# **NSG Membership for Non-NPT NWS: Criteria and Prospects**

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#### Abstract

There is an emerging debate on the expansion of the 48nation Nuclear Suppliers Group (NSG)--a cartel of nuclear exporting countries-- for the non-NPT Nuclear Weapons States (NWS) (especially India and Pakistan, both of whome have formally applied for NSG membership in 2016). China calls for a strict criteria including signing of the NPT as a pre-requisite for NSG membership whereas the US strives for Indian entry into the NSG without strict restrictions. A criterion-based approach is also evolving which may create a balance between political motives and non-proliferation commitments. The June 2016 Plenary of the NSG has failed to achieve consensus on the issue. Subsequently, a synthesis called Grossi formula proposed nine conditions as a benchmark for the membership of non-NPT NWS. Though the 2017 NSG Plenary though considered applications of non-NPT states, yet it decided to continue deliberations on the issue. This paper attempts to analyse various proposed criteria and assesses the prospects of NSG membership for the non-NPT NWS.

**Keywords:** NSG membership, Criterion-based approach, Non-NPT NWS.

#### Introduction

India and Pakistan aspire to become members of the nuclear export cartel; the Nuclear Suppliers Group (NSG). The NSG is a 48-nation volunteer arrangement dealing in export of nuclear material and

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technology. The cartel aims at nuclear non-proliferation and complements the 1968 Nuclear Non-Proliferation Treaty (NPT).

The current debate in the NSG revolves around determining the criteria for expansion in the nuclear cartel for the non-NPT Nuclear Weapon States (NWS), mainly India and Pakistan. India formally applied for the NSG membership on 12<sup>th</sup> May 2016 and Pakistan did so on 19<sup>th</sup> May 2016.<sup>1</sup> Different proposals are under consideration for the determination of an apt criterion. Presently, an aspirant of the NSG must be able to supply items mentioned in NSG Annexes to Part 1 and Part 2; adhere to NSG guidelines, be a party to the NPT or a Nuclear Weapon Free Zone (NWFZ) treaty and have full-scope safeguards.<sup>2</sup>

There are various perspectives on NSG membership for a non-NPT NWS. For instance, China calls for strict criteria including the condition of signing NPT as a pre-requisite whereas the US favours criteria that facilitates Indian entry. However, some of NSG members call for a general criterion.<sup>3</sup> The June, 2016 Plenary of the NSG could not yield a consensus for granting membership to India and Pakistan. In December 2016, the Grossiformula was floated which aimed at getting India in and keeping Pakistan out of the NSG membership. Consensus on the Grossi formula could not be generated in 27<sup>th</sup> Plenary of NSG held from June 22-23, 2017 in Bern, Switzerland. However, the statement that, "the Group noted the requests for participation that had been submitted. The NSG had discussions on the issue of Technical, Legal and Political Aspects of the participation of non-NPT States in the NSG," draws wide attention of

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<sup>&</sup>lt;sup>1</sup> Kamran Akhtar, "India's NSG Politics" (views expressed by an official from Pakistan Foreign Office in a seminar at Strategic Vision Institute, Islamabad, on November 08, 2016).

<sup>&</sup>lt;sup>2</sup> Syed Adnan Athar Bukhari, "Indian Quest for Membership in the NSG: Prospects and Challenges," Strategic Studies Institute Islamabad, (December 15, 2014) http://ssii.com.pk/2014/12/15/competition-winner-syed-adnan-athar-bukhari/ (accessed September 9, 2017).

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Public Statement Plenary Meeting of the Nuclear Suppliers Group, Bern, Switzerland, 22-23 June, 2017,

http://www.nuclearsuppliersgroup.org/images/NSGPlenaryBernPublic\_Statement\_final.pdf.

professionals and academics around the globe. It was agreed to convene an informal meeting in November, 2017.<sup>5</sup>

With this backdrop, the paper explores the evolution process, highlights the objectives of the Nuclear Suppliers Group (NSG), describes the present membership criteria, and evaluates the ongoing debate to consider requests of the non-NPT NWS, including the cases of Pakistan and India.

# The NSG: A Voluntary Nuclear Export Cartel

During 1950s and 1960s, the proponents of non-proliferation endeavored to control the proliferation of nuclear weapons that led to formation of the Nuclear Non-proliferation Regime which included several treaties (for example, the NPT and Nuclear Weapons Free Zones), institutional arrangements (including the IAEA and its safeguards system) and voluntary export control regimes (including the Missile Technology Control Regime (MTCR), Nuclear Suppliers Group (NSG), Wassenaar Arrangement and Australia Group). Major focus of the non-proliferation regime was to control the dual use of sensitive technologies that might be used for military purposes.

