilities as well along with an increase in heavy water production facilities.

From all open source accounts, Pakistan's production, and rate of production, of fissile material for nuclear weapons has far surpassed India's capabilities and it is now poised to become the fourth largest stockholder of nuclear weapons after America, Russia and China. *The rate of vertical proliferation of nuclear weapons in Pakistan today is currently probably the world's fastest, with no sign of it slowing down in any substantive degree*

3) Export controls and horizontal proliferation

One of the factors to be considered for membership is how far the prospective member state is "supportive of international efforts towards non-proliferation of weapons of mass destruction and of their delivery vehicles." There are two elements to this question of non-proliferation – horizontal and vertical. Horizontal proliferation relates to the efforts of a state to either acquire or export controlled and restricted technologies through clandestine channels.

On the subject of clandestine exports, there has not been any evidence of any Indian attempt to proliferate to any other state – nuclear weapon state or otherwise – either fissile material or the technology to produce fissile material for nuclear weapon purposes. In the case of Pakistan, the history of the A.Q. Khan nuclear proliferation network is well known and documented. In 2009, the United States imposed sanctions under the provisions of the Nuclear Proliferation Prevention Act (NPPA) on A. Q. Khan and a number of colleagues and cohorts for having materially and "with requisite knowledge contributed through export of certain goods or technologies, to the efforts by non-nuclear weapon states to acquire unsafeguarded special nuclear material or to use, develop, produce, stockpile, or otherwise acquire

any nuclear explosive device.” These sanctions, imposed on January 9, 2009, are still active and in force today.

Sanctions imposed pursuant to the NNPA cease to apply only if the President determines and certifies in writing to the Congress that:

“(1) reliable information indicates that the foreign person or United States person with respect to which the determination was made under subsection (a)(1) of this section has ceased to aid or abet any individual, group, or non-nuclear-weapon state in its efforts to acquire unsafeguarded special nuclear material or any nuclear explosive device, as described in that subsection; and

(2) the President has received reliable assurances from the foreign person or United States person, as the case may be, that such person will not, in the future, aid or abet any individual, group, or non-nuclear-weapon state in its efforts to acquire unsafeguarded special nuclear material or any nuclear explosive device, as described in subsection (a)(1) of this section.”

The continued application of these NNPA sanctions imply that the US President is unable, even after a gap of more than nine years, to determine and certify in writing that the A.Q. Khan nuclear proliferation network has ceased its proliferation related activities.

On a number of occasions in the recent past, evidence has surfaced that either the A. Q. Khan network or a variant thereof is still operating, engaging in illicit exports of controlled items to Pakistan from USA and other western countries. Much of the relevant material in connection with these activities will be in the classified files of individual countries. But, undoubtedly, NSG members will have sufficient information on the basis of the informal information sharing scheme followed in the NSG plenaries and will, therefore, be in the best position to judge the relative adherence to non-proliferation by India and Pakistan.

Inward horizontal proliferation – imports – when they are illegal under the laws of the country from where they are imported is also a matter of concern especially when it is done through either ghost/shadow firms or nationals of the country of export. Usually, when such transactions are exposed, either the firms are fined/listed in the Entity List of the exporting country or the nationals are tried and sentenced. Whereas the US and Japanese Entity Lists have added scores of such Pakistani firms to their Entity Lists in the last decade, much after the exposure of the A.Q. Khan network, there have been no, or very few, additions of Indian firms. Here again the Entity Lists of the other members of NSG are not in the public domain but, no doubt, the member countries themselves will have full information on which to base their valuations/judgements.

Part III: Gains if admitted and losses if not admitted

There has been a lot of debate and discussion in India on the rationale behind India's application for membership in the NSG. What are the potential gains, if any, if India gains admission? And conversely, what are the potential losses if it does not become a member? We shall discuss below not only the potential gains/losses to India on admission to NSG but that of others as well, in particular NSG itself, Pakistan, and other third parties.

Gains for India

The 2005 India-US nuclear deal and the 2008 NSG exemption to India had benefited India enormously. One of India's major aims in securing the 2008 NSG exemption was to further its civilian nuclear energy programme. The rationale was to "create the necessary conditions for India to obtain full access to the international fuel market, including reliable uninterrupted and continual access to fuel supplies from firms in several nations." Lack of sufficient uranium fuel had seriously affected the PLF (Power Load factor) of NPCIL's operating nuclear power plants. It had fallen from a high of nearly 85 per cent in 2001-02 to a low of 50 per cent in 2008-09.

