

# Information Circular

**INFCIRC/539/Rev.7**

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**General Distribution**

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## Communication Received from the Permanent Mission of the Republic of Kazakhstan to the International Atomic Energy Agency on Behalf of the Participating Governments of the Nuclear Suppliers Group

1. The Secretariat has received a note verbale dated 22 October 2019 from the Permanent Mission of the Republic of Kazakhstan to the International Atomic Energy Agency. Attached to this note verbale are a letter from the Chair of the Nuclear Suppliers Group (NSG)<sup>1</sup> to the Acting Director General, and a revised text of the document entitled “The Nuclear Suppliers Group: Its origins, role and activities.” The original version of this document was issued as INFCIRC/539 on 15 September 1997: revisions were issued on 17 April 2000, 16 September 2003, 30 May 2005, 5 November 2009, 4 December 2012 and 22 January 2015.
2. As requested in the aforementioned note verbale, the texts of the note verbale, as well as of the letter and attachment thereto, are hereby reproduced for the information of all Member States.

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<sup>1</sup> A list of NSG participating Governments is contained in the Annex to this INFCIRC.



**PERMANENT MISSION  
OF THE REPUBLIC OF KAZAKHSTAN  
TO THE INTERNATIONAL ORGANIZATIONS  
IN VIENNA**

30-35/167

The Permanent Mission of the Republic of Kazakhstan to the International Organizations in Vienna presents its compliments to the International Atomic Energy Agency and has the honour to forward a letter, dated 21 October 2019 from Mr. Kairat Sarybay, Ambassador, Resident Representative of the Republic of Kazakhstan to the International Organizations in Vienna, current Chairperson of the Nuclear Suppliers Group (NSG), regarding agreed amendments to INFCIRC/539 (The Nuclear Suppliers Group: Its Origins, Roles and Activities).

The Permanent Mission of the Republic of Kazakhstan to the International Organizations in Vienna has the honour to request that the amended INFCIRC/539, together with Ambassador Sarybay's letter be circulated among the Member States of the IAEA.

The Permanent Mission of the Republic of Kazakhstan to the International Organizations in Vienna avails itself of this opportunity to renew to the International Atomic Energy Agency the assurances of its highest consideration.

Attachment: 15 p.



October 22, 2019

**INTERNATIONAL ATOMIC ENERGY AGENCY  
VIENNA**



**Permanent  
Representative of the  
Republic of Kazakhstan  
to the International Organizations  
in Vienna -  
The Nuclear Suppliers Group Chair  
for 2019-2020**



Permanent Mission  
of the Republic of Kazakhstan  
to the International  
Organizations in Vienna

22 October 2019  
№30-35/1444

**Your Excellency,**

In my capacity as the Chair of the Nuclear Suppliers Group (NSG), I am pleased to send you, a revised text of the document entitled: "The Nuclear Suppliers Group: Its Origins, Role and Activities."

The purpose of this document is to provide detailed background on the origins of the NSG Guidelines (INFCIRC/254/Parts 1 and 2, as amended), which govern the exports of items and technologies exclusively for nuclear use, as well as the export of nuclear-related dual-use items and technologies. The initial version was published by the International Atomic Energy Agency (IAEA) as INFCIRC/539, dated 15 September 1997. Subsequent revisions followed, the latest—the sixth—having been published on 22 January 2015. Participating Governments of the NSG have decided that the developments which have occurred since then have warranted a further update to the document.

I would be grateful if you could circulate the attached document among the Member States of the IAEA, as a revised version of INFCIRC/539.

Please accept, Your Excellency, the assurance of my highest consideration

Sincerely,

**Kairat Sarybay  
Ambassador**

Encl.: As stated.

**H.E. Mr. Cornel Feruta  
Director General (Acting)  
International Atomic Energy Agency  
Vienna**

## ***The Nuclear Suppliers Group: Its Guidelines, Origins, Structure, and Role***

### **Overview**

1. The Nuclear Suppliers Group (NSG) is a group of nuclear supplier countries of nuclear material, equipment and technology and nuclear-related dual-use equipment, materials, software and related technology, which seeks to contribute to the non-proliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports. NSG Participating Governments (hereinafter referred to as “NSG participants or PGs”) are listed in the Annex. NSG participants pursue the aims of the NSG through adherence to the NSG Guidelines, which are adopted by consensus, and through an exchange of information, notably on developments of nuclear proliferation concern.

2. The NSG Guidelines are consistent with, and complement, the various international, legally binding instruments in the field of nuclear non-proliferation. These instruments include the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco), the South Pacific Nuclear-Free-Zone Treaty (Treaty of Rarotonga), the African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba), the Treaty on the Southeast Asia Nuclear-Weapon-Free Zone (Treaty of Bangkok), and the Central Asian Nuclear-Weapon-Free Zone Treaty (Treaty of Semipalatinsk).

### **I. The NSG Guidelines**

3. The aim of the NSG Guidelines is to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices, and that international trade and cooperation in the nuclear field is not hindered unjustly in the process. The NSG Guidelines facilitate legitimate trade by providing the means whereby peaceful nuclear cooperation can take place in a manner consistent with international nuclear non-proliferation norms. The NSG encourages all States to adhere to the Guidelines.