The NPT is the cornerstone of the non-proliferation regime. It was signed in 1968 and called for banning proliferation of nuclear weapons, encouraging peaceful uses of nuclear technology and seeking disarmament. Keeping in view the encouragement of peaceful uses of nuclear technology, the danger associated with dual-use<sup>6</sup> of material and technology loomed large over the policy makers. In this connection, several NPT nuclear supplier states decided to deliberate which dual use technology should be shared with non-nuclear-weapon states. In 1971, these supplier countries established the Zangger Committee. The committee also required states outside the NPT to institute IAEA safeguards for import of specific items that might be used in developing

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Dual-use of material and technology is referred for those materials and equipments which can be used both for military and non-military purposes.

nuclear weapons. These items were collectively referred as the "trigger list." 7

When India carried-out 'peaceful' nuclear explosions in 1974, it was confirmed that nuclear material and technology could be used for building weapons too because it remained evident that India, which conducted an underground nuclear test at Pokharan in the Rajasthan desert, codenamed the "Smiling Buddha", was actually part of an accelerated weapons programme. Facts remain that India used CIRUS reactor provided by Canada and heavy water supplied by the US. India used these supplies to extract plutonium which was used for nuclear testing. 9

The world realized the dangers of proliferation with regard to export of nuclear technology. It was decided to make more stringent efforts on export controls of nuclear technology and sensitive materials. Several Zangger Committee members along with France (that was outside the NPT then) established the Nuclear Suppliers Group (NSG) to augment efforts in curbing the proliferation of nuclear weapons. The group was formed in 1975 as a consequence to the so-called Indian Peaceful Nuclear Explosions (PNE). With time, its members increased.

Currently, the NSG is a 48-member nuclear cartel dealing with export of nuclear technology and sensitive nuclear material. The cartel is committed to the non-proliferation goal by implementation of two sets of Guidelines for nuclear exports and nuclear-related exports. It is pertinent to take into account the working of the NSG to comprehend the issue on the following lines:

10 Ibid.

<sup>&</sup>lt;sup>7</sup> Daryl Kimball, "The Nuclear Suppliers Group (NSG) at a Glance," *Arms Control Association*, last updated October 2012, https://www.armscontrol.org/factsheets/NSG.

<sup>8&</sup>quot;1974," Nuclear Files. Org. accessed January 24, 2017,

http://www.nuclearfiles.org/menu/timeline/timeline\_page.php?year=1974.

<sup>&</sup>lt;sup>9</sup> George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (California: University of California Press, 2002).

- The NSG is a voluntary group which was formed to check Indian PNE type of nuclear testing.
- The NSG participants meet once in a year in NSG Plenary meeting (usually in June).
- The NSG troika (composed of three persons including past, present and future chairs of the NSG) work for outreach (activities related to adherence to the NSG guidelines) and coordination of the group.
- Its rules and working are not legally binding yet provides only a normbased nuclear non-proliferation framework.
- The NSG works on the rule of consensus whereby each member has a veto power.
- All decisions are taken in the NSG by getting unanimous approval. This will also be required in case of expansion of the NSG membership.

The NSG has two sets of Guidelines which are provided in two parts. Part I was adopted in 1978. It included fissile materials, nuclear reactors and equipment, and reprocessing and enrichment equipment. Part II was published in 1992. It included dual-use goods, which are non-nuclear items with a potential to develop weapons, for example, machine tools and lasers. Part I was established after the Indian PNE of 1974 and Part II was adopted in response to Iraq's perceived proliferation potential in early 1990s.11

The fundamental objective of the NSG Guidelines is to ensure that nuclear trade for peaceful purposes should not contribute to the proliferation of nuclear weapons or other nuclear explosive devices. These guidelines are referred to as INFCIRC/254, Part 1 and INFCIRC/254, Part 2.12 The former is known as 'trigger list' which includes guidelines for nuclear transfers such as physical protection, safeguards, special controls on sensitive exports etc. Its Annex B gives clarification of such items which include:

<sup>&</sup>lt;sup>11</sup>Daryl Kimball, "The Nuclear Suppliers Group (NSG) at a Glance".

<sup>12 &</sup>quot;Guidelines," Nuclear Suppliers Group, accessed January 25, 2017, http://www.nuclearsuppliersgroup.org/en/guidelines.

- "nuclear reactors and equipment;
- non-nuclear material for reactors;
- plants and equipment for reprocessing;
- plants and equipment for fabrication of nuclear fuel elements;
- plants and equipment for separation of isotopes;
- plants for heavy water production; and
- plants and equipment for conversion."<sup>13</sup>

Part II of the NSG Guidelines deal with 'dual-use items.' It includes;

- "industrial equipment;
- materials;
- uranium isotope separation equipment and components (other than trigger list items);
- heavy water production plant related equipment (other than trigger list items);
- test and measurement equipment for the development of nuclear explosive devices; and
- components for nuclear explosive devices."<sup>14</sup>

The updated list of the NSG Part I and Part II Guidelines were published on November 8, 2016 after three years of review. They were published on the IAEA's website as INFCIRC/254/Rev.13/Part 1 and INFCIRC/254/Rev.10/Part 2 respectively. The NSG Guidelines complement the NPT and treaties on Nuclear Weapon Free Zones.

Full-scope safeguards are mandatory for export of items in Part I. The "Non-proliferation Principle" was adopted in 1994 in the NSG which established that a supplier authorizes a transfer only when satisfied that the transfer would not contribute to the proliferation of nuclear weapons no matter the recipient being a member of NPT or/and member of treaty

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<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> "NSG Part 1 and Part 2 Guidelines Updated," *Nuclear Suppliers Group*, accessed January 25, 2017, http://www.nuclearsuppliersgroup.org/en/.

