



# International Trade of Nuclear Materials and Equipment

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## Program of the Course

### **Specificity of Nuclear Trade Rules :**

Why does nuclear trade derogate to general  
trade rules ?

### **Export Control Rules :**

- International export control regime
- European Union export control regime

### **Case study**

# 1. Specificity of Nuclear Trade Rules :

Why does nuclear trade derogate to general trade rules ?

## International Trade Principle

**Principle** : International trade exchanges should flow as smoothly, predictably and freely as possible

Within the guidelines defined by WTO (GATT, GATTS, TRIPS agreements)

**Derogations** : Strictly defined and exceptional  
Established by international agreements

## Derogations usually based on

- Quotas (steel, cereals, textiles)
- Health protection (food and mouth disease, H1N1)
- Protection of cultural goods (national treasure)
- International Security (trade embargos)

## Article XXI of the GATT Agreement

Establishes 5 exceptions for security **reasons**:

- Information exception
- UN embargoes exception
- War and emergency exception
- Arms and related items exception
- Nuclear materials exception

## 1. Information exception

*Nothing in this Agreement shall be construed*

- (a) to require any contracting party to furnish any **information** the **disclosure** of which it considers contrary to its essential security interests;*

Used by the USA against Czechoslovakia : *provides that a contracting party shall not be required to give information which it considers contrary to its security interest – and to the security interest of other friendly countries – to reveal the names of the commodities that it considers to be most strategic : items listed could remain confidential*

## 2. UN embargoes exception

*Nothing in this Agreement shall be construed*

- (c) to prevent any contracting party from taking any action in pursuance of its obligations **under the United Nations Charter** for the maintenance of international peace and security.*

**Brazil**’s 1994 notification on import licensing notes “that the import licensing system of Brazil applies for good entering from or exported to any country except for those covered by UN embargoes”

**Cyprus** “notes that imports from certain countries are prohibited in accordance with United Nations resolutions”

# United Nations Charter

## Article 39

The **Security Council** shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what **measures** shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and **security**

## Article 40

The Security Council may decide what **measures** not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or **partial interruption of economic relations** and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations

## Embargoes decided by the UN Security Council

Libya, Belarus, Former Yugoslav Republic of Macedonia, Bosnia and Herzegovina, Moldova, Burma Myanmar (Burma), Democratic Republic of Congo, Côte d'Ivoire, Sierra Leone, Croatia, Somalia, Haiti, Sudan, Iran, Syria, Iraq, Terrorist groups (foreign terrorist organisations), Ivory Coast, Democratic People's Republic of Korea (North Korea), Uzbekistan, Lebanon, Yugoslavia (Serbia and Montenegro), Liberia, Zimbabwe, Al Qaeda, Usama bin Laden and Taliban

## Items covered by UN embargoes could be rather different:

- Embargo on **arms** and **related materials**
- Ban on exports of equipment for **internal repression**
- Ban on provision of certain **services**
- Restrictions on admission
- **Freezing of funds** and economic resources of certain persons who constitute a threat to the peace and national reconciliation process
- Import ban on diamonds

## Some embargoes could be decided unilaterally by States or group of States

UE : China, USA, Iran (nuclear)

### 3. War and emergency exception

*Nothing in this Agreement shall be construed*

- (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests*
- (iii) taken in time of war or other emergency in international relations;*

*or*

*“the history of the Arab boycott was beyond doubt related to the extraordinary circumstances to which the Middle East area had been exposed. The state of war which had long prevailed in that area necessitated the resorting to this system. ... In view of the political character of this issue, the United Arab Republic did not wish to discuss it within GATT. ... It would not be reasonable to ask that the United Arab Republic should do business with a firm that transferred all or part of its profits from sales to the United Arab Republic to an enemy country”*

Used also by EU during **Falkland War** (1982) and **Yugoslavian War** (1991) and by the USA (**Cuban Liberty and Democratic Solidarity Act**)

## 4. Arms and related items exception

*Nothing in this Agreement shall be construed*

- (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests*
- (ii) relating to the traffic in **arms**, ammunition and **implements of war** and to such traffic in **other goods** and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;*

- Used by the United States at the beginning of the Cold War in order to impose an embargo on export of strategic goods (200 entries) to Czechoslovakia
- Based for Wassenaar Arrangement, Zangger, NSG lists of strategic items and later dual-use items

