

R – Export Controls

The Zangger Committee

The Zangger Committee: A History 1971-1990

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The Origins.

1. The origins of the Zangger Committee, also known as the Nuclear Exporters' Committee, sprang from Article III.2 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) which entered into force on 5 March 1970. Under the terms of Article III.2: 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.

2. Between 1971 and 1974 a group of fifteen states, some already Party, the others prospective Parties to the NPT, held a series of informal meetings in Vienna chaired by Professor Claude Zangger of Switzerland. As suppliers or potential suppliers of nuclear material and equipment their objective was to reach a common understanding on:

- the definition of what constituted 'equipment or material especially designed or prepared for the processing, use or production of special fissionable material';
 - the conditions and procedures that would govern exports of such equipment or material in order to meet the obligations of Article I II2 on a basis of fair commercial competition.
3. The group, which came to be known as the 'Zangger Committee', decided that its status was informal, and that its decisions would not be legally binding upon its members.

The Rules of the Game - INFCIRC/209 Series.

4. By 1974 the Committee had arrived at a consensus on the basic 'rules of the game' which were set out in two separate memoranda dated 14 August 1974. The first defined and dealt with exports of *source and special fissionable material* (Article I II2(a) of the NPT). The second defined and dealt with exports of *equipment and non-nuclear material* (Article III2(b) of the NPT). The Committee agreed to exchange information about actual exports, or issue of licenses for exports, to any non-nuclear weapon States not Party to the NPT through a system of Annual Returns which are circulated on a confidential basis amongst the membership each year in April.

5. The consensus, which formed the basis of the Committee's 'Understandings' as they are known, was formally accepted by individual Member States of the Committee by an exchange of Notes amongst themselves. These amounted to unilateral declarations that the Understandings would be given effect through respective domestic export control legislation.

6. More or less in parallel with this procedure each Member State (except three) wrote identical letters to the Director General of the IAEA, enclosing edited versions of the two memoranda, informing him of its decision to act in conformity with the conditions set out in them and asking him to communicate this decision to all Member States of the Agency. The letters and memoranda were accordingly published as IAEA document INFCIRC/209 dated 3 September 1974.

7. [Eds..]

The 'Trigger List'.

8. The memorandum dealing with equipment and non-nuclear material (INFCIRC/209, Memorandum B) became known as the 'Trigger List': the export of items listed on it 'trigger' IAEA safeguards, ie they will be exported only if the source or special fissionable material produced, processed or used in the equipment or material in question is subject to safeguards under an Agreement with the IAEA.

Trigger List 'Clarification'.

9. Attached to the original Trigger List was an Annex 'clarifying' or

defining the items described on it in some detail. The passage of time and successive developments in technology have meant that the Committee is constantly engaged in monitoring the need for revision or further 'clarification' of Trigger List items and the original Annex has thus grown considerably.

[Eds..]

Status of the Committee.

10. The Committee's Understandings and the INFCIRC/209 series documents that arise from them have no status in international law but are arrangements unilaterally entered into by Member States. They make an important contribution to the non-proliferation regime, and are continuously adapted in response to evolving circumstances.

[Eds..]

Working Paper on Multilateral Nuclear Supply Principles of the Zangger Committee. 2026 Review Conference

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Introduction

1. Previous Review Conferences of the Parties to the Nuclear Non-Proliferation Treaty, when reviewing the implementation of the Treaty in the area of export controls, have repeatedly noted the role of the Zangger Committee. The Committee essentially contributes to the interpretation of article III, paragraph 2, of the Treaty and thereby offers guidance to all parties to the Treaty. The Committee or its work was referenced in Final Documents or in Committee reports of Treaty Review Conferences from 1975, 1985, 1990, 1995 and 2000, as well as in the action plan on nuclear disarmament developed in 2010.

2. The purpose of the present paper is to describe the work of the Zangger Committee in order to provide better insight into the Committee's objectives. Furthermore, it is consistent with one of the calls of the 1995 Review and Extension Conference, which in paragraph 17 of its decision entitled "Principles and objectives for nuclear non-proliferation and disarmament" stated that "transparency in nuclear export controls should be promoted within the framework of dialogue and cooperation among all interested States party to the Treaty".

3. Attached to the present paper are the statements of previous Treaty Review Conferences referring to the Zangger Committee or its activities.

Zangger Committee

Article III, paragraph 2

4. Article III, paragraph 2, of the Treaty performs a vital function in helping to ensure the peaceful use of nuclear material and equipment. Specifically, it states:

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.

5. The main significance of the paragraph is that parties to the Treaty should not export, directly or indirectly, nuclear material and equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear-weapon States not parties to the Treaty unless the export is subject to International Atomic Energy Agency (IAEA) safeguards as required by article III. This is an important provision because recipient countries not parties to the Treaty may not have accepted any other nuclear non-

proliferation obligations. By interpreting and implementing article III, paragraph 2, the Zangger Committee helps to prevent the diversion of exported nuclear material and equipment or material from peaceful purposes to nuclear weapons or other nuclear explosive devices, which furthers the objectives of the Treaty and enhances the security of all States.