4. The first set of NSG Guidelines<sup>1</sup> governs the export of items that are especially designed or prepared for nuclear use. These include: (i) nuclear material; (ii) nuclear reactors and equipment therefor; (iii) non-nuclear material for reactors; (iv) plants and equipment for the reprocessing, enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) technology (including software) associated with each of the above items. The NSG Part 1 Guidelines for Nuclear Transfers were originally published as an International Atomic Energy Agency (IAEA) Information Circular INFCIRC/254 in 1978.

5. The second set of NSG Guidelines<sup>2</sup> governs the export of nuclear-related dual-use items and technologies, that is, items that can make a major contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activity, but that have non-nuclear uses as well, for example in industry. The NSG Part 2 Guidelines on Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology were published as Part 2 of the IAEA’s

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<sup>1</sup> These guidelines are contained in INFCIRC/254, Part 1 (as amended).

<sup>2</sup> These guidelines are contained in INFCIRC/254, Part 2 (as amended).

Information Circular INFCIRC/254 in 1992.

6. The NSG Part 1 Guidelines state that suppliers should authorize a transfer only upon formal government assurances from recipients in accordance with paragraphs 2 to 4 of the Part 1 Guidelines. The recipient of a subsequent retransfer is expected to provide the same formal government to government assurances as those required by the supplier for the original transfer. The recipient or importing government also has to provide assurance that it will not re-transfer specific items, material, facilities or technology mentioned in paragraph 9 of Guidelines (heavy water, material usable for nuclear weapons, enrichment, reprocessing etc.) that it has received to a third government without the exporting government's prior consent. The NSG Part 1 Guidelines also recognise the fact that there is a class of technologies and materials that are particularly sensitive – namely enrichment and reprocessing facilities and equipment and technology therefor. Exporters are required to exercise particular caution in the transfer of sensitive facilities, technology and material usable for nuclear weapons or other nuclear explosive devices. The implementation of effective physical protection measures is also required because it can help prevent the theft and illicit transfer of nuclear material. The NSG Part 1 Guidelines are applied both to NSG participants and non-NSG participants. Most NSG participants do not possess a self-sufficient fuel cycle and are major importers of nuclear items. Accordingly, they are required to provide the same assurances for nuclear transfers as non-NSG participants in accordance with the Guidelines.

7. There is close interdependence between the controls in Part 1 of the Guidelines and the effective implementation of comprehensive IAEA safeguards. The committee reviewing the implementation of Article III at the 1990 NPT Review Conference (NPTRC) recommended that nuclear supplier States should “require, as a necessary condition for the transfer of relevant nuclear supplies to non-nuclear weapon States (NNWS), the acceptance of IAEA safeguards on all their current and future nuclear activities (i.e. full-scope safeguards or comprehensive safeguards)”. At the 1992 NSG Plenary in Warsaw, a declaration<sup>3</sup> by all NSG participants was made “of a common policy of requiring the application of full-scope IAEA safeguards to all current and future nuclear activities as a necessary condition for all significant, new nuclear exports to NNWS”. This declaration was reflected in Revision 2 of the NSG Part 1 Guidelines published by the IAEA as INFCIRC/254/Part 1 in 1995. The NSG supports fully international efforts to strengthen safeguards to detect undeclared activities as well as to monitor declared nuclear activities to ensure that they continue to meet vital nuclear non-proliferation requirements and to provide the assurances needed for the continuation of international nuclear trade. The requirement that no transfer of Trigger List items to NNWS takes place unless the recipient State has full-scope safeguards on all its nuclear activities is particularly pertinent because it establishes a uniform standard of supply that is based on the IAEA's international verification system. The strengthening of the IAEA safeguards system from 1997 onwards has improved considerably the Agency's ability to exercise its verification role.

8. The NSG Part 1 Guidelines also contain the so-called “Non-Proliferation Principle,” adopted in 1994, whereby a transfer, notwithstanding other provisions in the NSG Guidelines, is only authorised when the exporting country has been satisfied that the transfer would not contribute to the proliferation of nuclear weapons. The Non- Proliferation Principle seeks to cover the rare but important cases where adherence to the NPT or to a Nuclear Weapon Free Zone Treaty may not by itself be a guarantee that a State will consistently share the objectives of the Treaty or that it will remain in compliance with its Treaty obligations.

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<sup>3</sup> The 1992 Statement on full-scope safeguards is attached to INFCIRC/405.

9. Annex A to the NSG Part 1 Guidelines, the “Trigger List”, lists the specific types of material and equipment to which the conditions of supply described in the NSG Part 1 Guidelines apply. Due to the illustrative nature of the Trigger List, it also contains definitions and General Notes to support the interpretation of the Trigger List by supplier governments. Annex B to the Part 1 Guidelines, Clarification of items on the Trigger List, elaborates illustrative examples of the facilities, items, technology and materials contained in Annex A. ‘Trigger List’ items “trigger” a requirement for IAEA safeguards in the country of destination. The Trigger List covers *especially designed or prepared* (EDP) equipment, components, materials, subsystems and facilities for processing, use, and production of special fissionable material. The guiding question for listing items on the Trigger List is “do the items meet the EDP criteria for the processing, use, or production of special fissionable material?”.