## 5. Nuclear materials exception

*Nothing in this Agreement shall be construed*

- (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests*
- (i) relating to fissionable materials or the materials from which they are derived;*

## Interpretation

- Minimum** : exempts only “national security essential interests” related restrictions  
Nuclear trade could be restricted for “non-proliferation concerns”
- Maximum** : exempts all nuclear trade restrictions  
Nuclear trade could be limited to ensure/protect national energy needs

## International Nuclear Trade Exchanges Principle

**The general trade principle is overturned**

- Principle : Prohibition
- Trade : Exception

**All nuclear transfers are submitted to (export)  
authorisation**

- Might even lead to prohibition of specific technologies : suppliers “should restrain themselves” to transfer some “sensitive technologies”

## Why is it so ?

Nuclear trade is ... Victim of the Original Sin

First developments of nuclear applications were devoted to the elaboration of an **explosive device**

WWII, Hiroshima and Nagasaki

**Consequence:** nuclear energy has been essentially considered as **military** technology rather than an energy with large **peaceful** applications

## 1946 : US imposed a trade prohibition on all nuclear technologies

**Adoption** in July 1946 of the Atomic Energy Act (McMahon Act) establishing a program **restricting the dissemination of information** inside and outside the country

**Motivation** : if potential peaceful application of nuclear physics could be developed, it **could not be split** from military one

Nevertheless US prohibition regime appeared rapidly to be :

### 1. Ineffective to counter nuclear weapons proliferation

US principal political competitor and allies have succeeded to elaborate and test a nuclear explosive device (USSR 49, UK 52)

### 2. Politically damageable

Soviet Union was developing a large peaceful application of a nuclear research program and was **ready to share** it with its allies and with any potential ally

### 3. Commercially damageable

**Conditions of supply** required by States developing their civil nuclear programs were less constraining than those imposed to US industries

Production of isotopes for medical use

## 1953: US reversed its strategy by initiating a sharing policy

**Principle** : International exchanges of nuclear technologies are possible **IF** and **ONLY** fissile materials produced or transferred are under adequate safeguards

**Atoms for Peace Plan** presented by the President Dwight D. Eisenhower in December 1953:

**Open access to (US) peaceful nuclear applications in exchange of the submission by the end-user of adequate safeguards assumed by the supplier State or by an international organisation**

Between 1956 and 1962, Atoms for Peace Plan provided research reactors, training and fissile materials to 26 countries

## Difficulties raised by new sharing policy initiated by Atoms for Peace

**Absence of common guidelines and conditions of supply required by different suppliers**

- On **safeguards**;
- On **criteria**;
- On the **list** of goods and technologies;

Therefore India, Israel, China,... were supplied by different suppliers under different conditions of supply

## Balancing the sharing policy by Multilateral Export Control Regime

Avoid the risk that US technologies might be transferred directly or indirectly to a **Warsaw Pact member** or another sensitive country, such as **China**

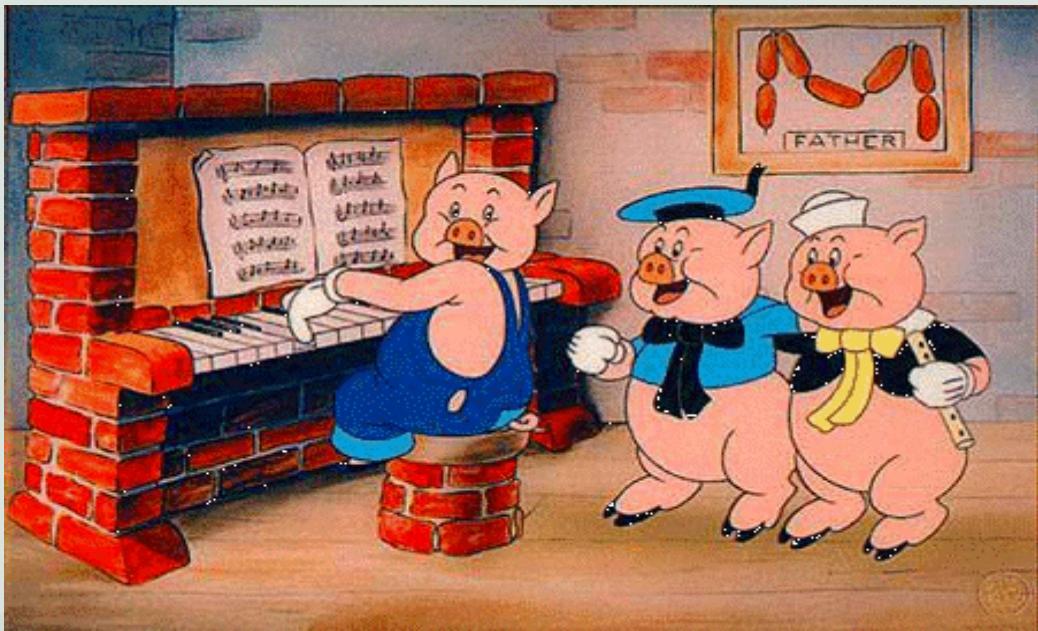
The establishment of **a multilateral export control regime** was suggested to **NATO** members

