

EUP2P

**The Dual use Regulation:
general frame, control regimes and
weaknesses**

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Angelo Minotti, Ph. D.

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Security Council

Distr.: General
28 April 2004

Resolution 1540 (2004)

**Adopted by the Security Council at its 4956th meeting,
on 28 April 2004**

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,* constitutes a threat to international peace and security,

Encouraging all Member States to implement fully the disarmament treaties and agreements to which they are party,

Determined to facilitate henceforth an effective response to global threats in the area of non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

1. *Decides that* 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;

2. *Decides also* that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, 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;

3. *Decides also* that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

UN 1540 Resolution (4/5)

* Definitions for the purpose of this resolution only:

Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use.

Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

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.

04-32843 (E)

*** 0432843 ***

UN 1540 Resolution (5/5)

What's new?

- The UNSC 1540 (2004) establishes a universal mandatory obligation (legally binding). Before this resolution non-proliferation regimes were based on bilateral or multilateral agreements.
- A comprehensive review is foreseen every 5 years (2009 and 2016).
- The 1540 committee releases annual review reports (on the implementation of the resolution).

Multilateral export control regimes on dual use goods and technologies

1. **Missile Technology Control Regime**
2. **Wassenaar Arrangement**
3. **the Nuclear Suppliers Group**
4. **the Australia Group (on bio-chemical weapons*)**

These regimes are voluntary mechanisms through which nonbinding 'guidelines' are maintained. They operate by consensus.

*bio-chemical weapons are furtherly regulated by 2 binding conventions:

- the Chemical Weapons Convention
- the Biological Weapons Convention

Missile Technology Control Regime (MTCR) (1/2)

The Missile Technology Control Regime is an informal and voluntary association of countries which share the goals of non-proliferation of unmanned delivery system capable of delivering weapons of mass destruction, and which seeks to coordinate national export licensing efforts aimed at preventing their proliferation.

Members: 34 (know as 'partners')

Relevant treaty: --

Missile Technology Control Regime (MTCR) (2/2)

Participants:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, BRAZIL, CANADA, CZECH REPUBLIC, DENMARK, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, ICELAND, INDIA, IRELAND, ITALY, JAPAN, LUXEMBOURG, NETHERLANDS, NEW ZEALAND, NORWAY, POLAND, PORTUGAL, REPUBLIC OF KOREA, RUSSIAN FEDERATION, SOUTH AFRICA, SPAIN, SWEDEN, SWITZERLAND, TURKEY, UKRAINE, UNITED KINGDOM, UNITED STATES OF AMERICA.



Wassenaar Arrangement (1/2)

The Wassenaar Arrangement was established in order to contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilising accumulations.

