

NSG

### **Nuclear Suppliers Group**

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23<sup>rd</sup> Asian Export Control Seminar
Tokyo





**NSG** Chair

# Export Controls and the International Nonproliferation Regime



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- Treaty on the Non-Proliferation of Nuclear Weapons
  - 1970 entry into force
  - Foundation of global non-proliferation regime
  - Calls on States party to implement conditions of supply for sensitive equipment and material transfers

#### NPT 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.

116 United Nations Member States have adopted nuclear export controls



# International Nonproliferation Regime



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Nuclear export controls are just one means of halting the spread of nuclear weapons, along with:

- IAEA safeguards
- physical protection
- material control and accounting measures



## MULTILATERAL NUCLEAR EXPORT CONTROLS



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Prevent the proliferation of nuclear weapons by:

- creating international standards for countries to support a principled position on nuclear nonproliferation
- learning how proliferators exploit weaknesses to procure materials and capabilities necessary for a nuclear program



### Opportunities for Preventing Proliferation Vary



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- Fissile material production involves:
  - specialized equipment and facilities
  - skilled workforce, facilities, equipment, time, and money

### Remains principal obstacle & rate-determining step to nuclear weapons

- Nuclear weapon design or testing work includes:
  - theoretical work and non-nuclear testing and diagnostics

Typically involves small number of people and dual-use equipment/ facilities that are more difficult to detect



## Opportunities for Preventing Proliferation Vary (cont.)



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Preventing meaningful assistance to fissile material production is the most effective means of slowing nuclear proliferation

- Exports controls:
  - on nuclear items inherently emphasize controls on fissile material production
  - on items for weaponization are important but less effective because they must address the dual use nature of many components
  - are most effective before fissile material production facilities are constructed and operational



## Multilateral Export Control Regimes



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### **Zangger Committee**

- Established 1971-1974 to interpret NPT Article III.2
- 39 Member Governments
- Determines the meaning and application of "especially designed or prepared"
- Trigger List covers material and equipment transfer

#### **Nuclear Suppliers Group**

- Established in 1974 following India's first nuclear test
- 48 Participating Governments (PGs)
- Conscious effort to balance trade and security interests
- Trigger List and Dual Use List Cover material, equipment, and technology transfer







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- Contribute to the nonproliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclearrelated exports
  - Guidelines for the Export of Nuclear Material, Equipment and Technology (INFCIRC/254/Rev.10/Part 1), originally adopted in 1978
  - Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Materials, Software and Related Technology (INFCIRC/254/Rev.7/Part 2), originally adopted in 1992

#### NSG Part 1 and Part 2 Guidelines

- Aim 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
- Any change requires a consensus decision in the NSG
- Have been revised 21 times, most recently in November 2013, following the three year Fundamental Review of the Trigger List and Dual Use List







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#### NSG Part 1 Guidelines Trigger List:

- is illustrative of commodities "especially designed or prepared" for the processing, use, or production of special fissionable material.
- prohibits the export of commodities and related technology:
  - to any non-nuclear weapon state that does not have a legally binding commitment for full scope safeguards with the IAEA; or
  - if the exporting country is not satisfied that the export will be used for peaceful purposes



# NSG Part 2 Guidelines



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#### Part 2 of the NSG Guidelines Dual Use List

- includes nuclear related dual-use equipment, materials and technologies.
- prohibits the export of controlled commodities and technologies:
  - to any non-nuclear weapons state for use in nuclear explosive activity, or in an unsafeguarded nuclear fuel-cycle facility;
  - when there is an unacceptable risk of diversion, or if the export would be contrary to nonproliferation objectives; or
  - if there is a risk of diversion to terrorist acts.