10. By developing the NSG Part 2 Guidelines, the NSG further demonstrated its commitment to nuclear non-proliferation by ensuring that dual-use items are controlled to ensure their strict non-explosive use. These items, however, continue to be available for peaceful nuclear activities subject to IAEA safeguards, as well as for other industrial activities where they do not contribute to nuclear proliferation.

11. The Annex to the Part 2 Guidelines, or Dual-Use List, covers both nuclear fuel cycle activities and weaponization. The Dual-Use List is a definitive list in which entries for the controls are described with a degree of technical detail and narrowly worded to cover only those items that are “significant” and “controllable.”

### **How the Guidelines Work**

12. The NSG Guidelines are sets of conditions of supply that are applied to nuclear transfers for peaceful purposes to help ensure that such transfers will not be diverted to unsafeguarded nuclear fuel cycle or nuclear explosive activities. Although the NSG Guidelines are not legally-binding, NSG PGs commit to apply those Guidelines via their national legislation. For some time now, many nuclear supply arrangements have incorporated NSG conditions of supply. Such arrangements are designed to expedite transfers and trade. The NSG commitments, when woven into the supply arrangements with a basis in respective national laws, provide governments with legitimate and defensible arguments that such arrangements diminish proliferation risk. In this manner, non-proliferation and trade purposes are mutually reinforcing.

13. The NSG Guidelines are implemented by each NSG participant in accordance with its national laws and practices. Decisions on export applications are taken at the national level in accordance with national export licensing requirements. This is the prerogative and right of all States for all export decisions in any field of commercial activity and is also in line with the text of Article III.2 of the NPT, which refers to “each State Party,” and thus emphasises the sovereign obligation of any party to the Treaty to exercise proper export controls.

14. The NSG does not have a mechanism for limiting supply and does not take collective decisions on licence applications as a group. NSG participants meet regularly to exchange information on issues of nuclear proliferation concern and how they may impact national export control policy and practice.

15. As practised by NSG participants, export controls operate on the basis that cooperation is the principle and restrictions are the exception. Few NPT parties have been refused items that are listed on the NSG Control Lists: this has occurred when an NSG participant had good reason

to believe that the item in question could contribute to nuclear proliferation. Almost all refusals by NSG participants of applications for export licences have concerned States with unsafeguarded nuclear programmes.

## II. The Origins of Nuclear Export Controls and Development of the NSG

16. From the beginning of international cooperation in the peaceful uses of nuclear energy, supplier countries have recognised the responsibility to ensure that such cooperation does not contribute to the proliferation of nuclear weapons. Shortly after entry into force of the NPT in 1970, multilateral consultations on nuclear export controls led to the establishment of two separate mechanisms for dealing with nuclear exports: (1) the Zangger Committee in 1971-when major nuclear suppliers regularly involved in nuclear trade came together to reach common understandings on how to implement Article III.2<sup>4</sup> of the NPT with a view to facilitating a consistent interpretation of the obligations arising from that Article, and (2) what has become known as the Nuclear Suppliers Group in 1975. The NSG and the Zangger Committee differ slightly in the scope of their Trigger Lists of EDP items and in the export conditions for items on those lists. Concerning the scope of those lists, the Zangger list is restricted to items falling under Article III.2 of the NPT. The NSG arrangement covering exports of dual-use items is a major difference between the NSG and the Zangger Committee. As dual-use items cannot be defined as EDP equipment, they fall outside the Zangger Committee's mandate. Despite these differences between the two regimes, it is important to keep in mind that they serve the same objective and are equally valid instruments of nuclear non-proliferation efforts. There is close cooperation between the NSG and the Zangger Committee on the review and amendment of the Trigger Lists.

17. A series of meetings were held in London in 1975 by Canada, France, Japan, Soviet Union, United Kingdom, United States, and West Germany following the explosion in 1974 of a nuclear device by a non-nuclear-weapon State, an event which demonstrated that nuclear technology transferred for peaceful purposes could be misused. The meetings continued from 1976 to 1978 with additional governments taking part. This group was known as the "London Club" and later as the "Nuclear Suppliers Group.". It was thus the sense of the NSG that conditions of nuclear supply might need to be adapted so as to better ensure that nuclear cooperation could be pursued without contributing to the risk of nuclear proliferation. The 1975 to 1978 meetings brought together the major suppliers of nuclear material, non-nuclear material for reactors, equipment, and technology that were members of the Zangger Committee, as well as States that were not parties to the NPT.

18. The NSG, taking into account the work already done by the Zangger Committee, agreed on a set of guidelines incorporating a Trigger List. The NSG Guidelines were published in 1978 as INFCIRC/254 (subsequently amended), to apply to nuclear transfers for peaceful purposes to help ensure that such transfers would not be diverted to unsafeguarded nuclear fuel cycle or

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Article III.2 of the NPT states that:

"Each State Party to the Treaty undertakes not to provide:

(a) source or special fissionable material, or

(b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article."

nuclear explosive activities.

