

The Nuclear Suppliers Group (NSG) Evolution and Outlook

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Outline

1. NSG in context
2. Origins and development
3. Structure and functioning
4. Guidelines and Control Lists
5. Outlook: Challenges and key issues
6. Switzerland and the NSG



NSG in context

NSG is a **multilateral export control regime**: informal arrangement of nuclear supplier countries that agree on and implement standards for the export of nuclear and nuclear-related dual-use items.

Standards (conditions of supply and principles) are not legally-binding but represent a policy commitment to be implemented at the national level by the members of the Group.



Aim of the NSG:

- to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons and other nuclear explosive devices, and
- that international trade and cooperation in the nuclear field are not hindered unjustly.



Tools:

- Guidelines and Control Lists
- Information Exchange



NSG complements the other multilateral export control regimes:

- Zangger Committee (ZC) – Nuclear
- Australia Group (AG) – Chemical and Biological
- Missile Technology Control Regime (MTCR) – Missiles
- Wassenaar Arrangement (WA) - Conventional



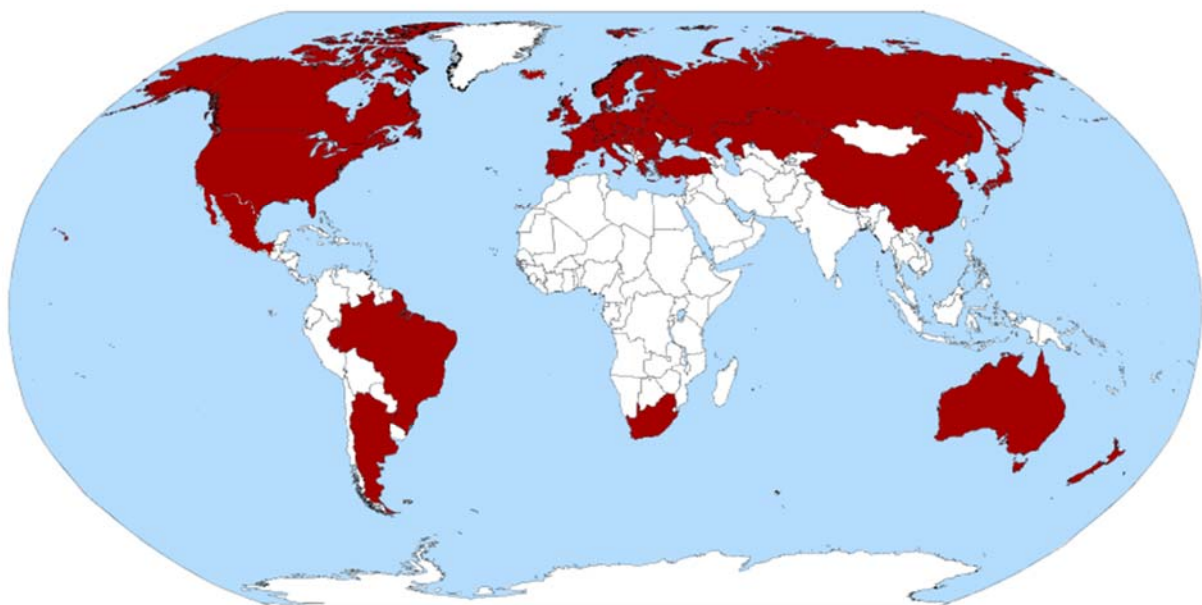
NSG complements legally-binding elements of the **global nuclear non-proliferation regime**:

- Treaty on the Non-Proliferation of Nuclear Weapons (entry into force 1970)
- Treaties on Nuclear-Weapon-Free Zones
- IAEA Safeguards Agreements
- UN Security Council Resolution 1540 (2004)

7



48 Participating Governments (PGs)





Origins and development

1950s/1960s: Individual nuclear suppliers developed their own policies.

1971: Major nuclear suppliers came together in the **Zangger Committee** to reach a common understanding on how to interpret and implement NPT Article III.2 (general legal norm for nuclear exports).