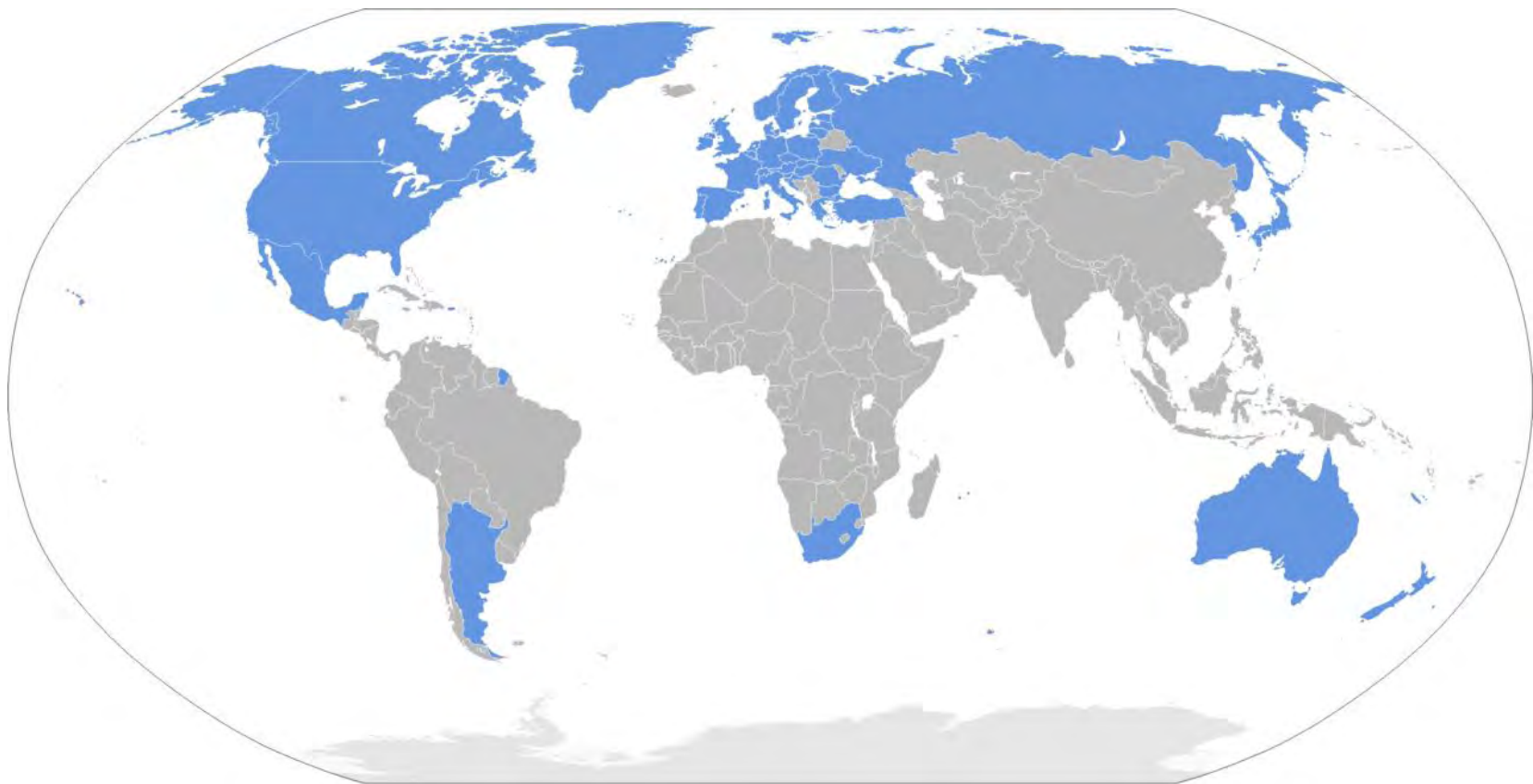
Members: 41

Relevant treaty: Potentially Arms Trade Treaty

Wassenaar Arrangement (2/2)

Participants:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, JAPAN, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, MEXICO, NETHERLANDS, NEW ZEALAND, NORWAY, POLAND, PORTUGAL, REPUBLIC OF KOREA, ROMANIA, RUSSIAN FEDERATION, SLOVAKIA, SLOVENIA, SOUTH AFRICA, SPAIN, SWEDEN, SWITZERLAND, TURKEY, UKRAINE, UNITED KINGDOM, UNITED STATES



Nuclear Suppliers Group (NSG) (1/2)

The Nuclear Suppliers Group 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.