6. The Zangger Committee understandings, in line with article III, paragraph 2, also relate to exports to non-nuclear-weapon States parties to the Treaty insofar as the recipient should recognize the items on the trigger list as a basis for its export control decisions in the case of re-exports.

Zangger Committee understandings

7. Between 1971 and 1974 a group of 15 States, some already parties to the Treaty, others prospective parties, held a series of informal meetings in Vienna chaired by Professor Claude Zangger of Switzerland. As suppliers or potential suppliers of nuclear material and equipment, their objective was to reach a common understanding on:

(a) The definition of what constituted "equipment or material especially designed or prepared for the processing, use or production of special fissionable material" (as it was not defined anywhere in the Treaty);

(b) The conditions and procedures that would govern exports of such equipment or material in order to meet the obligations of article III, paragraph 2, on a basis of fair commercial competition.

8. The group, which came to be known as the Zangger Committee, decided that its status was informal and that its decisions would not be legally binding upon its members.

9. In 1972, the Committee reached consensus on "understandings" contained in two separate memoranda. Together, these memoranda form the guidelines of the Zangger Committee today. Each memorandum defines and provides for procedures for the export of materials and equipment described in article III, paragraph 2; the first memorandum concerns source and special fissionable material (article III, paragraph 2 (a)), the second concerns equipment and material especially designed or prepared for the processing, use or production of special fissionable material (article III, paragraph 2 (b)).

10. The consensus which formed the basis of the Committee's understandings was formally accepted by individual States members of the Committee by an exchange of notes among themselves. These amounted to unilateral declarations that the understandings would be given effect through respective national export control legislation. In parallel with this procedure, most member States wrote identical letters to the Director General of IAEA informing him of their decision to act in conformity with the conditions set out in the understandings. These letters also asked the Director General to communicate their decision to all States members of the Agency, which he did in INFCIRC/209, dated 3 September 1974.

11. Memorandum A defines the following categories of nuclear material:

(a) Source material: natural or depleted uranium and thorium;

(b) Special fissionable material: plutonium-239, uranium-233, uranium enriched in the isotopes 235 or 233.

12. Memorandum B, as clarified since 1974 (see below), contains plants, equipment and, as appropriate, material in the following categories: nuclear reactors, non-nuclear materials for reactors, reprocessing, fuel fabrication, uranium enrichment, heavy water production and conversion.

13. To fulfil the requirements of article III, paragraph 2, the Zangger Committee understandings contain three basic conditions of supply for these items:

(a) For exports to a non-nuclear-weapon State not party to the Treaty, source or special fissionable material either directly transferred, or produced, processed or used in the facility for which the transferred item is

intended, shall not be diverted to nuclear weapons or other nuclear explosive devices;

(b) For exports to a non-nuclear-weapon State not party to the Treaty, such source or special fissionable material, as well as transferred equipment and non-nuclear material, shall be subject to safeguards under an agreement with IAEA;

(c) Source or special fissionable material and equipment and non-nuclear material shall not be re-exported to a non-nuclear-weapon State not party to the Treaty unless the recipient State accepts safeguards on the re-exported item.

"Trigger list" and its clarification

14. The two memoranda became known as the "trigger list", since the export of listed items "triggers" IAEA safeguards. In other words, as described above, they will be exported only if (a) the transferred equipment or source or special fissionable material, or (b) the material produced, processed or used in the facility for which the item is supplied, is subject to safeguards under an agreement with IAEA based on the IAEA safeguards system for Treaty purposes.

15. Attached to the trigger list is an annex "clarifying", or defining the equipment and material of memorandum B in some detail. The passage of time and successive developments in technology have meant that the Committee is periodically engaged in considering possible revisions to the trigger list, and the original annex has therefore become increasingly detailed. Clarifications are conducted on the basis of consensus. In 2007, the Zangger Committee agreed on procedures for streamlining both its internal decision-taking and notification of changes to the Director General of IAEA, and also for facilitating the harmonization of its memoranda A and B with the trigger list of the Nuclear Suppliers Group.

16. A summary of these clarifications reflects both some detail on the contents of the trigger list and an idea of the work of the Zangger Committee. The changes to the list agreed on up to 2000 were included in the version of the Zangger Committee understandings published as IAEA document INFCIRC/209/Rev.2.

(a) In December 1978, the annex was updated to add heavy water production plants and equipment and a few specific items of isotope separation equipment for uranium enrichment;

(b) In February 1984, further detail was added to the annex to take into account technological developments during the preceding decade in the area of uranium enrichment by the gas centrifuge process;

(c) In August 1985, a similar clarification was made to the annex section on irradiated fuel reprocessing;

(d) In February 1990, the uranium enrichment section was further elaborated by the identification of items of equipment used for isotope separation by the gaseous diffusion method;

(e) In May 1992, specific items of equipment were added to the section on heavy water production;

(f) In April 1994, the enrichment section of the annex was subject to its most significant expansion to date. Existing portions of the section were updated and detailed lists of equipment were added for the enrichment processes, including aerodynamic, chemical and ion exchange, laser-based plasma and electromagnetic separation. A significant modification was also made to the entry for primary coolant pumps;

(g) In May 1996, the sections on reactors and reactor equipment, on non-nuclear materials, on the fabrication of fuel elements and on heavy water production were reviewed. Parts of these sections were updated and new, detailed equipment was added;

(h) In March 2000, a new section on uranium conversion was added. This section also contains elements transferred from section 3 on reprocessing.

