Export Controls and the International Nuclear Non-Proliferation Regime

The NSG – Promoting Responsible Supplier Behaviour

An overview of the NSG Guidelines and good practice documents

10th NPT Review Conference – Side Event

18 August 2022 - United Nations, New York
## Multilateral Export Control Regimes

<table>
<thead>
<tr>
<th>Zangger Committee</th>
<th>Nuclear Suppliers Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Established 1971-1974 to interpret NPT Article III.2</td>
<td></td>
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<tr>
<td>- 39 Member Governments</td>
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<tr>
<td>- Determines the meaning and application of “especially designed or prepared”</td>
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<tr>
<td>- Trigger List covers material and equipment transfer</td>
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<td>- Established in 1974 following a peaceful nuclear explosion</td>
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<td>- 48 Participating Governments (PGs)</td>
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<tr>
<td>- Conscious effort to balance trade and security interests</td>
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</tr>
<tr>
<td>- Trigger List and Dual Use List Cover material, equipment, and technology transfer</td>
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</tbody>
</table>
### NSG Participating Governments

<table>
<thead>
<tr>
<th>Argentina</th>
<th>Bulgaria</th>
<th>Denmark</th>
<th>Hungary</th>
<th>Latvia</th>
<th>New Zealand</th>
<th>Russian Federation</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Canada</td>
<td>Estonia</td>
<td>Iceland</td>
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<td>Serbia</td>
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<td>Austria</td>
<td>China</td>
<td>Finland</td>
<td>Ireland</td>
<td>Luxembourg</td>
<td>Poland</td>
<td>Slovakia</td>
<td>Türkiye</td>
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<td>Portugal</td>
<td>Slovenia</td>
<td>Ukraine</td>
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<td>Belgium</td>
<td>Cyprus</td>
<td>Germany</td>
<td>Japan</td>
<td>Mexico</td>
<td>Romania</td>
<td>South Africa</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Brazil</td>
<td>Czech Republic</td>
<td>Greece</td>
<td>Kazakhstan</td>
<td>Netherlands</td>
<td>Republic of Korea</td>
<td>Spain</td>
<td>United States</td>
</tr>
</tbody>
</table>

The European Commission and the Chair of the Zangger Committee participate as observers.
The NSG takes all decisions by consensus at the yearly Plenary Meeting

Recent Plenary Meetings:

Warsaw 2022
Brussels 2021
Nur-Sultan 2019
Jūrmala 2018
Bern 2017
Seoul 2016
Bariloche 2015
Buenos Aires 2014
Prague 2013
### NSG Part 1 Guidelines – Nuclear Transfers

- **Scope (1)**
- **Prohibition on nuclear explosives (2)**
- **Physical protection (3)**
- **CSAs as CoS (4-5)**
- **Special controls on sensitive exports (6)**
- **Enrichment (7)**
- **Reprocessing (8)**
- **Controls on retransfers (9)**
- **Nonproliferation principle (10)**
- **Implementation (11)**

### Supporting Activities:

- **Access for peaceful uses (12)**
- **Physical security (13)**
- **Effective IAEA safeguards (14)**
- **Plant designs (15)**
- **Export controls (16)**
- **Consultations (17)**
- **Changes to the Guidelines (18)**

### NSG Part 2 Guidelines – Nuclear-related Transfers (Dual-Use)

- **Objective (1)**
- **Basic principle (2)**
- **Definitions (3)**
- **Export licensing procedures (4)**
- **Catch all controls (5)**
- **Conditions for transfers (6)**
- **Retransfers (7)**
- **Additional items and conditions for transfers (8)**
- **Information exchange (9)**
- **Universal adherence (10)**
General Notes

Technology Controls

Software Controls

Definitions

Material and Equipment
  - Source and special fissionable material
  - Equipment and non-nuclear materials

Annex B to the Part 1

- nuclear reactors and equipment therefor;
- non-nuclear material for reactors;
- plants and equipment for reprocessing;
- plants and equipment for fabrication of nuclear fuel elements;
- plants and equipment for separation of isotopes;
- plants for heavy water production; and
- plants and equipment for conversion.
<table>
<thead>
<tr>
<th>Part 1</th>
<th>Part 2</th>
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</thead>
<tbody>
<tr>
<td>Covers fuel cycle technologies/items only</td>
<td>Covers both fuel cycle and weaponization</td>
</tr>
<tr>
<td>Listing of EDP items</td>
<td>Listing of dual-use items that are both significant and controllable</td>
</tr>
<tr>
<td>Illustrative List</td>
<td>Definitive List</td>
</tr>
<tr>
<td>Technical descriptions of controlled items can be sufficiently broad to cover all usable items of that type</td>
<td>Technical descriptions precisely and narrowly worded to cover only those items that are significant and controllable. Not all usable items are necessarily controlled</td>
</tr>
<tr>
<td>De minimis quantities for certain materials/items</td>
<td>In general, no de minimis quantities for materials</td>
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</table>
Recent Changes

The 2022 Plenary decided to update Part 2 of the NSG Guidelines (Dual-Use List)

- 1.B.1 “Flow-forming Machines.” This amendment ensures the coverage of flow-forming machines that can be used to produce gas centrifuge rotors are harmonized with the controlled parameters of the centrifuges.
- 3.B.2 “Rotor fabrication or assembly equipment”. This amendment ensures the dimensions for gas centrifuge rotor fabrication equipment are harmonized with the controlled parameters of the centrifuges.
- Editorial correction: In the definitions section of the Dual-Use List, the abbreviation for the unified atomic mas unit was depicted erroneously with a capital ‘U’; it has been corrected to a lower case ‘u’.

See: https://www.nuclearsuppliersgroup.org/en/guidelines
Cyclical Updating of the Control Lists

• Control Lists generally updated every year following Plenary Meeting

• Agreed changes to Control Lists shared via the NSG website for information purposes.

• Every 3 years, consolidated changes forwarded to IAEA for official publication as part of the INFCIRC series (INFCIRC/254 Part 1 and Part 2).

• Participating Governments decide whether they implement approved changes on annual notification or IAEA publication (last updated July 2022).
NSG Guidelines and Control Lists increasingly represent the global standard for nuclear and dual use nuclear related trade: Internationally renowned set of best practices

• NPT 2010 Action Plan
  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.”

• United Nations Security Council Resolution 1540
  “[T]hat all states shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear [.....] weapons, including by establishing appropriate controls over related materials.”

• Cited in IAEA Model Additional Protocol
The NSG …

- Neither approves nor denies
- Sets an agreed international standard
- National Implementation
The NSG – how does it work?
NSG Outreach – Promoting responsible supplier behaviour

- Non-participants
- Transit & transshipment countries
- Multilateral & regional fora
- Other export control regimes
- Industry
Besides the NSG Guidelines, the NSG offers “good practices” which can support implementation of export controls:

- Efficient Processing of Government to Government Assurances (GTGA)
- Good Practices for Corporate Standards to Support the Efforts of the International Community in the Non-Proliferation of Weapons of Mass Destruction
- Good Practices for the Implementation of Brokering and Transit/Transshipment Controls
The Nuclear Suppliers Group (NSG) is a group of nuclear supplier countries that 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.
Thank you for your attention

Questions?