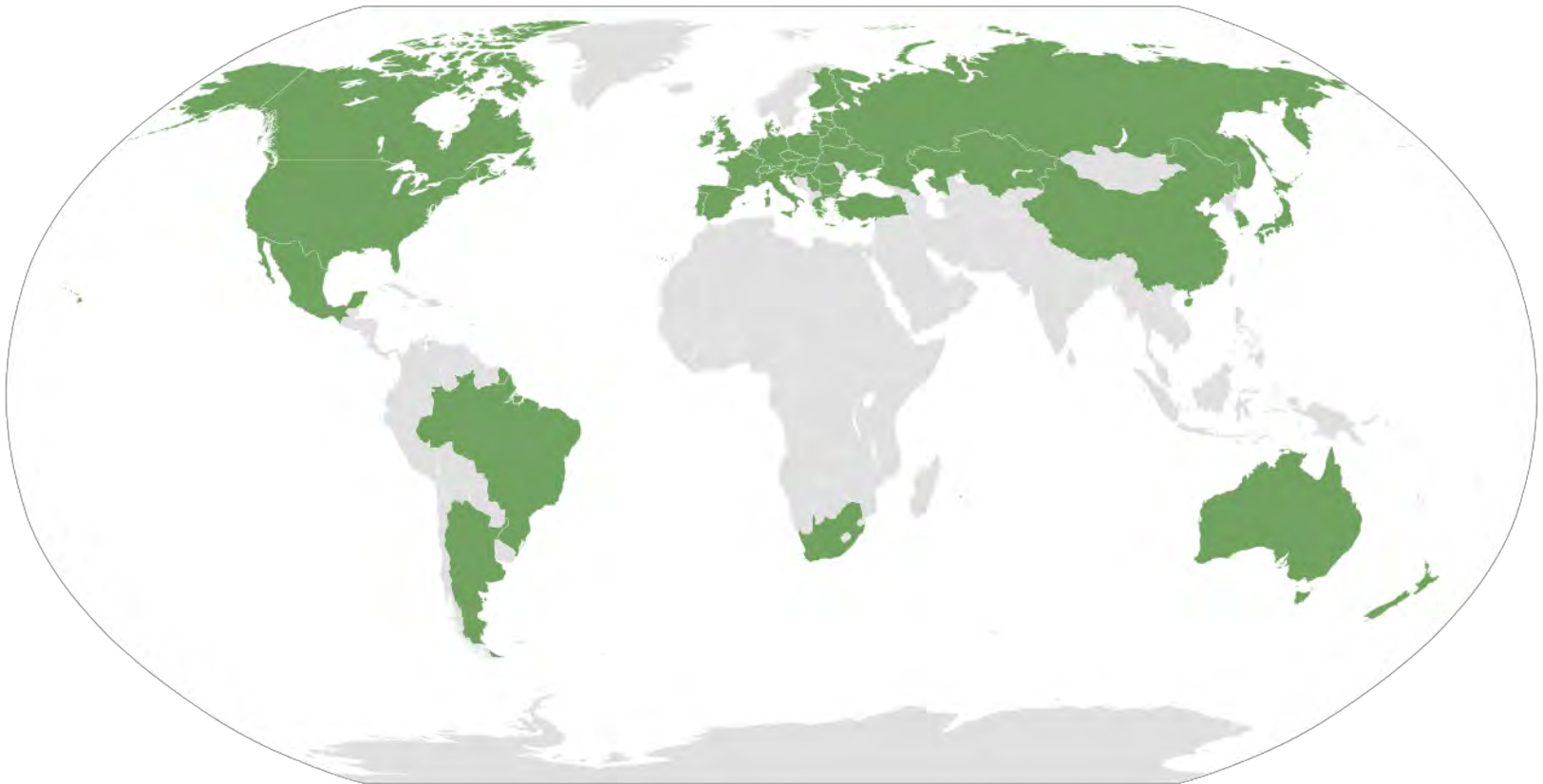
Members: 48

Relevant treaty: Nuclear non-proliferation treaty

Nuclear Suppliers Group (NSG) (2/2)

Participants:

ARGENTINA, AUSTRALIA, AUSTRIA, BELARUS, BELGIUM, BRAZIL, BULGARIA, CANADA, CHINA, CROATIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, ICELAND, IRELAND, ITALY, JAPAN, KAZAKHSTAN, REPUBLIC OF KOREA, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, MEXICO, NETHERLANDS, NEW ZEALAND, NORWAY, POLAND, PORTUGAL, ROMANIA, RUSSIAN FEDERATION, SERBIA, SLOVAKIA, SLOVENIA, SOUTH AFRICA, SPAIN, SWEDEN, SWITZERLAND, TURKEY, UKRAINE, UNITED KINGDOM, and UNITED STATES



The Export Control Regimes and EU Control List

The lists settled by control regimes are integrated into the

EU control list of Regulation (EU) n. 428/2009 on dual use items.

This integration is based on a fixed structure.

'dual-use items' shall mean items, including software and technology, which can be used for both civil and military purposes, and shall include all goods which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices;

EU Dual Use Reg. 428/2009,

Scope

Article 3

1. An authorisation shall be required for the export of the dual-use items listed in Annex I.
2. Pursuant to Article 4 or Article 8, an authorisation may also be required for the export to all or certain destinations of certain dual-use items not listed in Annex I.

Article 22

1. An authorisation shall be required for intra-Community transfers of dual-use items listed in Annex IV. Items listed in Part 2 of Annex IV shall not be covered by a general authorisation.

(Items of Stealth technology, of community strategic control, of MTCR technology, of Chemical Weapons Convention, of NSG technology)

EU Dual Use Reg. 428/2009 - Structure (1/2)