17. In February 2008, INFCIRC/209/Rev.2 was modified to include expanded details on the separation of isotopes of special fissionable material, with the addition of an explanatory note, an introductory note in the annex and

a technical amendment already agreed in June 2006. The annex was also amended to include text on valves especially designed or prepared for gas centrifuge enrichment plants.

18. In July 2009, a correction was issued to INFCIRC/209/Rev.2 eliminating several minor errors in both memoranda A and B.

19. In June 2014, an updated list was issued in order to more clearly define the standard of implementation that all States members of the Zangger Committee regard as essential for the fulfilment of the understandings. In addition, amendments previously approved by the Zangger Committee and published as INFCIRC/209/Rev.2/Mod.1 and INFCIRC/209/Rev.2/Corr.1 were incorporated into the actual text of the trigger list in memorandum B. All of the changes to the list were included in the version of the Zangger Committee understandings published as IAEA document INFCIRC/209/Rev.3.

20. In February 2017, a further updated list was issued as INFCIRC/209/Rev.4 to clarify a number of issues, including with regard to neutron detectors and deuterium and heavy water.

21. In February 2020, a further amendment took place to clarify the decontrol of nuclear grade graphite not intended for use in nuclear reactors, to expand the description of fuel cladding breaching machines and to broaden the nomenclature for equipment used in dissolvers. This list was issued as INFCIRC/209/rev. 5.

22. In November 2025, the Committee amended the list to clarify that exports of Deuterium and Heavy Water are only controlled if they are for nuclear reactor use as well as to update the text on Heavy Water production plants. This current list is INFCIRC/209/rev. 6.

Membership

23. All Zangger Committee members are parties to the Treaty that are capable of supplying items on the trigger list. Currently there are 39 members (Argentina, Australia, Austria, Belarus, Belgium, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, France, Finland, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, the Republic of Korea, Luxembourg, the Kingdom of the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Türkiye, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America). The Delegation of the European Union attends the meetings as a permanent observer. Any party that is an actual or potential nuclear supplier and is prepared to implement the Committee's understandings is eligible for membership. Decisions to invite new members of the Committee are taken by consensus of existing members. In the interests of strengthening the Treaty and the nuclear non-proliferation regime in general, Zangger Committee members have urged parties to the Treaty that are nuclear suppliers to consider seeking membership. States parties to the Treaty interested in doing so should visit the Committee's website (www.zanggercommittee.org) and may contact the secretariat (the Mission of the United Kingdom in Vienna) or any State member of the Committee.

Outreach

24. In 2001, the Zangger Committee decided to launch an outreach programme between the Zangger Committee and third countries. The outreach programme has three objectives:

(a) To build a strong and sustainable relationship between the Zangger Committee and third countries;

(b) To increase the transparency of the activities of the Zangger Committee by explaining its role, purpose and functions, in particular its role as technical interpreter of article III, paragraph 2, of the Treaty;

(c) To provide opportunities for open dialogue on issues of common interest and concern on non-proliferation and nuclear export controls.

25. In conducting this exercise, the Zangger Committee wishes to underline that:

(a) The outreach programme reflects the fact that the Zangger Committee is a technical body with a remit to interpret article III, paragraph 2, of the Treaty and as such outreach will not be a political dialogue;

(b) The programme is restricted to States parties to the Treaty;

(c) The programme is informal.

26. Subjects for discussion include:

(a) The role and purpose of the Zangger Committee;

(b) The trigger list and its clarification;

(c) Conditions of supply;

(d) Membership of the Zangger Committee;

(e) The Zangger Committee and the Treaty Review Conferences.

27. In November 2008, the Zangger Committee agreed to expand its outreach programme and the Chair wrote to a number of States parties to the Treaty, inviting each to participate in an outreach dialogue with the Zangger Committee.

Zangger Committee and Treaty Review Conferences

28. At the first Treaty Review Conference in 1975, a brief paragraph in the Final Document referenced the work of the Zangger Committee without naming it. Paraphrasing, this paragraph stated that, with regard to implementation of article III, paragraph 2, the Conference noted that a number of nuclear suppliers had adopted certain minimum requirements for IAEA safeguards in connection with their nuclear exports to non-Treaty non-nuclear-weapon States. The Review Conference went on to attach particular importance to the fact that those suppliers had established as a supply condition an undertaking of non-diversion to nuclear weapons.

29. In 1980, the Review Conference produced no consensus final document. However, the Final Document of the 1985 Review Conference contained a short reference to the Committee's activities, again without naming it. This time the Conference in effect endorsed the main activity of the Zangger Committee by indicating that further improvement of the trigger list should take into account advances in technology.