The Coordinating Committee for Multilateral Export Controls (**COCOM**) was created in 1950

Principle was to ban the export of **sensitive** items, mostly military related ones, to Warsaw Pact members and China

**Derogation** would have to be authorised by **consensus** of all participating States

To understand easier ...



*Export control regime is one of the three houses :Straw, Sticks and Bricks*

*The wolf is the proliferator*



*The pigs are ... the list of nuclear materials, equipments and technologies*

## Once upon the time ...the COCOM (1956)

Adopted the so-called “strategic list” which included a **list of nuclear items** submitted to export authorisation

Covered material, equipment and technology “**especially designed**” or “**designed**” for the use of nuclear energy

*Nevertheless, China succeeded to build a weapon*

## *The house of sticks : NPT (1968) and Zangger Committee (1974)*

Adopted a list of nuclear materials, equipments and technologies (especially designed for), the export thereof will trigger a requirement of safeguards by the supplier

*But India, Israel succeeded to build weapons*

## *The house of bricks : The Nuclear Suppliers Group (1978)*

- Some suppliers have not signed or ratified the NPT
- Not politically bound by Zangger list of nuclear materials, equipments and technologies
- Creation of Group of Nuclear Suppliers States with no direct link with NPT and adoption of the same list that the one of the Zangger Committee



*But disclosure of Iraqi nuclear weapons research program at the end of the first Gulf War*

## *The house of .... steal: The Nuclear Suppliers Group (1992)*

Adoption of new list of items : “**dual-use items**”

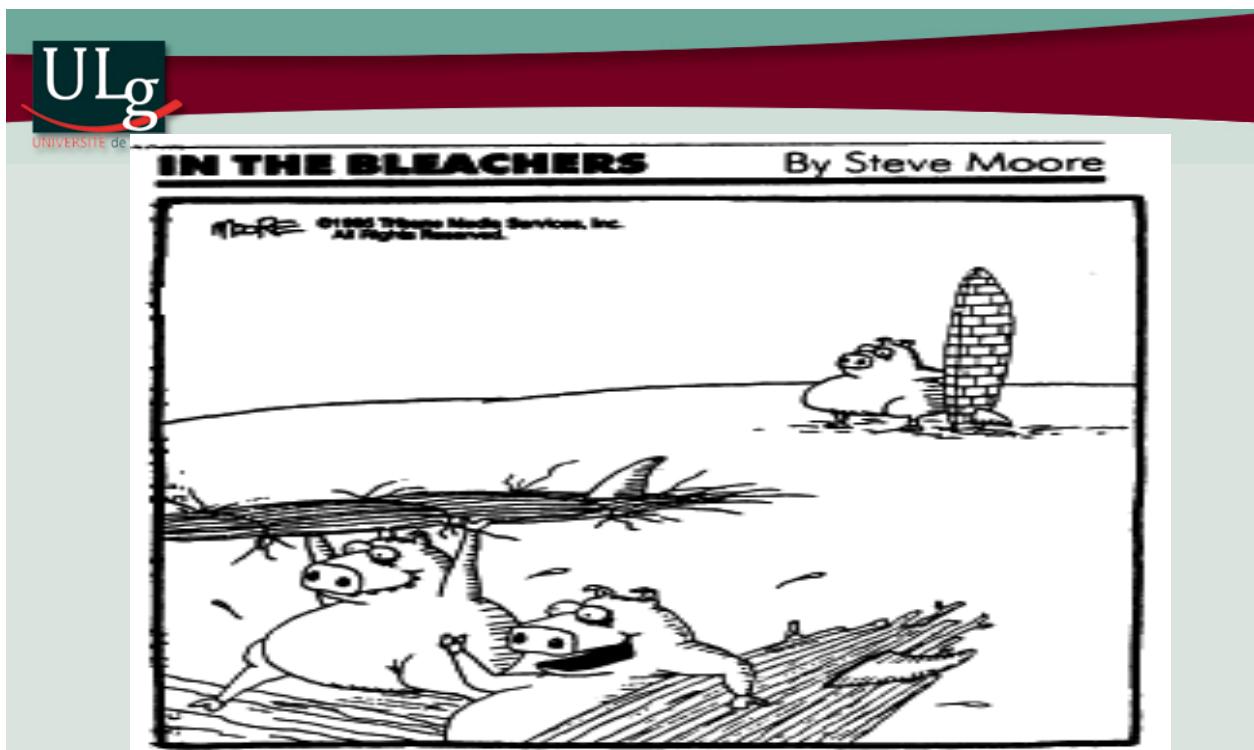
Equipment, material and technology which have **both** nuclear and non-nuclear applications and could make a significant contribution to an **unsafeguarded** nuclear fuel cycle or nuclear explosive