<sup>&</sup>lt;sup>16</sup> "The Nuclear Suppliers Group: Its Origins, Role and Activities," INFCIRC 539 Revision 6, (The International Atomic Energy Agency, January 22, 2015), 1.

of any NWFZ.17 Most NSG participants do not have facility of selfsufficient fuel cycle and thus import materials from other members with strict compliance to the Guidelines. 18

In 2002 Vienna Plenary, several comprehensive amendments were agreed to avert any possible incident of nuclear terrorism. The meeting emphasized that effective export controls were significant to curb nuclear terrorism. In 2004, the NSG supported the UNSC Resolution 1540 (2004), and adopted a "catch all" mechanism in the NSG Guidelines in its Göteborg Plenary. This move directed the establishment of national legal mechanisms to control export of any item even if it was not on the control list provided these items are suspected to be used for any possible proliferation. 19

In September 2008, participating governments (PGs) of the NSG permitted transfer of "trigger list" and dual use items and related technology to India for peaceful purposes. This specific waiver for export of nuclear technology was granted to India while considering various steps India took for non-proliferation including separation of civilian and military reactors, an IAEA safeguards agreement under INFCIRC/734, adherence to the NSG Guidelines, continuation of moratorium on nuclear testing, commitment to sign and adhere to Additional Protocol and work toward a Fissile Material Cutoff Treaty (FMCT).<sup>20</sup> It is noteworthy that India has never signed the NPT, conducted nuclear weapons tests and does not have full-scope IAEA safeguards. Despite these facts, the NSG granted it a country-specific waiver which has outrightly questioned the credibility of the non-proliferation regime in general and NSG in particular.21

<sup>18</sup>Ibid., 8.

<sup>&</sup>lt;sup>17</sup>Ibid., 5.

<sup>&</sup>lt;sup>19</sup>Ibid., 9.

<sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Syed Adnan Athar Bukhari, "Dynamics of Nuclear South Asia: Implications for Nonproliferation Regime" (M.Phil. dissertation, School of Politics and International Relations, Quaid-i-Azam University, Islamabad, 2014), 63.

India has signed agreements with USA, Russia, France, UK, South Korea, Canada, Argentina, Kazakhstan, Mongolia and Namibia after getting waiver from NSG cartel. It also secured a safeguards agreement with Canada in 2010 for promoting trade of sensitive nuclear material and technology. Such arrangements are in process with Australia as well. In this way, India became eligible to be recipient of nuclear technology and materials despite being non-signatory of NPT. "This implied the notion of politics of proliferation where economic interests dominate over non-proliferation agenda."<sup>22</sup>

The next section outlines the existing rules for the NSG membership and analyzes the emerging debate as to how to integrate the non-NPT NWS into the NSG. This entails conflicting perspectives and initiated a debate for determining criteria for such states.

# **NSG Rules for Membership**

The present procedure for membership of the nuclear cartel was adopted in the 2001 Aspen Plenary of the NSG. The following obligations were setforth as criteria for the membership:

- "The ability to supply items (including items in transit) covered by the annexes to Parts 1 and 2 of the NSG Guidelines;
- Adherence to the Guidelines and action in accordance with them;
- Enforcement of a legally based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines;
- Full compliance with the obligations of one or more of the following: the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Treaties of Pelindaba, Rarotonga, Tlatelolco, Bangkok, or an equivalent international nuclear nonproliferation agreement; and
- Support of international efforts towards nonproliferation of weapons of mass destruction and of their delivery vehicles."<sup>23</sup>

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<sup>&</sup>lt;sup>22</sup>Ibid.

<sup>&</sup>lt;sup>23</sup> "Nuclear Suppliers Group," Civil Services Mentor Magazine, June 2016.

Moreover, the 2001 meeting also defined the term 'adherence' as:

"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 INFCIR series."24

There has been a debate in the recent years regarding expansion in the membership of NSG for non-NPT NWS (mainly India and Pakistan). Hibbs and Dalton asked if the NSG should be a universal export control organization or a group of "like-minded" states to follow near universal global non-proliferation principles.<sup>25</sup> For bringing India into the NSG, a debate over criteria for the NSG membership has been generated between the idea to grant membership based on non-proliferation norms versus the idea of bringing all those states which have potential for export of nuclear material, technology and equipment in accordance with the NSG trade control criterion.<sup>26</sup> Subsequently, it was claimed that "the NSG is neither an international treaty nor replica of NPT."27 It complements the NPT by adopting NSG Guidelines. If this has been the case "then new NSG applicants need only to tighten up their export controls to NSG standards to gain entry."28 This makes no compulsory requirement of signing NPT to be an aspirant of NSG membership.<sup>29</sup>Given the fact, if India and Pakistan are to become members of the NSG, it requires amending the rules of the NSG membership criteria by waiving/deleting of the clause of signing of the NPT or a treaty of NWFZ for non-NPT NWS.

<sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Mark Hibbs and Toby Dalton, "Nuclear Suppliers Group: Don't Rush New Membership," Proliferation Analysis (Carnegie Endowment for International Peace, June 14, 2012).

<sup>&</sup>lt;sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup>Zafar Nawaz Jaspal, "India-Pakistan Candidacy for NSG," Journal of Security & Strategic Analyses, Vol. II, No. 1 (Summer 2016), 18.

<sup>&</sup>lt;sup>28</sup> Michael Krepon, "Club Membership," Arms Control Wonk, June 26, 2016, http://www.armscontrolwonk.com/archive/1201515/club-membership/.

<sup>&</sup>lt;sup>29</sup>Zafar Nawaz Jaspal, "India-Pakistan Candidacy for NSG," 18.