6 Annexes:

- A 1: Dual Use goods list

-A 2: Union general Export Authorization

-A 3: Authorization models

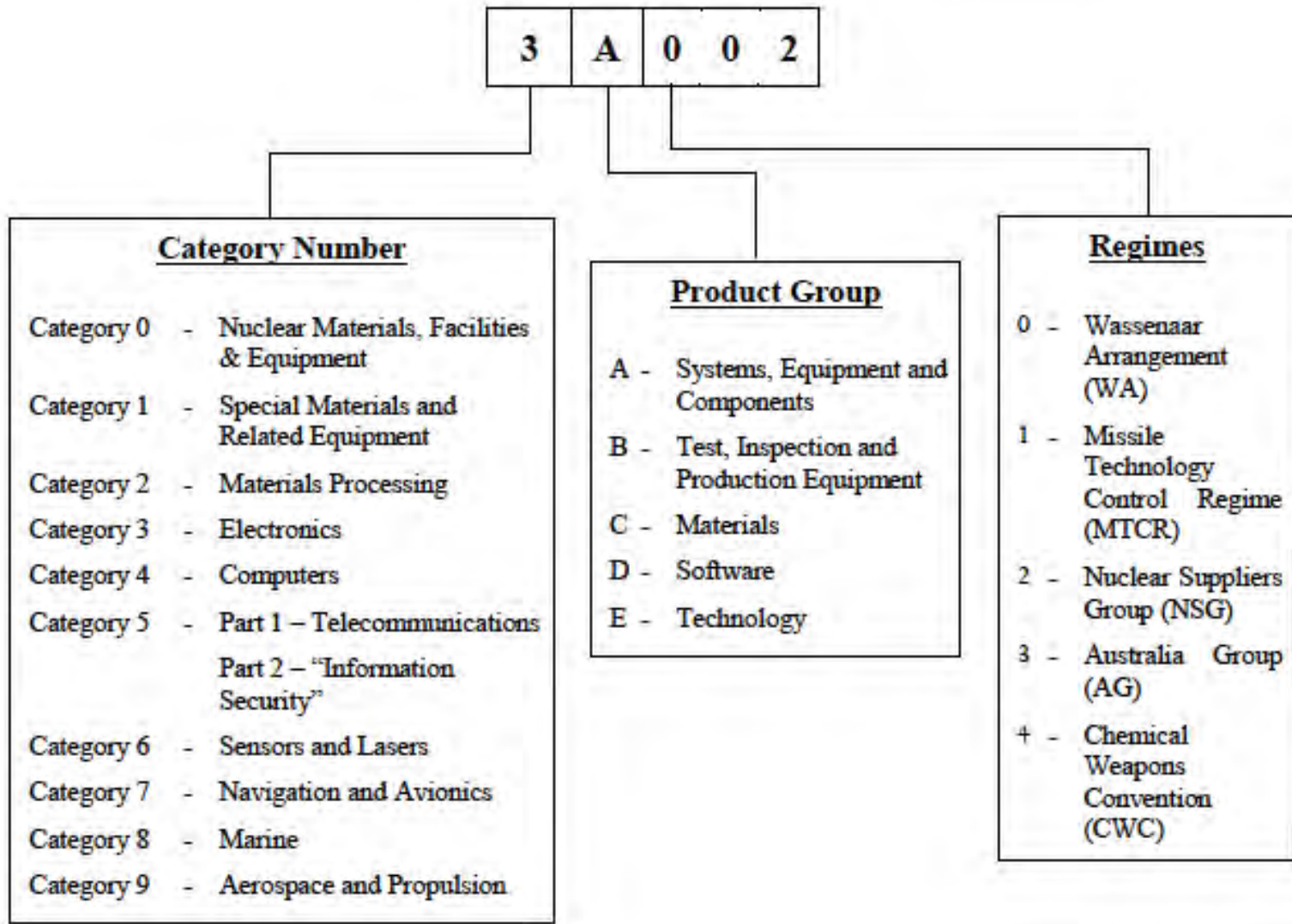
-A 4 (A3): other items

(Stealth's technology, of the Community Strategic Control, MTCR's technology, CWC's technology, NSG's technology)

-A 5: Repealed regulation with its successive amendments

-A 6: Correlation table

EU Dual Use Reg. 428/2009 – Structure (2/2)



EU Dual Use Reg. 428/2009 – Annex I, general notes and definitions (1/4)

GENERAL NOTES TO ANNEX I

1. For control of goods which are designed or modified for military use, see the relevant list(s) of controls on military goods maintained by individual Member States. References in this Annex that state "SEE ALSO MILITARY GOODS CONTROLS" refer to the same lists.

2. The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components are the principal element of the goods and can feasibly be removed or used for other purposes.

N.B.: *In judging whether the controlled component or components are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the goods being procured.*

3. Goods specified in this Annex include both new and used goods.

NUCLEAR TECHNOLOGY NOTE (NTN)

(To be read in conjunction with section E of Category 0.)

