



# Export Controls and the International Nuclear Non-Proliferation Regime



NUCLEAR SUPPLIERS GROUP  
GRUPO DE PROVEEDORES NUCLEARES

## The NSG – Promoting Responsible Supplier Behaviour

*An overview of the NSG Guidelines  
and good practice documents*

10<sup>th</sup> NPT Review Conference – Side Event

18 August 2022 - United Nations, New York



# Multilateral Export Control Regimes



## 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 a peaceful nuclear explosion
- 48 Participating Governments (PGs)
- Conscious effort to balance trade and security interests
- Trigger List and Dual Use List Cover material, equipment, and *technology* transfer



## NSG Participating Governments

Argentina	Bulgaria	Denmark	Hungary	Latvia	New Zealand	Russian Federation	Sweden
Australia	Canada	Estonia	Iceland	Lithuania	Norway	Serbia	Switzerland
Austria	China	Finland	Ireland	Luxembourg	Poland	Slovakia	Türkiye
Belarus	Croatia	France	Italy	Malta	Portugal	Slovenia	Ukraine
Belgium	Cyprus	Germany	Japan	Mexico	Romania	South Africa	United Kingdom
Brazil	Czech Republic	Greece	Kazakhstan	Netherlands	Republic of Korea	Spain	United States



NSG  
NUCLEAR SUPPLIERS GROUP  
GRUPO DE PROVEEDORES NUCLEARES



The European Commission and the Chair of the Zangger Committee participate as observers



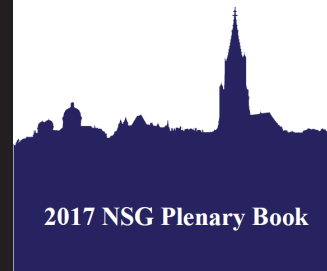
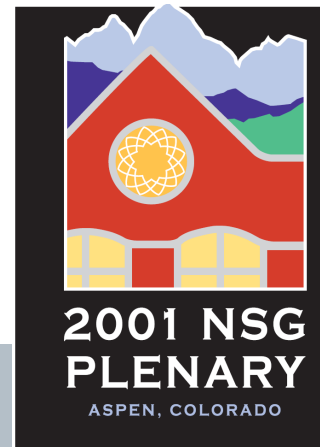
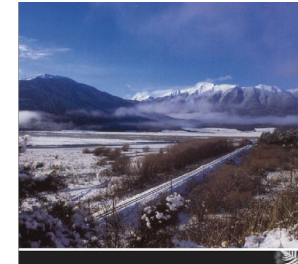
# The NSG takes all decisions by consensus at the yearly Plenary Meeting

## Recent Plenary Meetings:

- Warsaw 2022
- Brussels 2021
- Nur-Sultan 2019
- Jūrmala 2018
- Bern 2017
- Seoul 2016
- Bariloche 2015
- Buenos Aires 2014
- Prague 2013



2018 NSG Plenary Book



NSG  
2015 Plenary  
Bariloche

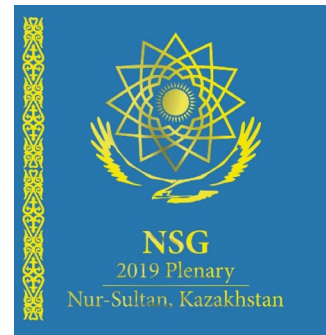
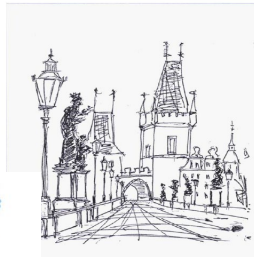
June, 1-5, 2015  
Bariloche, Argentina



NUCLEAR SUPPLIERS GROUP  
PLENARY AND ASSOCIATED MEETINGS  
3-6 MAY 1999  
FLORENCE, ITALY



NUCLEAR SUPPLIERS GROUP  
GRUPO DE PROVEEDORES NUCLEARES





## The NSG Guidelines Part 1 and Part 2

### 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)

### NSG Part 1 Guidelines – Nuclear Transfers

#### 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)





## Annex A to the Part 1

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.



NSG

NUCLEAR SUPPLIERS GROUP  
GRUPO DE PROVEEDORES NUCLEARES



## Part 1

Covers fuel cycle technologies/items only

Listing of EDP items

Illustrative List

Technical descriptions of controlled items can be sufficiently broad to cover all usable items of that type

De minimis quantities for certain materials/items

## Part 2

Covers both fuel cycle and weaponization

Listing of dual-use items that are both significant and controllable

Definitive List

Technical descriptions precisely and narrowly worded to cover only those items that are significant and controllable. Not all usable items are necessarily controlled

In general, no de minimis quantities for materials







## 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 mass 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).



Updated NSG Part 1 – Trigger List (PDF file)  
Updated NSG Part 1 – Trigger List, track edit change version (PDF file)  
Updated NSG Part 2 – Dual-Use List (PDF file)  
Updated NSG Part 2 – Dual-Use List, track edit change version (PDF file)