30. In 1990, the Zangger Committee was mentioned by name and the Conference provided a brief description of its aims and practices. While the Conference did not adopt a final declaration, Main Committee II agreed on language pertaining to a number of ideas and proposals concerning implementation of the Treaty in the areas of non-proliferation of nuclear weapons and safeguards. Main Committee II observed that Zangger Committee members had met regularly to coordinate the implementation of article III, paragraph 2, and had adopted nuclear supply requirements and a trigger list. It recommended that this list be reviewed periodically to take into account advances in technology and changes in procurement practices, a recommendation that the Zangger Committee has continued to pursue. Main Committee II also urged all States to adopt the Zangger Committee's requirements for any nuclear cooperation with a non-nuclear-weapon State not party to the Treaty.

31. At the 1995 Review and Extension Conference, the work of the Zangger Committee was also referenced in Main Committee II and, more specifically, in the working group established by Main Committee II to consider export control issues. While the Conference did not adopt a final declaration similar to those of previous conferences, consensus text on the Zangger Committee was attained. The unofficial text emerging from this exercise was subsequently published in the IAEA document INFCIRC/482 for information purposes. The working group noted that a number of States parties engaged in the supply of nuclear material and equipment had formed an informal group known as the Zangger Committee and had adopted certain understandings. It invited States to consider applying these understandings and recommended that the list of items and the procedures for implementation

be reviewed from time to time. The working group further noted that the application by all States of the understandings of the Zangger Committee would contribute to the strengthening of the non-proliferation regime. At the same time it called for international consultations among all interested States.

32. The Conference approved, *inter alia*, decision 2, which contained a set of principles and objectives, and decision 3, which provided the basis for the adopted enhanced review mechanism of the implementation of the Treaty.

33. Decision 2 contains several principles of particular relevance to the work of the Zangger Committee in the fields of safeguards and export controls (see annex II, principles 9 to 13). In addition, principle 17 calls upon all States to promote transparency in nuclear-related export controls through cooperation and dialogue. Members of the Committee have worked to promote transparency through international seminars and other forms of dialogue.

34. At the 2000 Review Conference, export control issues were discussed by an informal, open-ended working group established by Main Committee II. The working group did not reach final agreement on a text mentioning the Zangger Committee. In the end, only two paragraphs of the Final Document referenced indirectly the work of the Zangger Committee without naming it: the Conference recommended that the list of items triggering IAEA safeguards and the procedures for implementation be reviewed from time to time, and it requested that any supplier arrangement be transparent.

35. At the 2005 Review Conference, export control issues were discussed in Main Committee II. Main Committee II did not, however, reach consensus on a text. No consensus was reached on a final document.

36. At the 2010 Review Conference, export control issues were discussed in Main Committee II. While the Zangger Committee was not mentioned by name, the Final Document highlighted the importance of effective and transparent export controls and encouraged States parties to make use of multilaterally negotiated and agreed guidelines in developing their own national export controls.

37. In the preparatory cycle for the 2015 Review Conference, the Zangger Committee issued a working paper on procedures in relation to exports of nuclear materials and certain categories of equipment and material in relation to article III, paragraph 2, of the Treaty (NPT/CONF.2015/PC.III/WP.37), and subsequently invited all States parties to the Treaty to become additional co-sponsors of this working paper. While the Review Conference did not adopt a consensus outcome, export controls were discussed in Main Committee II and reflected in the working paper issued by the Chair of that Committee.

38. Members of the Zangger Committee issued working papers for the 2017, 2018 and 2019 meetings of the Preparatory Committee for the 2020 Review Conference. Most recently, the present paper was updated to further underline that export controls help to ensure the peaceful uses of nuclear material and equipment.

39. At the 2022 Review Conference, while no consensus outcome was adopted, export controls were discussed in Main Committee II, which was reflected in the working paper issued by the Committee's Chair.

40. In preparation for the 2026 Review Conference, Members of the Zangger Committee issued working papers for the 2023, 2024 and 2025 meetings of the Preparatory Committee.

41. The statements of Review Conferences on the Zangger Committee are attached to the present document (see annexes I and II).

Annex I

References to Zangger Committee activities in Treaty Review Conference documents

First Treaty Review Conference (1975)

1. A paragraph in the Final Document referenced the work of the Zangger Committee without naming it:

With regard to the implementation of Article III, 2 of the Treaty, the Conference notes that a number of States suppliers of material or equipment have adopted certain minimum, standard requirements for IAEA safeguards in connexion with their exports of certain such items to non-nuclear-weapon States not Party to the Treaty (IAEA document INFCIRC/209 and addenda). The Conference attaches particular importance to the condition, established by those States, of an undertaking of non-diversion to nuclear weapons or other nuclear explosive devices, as included in the said requirements. (NPT/CONF/35/I, annex I, page 3)

Third Treaty Review Conference (1985)

2. The 1980 Treaty Review Conference produced no final document, but the 1985 Final Document contained a reference to the Committee without naming it:

13. The Conference believes that further improvement of the list of materials and equipment which, in accordance with Article III (2) of the Treaty, calls for the application of IAEA safeguards should take account of advances in technology. (NPT/CONF.III/64/I, annex I)

Fourth Treaty Review Conference (1990)