The list was adopted by NSG in 1992 and by Wassenaar in 1996



But new **nuclear proliferation concerns** have been raised since the adoption of dual-use list by the NSG:

And if fundamental **principles** on which nuclear export control regimes were based are **not adequate to fight** the nuclear weapons proliferation?



*The pig watched his two friends run into the surf with boards made of straw and sticks. Later however, his smug sense of security - along with his board of bricks - vanished in about 40 feet of water.*

## The Future : Controlling of *non-listed* items

Regimes based on lists have shown their limits :

**Lengthy delays** for updating the lists

**Lists are often below the last level of technology development**

- Between **6 and 12 months** to obtain a consensus and a few more to implement it at the national level

- International lists of controlled items have to be **inserted** into national export control regulations

**Most of international export control regimes are not legally binding**

## Inadequacy of technical parameters

Could be countered by importing items which have technical parameters just **below** the one of the controlled items

The upgrade could be operated with more or less success by the recipient according to its level of technology development

## How ? via catch-all clauses

**Principle** : focusing on the **final/potential** end-users more than on item itself

- In its common use, the item does not present a high proliferation risk but in **certain cases** it could contribute to a WMD program;
- Requiring an authorisation for all exports would be **useless** due to the number of transactions;
- Export authorisation would be required only on case-by-case basis and for **dedicated end-users**;

Catch-all clause is essentially implemented by National Authorities

## Two levels:

Catch-all I requires an authorisation for the transfer of non-listed items when the exporter is **informed** by its competent National Authorities that the items in question may be intended, in their entirety or part, for use in connection with nuclear weapons research program

Catch-all II and III require that if the **exporter is aware** or **has grounds for suspecting** that non-listed items are intended to contribute to nuclear weapons activities; he must notify his authorities which **will decide whether or not** it is expedient to make the export concerned subject to authorisation

## 2. Export Control Rules :

# International Export Control Regime(s)

### Elements of Export Control Regime

#### Preliminary Remarks:

Nuclear Export Control Regime is largely governed by **informal regulation** (soft law)

- One/two formal international acts : NPT, UNSCR 1540 and 1887
- Several informal acts: Zangger Committee, NSG, Wassenaar Arrangement

**Difficulty:** Political commitment usually requires an adoption of national regulation instruments to implement it. Always a risk of an incomplete implementation or an “à la carte” implementation

## Nuclear Export Control Regime : Mix of International, Regional and National legislations and bodies

- NPT, NSG Guidelines, UNSCR, European Regulations, National Regulations and sometimes Sub-national Regulations
- Security Council, IAEA, European Institutions, National Authorities,...

## Export Control Regime should normally integrate three elements:

1. **Authorisation** system to analyse the export/transit/import applications
2. **Control and verification** system to verify the end-users and the use of the items transferred
3. **Sanctions** to penalise infringements

## What do we have ?

- **Treaty on the Non-Proliferation of Nuclear Weapons**  
Cornerstone of the regime
- **UNSC 1540 and 1887**  
Called for the establishment of an efficient national export control regime
- **Nuclear Suppliers Group (NSG):**
  - Guidelines for Nuclear Transfers ([INFCIRC/254/Rev.8/Part.1](#))
  - Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software, and Related Technology ([INFCIRC/254/Rev.7/Part.2](#))
- **Zanger Committee**  
Guidelines for nuclear transfers (Trigger List: INFCIRC/209/Rev.2)
- **Wassenaar Arrangement**
  - Guidelines and procedures
  - List of Dual-Use Goods and Technologies
- **Missile Technology Control Regime (MTCR)** and International Code of Conduct against Ballistic Missile Proliferation