19. Between 1978 and 1991, the NSG was not active, even though its Guidelines were in place. At the 1990 NPTRC, a number of recommendations made by the committee reviewing the implementation of Article III had a significant impact on reactivating the NSG's activities in the 1990s. These recommendations included the following:

- That NPT parties consider further improvements in measures to prevent the diversion of nuclear technology for nuclear weapons;
- That States engage in consultations to ensure appropriate coordination of their controls on the exports of items, such as tritium, not identified in Article III.2 but still relevant to nuclear weapons proliferation and therefore to the NPT as a whole;
- That nuclear supplier States require, as a necessary condition for the transfer of relevant nuclear supplies to NNWS, the acceptance of IAEA safeguards on all their current and future nuclear activities (i.e. full-scope safeguards or comprehensive safeguards).

20. In response, the NSG decided at the 1992 NSG Plenary in Warsaw:

- To establish guidelines for transfers of nuclear-related dual-use equipment, material, and technology (items which have both nuclear and non-nuclear applications) that could make a significant contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activity. These Dual-Use Guidelines were published as Part 2 of INFCIRC/254, and the original Guidelines published in 1978 became Part 1 of INFCIRC/254;
- To establish a framework for consultation on the Dual-Use Guidelines, for the exchange of information on their implementation and on procurement activities of potential proliferation concern;
- To establish procedures for exchanging notifications that have been issued as a result of national decisions not to authorise transfers of dual-use equipment or technology and to ensure that NSG participants do not approve transfers of such items without first consulting with the State that issued the notification;
- To make a full-scope safeguards agreement with the IAEA a condition for the future supply of Trigger List items to any non-nuclear-weapon State. This decision ensured that only NPT parties and other States with full-scope safeguards agreements could benefit from nuclear transfers.

21. The decision to establish the NSG Part 2 Guidelines was made in response to recommendations made by the committee reviewing the implementation of Article III of the 1990 NPTRC and in response to evidence in the early 1990s that export control provisions then in force had not prevented one state party to the NPT, from pursuing a clandestine nuclear weapons programme to acquire dual-use items not covered by the NSG Guidelines and then use these items to build Trigger List items.

22. The endorsement at the 1995 NPT Review and Extension Conference (NPTREC) of the full-scope safeguards policy already adopted by the NSG in 1992 clearly reflects the conviction of the international community that this nuclear supply policy is a vital element to promote shared nuclear non-proliferation commitments and obligations. Specifically, paragraph 12 of



decision 2 on "Principles and Objectives for Nuclear Non- Proliferation and Disarmament" states that full-scope safeguards and international legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices should be a condition for granting licences for Trigger List items under new supply arrangements with NNWS.

23. The NSG held an Intersessional Meeting in Vienna in October 1998, following the concern expressed by NSG participants at the nuclear tests conducted by two non-nuclear weapons states in May 1998. NSG participants discussed their impact and they reaffirmed their commitment to the NSG Guidelines.

24. The 2000 NPTRC reconfirmed that any transfer of nuclear-related dual-use items should be in full conformity with the NPT, and called upon all States parties to ensure that their exports of nuclear-related dual-use items to States not party to the Treaty do not assist any nuclear weapons programme.

25. NSG participants welcome the recognition in United Nations Security Council Resolution (UNSCR) 1540 (2004) of the importance of export controls to non-proliferation efforts, as well as the UN Security Council's decision that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear weapons, including establishing end-user controls. NSG PGs also welcome the follow-up resolutions (1673, 1810, 1977, 2055 and 2325) and the continuing work of the UNSCR 1540 Committee.

26. To further strengthen NSG participants' national export controls, the 2004 NSG Plenary in Göteborg decided to adopt a "catch-all" mechanism in the NSG Guidelines, to provide a national legal basis to control the export of nuclear -related items that are not on the control lists, when such items are or may be intended for use in connection with a nuclear weapons programme.

27. At the 2005 NSG Plenary in Oslo, NSG PGs adopted additional strengthening measures: to establish a procedure towards suspending, through national decisions, nuclear transfers to countries that are non-compliant with their safeguards agreements; that supplier and recipient States should elaborate appropriate measures to invoke fall-back safeguards if the IAEA can no longer undertake its safeguards mandate in a recipient state, and to introduce the existence of effective export controls in the recipient state as a criteria of supply for nuclear material, equipment and technology and a factor for consideration for dual-use items and technologies.

28. Beginning in 2005, the NSG examined issues raised by the US-India Joint Statement of July 2005, and the possibility of future NSG-India civilian nuclear cooperation. In September 2008, NSG PGs adopted a policy statement on civil nuclear cooperation with the IAEA-safeguarded Indian civil nuclear program in the 2008 Statement on Civil Nuclear Cooperation with India (INFCIRC/734). In so doing, NSG PGs took note of steps India voluntarily undertook to separate its civilian nuclear facilities, the conclusion and approval by the IAEA Board of Governors of a safeguards agreement for India's civilian nuclear facilities and India's commitment to sign and adhere to an Additional Protocol to that agreement, and to support international efforts to limit the spread of enrichment and reprocessing technologies, and India's other steps to strengthen its domestic export control system, adhere to the NSG Guidelines and continue a moratorium on nuclear testing and work toward a Fissile Material Cutoff Treaty (FMCT). Based on these commitments and actions of India, the policy permits transfers of Trigger List and dual-use items and/or related technology to India for peaceful purposes and for