The "technology" directly associated with any goods controlled in Category 0 is controlled according to the provisions of Category 0.

"Technology" for the "development", "production" or "use" of goods under control remains under control even when applicable to non-controlled goods.

The approval of goods for export also authorizes the export to the same end-user of the minimum "technology" required for the installation, operation, maintenance and repair of the goods.

Controls on "technology" transfer do not apply to information "in the public domain" or to "basic scientific research".

GENERAL TECHNOLOGY NOTE (GTN)

(To be read in conjunction with section E of Categories 1 to 9.)

The export of "technology" which is "required" for the "development", "production" or "use" of goods controlled in Categories 1 to 9, is controlled according to the provisions of Categories 1 to 9.

"Technology" "required" for the "development", "production" or "use" of goods under control remains under control even when applicable to non-controlled goods.

Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not controlled or whose export has been authorised.

N.B.: This does not release such "technology" specified in 1E002.e., 1E002.f., 8E002.a. and 8E002.b.

Controls on "technology" transfer do not apply to information "in the public domain", to "basic scientific research" or to the minimum necessary information for patent applications.

EU Dual Use Reg. 2420/2015 – Annex I, general notes and definitions (3/4)

"Technology" (GTN NTN All) means specific information necessary for the "development", "production" or "use" of goods. This information takes the form of 'technical data' or 'technical assistance'.

N.B.: 1: *'Technical assistance' may take forms such as instructions, skills, training, working knowledge and consulting services and may involve the transfer of 'technical data'.*

N.B. 2: *'Technical data' may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.*

"Development" (GTN NTN All) is related to all phases prior to serial production, such as: design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, layouts.

"Production" (GTN NTN All) means all production phases, such as: construction, production engineering, manufacture, integration, assembly (mounting), inspection, testing, quality assurance.

"Use" (GTN NTN All) means operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing.

EU Dual Use Reg. 2420/2015 – Annex I, general notes and definitions (4/4)

GENERAL SOFTWARE NOTE (GSN)

(This note overrides any control within section D of Categories 0 to 9.)

Categories 0 to 9 of this list do not control "software" which is any of the following:

a. Generally available to the public by being:

1. Sold from stock at retail selling points, without restriction, by means of:

a. Over-the-counter transactions;

b. Mail order transactions;

c. Electronic transactions; or

d. Telephone call transactions; and

2. Designed for installation by the user without further substantial support by the supplier;

N.B.: Entry a. of the General Software Note does not release "software" specified in Category 5 - Part 2 ("Information Security").

b. "In the public domain"; or

c. The minimum necessary "object code" for the installation, operation, maintenance (checking) or repair of those items whose export has been authorised.

N.B.: Entry c. of the General Software Note does not release "software" specified in Category 5 - Part 2 ("Information Security").

Countries subject to additional control (restrictions or embargoes), as of today

Afghanistan	Haiti	Somalia
Belarus	Iran	South Sudan
Bosnia and Herzegovina	Iraq	Sudan
Burundi	Democratic People's Republic of Korea	Syria
Central African Republic	Lebanon	Tunisia
China	Liberia	Ukraina (Seb. e Crimea)
Democratic Republic of Congo	Libya	USA
Cote d'Ivoire	Moldova	Yemen
Egypty	Myanmar/Burma	Zimbabwe
Eritrea	North Korea	
Republic of Guinea (Conakry)	Russia Federation	
Guinea-Bissau	Serbia and Montenegro	

Prohibited trades to certain destination and/or entities (e.g., North Korea, Russia, Iran)

Sanctions

- As far as EU sanctions / restrictive measures are concerned, they include:
 - ✓ restrictions on exporting or supplying arms and associated technical assistance, training and financing
 - ✓ controls on the export, transit and brokering of dual use items or other restricted goods
 - ✓ **a ban on exporting equipment** that might be used for internal repression
 - ✓ **financial sanctions** on individuals, in government, government bodies and associated companies, or terrorist groups and individuals associated with those groups; such sanctions **can vary from the comprehensive – prohibiting the transfer of funds to a sanctioned country and freezing the assets of a government**, the corporate entities and residents of the target country – to targeted asset freezes on individuals/entities
 - ✓ **travel bans on named individuals**
 - ✓ **bans on imports of raw materials** or goods from the sanctions target

Dual Use Regulation Technical Weaknesses (1/6)

1) PRINCIPAL ELEMENT: VAGUE DEFINITION

2. The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components are the principal element of the goods and can feasibly be removed or used for other purposes.