3. While the Conference did not adopt a final document, Main Committee II did agree on a number of ideas and proposals, including the following language on the Zangger Committee:

27. The Conference notes that a number of States Parties engaged in the supply of nuclear material and equipment have met regularly as an informal group which has become known as the Zangger Committee in order to co-ordinate their implementation of Article III.2. To this end these States have adopted certain requirements, including a list of items triggering IAEA safeguards, for their export to non-nuclear-weapon States not Party to the Treaty, as set forth in the IAEA document INFCIRC/209 as revised. The Conference urges all States to adopt these requirements in connection with any nuclear co-operation with non-nuclear-weapon States not Party to the Treaty. The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation be reviewed from time to time to take into account advances in technology and changes in procurement practices. The Conference recommends the States Parties to consider further ways to improve the measures to prevent diversion of nuclear technology for nuclear weapons, other nuclear explosive purposes or nuclear weapon capabilities. While recognizing the efforts of the Zangger Committee in the non-proliferation regime, the Conference also notes that items included in the "trigger list" are essential in the development of nuclear energy programmes for peaceful uses. In this regard, the Conference requests that the Zangger Committee should continue to take appropriate measures to ensure that the export requirements laid down by it do not hamper the acquisition of such items by States Parties for the development of nuclear energy for peaceful uses. (NPT/CONF.IV/DC/1/Add.3(A))

Treaty Review and Extension Conference (1995)

4. While the Conference did not adopt a final declaration similar to those of previous conferences, Main Committee II and its subsequent working group did agree on a number of ideas and proposals, including the following language on the Zangger Committee, which reached informal consensus in the working group of Main Committee II and was separately published in IAEA document INFCIRC/482:

5. The Conference notes that a number of States Parties engaged in the supply of nuclear material and equipment have met regularly as an informal group known as the Zangger Committee. These

States have adopted certain understandings, including a list of items triggering IAEA safeguards, for their export to non-nuclear weapon States not parties to the Treaty, as set forth in IAEA document INFCIRC/209, as amended. The Conference invites all States to consider applying these understandings of the Zangger Committee in connection with any nuclear cooperation with non-nuclear-weapon States not parties to the Treaty. The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation be reviewed from time to time to take into account advances in technology and changes in procurement practices....

7. The Conference notes that the application by all States of the understandings of the Zangger Committee would contribute to the strengthening of the non-proliferation regime. The Conference calls for wider participation in international consultations among all interested States parties concerning the formulation and review of such guidelines, which relate to the implementation of States parties obligations under Article III, paragraph 2. (INFCIRC/482, attachment)

5. The Conference adopted in decision 2 a number of principles and objectives related to safeguards and export controls, which are reproduced in annex II.

Sixth Treaty Review Conference (2000)

6. Main Committee II and its subsequent working group discussed a number of ideas and proposals, including the following language on the Zangger Committee, without reaching final agreement:

41. The Conference notes that a number of States Parties engaged in the supply of nuclear material and equipment have met regularly as an informal group known as the Zangger Committee, in order to co-ordinate their implementation of Article III, paragraph 2 of the Treaty. To this end, these States have adopted certain understandings, including a list of items triggering IAEA safeguards, for their export to non-nuclear-weapon States not parties to the Treaty, as set forth in IAEA document INFCIRC/209 as amended....

69. The Conference invites all States to adopt the understandings of the Zangger Committee in connection with any nuclear co-operation with non-nuclear-weapon States not parties to the Treaty. (NPT/CONF.2000/MC.II/1)

7. In the Final Document, two paragraphs referenced indirectly the work of the Zangger Committee without naming it:

52. The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation, in accordance with article III, paragraph 2, be reviewed from time to time to take into account advances in technology, the proliferation sensitivity and changes in procurement practices.

53. The Conference requests that any supplier arrangement should be transparent and should continue to take appropriate measures to ensure that the export guidelines formulated by them do not hamper the development of nuclear energy for peaceful uses by States parties, in conformity with articles I, II, III, and IV of the Treaty. (NPT/CONF.2000/28 (Parts I and II))

Seventh Treaty Review Conference (2005)

8. Though the Zangger Committee and export controls were discussed in Main Committee II, no consensus was reached on a text for main Committee II, nor was a final document agreed.

Eighth Treaty Review Conference (2010)

9. In the Final Document, one paragraph referenced indirectly the work of the Zangger Committee without naming it:

26. The Conference recognizes that national rules and regulations of States parties are necessary to ensure that the States parties are able to give effect to their commitments with respect to the transfer of nuclear and nuclear-related dual-use items to all States taking into account articles I, II and III of the Treaty, and, for States parties, also fully respecting article IV. The Conference notes that numerous States underline that effective and transparent export controls are important for facilitating the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy, which, in the view of those States, depends on the existence of a climate of confidence about non-proliferation. (NPT/CONF.2010/50 (Vol. I))

10. Furthermore, three of the recommendations referenced export controls:

Action 35. The Conference urges all States parties to ensure that their nuclear related exports do not directly or indirectly assist the development of nuclear weapons or other nuclear explosive devices and that such exports are in full conformity with the objectives and purposes of the Treaty as stipulated, particularly, in articles I, II and III of the Treaty, as well as the decision on principles and objectives of nuclear non-proliferation and disarmament adopted in 1995 by the Review and Extension Conference.