use in IAEA safeguarded civil nuclear facilities, provided that the transfer satisfies all other provisions of the NSG Guidelines, as revised. The statement notes that NSG PGs will report approved transfers to India of INFCIRC/254 Part 1, Annex A and B items, requests the Chair to confer and consult with India and report to the Plenary, and states that PGs will consult regularly on matters connected to the implementation of all aspects of the policy statement. The statement also includes a provision for PGs to meet, if deemed necessary, in accordance with INFCIRC/254, Part 1, Rev. 9, paragraph 16. At each regularly scheduled CG and Plenary meeting since adopting the exception, PGs have fulfilled the regular reporting and consultation requirements of the 2008 policy statement on civil nuclear cooperation with India.

29. The NPTRC in 2010 (Action 36) encouraged States parties to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls.

30. Noting the importance of keeping up to date with technological developments, PGs agreed at the 2010 NSG Plenary in Christchurch to undertake a fundamental review of the NSG lists. Technical experts conducted regular interactions under the auspices of the Dedicated Meeting of Technical Experts (DMTE). The fundamental review of the NSG lists was completed at the 2013 NSG Plenary in Prague. The IAEA published all 54 agreed amendments in revised IAEA documents INFCIRC/254/Part 1 and INFCIRC/254/Part 2, and the NSG published the changes on its public website.

31. The 2013 NSG Plenary in Prague agreed to amend Paragraph 3.a and Annex C of the Part 1 Guidelines to reference recognized IAEA recommendations for physical protection.

32. The 2016 NSG Plenary in Seoul endorsed a paper on "Efficient Processing of Government to Government Assurances (GTGA)", which can be found in the "National Practices" section of the NSG website.

33. The 2017 NSG Plenary in Bern approved revised guidance for enhancing outreach to individual non-PGs, transit and trans-shipment countries, multilateral and regional fora, other export control regimes, and industry.

34. At each Plenary meeting, NSG PGs take stock of developments in the nuclear field since the last Plenary meeting, exchange information on positive and negative developments in the nuclear non-proliferation regime, and focus on specific regions and countries of concern. At the 2019 NSG Plenary in Nur-Sultan, the NSG stated that PGs supported the ongoing diplomatic processes and efforts to achieve the complete denuclearization of, and lasting peace on, the Korean Peninsula, and reconfirmed their commitment to full and comprehensive implementation of the UNSCRs 2371(2017), 2375(2017), 2397(2017) and previous relevant UNSC resolutions, which, inter alia, reaffirm that the Democratic People's Republic of Korea (DPRK) shall immediately abandon all nuclear weapons and existing nuclear programs in a complete, verifiable and irreversible manner. Within the framework of the NSG's mandate, the PGs noted that the supply of all NSG controlled items to the DPRK is prohibited according to the above-mentioned resolutions. PGs took note of the international community's continued obligations under UNSC Resolution 2231(2015) and took note of all the concerns expressed by the PGs in relation to its implementation, and urged compliance with UNSCR 2231 (2015). At the 2019 NSG Plenary in Nur-Sultan, the NSG also stated that since the 2018 Plenary in Jūrmala, the NSG had continued to receive briefings from the Joint Comprehensive Plan of Action (JCPOA) Procurement Working Group Coordinator, regarding the work of the Procurement Channel. PGs

expressed interest in receiving further briefings.

At the conclusion of each Plenary meeting, the NSG issues a public statement. Statements issued since 1992 as well as other useful information about the work of the NSG may be found at [www.nuclearsuppliersgroup.org](http://www.nuclearsuppliersgroup.org). Section IV below provides additional information on the website and other transparency measures the NSG has taken.

### **III. Structure and Role of the NSG**

#### **Participation**

35. From the initial publication of INFCIRC/254 in 1978 to now, participation has increased and now stands at 48 Participating Governments. (See the full list of NSG participants in the Annex.)

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

- Be able to supply items (includes transit items) covered by the Annexes to Parts 1 and 2 of the Guidelines;
- Adhere to and act in accordance with the Guidelines;
- Have in force a legally-based domestic export control system that gives effect to the commitment to act in accordance with the Guidelines;
- Be a party to the NPT, the Treaties of Tlatelolco, Rarotonga, Pelindaba, Bangkok, or Semipalatinsk, 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;
- Be supportive of international efforts towards the non-proliferation of weapons of mass destruction and of their delivery vehicles.

#### **Organisation of Work**

37. The NSG takes decisions by consensus. Overall responsibility for activities lies with the NSG participants who meet once a year in a Plenary meeting.

38. The NSG Chair rotates on an ad hoc basis, usually annually, and has overall responsibility for coordination of work and outreach activities. (See the full list of NSG Chair governments in the Annex). Any NSG participant is free to indicate its interest to chair the NSG and a decision is then reached by consensus. The NSG Troika, an informal arrangement composed of the previous, current and future NSG Chairs, contributes to outreach activities.