# Three Approaches for NSG Membership for Non-NPT NWS

India and Pakistan applied for the NSG membership in May 2016 for their cases to be decided in the June 2016 Seoul Plenary of the NSG. However, the group failed to arrive at any consensus on their applications and decided to continue its discussion.<sup>30</sup> Likewise, the decision could not be taken in 27<sup>th</sup> Plenary which was held in Bern in June 2017.Amb. <sup>®</sup> Zamir Akram suggested that there could be a two-step approach for admittance of India and Pakistan into the NSG. First is the setting-up of criteria for these states to join the NSG as a member and the second is to consider their applications following a laid down procedure.<sup>31</sup>

For the determination of criteria, three approaches being discussed are evaluated below:

First approach places requirement of signing the NPT for the NSG membership. Peoples Republic of China is the major supporter of this approach which has created a stumbling block for the US efforts to get India into the NSG. China's position has encouraged other eleven states (including Ireland, Austria, Switzerland, and Mexico) to draw a clear line.<sup>32</sup> These states are considering not to revise the criteria. Neither India nor Pakistan would be in a position to sign the NPT; therefore, this approach restricts entry of these states into the cartel.

The second approach is related to '6like-mindedness' which can also be referred to as country specific approach. This was advocated by India on behest of the US.<sup>33</sup> The US called for making efforts to bring India into export control cartel including MTCR, NSG, Wassenaar Arrangement and Australia Group in 2010. India, in this scheme, has been granted membership of MTCR in June 2016. Mr. John Kerry, former Secretary of State claimed that:

33 Michael Krepon, "Club Membership".

<sup>&</sup>lt;sup>30</sup> Public Statement of Plenary meeting of the Nuclear Suppliers Group, Seoul, Republic of Korea, June 23-24, 2016.

<sup>&</sup>lt;sup>31</sup> In-house Seminar, "27<sup>th</sup> NSG Plenary Meeting: Challenges and Prospects," organized by Strategic Vision Institute, May 29, 2017.

<sup>&</sup>lt;sup>32</sup>Zamir Akram, "The NSG after Seoul," *The Express Tribune*, July 5, 2016.

"The United States believes each application should be considered individually on its merits and according to the NSG's factors for consideration....India has shown strong support for the objectives of the NSG and the global nuclear non-proliferation regime and is a 'likeminded' state deserving of NSG admission."

This approach is discriminatory and creates exceptionalism in the non-proliferation regime for a specific country rather than determining general criteria for even-handed treatment with all Non-NPT Nuclear Weapons States.

The third approach can be categorized as a 'criterion based approach.' Pierre Goldschmidt in his article "NSG Membership: A criterion-based Approach for Non-NPT States" enumerated fourteen conditions for consideration while making an objective criteria for entry of the non-NPT states into the NSG. A general criterion can be set by adopting all or many of the following conditions for non-NPT NWS to become member of the nuclear cartel:

- To comply with Articles I, III.2 and VI of the NPT. (This requires guarantee of nuclear weapon states (India and Pakistan) not to transfer nuclear weapons or other explosive device and nuclear material and technology for manufacture of nuclear weapons; undertakes not to provide fissionable source unless the source is subject to safeguards; and, seeking disarmament.)
- To make and enforce a Voluntary Offer Agreement (VOA) with the IAEA to place all new nuclear facilities located outside the existing military nuclear sites according to INFCIRC/66-type safeguards agreements;
- 3. To ratify an Additional Protocol to its safeguards agreement; (India has signed and ratified the Additional Protocol in 2014. Pakistan needs to conform to the IAEA Additional Protocol);

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<sup>&</sup>lt;sup>34</sup> Anwar Iqbal, "China opposes India's bid to join NSG," *The Dawn*, June 10, 2016.

- 4. Should not be in violation of an IAEA safeguards agreement;
- To make commitment not to export or transfer items specified in INFCIRC/254/ Parts 1 and 2 to a NNWS unless such State has a Comprehensive Safeguards Agreement (CSA) and an Additional Protocol (AP) in force with the IAEA;
- To make and enforce legal measures for effective and uninterrupted implementation of the NSG Guidelines, both Part 1 and Part 2, including export licensing regulations, enforcement measures, and penalties for violations;
- 7. To make commitment to share information on "catch all" denials with the IAEA and members of the NSG;
- 8. To sign and ratify the Comprehensive Test Ban Treaty (CTBT), as specifically requested of India and Pakistan;
- To make commitment to adhere to a unilateral moratorium on nuclear tests, as required under Step 2 of the 2000 NPT Review Conference Final Document's "13 Steps", pending the entry into force of the CTBT;
- To fully implement all UN Security Council resolutions on nuclear nonproliferation or terrorism (in particular, Resolution 1540);
- 11. To adhere to the guidelines of Missile Technology Control Regime (MTCR) and make and enforce the corresponding export control legislation;
- 12. To ratify the Convention on the Physical Protection of Nuclear Material (CPPNM), as amended in 2005;
- 13. To be a party to the International Convention for the Suppression of Acts of Nuclear Terrorism, as adopted by the UN General Assembly in resolution A/RES/59/290 (April 2005);
- 14. To make commitment to implement in good faith Step 3 of the "13 Steps" of 2000 NPT RevCon which calls for agreeing to immediate commencement of negotiations on a treaty banning the production

of fissile material for nuclear weapons which will be concluded within five years, pending completion of a formal treaty banning the production of fissile material for nuclear weapons.<sup>35</sup>