Action 36. The Conference encourages States parties to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls.

Action 37. The Conference encourages States parties to consider whether a recipient State has brought into force IAEA safeguards obligations in making nuclear export decisions. (NPT/CONF.2010/50 (Vol. I))

Ninth Review Conference (2015)

11. No consensus was reached on a final document or on a text for Main Committee II. The Chair of Main Committee II included in his report a number of references to export control, including:

43. The Conference urges all States parties to ensure that their nuclear-related exports do not directly or indirectly assist the development of nuclear weapons or other nuclear explosive devices and that such exports are in full conformity with the objectives and purposes of the Treaty as stipulated, particularly, in articles I, II and III of the Treaty, as well as the decision on principles and objectives of nuclear non-proliferation and disarmament adopted in 1995 by the Review and Extension Conference.

44. The Conference recognizes that national rules and regulations of States parties are necessary to ensure that the States parties are able to give effect to their commitments with respect to the transfer of nuclear and nuclear-related dual-use items to all States taking into account articles I, II and III of the Treaty, and for States parties, also fully respecting article IV. In this context, the Conference urges States parties that have not yet done so to establish and implement effective national rules and regulations. The Conference encourages States parties to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls.

45. The Conference encourages States parties to consider whether a recipient State has brought into force IAEA safeguards obligations in making nuclear export decisions.

Tenth Review Conference (2022)

12. No consensus was reached on a final document or on a text for Main Committee II. The Chair of Main Committee II included in her report a number of references to export control, including

49. The Conference recalls that all States parties have undertaken in article III, paragraph 2, of the Treaty not to provide source or special fissionable material or 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 is subject to the safeguards required by article III of the Treaty. The Conference notes that a number of States parties which are suppliers of material or equipment have adopted certain minimum, standard requirements for IAEA safeguards in connection with their exports of certain equipment or material especially designed or prepared for the processing, use or production of special fissionable material (IAEA document INFCIRC/209 and addenda).

50. The Conference recalls that paragraph 12 of decision 2, adopted by the 1995 Review and Extension Conference, affirmed that new supply arrangements for the transfer of source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear-weapon States should require, as a necessary precondition, acceptance of full-scope IAEA safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices. The Conference reaffirms that supplier arrangements should continue to be transparent and ensure that the export guidelines formulated by them do not hamper the development of nuclear energy for peaceful uses by States parties in conformity with the Treaty.

51. The Conference recognizes that there are nuclear-related dual-use items of equipment, technology and materials not identified in article III, paragraph 2, of the Treaty that are relevant to the proliferation of nuclear weapons and therefore to the Treaty as a whole. The Conference calls upon all States parties to ensure that their exports of nuclear-related dual-use items do not assist any nuclear weapons programme. The Conference reiterates that each State party should also ensure that any transfer of such items is in full conformity with the Treaty. The Conference notes that a number of States which are suppliers of material or equipment have adopted guidelines and a control list for transfers of nuclear-related dual-use equipment, materials, software and related technology (IAEA document INFCIRC/254 and addenda).

52. The Conference highlights the aim of export controls to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices. The Conference calls upon all States parties, in acting in pursuance of the objectives of the Treaty, to observe the legitimate right of all States parties, in particular developing States, to full access to nuclear material, equipment and technological information for peaceful purposes.

53. The Conference recognizes that sound national laws and regulations of States parties are necessary to ensure that the States parties are able to give effect to their commitments with respect to the transfer of nuclear and nuclear-related dual-use items to all States in accordance with the relevant provisions of the Treaty. In this context, the Conference urges States parties to establish, maintain and strengthen the

effectiveness of national laws and regulations for export controls of such items.

54. The Conference welcomes the increasing adherence of States parties to multilaterally negotiated guidelines and understandings in developing their own national export controls. The Conference encourages States parties to consider whether a recipient State has brought into force IAEA safeguards obligations in making nuclear export decisions.

55. The Conference encourages all States parties to facilitate transfers of nuclear technology and materials and international cooperation among States parties, in conformity with articles I, II, III and IV of the Treaty, and to eliminate in this regard any undue constraints inconsistent with the Treaty.

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

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[Eds...]

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 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 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 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 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.

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. 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 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 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 (NPTRC) 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 fullscope 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 transshipment countries, multilateral and regional fora, other export control regimes, and industry.

34. At the 2019 NSG Plenary (Nur-Sultan), the multilingual NSG explanatory video "What is the NSG" was completed and uploaded to the NSG website following the approval of the video text at the 2018 NSG Plenary (Jürmala).

35. The thirtieth Plenary Meeting of the NSG was held in Brussels, Belgium, in June 2021. Due to the COVID-19 Pandemic, the 2020 NSG Plenary meeting, initially planned for June 2020, had not taken place. PGs agreed to follow in future the new timing of the Plenary taking place at the end of a Chair's term in office, welcoming the smooth transition that allowed for continuity in the work of the NSG.