The NSG waiver facilitated the signing of civil nuclear cooperation agreements between India and several other countries like France (2008), United States (2008), Mongolia (2009), Namibia (2009), Russia (2010), Canada (2010), Argentina (2010), the Czech Republic (revalidated in 2010), Kazakhstan (2011), Republic of Korea (2011), Australia (2014), Sri Lanka (2015), and United Kingdom and Northern Ireland (2015). As a result of these agreements, it became possible to freely import nuclear fuel. In the subsequent years, the PLF rose substantially, reaching 82 per cent by 2014-15.

The NSG exemption also resulted in a number of foreign governments/firms negotiating with India on the export, with subsequent domestic production, of nuclear power reactors, in addition to the already existing agreement in respect of Kudankulam. France-based AREVA was allotted a site in Jaitapur, Maharashtra; US firm Westinghouse was allotted a site at Mithiwardi, Gujarat and US-based General Electrics was provided a site at Kovvada, Andhra Pradesh. These imported reactors were intended to increase India's nuclear power capacity by nearly 30,000 MWe. That few, if any, of the contracts have been actually finalized is due more to some of the provisions of the Indian Civil Nuclear liability Act than any lack of action from the NSG.

Thus, from one perspective of the future growth of civilian nuclear energy programme, there is no immediate Indian need for NSG membership. However, this assurance is conditional upon a caveat. There is no doubt that if India is to realize its goal of increasing civilian nuclear power capacity in hundreds of GWe (Gigawatt of electricity), it will have to rely heavily on the supply of nuclear fuel, systems and components. While there are no difficulties in accessing the international market and especially the NSG countries, there is always the potential danger of NSG

Guidelines being modified in future with adverse impact on the Indian nuclear industry.

It is true that the 2008 NSG exemption did state that: “In order to facilitate India’s adherence to INFCIRC/254/Parts 1 and 2 and to remain current in its implementation of the Guidelines, the NSG Chair is requested to consult with India regarding changes to, and implementation of, the Guidelines and inform the Plenary of the outcome of the dialogue with India. Consultations with India regarding proposed amendments will facilitate their effective implementation by India.” But this does not by itself assure in any unequivocal manner that India’s views on the proposed amendments will be fully respected. It is only with membership that India can assure itself that no decision inimical to its interests will be taken collectively by the NSG.

Hence, India’s membership in the NSG is essential to safeguard future Indian interests in nuclear commerce. However, contrary to some reports and analyses, NSG membership is in no manner a requirement or necessary condition for India to engage in nuclear exports. In fact, even without the NSG exemption, India would have been able to export nuclear technology, systems, components and reactors had it chosen to do so.

Apart from these tangible and essential goals, there is always the goal of making India a part of the global nuclear governance regime in all its aspects – civil application of nuclear science, global nuclear nonproliferation governance, nuclear security to safeguard against nuclear accidents/incidents, protection of the global stock of nuclear material falling in the hands of non-state actors, etc. NSG being one of the pillars engaged in such nuclear governance, it is only natural and fitting that India becomes part of such a global governance architecture in the important arena of nuclear science, technology and applications.

Gains for the NSG

What does the NSG gain from Indian membership? For a long time, the NSG has been grappling with the problem of how to associate the three non-NPT, nuclear weapon capable, countries in global nuclear governance issues. As early as 2001, the NSG Plenary at Aspen “agreed there should be consideration of options **for** intensified dialogue with non-NSG countries, including those that are not parties to the NPT and that possess developed nuclear capability and are potential nuclear suppliers.” Although the 1st NSG Consultative Group (CG) meeting in late 2001 discussed this item threadbare, members could not reach a consensus and many were not keen on deep engagement with these countries, all expressed a keen desire to engage these countries in the global nuclear non-proliferation regime. The next stage of a serious discussion of this nature was at the time of the India-US nuclear deal resulting in the grant of NSG exemption for India on a one-time, one-country basis. However, since 2011, NSG plenaries have been discussing the relationship with India, apparently with no consensus. However, the need to engage

with these countries, under proper conditions, has only increased with the growth of non-state actor entities interested in acquiring WMD capabilities.

It is true that India's non-proliferation commitments are not dependent on NSG admission, which may not be true of certain other states which have in the past actually engaged in transferring WMD technologies and systems to NNMS and operating a former IAEA Director General termed as a "Nuclear Wal-Mart"!

So, NSG does not gain much in terms of its nonproliferation efforts by admitting India. Nevertheless, it would gain from admitting the last remaining major nuclear industrial capable nation. In short, while both India and NSG do not stand to gain anything substantial in the immediate and near term future, both stand to gain from being able to forestall any future negative developments.

All in all, while neither side may be desperate to be together, both will only gain with such a partnership even though neither may suffer greatly if there is no partnership.