## The NSG as an International Standard



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NSG Guidelines and Control Lists increasingly represent the global standard for nuclear and dual use nuclear related trade:

- 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
- NSG "Watch Lists" adopted by United Nations Sanctions Committee



### Wide Application of the NSG Guidelines



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- NSG PGs Implement the Guidelines and Control Lists in their national regulations
  - EU Control Lists
  - Reflected in PG Nuclear Cooperation Agreements
- Outreach Partners and UN Member States increasingly are implementing the Guidelines and Control Lists
  - 15 NSG Outreach Partners have harmonized to the Guidelines and Control Lists and several more are in the process of harmonization
  - 79 UN Member States implement Nuclear Export Control Lists
  - 67 UN Member States with end-use controls
  - 59 UN Member States with catch-all controls



### NSG Enabling Legitimate Nuclear Trade



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- NSG itself does not deny or approve exports
  - PGs have flexibility to implement Guidelines and apply the Trigger and Dual Use Lists
- Goal is to harmonize nuclear cooperation between suppliers/receivers consistent with shared principles
  - Permit the maximum amount of legitimate nuclear and dual use commerce
  - Reduce as practicable licensing burdens on PGs and Industry
  - Apply a common, non-discriminatory standard for transfers



### Transparency and Outreach



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- 1995 NPT RevCon called for greater transparency in multilateral export controls
- 1996 Buenos Aires Plenary, PGs agreed to initiate an outreach program
  - NSG Website
  - Outreach seminars
  - Joint activities
  - Implementation assistance
- Outreach Partners include:
  - Brokering and transshipment States
  - Recipient governments
  - Aspiring exporters
  - Regional organizations
  - Industry
  - Multilateral institutions and regimes







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- NSG Chairs and 1540 Committee Chairs consult on:
  - Requests for assistance on 1540 implementation
  - Crosscutting issues, such as Germany's Brokering and Transit/Transshipment good practices paper endorsed by NSG PGs
- Action 18, UNSCR 1977

[1540 Committee should encourage organizations such as the NSG to] enhance cooperation and information sharing with the 1540 Committee on technical assistance and all other issues of relevance for the implementation of resolution 1540.



### NSG Structure and Decisionmaking



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- Plenary: Decision making body for Part 1 and Part 2 issues
- Consultative Group (CG): Working-level deliberative body for Part 1 and Part 2 Guidelines issues
  - The CG will take-up all cross-cutting issues
- Technical Experts Group (TEG): Working-level technical body for (Annexes of the INFCIRC/254/Parts 1 and 2)
  - The TEG will take up technical questions related to the control lists
- Information and Exchange Meeting (IEM) and the Licensing and Enforcement Experts Meeting (LEEM): These bodies meet once a year during Plenary Week to share information related to identifying and discussing proliferation trends and concerns.



# Developments since 2015 presentation



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- Technical Changes to the Guidelines agreed
  - A change clarifying the scope of control of DUL entry 1.B.2.c related to machine tools for grinding;
  - A correction of the names used in DUL entry 5.B.5 related to Hydrodynamic Experiments;
  - An amendment of the DUL entry 3.B.3, Centrifugal multiplane balancing machines;
  - An amendment of entry 1.10 of the Trigger List, clarifying the measurement range of neutron detectors;
  - An amendment of the Trigger List definition of time periods;



# Developments since 2015 presentation



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- Informal joint workshop on machine tools with experts from the Wassenaar Arrangement (WA) in April 2015 with national experts from the WA Expert Group
- Discussion of the implications of JCPOA on NSG activities
- Transparency and communication
- Greater interaction with 1540 Committee (meetings with PoCs and assistance missions planned)
- Next Plenary Meeting in Korea







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- The need for a strong export control regime will continue to become increasingly important.
- The NSG plays an important role in helping ensure that nuclear transfers are made for peaceful purposes.
- The NSG recognizes the importance of its role and is currently working to improve its effectiveness through a number of new initiatives in the CG.



### Nuclear Suppliers Group: Resources on the Website



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The NSG dedication to transparency has led to the overhauling of its website and the creation of several reference documents on the policy of the NSG and best practice documents for implementing the NSG Guidelines:

www.nuclearsuppliersgroup.org

#### Official Documents

- Part 1 Guidelines (INFCIRC/254, Part 1)
- Part 2 Guidelines (INFCIRC/254, Part 2)
- The Nuclear Suppliers Group: Its Origins, Role and Activities (INFCIRC 539)
- Statement on Civil Nuclear Cooperation with India (INFCIRC/734)

#### National Papers and Guidance

- Good Practices for the Implementation of Brokering and Transit/Transshipment Controls
- Good Practices for Corporate Standards to Support the Efforts of the International Community in the Non-Proliferation of Weapons of Mass Destruction