36. 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 Jürmala, 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. 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

37. 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.)

38. 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

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

40. 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.

41. 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.

42. 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.

43. 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.

44. 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?

45. 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

46. 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.

47. 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.

48. 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.

49. 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

50. 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.

51. 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.

52. 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.

53. 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 nongovernmental 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.

54. 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).

55. 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

56. 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.

57. 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.

58. 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.

59. 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.

60. 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.

61. 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.

62. 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.

Argentinian Statement on behalf of the NSG. 10th NPT Review Conference

(New York, August 2022)

It is my honor to address this Committee in my capacity as current Chairperson of the Nuclear Suppliers Group (NSG) for the year 2022-2023.

The NSG is a group of responsible nuclear exporter countries working to reinforce the objectives of Art. III, 2 of the Non Proliferation Treaty and to contribute to the non-proliferation of nuclear weapons through exports control.

As we all know Article III, 2 of the NPT sets the obligation to apply safeguards on exports for peaceful purposes to any non-nuclear-weapon State of nuclear equipment or material especially designed or prepared for the processing, use or production of special fissionable material. This Article does not cover exports of technology, such as design information to build a reactor, or the exports of nuclear-related dual-use equipment and technology which could be used to develop nuclear weapons.

In this respect the role played by the NSG adds value to the non-proliferation architecture through the elaboration and implementation of Guidelines covering the exports of nuclear material equipment and technology in Part 1, and transfers of nuclear-related dual-use equipment, materials, software and related technology in Part 2. The NSG Guidelines are published by the IAEA as documents INFCIRC 254 Part 1 and Part 2. The NSG Guidelines were first published in 1978, and this year marks the 30th anniversary of the establishment in 1992 of Part 2 of the Guidelines.

The robust and effective export controls implemented by NSG participating governments promote responsible supplier behavior enabling legitimate trade and investment.

At the same time NSG Guidelines constitute important tools that can assist all NPT States parties to effectively implement national export, transit, transshipment and re-exports controls.

The importance of export controls has been recognized in Action 36 of the Final Document of the 2010 NPT Review Conference where States parties are encouraged to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls. The United Nations Security Council has also highlighted the significant role of export controls in its resolution 1540 and other related decisions. There is an established practice of contacts and dialogue between the NSG and the Security Council.

Let me now update this Main Committee II about the NSG work since our presentation to the last NPT Review Conference in 2015. During these past seven years the NSG has been chaired by the Republic of Korea, Switzerland, Latvia, Kazakhstan, Belgium, your country Poland, currently by Argentina and after the next Plenary

Brazil will take such responsibility in terms of ongoing activities since the 2015 NPT Review Conference, NSG Participating Governments have continued to exchange information on global proliferation challenges and reiterated their firm support for the full, complete and effective implementation of the NPT as the cornerstone of the international non-proliferation regime. The Group has continued to maintain its focus on technical issues important to the implementation of the Control Lists, by exchanging views and agreeing on a number of proposals to clarify and update the NSG Guidelines and Control Lists to keep pace with the evolution and development of technologies as well as with an evolving global security landscape and a fast paced nuclear and nuclear-related industry.

The NSG has adopted a number of recommendations related to changes to the Trigger List and Dual-Use Annex to be included in revisions to INFCIRC/254 Parts 1 & 2 (as amended) following the 2016, 2019 and 2022 Plenary meetings (in keeping with the 3-year publication decision).

The Group has considered the importance of efficient and effective processing of Government to Government Assurances to ensure that NSG Participating Governments have the necessary tools to facilitate the timely authorization of legitimate exports of nuclear material, equipment and technology pursuant to the NSG Part 1 Guidelines.

An important aspect of work in the NSG continues to be balancing the need for confidentiality with the principle of transparency – an important aspect of which is to reach out to interested NPT States Parties on the margins of the Review Conferences to enhance understanding of the NSG and its Guidelines. Successive NSG Chairs have regularly made presentations on behalf of the NSG at the Asian Export Control Seminar in Tokyo, and the

Chair of the Technical Experts Group presented at a Training Course for the 1540 Points of Contact in the Asia Pacific Region (2019).

Over the years the Group continues to consider matters related to enlargement including the “Technical, Legal and Political Aspects of the Participation of non-NPT States in the NSG”. The NSG regularly encourages all nuclear suppliers to express their responsible approach to nuclear exports by adhering to the NSG Guidelines, to fully implement all UNSC resolutions relevant to the work and purposes of the NSG, to exercise utmost vigilance, and to make every effort to ensure that none of their exports of goods and technologies contribute to nuclear weapons programs.

The highlights from NSG Plenary meetings since the last briefing in 2015 include the following:

In 2015 further enhancements to outreach were agreed, including through dedicated briefing(s) for interested non-NSG partners on the work of the Group, increased visibility of the NSG at appropriate international meetings to improve public awareness about the NSG’s work and mission, and a dedicated response to non-NSG partners seeking assistance and practical experience on developing, updating, strengthening and implementing national export control systems.