Goldschmidt claimed that considering such conditions for making criteria would reinforce the non-proliferation regime and would avoid further discrimination among NPT non-nuclear weapon states. <sup>36</sup>Waseem Qutab claimed that criteria based approach would also bring the two states together to an agreed upon framework. This will also multilateralize a bilateral problem. <sup>37</sup>

The first approach is restrictive and stringent as it puts the requirement of signing of the NPT for NSG candidature. Neither India nor Pakistan will be ready to sign NPT by rolling back their nuclear weapons programme. The second approach only considers the admittance of India with exclusive criteria which is tailor-made by the US specifically to facilitate India's entry into the cartel. The third approach seems reasonable and practicable as it sets a general criteria for Non-NPT NWS. Such criterion-based approach should, therefore, be adopted which should be equally applicable for all non-NPT nuclear weapon states.

#### India's Case

The NSG waiver to India granted in 2008, opened avenues for it to carry out nuclear agreements with the US under the Indo-US nuclear agreement of 2008 and with other countries including Australia, Canada, France, Kazakhstan, and Russia.<sup>38</sup> The Obama administration committed to support India's membership into the four multilateral export control regimes (Nuclear Suppliers Group, Missile Technology Control Regime,

<sup>&</sup>lt;sup>35</sup> Pierre Goldschmidt, "NSG Membership: A criterion-based Approach for Non-NPT States," *Proliferation Analysis* (Carnegie Endowment for International Peace), May 24, 2011.

<sup>&</sup>lt;sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Waseem Qutab, in-house Seminar, "27<sup>th</sup>NSG Plenary Meeting: Challenges and Prospects," organized by Strategic Vision Institute, Islamabad, May 29, 2017.

<sup>&</sup>lt;sup>38</sup> Daryl G. Kimball, "Nuclear Suppliers Divided on Indian Bid," *Arms Control Association*, July-August, 2016, https://www.armscontrol.org/ACT/2016\_07/News/Nuclear-Suppliers-Divided-on-Indian-Bid.

Australia Group, and Wassenaar Arrangement) in 2010.<sup>39</sup> Ambassador (R) Masood Khan, the President of Azad Jammu and Kashmir and the then DG, Institute of Strategic Studies Islamabad (ISSI) highlighted that India was receiving special treatment because of the 'Realpolitik' rather more appropriately the 'US-politik.' This approach promotes exceptionalism and discrimination.<sup>40</sup> Subsequently, India endeavoured for the NSG membership since 2011 and its efforts were augmented when it formally applied for the NSG membership in May, 2016. The Indian external minister Sushma Swaraj claimed that she was confident of the support of 21 countries in the NSG for voting in favour of India becoming a member in 2016 Seoul Plenary. However, it is worth mentioning that consent of all 48 countries is mandatory for admitting a new member into the cartel.<sup>41</sup>

Securing NSG membership is a matter of national prestige for India because it is already availing almost all benefits of the nuclear trade having exemption under the 2008 Indo-US Nuclear Deal. This fact has also been acknowledged by the Indian external minister, Shushma Swaraj, saying that, "Why are we pushing now? It is about the difference between sitting inside and outside the room. Despite the waiver, we were outside the room. When you are inside the room, then you take part in the decision-making." 42

The NSG in its June 2016 plenary at Seoul could not decide upon membership of India, despite a high-level lobbying effort done by both the US and Indian governments.<sup>43</sup> In November 2016, representatives of the NSG met to discuss the matter of membership for non-NPT NWS. China, Turkey, Austria and Ireland rejected India's request. Switzerland, Brazil, Russia and New Zeeland indicated their support but practically did

<sup>39</sup> Joint Statement by President Obama and Prime Minister of India, November 8, 2010.

<sup>&</sup>lt;sup>40</sup>Masood Khan, "Pakistan's Non-Proliferation Efforts and Strategic Export Control System" (views expressed at a seminar of the Institute of Strategic Studies, Islamabad (ISSI), Islamabad on May 3, 2016).

<sup>&</sup>lt;sup>41</sup> "A brief history of the NSG," WION, June 26, 2016, http://www.wionews.com/south-asia/a-brief-history-of-the-nsg-843.

<sup>&</sup>lt;sup>42</sup>DevirupaMitra, "Hopeful of Convincing China on India's Membership of NSG: Sushma Swaraj," *The Wire, on* June 20, 2016.