**The Resolution 1540 (2004)**  
**Adopted by the Security Council on 28**  
**April 2004**

## Principles

- Adopted to **reinforce** international and national instruments to counter the risk of WMD acquisition by non-state actors  
Not specifically dedicated to nuclear and nuclear related items
- Establishes **principles** and essential elements of a national export control regime
- Does not establish **lists** of items to control  
No definition of WMD
- **Peer review process** to evaluate the implementation of the Resolution  
1540 Committee, 133 States have submitted a report

## Resolution established mostly two groups of States' commitments

1. *All States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery*

### - Essentially a principle

Does not define how it should be implemented  
(conditions, criteria)

### - Focus on Non-State Actors (not like the NPT)

Defined as: *individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution*

### - Concerns all WMD and missiles

Defined as: *missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use*

## 2. Commitments to elaborate an appropriate National Export Control Regime

« *All States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor* » to elaborate WMD « *in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them* »

« *All States shall take and enforce effective measures to establish domestic controls to prevent the proliferation* » of WMD, « *including by establishing appropriate controls over related materials* »

## Appropriate effective laws

Controlling export, transit, transhipment and re-export and controls on providing funds and services related, appropriate criminal or civil penalties for violations

## Domestic control measures

Physical protection, accounting system, end-user controls, border controls, law enforcement

## Related materials

*Materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery*

**Does not seem to include dual-use items as defined by NSG**

# The Resolution 1887 (2009) Adopted by the Security Council on 24 September 2009

## Principles

- Adopted to **reinforce** the principles of UNSCR 1540
- **Broader field of implementation** concerns *All situation of non-compliance with non-proliferation obligations*
  - Not limited to Non-State Actors
  - But focuses essentially on nuclear non-proliferation
- Security Council appoints itself a primary responsibility to evaluate noncompliance with **non-proliferation obligations**

*The Security Council which will determine if that situation constitutes a threat to international peace and security*

## Dedicated to nuclear non-proliferation

*Calls upon States to adopt stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle*

- **Reinforcing the control** on sensitive items as defined by the NSG  
Reprocessing, enrichment
- **Sensitive goods are not defined** by the Resolution therefore could be  
Trigger list items and/or Dual-Use items

## Introduces two “UN conditions of supply”

*Supplier shall require as a condition of nuclear exports that the recipient State agree that, in the event that it should terminate, withdraw from, or be found by the IAEA Board of Governors to be in non-compliance with its IAEA safeguards agreement, the supplier state would have a right to require the return of nuclear material and equipment provided prior to such termination, non-compliance or withdrawal, ...*

Remains drafted as a criteria even if it sounds like a condition

*Encourages States to consider whether a recipient State **has signed and ratified an additional protocol based on the model additional protocol** in making nuclear export decisions;*

## **Export control commitments required by the NPT**

Export of nuclear equipment and technology is essentially **governed by one provision (Article III.2)** :

NPT Parties take the commitment 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 (NNWS) for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article*

## What does it mean ?

Article III.2 establishes **two commitments** to be implemented by the supplier State :

1. To control the transfer to **NNWS** (as defined by article IX.3) of a **non-defined list** of items
2. To submit the export of nuclear items to the condition that fissile materials, being used in the facilities where the items are to be transferred, would be submitted to **safeguards**

To clarify those commitments some States Parties established an informal instrument known as **Zangger Committee** (1978)

- Adopted a **list** of materials, equipments and technologies (INFCIRC/209)
- Defined that **IAEA safeguards** required by Article III of the NPT are those defined by the INFCIRC/153 also called Comprehensive Safeguards

## Article III NPT 2000 Review Conference understanding

- **Comprehensive Safeguards Agreement** has been considered as the one required by article III.2
- Items listed **do not include nuclear related dual-use** items nevertheless such items : *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 to States not party to the Treaty do not assist any nuclear-weapons programme*

# Commitments imposed by the Nuclear Suppliers Group

**Principal informal instrument** regarding the control of nuclear transfers

Included all major potential suppliers except India, Israel and Pakistan

Not an international nuclear export control regime but established **common understanding** of export control principles that each participating State shall introduce into its national export control regime