39. Typically, the agenda of the Plenary meeting focuses on reports from the standing bodies as well as on reports from the previous NSG Chair on outreach activities, and sharing of information as specified in the 2008 Statement on Civil Nuclear Cooperation with India (INFCIRC/734). Time is also allotted to review items of interest such as trends in nuclear proliferation and developments since the previous Plenary meeting, and to reflect on priorities for the coming year.

40. The NSG has two standing bodies that report to the Plenary. These are the Consultative Group (CG) and the Information Exchange Meeting (IEM) with Chairs that have a one-year renewable term of office. The CG meets between Plenaries and is tasked to hold consultations on issues associated with the Guidelines on nuclear supply and the technical annexes. The IEM precedes the NSG Plenary and provides another opportunity for NSG participants to share information and developments of relevance to the objectives and content of the NSG Guidelines. Under the mandate of information exchange, the Licensing and Enforcement Experts Meeting (LEEM), discusses issues relating to effective licensing and enforcement practices. The LEEM reports the results of its discussions through the IEM Chair at the Plenary meeting.

41. NSG participants review the Guidelines published in INFCIRC/254 from time to time to ensure that they are up to date to meet evolving nuclear proliferation challenges and technology developments. As appropriate, the NSG Chair notifies the Director General of the IAEA of agreed amendments to Parts 1 and 2 of the NSG Guidelines and their associated lists and requests that the IAEA publishes revisions to INFCIRC/254 accordingly. Such amendments can be additions, deletions, clarifications or corrections.

42. At the conclusion of a 3-year fundamental review launched at the 2010 NSG Plenary in Christchurch, the 2013 NSG Plenary in Prague agreed to establish a Technical Experts Group (TEG), which, at the request of the CG, is tasked with ensuring that the NSG Control Lists are complete and up-to-date with technical advancements. The TEG meets to discuss and make recommendations to the CG on all technical questions referred to it by the CG, on an as-needed basis. The CG may consider requesting the TEG to address key questions/issues, such as: are there control entries that should be added or deleted? Are there control entries for which technical parameters have become obsolete or outdated and need to be changed/updated? Have new and emerging technologies and recent developments applicable to nuclear activities been duly accounted for as appropriate and needed?

43. The NSG does not have a formal secretariat or a general budget. The organisational functions are carried out on a voluntary basis by a number of NSG participants. Japan, through its Permanent Mission of Japan to the International Organisations based in Vienna, acts as the Point of Contact (POC), carrying out a practical support function. The POC receives and distributes NSG documents, maintains the official record, notifies meeting schedules and provides logistical and practical assistance to the Chairs of the Plenary, the CG and IEM and the Chairs of the TEG, LEEM and any working groups that may have been established by the Plenary. The United States is responsible for the NSG Information Sharing System (NISS), while Germany, through its Federal Office for Economic Affairs and Export Control, is responsible for hosting the NSG public website, supported technically by the European Commission's Joint Research Centre in Ispra, Italy.

#### **IV. NSG Action to Promote Openness, Transparency, and Adherence**

44. The NSG is aware that non-NSG participants have in the past expressed concern about a perceived lack of transparency in the NSG's activities. NSG meeting confidentiality allows a frank discussion among participants to take place, which facilitates consensus decision-making. When a decision is reached it is communicated publicly via the NSG website or, for changes to the Guidelines, as an IAEA Information Circular. As non-NSG participants have not been part of the decision-making process in the establishment of the

Guidelines, concerns have therefore been expressed that the NSG has sought to deprive States of the benefits of nuclear technology or impose requirements on non-NSG participants, which have been made without their participation. NSG participants understand the reasons for these concerns but state emphatically that the objectives of the NSG have consistently been to fulfil their obligations as suppliers to support nuclear non-proliferation and, in doing so, to facilitate peaceful nuclear cooperation.

45. The NSG welcomed the call in paragraph 17 of the “Principles and Objectives for Nuclear Non-proliferation and Disarmament” adopted at the 1995 NPTREC for more openness and transparency and responded substantively to the call at its 1996 NSG Plenary in Buenos Aires by establishing a working group to advance this objective. In 1997, this working group recommended the convening of the “1st NSG International Seminar on the Role of Export Control in Nuclear Non-Proliferation” held from 7 to 8 October 1997. A follow-up seminar took place in April 1999 in New York. Another initiative coming from this working group was the creation of the NSG website on 13 May 2002.<sup>5</sup>

46. The NSG has consistently promoted openness and greater understanding of its aims, as well as adherence to its Guidelines, and is prepared to support efforts by governments to adhere to and implement the Guidelines. Applying the NSG Guidelines and Annexes on a national basis helps governments to meet their export control obligations under UNSCR 1540 “to take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials”. Adherence and implementation of the NSG Guidelines shows a commitment to implement on a national basis an export control system for nuclear and dual-use items based on an existing and well-functioning model and represents a visible expression of support for international efforts towards the non-proliferation of weapons of mass destruction and their means of delivery.