1974: Nuclear explosion by India showed that nuclear technology transferred for peaceful purposes could be misused and thus a need to adapt the conditions of nuclear supply.

1975: Group of states met in London (“London Club”) to develop a more comprehensive list of export controls - led to the establishment of the **Nuclear Suppliers Group**.



1978: Publication of Guidelines for the Export of Nuclear Material, Equipment and Technology incorporating a “Trigger List” (Part 1 Guidelines)

Early 1990s: Discovery of a clandestine nuclear weapons programme in Iraq (largely by acquiring dual-use items and then building its own Trigger List items)

11



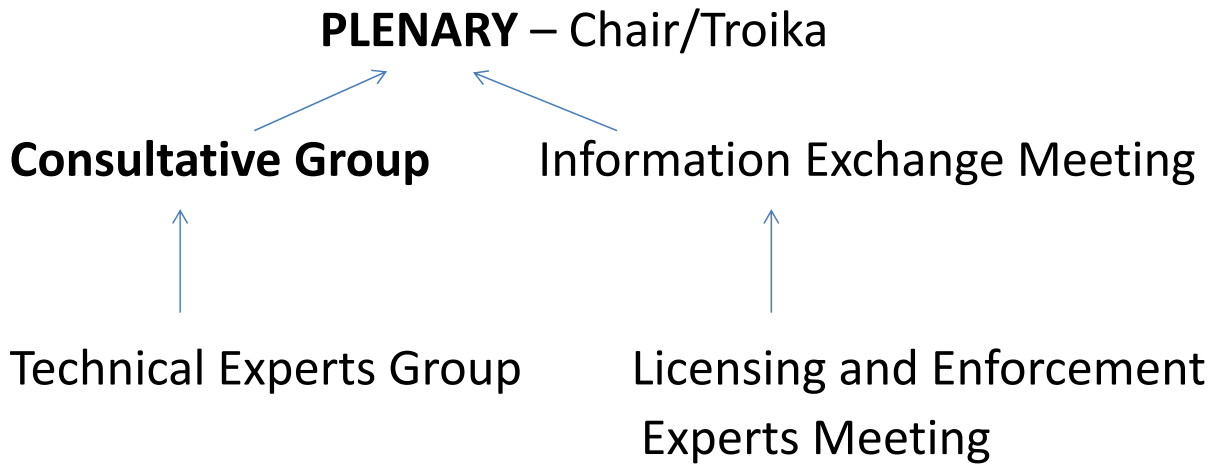
1992: Publication of Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software and Related Technology with a Dual-use Control List (Part 2 Guidelines)

Several major amendments of the provisions in the Guidelines since 1978/1992 (for instance to better respond to proliferation concerns or to help prevent acts of nuclear terrorism) as well as of the Control Lists (2010-2013 fundamental review)

12



Structure and functioning



Point of Contact (PM of Japan in Vienna) provides practical support to Chairs and the Group

13



Plenary

- Governing and decision-making body for all NSG issues
- Regular annual meeting (possibility for intersessional Extraordinary Plenaries)
- Mandates outreach activities by the Chair

Chair

- One-year term
- Assisted by “Troika” (previous, current, future Chairs)

14



Consultative Group (CG)

- Standing working body (at least twice a year)
- Considers issues related to the Guidelines and Control Lists, reports and makes recommendations to the Plenary

Technical Experts Group (TEG)

- Established in 2013 after the three-year fundamental review of the Control Lists
- Tasked by the CG with ensuring the Control Lists are complete and up-to-date, makes recommendations thereon to the CG

15



Information Exchange Meeting (IEM)

- Standing body that reports and makes recommendations to the Plenary
- To share information and developments of relevance to the objectives and content of the NSG Guidelines

Licensing and Enforcement Experts Meeting (LEEM)

- Meets during the Plenary week in close relationship with the IEM and reports to the IEM
- To discuss issues and exchange information related to effective licensing and enforcement practices