**Two Guidelines** adopted:

Guidelines for Nuclear Transfers

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

## NSG Field of Implementation

### Two lists of controlled items

- Items that are especially **designed or prepared for nuclear use** (trigger list):
  1. Nuclear **material**;
  2. Nuclear reactors and equipment therefor, Non-nuclear material for **reactors**;
  3. Plant and equipment for the **reprocessing, enrichment** and conversion of nuclear material and for fuel fabrication and heavy water production and;
  4. **Technology** associated with each of the abovementioned items;

- **Nuclear related dual-use items and technologies** (items that can make a major **contribution** to a unsafeguarded nuclear fuel cycle or **nuclear explosive activity**, but which have as well **non-nuclear uses** in chemical industry for instance)

## 6 categories :

- Industrial equipment
- Materials
- Uranium isotope separation equipment and components
- **Heavy water** production plant related equipment
- Test and measurement equipment for the development of nuclear explosive devices
- Components for nuclear explosive devices

## One Catch-all

Includes only the principle established by the Guidelines and concerns items relative to a nuclear explosive activity

*5. Suppliers should ensure that their **national legislation** requires an authorisation for the transfer of items not listed in the Annex if the items in question are or may be intended, in their entirety or in part, for use in connection with a “nuclear explosive activity.”*

*Suppliers will implement such an authorisation requirement in accordance with their domestic licensing practices.*

*Suppliers are encouraged to **share information** on “catch all” denials*

## **NSG Export Authorisation**

**Fundamental principle** : all items of the trigger and dual-use lists should be submitted to a **national export authorisation**

## Exception for “sensitive items” defined as “items usable for nuclear weapons”

- Transfers are not prohibited but suppliers are **invited** to “restrain” their transfers
- If enrichment or reprocessing facilities suppliers should encourage recipients to accept, as an alternative to national plants, supplier involvement and/or other appropriate **multinational participation** in resulting facilities

## NSG Export authorisation criteria

### Criteria for nuclear items (trigger list) :

#### 1. The non-proliferation principle

Suppliers should authorise the transfer only **when they are satisfied** that it would not contribute to the proliferation of nuclear **weapons** or any other nuclear explosive devices or to an act of nuclear **terrorism**

Principle largely criticised by non-participating States due to its “**subjective**” aspect

## 2. Restrain the transfer of items :

If there are potential risks of retransfer due to the **failure** by the recipient State to develop and maintain appropriate, effective national export and transhipment controls as identified by UNSCR 1540

## NSG criteria for transfers of dual-use items

- Recipient **Party to the Nuclear Non-Proliferation Treaty (NPT)** or to a similar international legally binding nuclear non-proliferation agreement, and has an **IAEA safeguards agreement in force** applicable to all peaceful nuclear activities;
- Recipient **non-Party to the NPT and has facilities** subject or not to IAEA safeguards;

- Items transferred are **appropriate for the stated end use** and whether that stated end use is appropriate for the end-user;
- Items **linked** to reprocessing or enrichment facility;
- Recipient State's **support** of nuclear non-proliferation and Recipient State's compliance with its international obligations in the field of non-proliferation;

- Recipients have been engaged in **clandestine** or illegal procurement activities;
- Transfer was not authorised to the end-user or whether the end-user has **diverted** for purposes inconsistent with the Guidelines any transfer **previously** authorised;
- Risk of diversion to acts of nuclear **terrorism**;
- **Risks of retransfer due to the failure by the Recipient State to develop and maintain appropriate, effective national exports and transhipment controls as identified by UNSCR 1540;**

# Conditions to authorise the transfer (trigger list)

1. **End-user** State should have brought into **force** an agreement with the IAEA requiring the application of **CSA**

Two **complementary formal recipient** governmental assurances should be provided if the above-mentioned agreement will be terminated

1. if the above-mentioned agreement should be terminated the recipient will **bring into force an agreement with the IAEA** based on existing IAEA model safeguards agreements requiring the application of safeguards on all trigger list items or related technology transferred by the supplier or processed, or produced or used in connection with such transfers
2. If the IAEA decides that the application of IAEA safeguards is no longer **possible appropriate verification measures** should be elaborated  
If the recipient does not accept these measures, it should allow at the request of the supplier the **restitution** of transferred and derived trigger list items

# Exceptions (nuclear trigger list items)

1. **Grandfather clause:** supplier's commitments linked to contracts signed before its NSG membership