<https://www.nuclearsuppliersgroup.org/en/guidelines>



## 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 ...



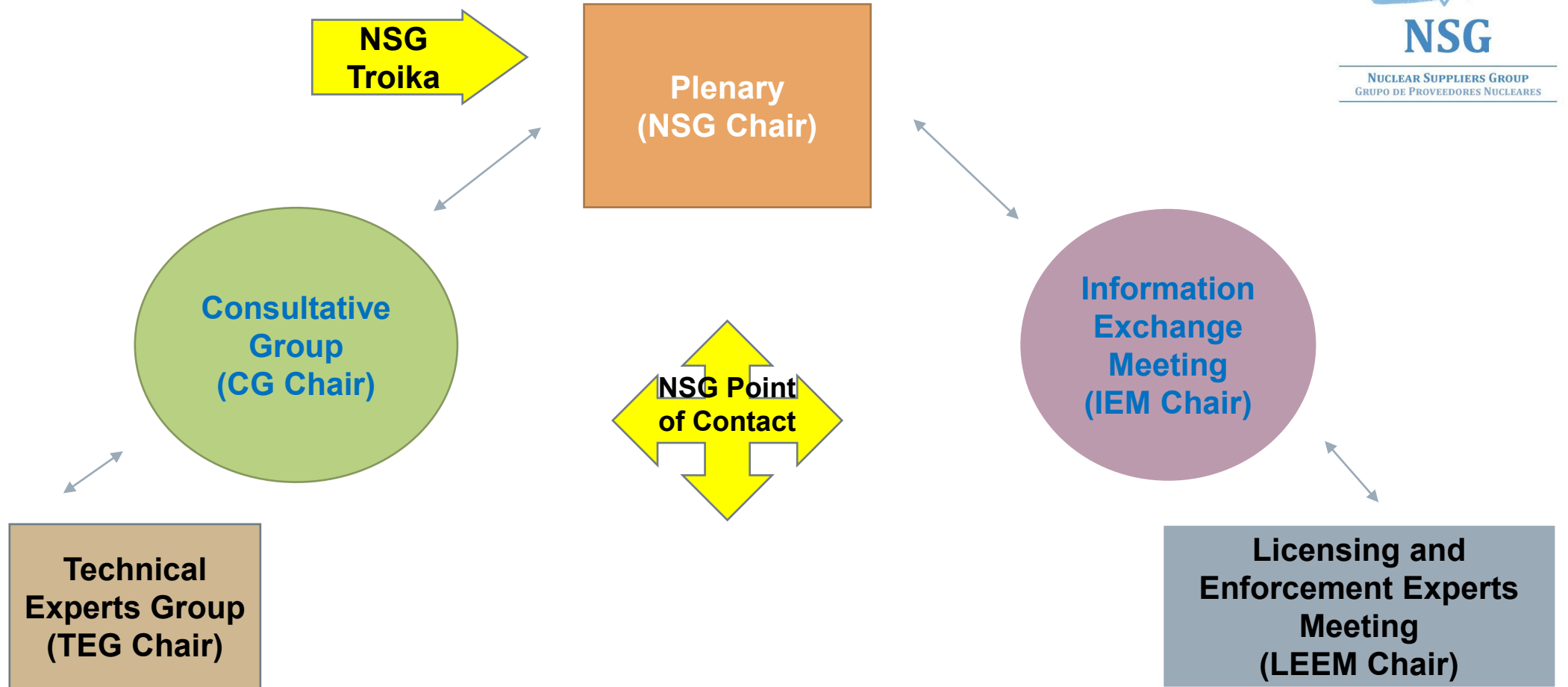
**Neither approves nor denies**

**Sets an agreed international standard**

**National Implementation**



# The NSG – how does it work?





# NSG Outreach – Promoting responsible supplier behaviour



**Non-participants**

**Multilateral & regional fora**



Nuclear Suppliers Group

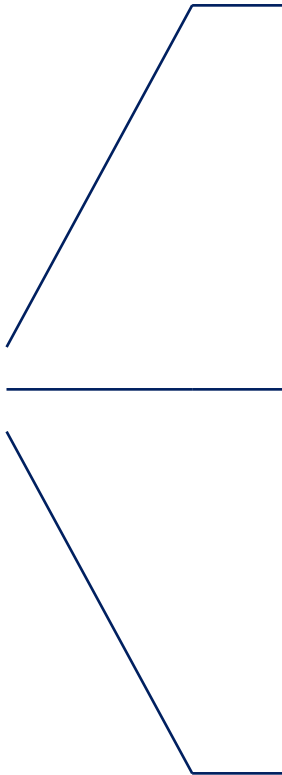
**Other export control regimes**

**Transit & transshipment countries**

**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








🔍 SITE SEARCH

## THE NSG EXPLAINED IN JUST UNDER FIVE MINUTES 2

The Nuclear Suppliers Group has produced an explanatory video that describes its activities in under five minutes. Presentation of the Control Lists, by exchanging views and agreeing on a number...

READ MORE
+



- Home
- About the NSG
- NSG Guidelines
- Organisation
- Chair's Corner
- Participants
- National Authorities
- Adherence
- Outreach
- Documents
- National Practices
- FAQ & Video
- Links
- Disclaimer

## 📌 ABOUT THE NSG

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.

Read more ... +

FaLang translation system by Faboba

### ★ FEATURED

- Guidelines for nuclear Transfers (INFCIRC/254, Part 1)
- Guidelines for transfers of nuclear-related dual-use equipment, materials, software, and related technology (INFCIRC/254, Part 2)

### 👤 NSG CHAIR



**Ambassador**  
**Mr Gustavo Ainchil (Argentina)**  
Visit the [Chair's Corner](#)





**NSG**

NUCLEAR SUPPLIERS GROUP  
GRUPO DE PROVEEDORES NUCLEARES

**Thank you for your attention**

**Questions?**