<sup>&</sup>lt;sup>43</sup> Daryl G. Kimball, "Nuclear Suppliers Divided on Indian Bid".

otherwise, while Italy, Kazakhstan and Belgium called for a criteria-based approach.44 There has been a clash of interest between the two major world powers; China acting as nonproliferation hardliner state and the US trying to secure waiver for its strategic partner India.<sup>45</sup>

Despite the rejection of Indian membership to NSG, it succeeded to secure entry into MTCR in June 2016 Plenary. The inclusion of India as MTCR member has given birth to another interesting situation: China being an NSG member has been denied entry into MTCR while India has been granted MTCR membership without getting into NSG. A possibility of bargain between China and India is there: getting India into the NSG by China and getting China into the MTCR by India.<sup>46</sup>

### Pakistan's Case

In view of the Indian application for the NSG membership, Pakistan also requested for the NSG membership in May, 2016.<sup>47</sup> Its application has been based on arguments that it has been a staunch supporter of nonproliferation and disarmament. It has an extensive nuclear programme for peaceful purposes. Pakistan's Foreign Office claimed that, "Pakistan has the expertise, manpower, infrastructure, as well as the ability to supply NSG controlled items, goods and services for a full range of nuclear applications for peaceful uses."48 It has adopted international standards in nuclear safety and security with a robust legal, regulatory and administrative structure.49

Pakistan Atomic Energy Agency (PAEC) runs many open peaceful nuclear programmes to showcase to the world. Pakistan established its Export Control Law in 2004 and submitted NSG compliant report in 2005, 2007 and 2012. 50 The revised export control lists in 2015 covers the scope

<sup>46</sup>Zafar Nawaz Jaspal, "India-Pakistan Candidacy for NSG", 23.

<sup>44 &</sup>quot;Politics of NSG and Ballistic Missile Tests" (views expressed at a seminar of Strategic Vision Institute, Islamabad, on December 29, 2016).

<sup>45</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> "Pakistan applies for NSG membership," The Times of India, May 20, 2016.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> Kamran Akhtar, "India's NSG Politics".

of Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR) and the Australia Group (AG). This makes Pakistan to qualify for membership of the NSG.<sup>51</sup>

An official of Pakistan's Foreign Office claimed that the country's strategy for the NSG membership is two-pronged; first to highlight Pakistan's strengths in the non-proliferation realm and second to point out the shortcoming of NSG exemption (with regard to India specific arrangements).<sup>52</sup>

Zafar Khan, the Director General of Strategic Export Control Division in Pakistan's Foreign Office, claimed that "Pakistan's application for NSG was founded on solid grounds and it had the expertise, human resource, infrastructure as well as the ability to supply NSG Part-I and Part-II items. <sup>53</sup>A Pakistani analyst, Tariq Osman Hyder, argued that Pakistan could contribute significantly in the non-proliferation regime as full partner if it is included in multilateral export control regimes like the NSG, MTCR, and the AG. <sup>54</sup>

Pakistan's contributions for nuclear safety and security can be reflected in its statement in 2014 Nuclear Security Summit (NSS) with following actions:

- Establishment of Pakistan Centre of Excellence for Nuclear Security (PCENS)
- The establishment of National Institute of Safety and Security (NISAS) under Pakistan Nuclear Regulatory Authority (PNRA) in 2014
- Pakistan's initiative of Nuclear Security Action Plan (NSAP) in 2006, which is renewable after every five years

<sup>&</sup>lt;sup>51</sup> Seminar on "Pakistan's Non-Proliferation Efforts and Strategic Export Control System," organized by The Institute of Strategic Studies, Islamabad (ISSI) on May 3, 2016.

<sup>52</sup> Kamran Akhtar, "India's NSG Politics".

<sup>&</sup>lt;sup>53</sup> "Strategic export control system robust, effective: Pakistan," *The Nation*, December 15, 2016.

<sup>&</sup>lt;sup>54</sup>Tariq Osman Hyder, "Pakistan's Non-Proliferation Efforts and Strategic Export Control System" (views expressed at a seminar of the Institute of Strategic Studies, Islamabad (ISSI), Islamabad on May 3, 2016).

- Pakistan has also installed a Nuclear Security Cooperation Programme (NSCP)
- To enhance radiological safety, the country has established a Nuclear and Radiological Emergency Support Centre (NURESC) and a National Radiation Emergency Coordination Centre (NRECC)
- The National Detection Architecture deploys special nuclear material sensors at important entry and exit locations to prevent illicit tracking of nuclear related materials.<sup>55</sup>

Moreover, Pakistan is member of Global Initiative to Combat Nuclear Terrorism. It acceded to the Convention on the Physical Protection of Nuclear Material (CPPNM) in March, 2016. It has been actively involved in Nuclear Security Summit (NSS) Process from 2010 to 2016. In 2014 NSS, Pakistan's former premier, Muhammad Nawaz Sharif stated that;

"Pakistan's nuclear security is supported by five pillars – a strong command and control system led by the National Command Authority (NCA); an integrated intelligence system; a rigorous regulatory regime; a comprehensive export control regime; and active international cooperation." <sup>57</sup>

Pakistan calls for an objective and criterion based approach with nodiscrimination as basis for NSG membership. With a country specific approach as espoused by joint US-India diplomatic missions, Pakistan will be in a permanently disadvantageous position.<sup>58</sup>

Amb. \*Zamir Akram has argued for Pakistan's strong candidature for the NSG membership based on the following three factors:

http://www.nti.org/learn/countries/pakistan/nuclear/.

<sup>57</sup>"Pakistan for global efforts against nuclear terrorism", *The Dawn*, March 24, 2014.

<sup>58</sup>Zafar Nawaz Jaspal, "India-Pakistan Candidacy for NSG", 26.

<sup>&</sup>lt;sup>55</sup> "Pakistan National Statement at Nuclear Security Summit," Ministry of Foreign Affairs, March 26, 2014, http://www.mofa.gov.pk/zahidan/pr-details.php?prID=1846.