Gains for Pakistan

The case of Pakistan is entirely different. Since it is a non-nuclear weapon state according to the NPT, and has neither IAEA fullscope safeguards on all of its nuclear activities or a NSG exemption from fullscope safeguards requirements as is the case with India, NSG members, with the exception of China, have refused to engage in any nuclear related commerce with Pakistan. Even China-Pakistan nuclear commerce has been held to be against NSG Guidelines by many NSG member countries. In addition, Pakistan's domestic nuclear industry, with the exception of nuclear weapons related matters, is underdeveloped as seen from its inability to construct on its own any civilian nuclear power reactors even after operational experience of running power reactors for more than 40 years. Nor has it invested in and developed its uranium resources. Therefore, it is entirely dependent on China for its entire civilian nuclear programme – from systems, components, reactors to nuclear fuel. Even a NSG exemption, like that granted to India, would be of enormous benefit to Pakistan in diversifying its suppliers.

Will NSG gain anything from Pakistan's admission? It is extremely doubtful. Certainly not in furthering the global nonproliferation norms when Pakistan is still under a number of sanctions for its proliferation related activities. Can Pakistan assist the global nonproliferation regime by bringing under international scrutiny fissile material currently not under any such scrutiny or supervision? No. If Pakistan does become a member and continues with its proliferation activities in contravention of NSG Guidelines, can NSG do anything about it? No, the inability of NSG to do anything about the continuing China-Pakistan nuclear trade, contrary to NSG Guidelines and China's assurances at the time of its admission, is an indication of its inability, as group, to deter members from carrying out activities barred under its Guidelines. Further, Pakistan apparently sees NSG membership as a means to assist its nuclear weapons programme. In fact, very recently, the US State Department Deputy Spokesperson felt the need to clarify on this by stressing

that “this (NSG membership) is not about an arms race and it’s not about nuclear weapons. This is about the peaceful civil use of nuclear energy, and so we would certainly hope that Pakistan understands that.”

Therefore, as far as NSG is concerned, Pakistan’s membership in the grouping will not have any impact on its proliferation related activities and hence on the non-proliferation objectives of the NSG.

Gains for Other Countries

Apart from Pakistan, one state that stands to gain from Pakistan’s admission into the NSG is China. In his address to the 59th IAEA General Conference in September 2015, the Chairman of the Pakistan Atomic Energy Commission (PAEC) stated that “Pakistan envisages a nuclear power generation capacity of 40,000 MWe under its Nuclear energy Vision-2050.” Without NSG exemption/membership, Pakistan will have to rely solely and wholly on Chinese financial and supply assistance to achieve anywhere near this target since both its domestic financial resources and nuclear industry capacity and capability are nowhere near the levels necessary for it to carry out this task relying on only its domestic capabilities. While China may not face any problem in financing such a huge programme, it will definitely face immense challenges in being able to assure Pakistan of lifetime supply of fuel on its own. A 1 GWe plant operating at 85 per cent load factor will require about 200 to 250 MT of natural Uranium (NU). The annual requirements for 40 GWe will be anywhere between 8,000 and 10,000 MT of NU, and it is very unlikely that China will be able to undertake such a long term commitment on its own. If, however, Pakistan were able to get an NSG exemption/membership, then while China can easily finance the construction of new power plants, Pakistan will be able to source nuclear fuel from countries other than China. It is, therefore, very much in China’s long term interest to have Pakistan gain NSG exemption and membership.

Part IV: South Korean Plenary

Formally adhering to NSG guidelines, India and Pakistan have applied to the current NSG Chair for membership in the group. Normally, under the Rules of Procedure, the NSG Chair would have informed the Participating Governments (PG) of the interest in membership of the government(s) concerned, of the Chair’s views with regard to its merits and of the procedure to be followed, and would have sought the views of Participating Governments on the Chair’s recommendations. The Chair would have then recommended either that an intersessional decision be taken on the government’s request for Participating status or that the matter be referred to the next Plenary for consideration and/or decision.

However, given the special nature of the application – the first by non-NPT states and that too by states possessing nuclear weapons – and the imminent regular Plenary session in the immediate future, the Chair had recommended an

extraordinary plenary session to discuss the special characteristics of the applications prior to the regular plenary session.

In line with NSG practice, there was no public release of the outcome of the extraordinary plenary. It is quite likely that the NSG Participating Governments had decided to refer the final decision to the Regular plenary to be held later.

The regular plenary will now be held on June 23-24. Will there be any final decision on the two applications by India and Pakistan? What are the possible outcomes of the Plenary with respect to admission of new PGs?