47. States may choose unilaterally to adhere to the NSG Guidelines without taking the step of applying to become an NSG participant. States that wish to make a unilateral declaration of adherence to the Guidelines should send 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. Any non-PG interested in more information about the adherence process should contact the NSG Chair via the POC. Neither the NSG nor NSG participants have any active role in verifying unilateral declarations of adherence, which provide no rights or privileges to a non-PG. If a state wants to become an NSG participant, it has to apply (see paragraph 36). A state’s previous adherence to the Guidelines will be considered as a factor for participation in the NSG.

## **NSG Outreach**

48. NSG Outreach is conducted by the NSG Chair on behalf of the NSG, in response to the interest shown by individual non-PGs, transit, and trans-shipment countries, multilateral and regional fora, other export control regimes, and industry. A series of contacts have taken place to inform these “outreach partners” about the NSG’s activities, as well as to encourage non-PGs to adhere to the Guidelines.

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<sup>5</sup> The seminar booklets for can be found on the NSG website in the “Documents” section.

49. NSG outreach activities also provide an opportunity for outreach partners to brief the NSG on nuclear non-proliferation and nuclear export controls issues, national export control systems and seek any advice or assistance from NSG participants. The NSG Plenary can also mandate the Chair to conduct outreach activities with specific governments. The aims of the outreach activities are to promote both adherence to the NSG Guidelines and a greater understanding of the role, mission, and work of the NSG. The NSG is prepared to support efforts by non-PGs to adhere to and implement the Guidelines through its outreach activities. Outreach facilitates an open dialogue on issues of common interest and concern related to nuclear non-proliferation and nuclear export controls.

50. This outreach might include the provision of: information about the NSG Guidelines and best practices, as well as how to make export control systems effective and efficient; and information about the NSG Control Lists, how to use them to establish national export control lists and how to review and update such lists. If there is an interest from non-PGs and the aforementioned entities in the NSG's work, it may be possible for visits, meetings and/or regular briefings to be organised by the NSG Chair to provide information on the NSG's activities and, for example, to encourage interested governments to adhere to the Guidelines. Any non-PG or potential outreach partner interested in outreach with the NSG should contact the NSG Chair, via the POC, for more information.

51. Recognising that an appropriate level of transparency, openness, and dialogue is welcome in order to address export control challenges posed by illicit procurement of nuclear and nuclear-related materials and the globalisation of the nuclear industry, NSG participants agreed at the 2004 NSG Plenary in Göteborg to strengthen contacts with non-partners through seminars and other joint activities with States outside of the NSG. These seminars and joint activities have provided an opportunity for States, both within and outside the NSG, and non-governmental organizations to pose questions, raise topics and exchange views on nuclear export controls. The NSG Chair regularly participates in the annual Asian Export Control seminar in Tokyo and makes a presentation on behalf of the NSG. A comprehensive list of all outreach seminars hosted or attended by NSG Chairs can be found on the NSG website.

52. The NSG Chair also conducts regular outreach with the IAEA, and the Chairs of the UNSCR 1540 Committee, and the Zangger Committee, and has participated in coordination meetings with the Chairs of the Australia Group, Wassenaar Arrangement, Missile Technology Control Regime (MTCR), and the Organization for Security and Co-operation in Europe (OSCE).

53. At the 2001 NSG Plenary in Aspen, the NSG agreed upon the creation of a website in order to better inform the public of the role and activities of the NSG. The website was opened to the public at the 2002 NSG Plenary in Prague; the 2011 NSG Plenary in Noordwijk and 2012 NSG Plenary in Seattle undertook to refine and restructure the website to keep it up to date. At the 2013 NSG Plenary in Prague, it was agreed to launch the new, revised NSG website to facilitate information sharing with the public in multiple languages. At the 2018 NSG Plenary in Jūrmala, NSG participants agreed to additional content for the NSG website including a "Frequently Asked Questions" (FAQ) section and an explanatory video about the NSG. The website can be found at the below links:

<http://www.nuclearsuppliersgroup.org>  
<http://www.nsg-online.org>

## Conclusions

54. Guided by the objectives of supporting nuclear non-proliferation and facilitating the peaceful applications of nuclear energy, the NSG has demonstrated its ability to remain responsive to major non-proliferation crises by developing the NSG Part 1 Guidelines in 1978, the NSG Part 2 Guidelines in 1992, and catch-all controls in 2004.

55. The NSG Guidelines have significantly strengthened international solidarity in the field of transfers of nuclear material. NSG activities reflect the non-proliferation and peaceful nuclear cooperation objectives that NSG participants share with all NPT parties and parties to other international legally binding non-proliferation commitments. Controls on the transfer of nuclear and nuclear-related dual-use items and technologies provide essential support for the implementation of these treaties and for the continuation and development of peaceful nuclear cooperation, thus also facilitating the utilisation of nuclear energy in developing countries.

56. Applying the NSG Guidelines and Annexes on a national basis helps governments meet their export control obligations under UNSCR 1540. In this sense, the NSG Guidelines are a public good which is available for the international community to assist governments to fulfil their international commitments and to reinforce the non-proliferation structure.

57. Updates to the Guidelines and Controls Lists are publicly available and their changes and evolution are explained in outreach activities. The NSG remains open to answering technical questions it may receive from interested stakeholders. Universal transparency of the NSG Guidelines and the Annexes will continue through their publication as IAEA Information Circulars.