<sup>56 &</sup>quot;Pakistan," Nuclear Threat Initiatives, last updated April, 2016,

- Pakistan has an inbuilt separation between civilian and military nuclear weapons programmes,
- All the civilian facilities of Pakistan are under International Atomic Energy Agency's (IAEA) safeguards,
- 3. Pakistan's nuclear laws and safety and security measures are in line with the NSG guidelines and IAEA requirements.<sup>59</sup>

"For addressing the dichotomy of some states being elevated and others ignored, there should be a criterion based approach instead of country specific approach. If India is granted the NSG membership and Pakistan left alone, Pakistan's path for obtaining NSG concessions would greatly diminish." <sup>60</sup>

The NSG membership for Pakistan is significant because of two reasons. First, Pakistan is becoming an active hub of economic activity which needs growing energy production. Nuclear technology provides a renewable and environmental friendly energy. Therefore, if new nuclear reactors are to be established, Pakistan needs support and cooperation of nuclear exporting countries. Second, Pakistan has been acting as a responsible nuclear state. Its entry into the NSG would strengthen the non-proliferation regime. It has more than forty years of experience in using and maintaining nuclear technology. It has deposits of uranium as natural resource. Its membership in the NSG therefore, is not only beneficial for Pakistan but also for the NSG.

### Grossi's Formula

Another interesting post-June 2016 development to secure NSG membership for India was that the two of the NSG troika, Ambassador Song Young-wan, chair of the NSG for the term 2016-17 and the chair for the term 2015-16, Mr. Rafael Mariano Grossi were given mandate to

<sup>60</sup> Syed Adnan Athar Bukhari, "Indian Quest for Membership in the NSG: Prospects and Challenges".

<sup>&</sup>lt;sup>59</sup> In-house Seminar, "27<sup>th</sup> NSG Plenary Meeting: Challenges and Prospects," organized by Strategic Vision Institute, Islamabad, May 29, 2017.

engage in consultation with all NSG governments to develop objective and equitable membership criteria for Non-NPT NWS. <sup>61</sup>The fact has been revealed by Daryl G. Kimball, Director, Arms Control Association, that Grossi circulated a two-page "revised version of a draft 'Exchange of Notes' for Non-NPT applicants." This draft reads Grossi's remarks as;

"...there is a unique confluence of ideas on clarifying the factors for consideration of the participation of non-NPT Parties. These ideas can be encapsulated into the areas of the IAEA safeguards regime, the NPT pillars, and halting nuclear testing, as well as clarifying how the NSG addresses violations of these commitments." 62

According to Kimball, Grossi gave a nine-point formula for consideration of membership for the non-NPT states. The non-NPT states would have to adopt the following proposed conditions to be eligible for NSG membership:

- Make and enforce strict separation of current and future nuclear facilities from non-civilian nuclear facilities.
- Declare to the IAEA all current and future civilian nuclear facilities.
- Make and enforce a safeguards agreement with the IAEA covering all declared civilian facilities, and all future civilian facilities, eligible for safeguards.
- Enforce the IAEA Additional Protocol.
- 5. Make a commitment not to use any transferred item from a NSG Participating Government in unsafeguarded facilities or activities.
- 6. Make a commitment not to conduct any nuclear explosive test.
- Declare clear description of intentions, plans and policies in support of the Comprehensive Test Ban Treaty.

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<sup>&</sup>lt;sup>61</sup>Zamir Akram, "NSG Deadlock," The Express Tribune, December 31, 2016.

<sup>&</sup>lt;sup>62</sup> Daryl G. Kimball, "NSG Membership Proposal Would Undermine Nonproliferation", Arms Control Association, December 21, 2016.

- 8. Make a commitment to support and strengthen non-proliferation and disarmament regimes.
- Have an understanding that (non-NPT applicant) would join a consensus of all other Participating Governments on the merits of any non-NPT Party application due to the unique nature of the non-NPT Party applications.<sup>63</sup>

Commenting on Grossi's formula, Kimball pointed out that the wording of these points was vague and open to wide interpretation, and did not consider any further nonproliferation commitments from India beyond the steps to which it committed in September 2008.<sup>64</sup> Moreover, the Clause on banning further nuclear testing is also not stringent as it fails to incorporate the provision that any further testing would lead to automatic suspension or termination of membership. Grossi's formula also stipulates that one non-NPT member state should reach an understanding not to block consensus on membership for another non-NPT member state. According to Kimball, this Clause has been provided for India getting the membership first and Pakistan later on. This approach is detrimental for the non-proliferation regime and erodes the credibility of the NSG.<sup>65</sup>

Amb. (R) Zamir Akram criticized the proposed Grossi-Song formula and claimed that it was designed to harm Pakistan's application for NSG membership as it called for a sequential rather than a simultaneous approach for both the applicants. He argued that Pakistan's credentials for NSG membership are equally good if not better than India's and therefore, both countries' applications should be considered concurrently and simultaneously.<sup>66</sup>

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>&</sup>lt;sup>66</sup>ZamirAkram, "NSG Deadlock".