16



Decision-making by **consensus**

Confidentiality vs. transparency

Transparency

- Public Statement issued after the Plenary
- Website (www.nuclearsuppliersgroup.org)
- Outreach

17



Outreach objectives

- Broaden understanding of the NSG's work
- Promote adherence to the NSG Guidelines
- Dialogue with third parties on issues of common interest and concern related to nuclear non-proliferation and nuclear export controls

18



Outreach partners and venues

- Countries that have adhered to the NSG Guidelines
- Countries with significant nuclear programmes
- Transit/Transshipment countries
- Multilateral and regional fora
- Industry

19



Guidelines and Control Lists

Guidelines for the Export of Nuclear Material, Equipment and Technology

Annex: “Trigger List”

(INFCIRC/254/Rev.13/Part 1) – 8 November 2016

Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software and Related Technology

Annex: “Dual-use List”

(INFCIRC/254/Rev.10/Part 2 [corrected]) – 5 February 2018

20



Part 1 Guidelines

Prohibit the export of trigger list items and related technology:

- to any non-nuclear-weapon state that does not have full-scope safeguards (three exceptions to FSS), and
- if the exporting country is not satisfied that the export will be used for peaceful purposes.

21



Three exceptions to the full-scope safeguards requirement:

- if the transfer is deemed essential for the safe operation of a safeguarded facility, or
- if the transfer is covered under a “grandfather” provision, or
- if the transfer is destined to a safeguarded facility in India (“2008 India exception”).

22



Other main conditions of supply include:

- Formal governmental assurances from recipients
- Physical protection measures
- Particular caution/restraint in the transfer of sensitive facilities, technologies and materials
- Retransfer provisions

23



Trigger List

Covers *nuclear fuel-cycle* material, equipment, technology (incl. software)

Guiding question: “Are the items *especially designed or prepared* for the processing, use or production of special fissionable material?”

Illustrative list: technical descriptions can be sufficiently broad to cover all usable items of that type

24



Trigger List contains:

- Nuclear material
- Nuclear reactors and equipment therefor
- Non-nuclear material for reactors
- Plants and equipment for reprocessing, enrichment and conversion of nuclear material, fuel fabrication and heavy water production
- Technology, incl. software, associated with the above items

25



Part 2 Guidelines

Prohibit (no exceptions) the export of dual-use list items:

- to any non-nuclear-weapon state for use in a nuclear explosive activity or an unsafeguarded nuclear fuel-cycle activity, or
- when there is a risk of diversion or when the export would be contrary to nonproliferation objectives, or
- when there is a risk of diversion to acts of nuclear terrorism.

“Catch-all” provision for non-listed items

26



Dual-use List

Covers both *fuel-cycle and weaponisation*, but items can have non-nuclear uses as well.

Guiding questions: “Have proliferators sought these items?”, “Can the items be controlled?”, “Is it feasible/useful to control them?”

Definitive list: entries with a degree of technical detail and narrowly worded to cover only those items that are *significant and controllable*

27



Dual-use List contains:

- Industrial equipment
- Materials
- Uranium isotope separation equipment and components (other than Trigger List items)
- Heavy water production plant related equipment (other than Trigger List items)
- Test and measurement equipment for the development of nuclear explosive devices
- Components for nuclear explosive devices
- Technology, incl. software, associated with the above items

28



Outlook: Challenges and key issues

- Global nuclear power capacity will increase
- Nuclear industry becoming more globalised
- Keeping pace with new technological developments
- Countering continued proliferation threats
- Promoting adherence to the NSG Guidelines
- Expansion vs. effectiveness
- Requests for participation from non-NPT States

29



Switzerland and the NSG

Member of the NSG since 1977

Lucerne Plenary (1993)

- Adopted Procedural Arrangement
- Amended Para. 4 of Part 1 of the Guidelines to include full-scope safeguards as a condition of supply

Bern Plenary (2017)

- Adopted revised guidance on outreach

30