The NSG welcomed the announcement on 16 January 2016 of the Implementation Day of the Joint Comprehensive Plan of Action (JCPOA). Following up on the Extraordinary Plenary held on 21 January and 26 April this year, the NSG expressed interest in continuing to be briefed by the Procurement Working Group coordinator on the Procurement Channel established under the JCPOA and UNSCR 2231 (2015) as appropriate, and the practice has continued.

In 2017 in its continuing efforts to enhance outreach, the NSG approved revised guidance, and launched an effort to update the NSG website including the addition of a homepage news banner and an interactive timeline to the history page, and launched further features including a video/interactive tutorial of the NSG based on INFCIRC/539 (as amended). The NSG has held informal dialogues with the nuclear industry since the Bern NSG Plenary in 2017, and PGs have exchanged views on national practices of awareness-raising and interaction with industry as well as

academic and research institutions, related to NSG controlled items. Building on an outreach event with the World Association of Nuclear Operators (WANO) and the World Nuclear Association (WNA) in 2018, the NSG held a follow-on outreach event in 2019 with three organizations representing the global civilian nuclear industry which addressed specific issues including technology and industry developments in the context of NSG Guidelines and Control Lists. Later that year the NSG held an informal dialogue with nominated representatives of industry to further explore matters related to implementing the NSG Guidelines. NSG PGs have continued to improve the NSG website adding an FAQ section, language on ‘Adherence’, a new section entitled ‘Outreach’, completion and upload of the multilingual NSG explanatory video “What is the NSG”, added a link to the Nuclear-related transfers and activities (procurement channel) on the UN website, approved amendments to the history section, added language to recognize outreach to Industry, and updated the news banner and Guidelines section to explain the process for updating the NSG Guidelines and Control Lists. In addition, a simplified Chinese language version (2019) and a Russian language version of the NSG website have been added (2021).

In 2020-2021 the restricted working conditions imposed by the COVID-19 pandemic created a number of challenges, but PGs nevertheless made a smooth transition that allowed for continuity of work through a secure remote video communication system and held informal online consultations and briefings during the “stoppage time”. The Group agreed to follow in future a new timing of the Plenary taking place at the end of a Chair’s term in office rather than at the beginning as had been the practice.

During the latter part of 2021 and into 2022, the NSG has continued to consider ways to strengthen support to the Chairs and the sustainability of the group, as well as to improve the understanding of PGs of the specific technical work through implementation tools and good practices to facilitate preparations in advance of Technical Experts Group meetings.

The recent 2022 Plenary brought the Group back to Warsaw 30 years after the creation of the Dual Use Regime. The adopted agreed changes to the Control Lists have been included in an updated INFCIRC/254 recently submitted to the IAEA for publication, in keeping with past practice. In Warsaw, the NSG also agreed to update its outreach tools, including the website and the document “The Nuclear Suppliers Group: Its Guidelines, Origins, Structure, and Activities” (published by the IAEA as INFCIRC/539/Revision 7) to reflect factual outcomes from the 2022 NSG Plenary in advance of the 10th NPT Review Conference. Work will continue to consider ways to promote increased dialogue with industry and to review the body of good practices documents to ensure they remain up to date.

The world is facing significant challenges in the area of climate change and there is an increasing recognition of the role that nuclear technology can play by providing a reliable and carbon neutral source of energy to the electrical grid.

In such context the current role of the NSG is crucial as a contribution to the exercise of the inalienable right to the peaceful uses of nuclear technology through international cooperation by providing a framework of certainty both for Governments and industry.

Public Statement Plenary Meeting Of The Nuclear Suppliers Group

(Cape Town, 25 July 2025)

1. The thirty-fourth Plenary Meeting of the Nuclear Suppliers Group (NSG) took place from 21 – 25 July 2025 in Cape Town, South Africa. The NSG brings together 48 Participating Governments with the European Commission and the Chair of the Zangger Committee participating as permanent observers. The Plenary was chaired by Ambassador Xolisa Mabhongo of the Republic of South Africa. The Minister of International Relations and Cooperation, Mr Ronald Lamola delivered keynote address on behalf of the Government of South Africa at the opening session.

2. The Group is an effective component of the international non-proliferation architecture, of which the Non-proliferation Treaty (NPT) is the cornerstone, including on the peaceful uses of nuclear energy. The Group aims, in line with United Nations Security Council Resolution 1540, to contribute to the prevention of proliferation of nuclear weapons through the implementation, on a national basis, of export controls for nuclear and nuclear-related dual-use equipment, materials, software, and related technology, without hindering international cooperation on the peaceful uses of nuclear energy.

3. The thirty-fourth Plenary coincided with the 50th anniversary of the establishment of the NSG. At this reflection point, Participating Governments reaffirmed their commitment to ensure through implementation of the NSG's Guidelines and Control Lists to facilitate nuclear trade for peaceful purposes and does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices. The NSG welcomed the increasing adherence of States to the NSG Guidelines and their contribution in developing national export controls.

4. The Participating Governments also exchanged perspectives on the current global geopolitical environment as it pertains to disarmament, non-proliferation and peaceful uses of nuclear technology.