A brief point-wise comments for the application of Grossi's formula in India-Pakistan cases, as deliberated in a seminar organised by Strategic Vision Institute, <sup>67</sup> are given below:

- India has a separation plan; Pakistan does not have a plan (which is notified to the IAEA). For materializing the Indo-US nuclear cooperation, one of the requirements was to have a safeguards agreement with the IAEA. India concluded such an agreement based on INFCIRC/66/Rev.2-type safeguards agreement on July 9, 2008. India provided a separation plan under the India-IAEA safeguards agreement (INFCIRC/731 dated July 25, 2008). It was decided that India would place 14 out of a total 22 atomic reactors for international inspection by 2014.<sup>68</sup> The IAEA approved the agreement in August, 2008.<sup>69</sup>
- India has notified existing and future civilian nuclear facilities;
  Pakistan has not done so. India for example has provided a list of 14 reactors for civilian purposes as mentioned in point no.1.
- India has agreed on an India-specific IAEA safeguards agreement under 2008 NSG exemption clause; Pakistan does not have such agreement.
- 4. India has signed and ratified the IAEA additional protocol; Pakistan does not have concluded it yet.
- 5. India and Pakistan can give such commitment not to use any item transferred for proliferation.
- 6. Both India and Pakistan have unilateral moratorium of no testing but both have never signed the CTBT.

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<sup>&</sup>lt;sup>67</sup> "Politics of NSG and Ballistic Missile Tests" (views expressed in a seminar organised by Strategic Vision Institute, Islamabad, on December 29, 2016).

<sup>&</sup>lt;sup>68</sup>Seiitsu Tachibana, "India-US Civil Nuclear Cooperation – Contentious Problems for NPT and Nuclear Disarmament" Institute for Peace Science, Hiroshima University, www.home.hiroshima-u.ac.jp.

<sup>&</sup>lt;sup>69</sup> "India Safeguards Agreement Signed," IAEA, February 2, 2013.

- Pakistan has been calling for signing a bilateral test ban treaty with India or mutual signing of the CTBT; India has not shown any such signs.
- 8. Both India and Pakistan call for non-proliferation and disarmament.
- This clause presumes India into the NSG as member should not object any other non-NPT NWS application. Critics say though India will not be acting against Pakistan's application, any other member on behalf of India may act this way.<sup>70</sup>

Prof. (R) Zafar Iqbal Cheema pointed out that "Pakistan does not qualify as per the first four points mentioned in the formula while the remaining five are applicable to both Pakistan and India." He argued that the "Grossi formula is well suited to India while technically it excluded Pakistan." There was consensus in the seminar that it was done intentionally to accommodate India. Pakistan's case may not be entertained or excluded from agenda by India or any of its allies if it gets NSG membership. To

However, it is interesting to note that the matter of membership for Non-NPT states was discussed in 27<sup>th</sup> plenary of the NSG in June, 2017 in Switzerland; yet, the decision was not taken. It was concluded that an informal meeting of the NSG states would be held in November 2017 to discuss the matter.

### Conclusion

The paper discussed the evolution, objectives, procedures and current membership criteria of the Nuclear Suppliers Group (NSG). The cartel aims at strengthening the non-proliferation regime and complements the NPT. The NSG works as a voluntary export control cartel which regulates the export of nuclear material and technology by nuclear exporting

71 Ibid.

<sup>70</sup> Ibid.

<sup>&</sup>lt;sup>72</sup> "Politics of NSG and Ballistic Missile Tests," (views expressed at a seminar of Strategic Vision Institute, Islamabad, on December 29, 2016).

states. In 2008, the cartel extended a specific waiver to India for export of nuclear technology which breached the normative spirit of the cartel.

In the last few years, India and Pakistan, the two non-NPT nuclear weapon states have been endeavoring to get membership of the 48member NSG. Since India and Pakistan are enduring rivals, both have to be treated equally by the International community for the promotion of peace and stability. The paper discussed the Indian case which claimed that the country had also been enjoying overwhelming support from the former Obama administration. In continuation of the US-India strategic partnership, India was granted membership of MTCR. Now, India is looking for membership of other cartels including the NSG. For India, the membership of the cartel is only a matter of prestige as it is already benefiting from the fruits of nuclear technology and materials emanating from the 2008 NSG exemption. For Pakistan, it is a question of maintenance of balance and stability vis-à-vis its adversary. Pakistan also eagerly needs nuclear cooperation from advanced countries to cater to its energy needs and for fulfilling its long-term nuclear energy program which seeks to generate 40000 MW of electricity by 2050. It is on these grounds that Pakistan bases its case for membership of the NSG.

The paper evaluated three proposed criteria for the membership of the non-NPT nuclear weapons states i.e. India and Pakistan. The first approach requires signing the NPT for the NSG membership. This approach is too restrictive as either India, nor Pakistan is ready to give up possession of its nuclear weapons. Second approach calls for likeminded states which is mainly supported by the US to facilitate India to get the NSG membership and leaving aside Pakistan. Third approach considers general and acceptable criteria which places certain non-proliferation pledges and commitments from the non-NPT nuclear weapons states to accept their candidature for the membership of the NSG.

The paper also shed's light on the 9-point Grossi formula which mainly favours the Indian case. India has done most of the demands mentioned in Grossi formula and leaves aside Pakistan's case for membership for future. Concurrent membership to the NSG would be the apt resolve, but unfortunately the US policy towards both is not even-handed. India has been enjoying fruits of nuclear trade ever since Indo-US Nuclear Deal of 2008 provided such exemption to its strategic partner. A non-discriminatory criterion-based approach should be adopted for all non-NPT NWS aspirants for NSG membership. This will not only strengthen the non-proliferation regime but also promote peace and stability in South Asia.