Although this is the first time that the NSG plenary would be formally discussing the admission of non-NPT countries, as early as 2001 the NSG Consultative Group (CG) had intense discussions on how NSG should approach its relations with these countries, without coming to any consensus on the subject.

Although there was no formal Indian application for the past more than five years since the US circulated a “Food for Thought” in May 2011, the past five NSG plenaries had regularly “discussed the NSG relationship with India.” The outcome of these discussions is not known officially although reports had suggested that the NSG Participating Governments had not been able to reach a consensus either on the NSG’s relationship with India or the criteria that should be the basis for such a relationship. However, in his briefing on June 13, the Chinese Foreign ministry Spokesman stated “The just concluded NSG meeting had no discussion on the accession of any country. The NSG Chair also announced that there was no such agenda. Everyone just talked about one common concern, which is how to deal with the accession of non-NPT countries to the group. Extensive discussions on this issue are still going on within the group, and such discussions are quite necessary.”

Of the 48 Participating Governments in the NSG, many – USA, UK, France, Russia, Mexico, Switzerland and others – have openly declared their support for India’s admission as a PG. Press reports have suggested that a few NSG PGs – China, New Zealand, Ireland, Turkey, South Africa and Austria – have expressed their opposition to India’s accession to NSG. Of these, only China has openly expressed its opposition and stated its reservation/objection for considering India’s application at this stage. Although China has been vocal in asserting that a number of other countries share its views, the others have not publicly stated either their positions or reservations.

NSG decisions are made by consensus. As explained earlier, while the NSG does have a formal Rules of Procedures and “Factors to be considered” for membership, the group has been flexible both in the interpretation and enforcement of its rules and Guidelines. In the ultimate analysis, the decisions by the individual countries are political in nature and the outcome depends on a number of factors, not all under any one country’s control. So it would be rash to predict what they will do. However, one can assess the various options open to NSG members and make a cautious estimate as to which of the options are more likely.

What are the possible outcomes of the South Korea Plenary? The NSG can either come to a decision or postpone its decision.

What are its possible decisions?

- i) **Admit both India and Pakistan:** The admission of both India and Pakistan is very unlikely at this stage. India's association with the NSG has been discussed by the group in an intense fashion since 2008. Also, since then, for the past six years, NSG Participating Governments have been maintaining contact and consultations with India through regular channels, including the Consultative Group and Plenary, for the purpose of considering matters connected with the implementation of all aspects of the NSG Exemption Notification taking into account relevant international commitments or bilateral agreements with India and have been satisfied with the results. In addition, as per the plenary request, the NSG Chairman has been regularly conferring and consulting with India with a view to intensifying dialogue and cooperation with India. So while NSG members are conversant with the various elements of the Indian application, the same is not true as far as their knowledge of the Pakistani application is concerned. Therefore, within the short period of time between the submission of Pakistan's application and the plenary, the NSG Participating Governments would not have had sufficient exchange of information with Pakistan and, therefore, would not be in a position to make the "admit" decision with respect to that country. Therefore, the admission of both India and Pakistan at this plenary is very unlikely.
- ii) **Deny admission to both India and Pakistan:** The NSG denying admission to both India and Pakistan is very unlikely. Whatever be the views of individual NSG members on NPT membership etc., all would, or should, realize that a blanket ban on their admission to NSG will not serve the global nuclear community's interests and will undermine their relevance. Therefore, a decision of blanket exclusion of both India and Pakistan from NSG at this time is not on the cards.
- iii) **Admit India and deny/postpone the decision on Pakistan:** While this is possible, the other NSG Participating Governments will have to carry China along with them. Therefore, much will depend on the attitude that China adopts. China has no doubt realized by now that at this juncture it will be very difficult for the NSG to admit Pakistan. It will, however, require strong assurances that the NSG will consider Pakistan's application on its own merits in the coming days with a further assurance that it will be done as soon as possible. Given the fact that it is in the NSG's interest to have Pakistan also as a member, it should not be difficult for them to assure China about their best intentions. This scenario is possible although the chances of it are not very high.
- iv) **Admit India and deny/postpone the decision on Pakistan, but defer both announcements to a later date.** This is the most likely scenario. The plenary

may decide to postpone the announcement till a later date so as to address a few outstanding issues. Such a step may be taken to assure that Pakistan's case will be considered on its own merit, that a decision will be taken as expeditiously as possible, and to assure that India will not stand in the way of Pakistan's admission. It is quite possible that the sudden secret visit of the Indian Foreign secretary to China last week was to convey such an assurance to China. This would seem to be the most probable outcome of the plenary.

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