2. **Safety clause :** transfers to a non-nuclear-weapon State when they are deemed essential for the safe operation of existing facilities and only if safeguards are applied to those facilities

Before granting such authorisation suppliers should inform and, if appropriate, consult in the event that they intend to authorise or to deny such transfers

Used twice by Russia in 2001 and 2006

## Other conditions supply (trigger list)

2. Submission of government-to-government assurances requiring **similar export condition** of supply:

- In case of **retransfers** of the items originally exported
- **Contamination principle:** transfer of items derived from facilities originally transferred, or with the help of equipment or technology originally transferred by the supplier  
Mechanism similar but not equivalent to the US *De Minimis* Clause

3. Submission of government-to-government assurances that the **prior consent** of the supplier will be required:

- In case of transfers or retransfers of items to States which do not require **CSA** as a condition of supply
- In case of transfers or retransfers of items related to **enrichment, reprocessing, heavy water** production or material usable for nuclear **weapons**
- For enrichment facility, or any other facility based on such technology the design or the operation for the **production of greater than 20% enriched uranium**

## Conditions to authorise of the transfer (dual-use)

- A statement from the end-user specifying the **uses** and **end use** location of the proposed transfers;
- An assurance explicitly stating that the proposed transfer or any replica thereof will not be used in **any nuclear explosive active** or **unsafeguarded** nuclear fuel cycle activity;

- An assurance that the **prior consent** of the supplier will be required before transferring any dual-use items to a State not adhering to the Guidelines;
- **No undercut principle:** A transfer should not be authorised if an “essentially identical” transfer has been denied by another State without consulting the one who has issued the denial

## Sanctions

**Consultation mechanism** between Participating States in case of doubt on violation of the supplier/recipient understanding of the Guidelines

Explosion of a nuclear device, illegal termination or violation of IAEA safeguards,...

Possibilities to **suspend** transfers of trigger list items to States in breach of theirs safeguards obligations

The suspension could be decided from the first IAEA investigation in case of suspicion of serious breaches of safeguards obligations

**The Indian exception:  
when the exception denies  
the rule**

Established formally by INFCIRC/734(corrected)

The decision adopted at the extraordinary plenary session of September 6<sup>th</sup>, 2008 authorises NSG States Parties to export to India **trigger list and dual-use items**

At each plenary Participating States have to **notify approved transfers** to India of trigger list items (not dual-use)

Participating States **could** also inform other Participating States of their **bilateral nuclear cooperation agreements** concluded with India

Presently following States have concluded nuclear agreements with India: US, France, Russia, Canada, Kazakhstan, Mongolia and Namibia

In exchange of an access to nuclear technology, India commits itself to:

- **Separate** civilian nuclear facilities from military ones;
- Conclude a **CSA** (including the Additional Protocol) with the IAEA for the application of safeguards to civilian nuclear facilities;
- **Refrain** from transfers of enrichment and reprocessing technologies to States that do not have them and **support** international efforts to limit their spread;

- Institute a national **export control system** capable of effective control of multilaterally controlled nuclear and nuclear related items;
- **Harmonise** its export control regime with the Guidelines of the NSG (including adherence to these Guidelines);
- Continue its unilateral **moratorium** on nuclear testing and its readiness to work towards the conclusion of an FMCT

## NPT requirements and India

**India :**

- **Not a NPT legally recognised Nuclear Weapons State as defined by Article IX**

No possibility to establish a tailor-made safeguards agreement similar to these applicable Nuclear Weapons States

China (INFCIRC/369), Russia (INFCIRC/327),  
France (INFCIRC/290), UK (INFCIRC/263),  
USA (INFCIRC/288)

## CSA requirement for any transfer from any NPT State Party

CSA is based on the principle that all facilities and not only a dedicated list provided by the end-user shall be submitted to safeguards

Before 1995 transfers to India were authorised if covered by dedicated safeguards agreement (INFCIRC/66)

## UNSCR 1887 requirements and India

2. *Calls upon States Parties to the NPT to comply fully with all their obligations and fulfil their commitments under the Treaty;*
4. *Calls upon all States that are not Parties to the NPT to accede to the Treaty as non-nuclear-weapon States so as to achieve its universality at an early date, and pending their accession to the Treaty, to adhere to its terms;*

## To conclude...

*“Who wants to be consistent? The dullards and the doctrinaire, the tedious people who carry out their principles to the bitter end of action, to the reductio ad absurdum of practice. Not I”* (Oscar Wilde)