58. The NSG remains open to admitting further supplier countries in order to strengthen international non-proliferation efforts, as already illustrated by its broadening participation in all regions of the world.

59. With regard to the future development of the Guidelines, NSG participants will continue to harmonise their national export control policies in a transparent manner. In this way they will continue to contribute to nuclear non-proliferation and at the same time support the development of nuclear trade and cooperation and help sustain genuine commercial competition between suppliers.

60. The NSG is committed to the further promotion of openness and transparency in its practices and policy and to maintaining the neutrality of export controls, both in the strict implementation of NSG commitments by NSG participants and in the promotion of universal adherence through outreach and transparency activities.

## ANNEX

**NSG Participating Governments including previous Chairs**

Participating Government	Adherence Letter	Date of Participation	Year of Chair – Plenary Venue
Argentina	INFCIRC/254/Add.17	12 Apr 1994	1996/97 – Buenos Aires 2014/15 – Buenos Aires 2015/16 – Bariloche
Australia	INFCIRC/254/Add.1	21 Feb 1978	--
Austria	INFCIRC/254/Add.16	18 Dec 1991	--
Belarus	INFCIRC/578	20 Apr 2000	--
Belgium	INFCIRC/254	11 Jan 1978	--
Brazil	INFCIRC/506	19 Apr 1996	2006/07 – Brasilia
Bulgaria	INFCIRC/254/Add.7	14 Dec 1984	--
Canada	INFCIRC/254	11 Jan 1978	1997/98 – Ottawa
China	INFCIRC/627	27 May 2004	--
Croatia	INFCIRC/469	23 June 2005	--
Cyprus	INFCIRC/587	20 Apr 2000	--
Czech Republic	INFCIRC/254	(11 Jan 78*) 5 Mar 1993	2002/03 – Prague 2013/14 – Prague
Denmark	INFCIRC/254/Add.3	13 Aug 1984	--
Estonia	INFCIRC/624	27 May 2004	--
Finland	INFCIRC/254/Add.2	28 Jan 1980	1995/96 – Helsinki
France	INFCIRC/254	11 Jan 1978	2000/01 – Paris
Germany	INFCIRC/254	11 Jan 1978	2008/09 – Berlin
Greece	INFCIRC/254/Add.4	19 Sep 1984	--
Hungary	INFCIRC/254/Add.8	2 May 1985	2009/10 – Budapest
Iceland	INFCIRC/750	11 June 2009	--
Ireland	INFCIRC/254/Add.6	14 Nov 1984	--
Italy	INFCIRC/254	11 Jan 1978	1999/00 – Florence
Japan	INFCIRC/254	11 Jan 1978	--
Kazakhstan	INFCIRC/608	8 May 2002	2019/20 – Nur-Sultan
Republic of Korea	INFCIRC/490	13 Oct 1995	2003/04 – Busan 2016/17 – Seoul
Latvia	INFCIRC/542	15 Oct 1997	2018/19 – Jūrmala
Lithuania	INFCIRC/619	27 May 2004	--
Luxembourg	INFCIRC/254/Add.5	13 Nov 1984	--
Malta	INFCIRC/626	27 May 2004	--
Mexico	INFCIRC/254/Rev.10/Part 1/Add.1 INFCIRC/254/Rev.8/Part 2/Add.1	5 Sep 2012	--
Netherlands	INFCIRC/254	11 Jan 1978	1991/92 – The Hague 2011/12 – Noordwijk
New Zealand	INFCIRC/458	19 Dec 1994	2010/11 – Christchurch
Norway	INFCIRC/254/Add.12	14 Sep 1989	2005/06 – Oslo
Poland	INFCIRC/254	11 Jan 1978	1992/93 – Warsaw
Portugal	INFCIRC/254/Add.9	10 Jan 1986	--



Romania	INFCIRC/254/Add.15	1 Aug 1990	--
Russian Federation	INFCIRC/254	11 Jan 1978	--
Serbia	INFCIRC/254/Rev.10/Part 1/Add.2 INFCIRC/254/Rev.8/Part 2/Add.2	30 Apr 2013	--
Slovakia	INFCIRC/254	(11 Jan 78*) 5 Mar 1993	--
Slovenia	INFCIRC/590	2 Oct 2000	--
South Africa	INFCIRC/436	6 Mar 1995	2007/08 – Cape Town
Spain	INFCIRC/254/Add.11	20 Oct 1988	1994/95 – Madrid
Sweden	INFCIRC/254	11 Jan 1978	2004/05 – Göteborg
Switzerland	INFCIRC/254	11 Jan 1978	1993/94 – Lucerne 2017/18 – Bern
Turkey	INFCIRC/577	20 Apr 2000	--
Ukraine	INFCIRC/505	12 Apr 1996	--
United Kingdom	INFCIRC/254	11 Jan 1978	1998/99 – Edinburgh
United States	INFCIRC/254	11 Jan 1978	2001/02 – Aspen 2012/13 – Seattle

\* - Czechoslovakia separated into the Czech Republic and Slovakia.

Permanent Observers:                      European Commission  
   Zangger Committee Chair