N.B.: *In judging whether the controlled component or components are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the goods being procured.*

THERE IS A MORE ACCURATE DEFINITION ONLY FOR CATEGORY 4:

"Principal element" (4), as it applies in Category 4, is a "principal element" when its replacement value is more than 35 % of the total value of the system of which it is an element. Element value is the price paid for the element by the manufacturer of the system, or by the system integrator. Total value is the normal international selling price to unrelated parties at the point of manufacture or consolidation of shipment.

Dual Use Regulation Technical Weaknesses (2/6)

2) SPECIALLY DESIGNED: NOT DEFINED INSIDE THE REG.

9A008 Components specially designed for solid rocket propulsion systems,

ONLY THE MTCR REGIME REPORTS A DEFINITION, BUT, BEING A REGIME,
IT HAS NOT A LEGAL POWER

- (a) "Specially designed" describes equipment, parts, components or "software" which, as a result of "development", have unique properties that distinguish them for certain predetermined purposes. For example, a piece of equipment that is "specially designed" for use in a missile will only be considered so if it has no other function or use. Similarly, a piece of manufacturing equipment that is "specially designed" to produce a certain type of component will only be considered such if it is not capable of producing other types of components.

Dual Use Regulation Technical Weaknesses (3/6)

3) EXPORT OF TECHNOLOGY (ART.2-7): AMBIGUOUS

2. 'export' shall mean:

(iii) transmission of software or technology by electronic media, including by fax, telephone, electronic mail or any other electronic means to a destination outside the European Community; it includes making available in an electronic form such software and technology to legal and natural persons and partnerships outside the Community. Export also applies to oral transmission of technology when the technology is described over the telephone;

Article 7

This Regulation does not apply to the supply of services or the transmission of technology if that supply or transmission involves cross-border movement of persons.

IF I DELIVER A LECTURE ON SENSITIVE TOPICS
OR I BRING WITH ME, IN MY BACKPACK, ABROAD, A SENSITIVE HANDBOOK?

Dual Use Regulation Technical Weaknesses (4/6)

4) VELOCITY OF UPDATING WITH THE TECHNOLOGY EVOLUTION: VERY, VERY, VERY SLOW!

THE ENTIRE PROCESS IS LONG AND FARRAGINOUS:

- NATIONAL ECONOMICAL INTERESTS
- REGIMES MEETINGS
- ETC ETC..

WITH THE RESULT OF LISTING ONLY “OLD”, OR “NOT FRONTIER TECHNOLOGIES”

for instance, the UAV:

9A012 "Unmanned aerial vehicles" ("UAVs"), unmanned "airships", related, equipment and components, as follows:

N.B. SEE ALSO 9A112.

a. "UAVs" or unmanned "airships", designed to have controlled flight out of the direct 'natural vision' of the 'operator' and having any of the following:

1. Having all of the following:

a. A maximum 'endurance' greater than or equal to 30 minutes but less than 1 hour; and

b. Designed to take-off and have stable controlled flight in wind gusts equal to or exceeding 46,3 km/h (25 knots); or

2. A maximum 'endurance' of 1 hour or greater;

9A112 "Unmanned aerial vehicles" ("UAVs"), other than those specified in 9A012, as follows:

a. "Unmanned aerial vehicles" ("UAVs") capable of a range of 300 km;

b. "Unmanned aerial vehicles" ("UAVs") having all of the following:

1. Having any of the following:

a. An autonomous flight control and navigation capability; or

b. Capability of controlled flight out of the direct vision range involving a human operator; and

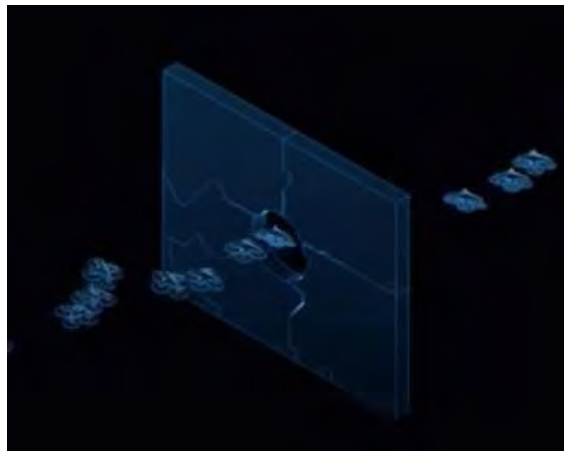
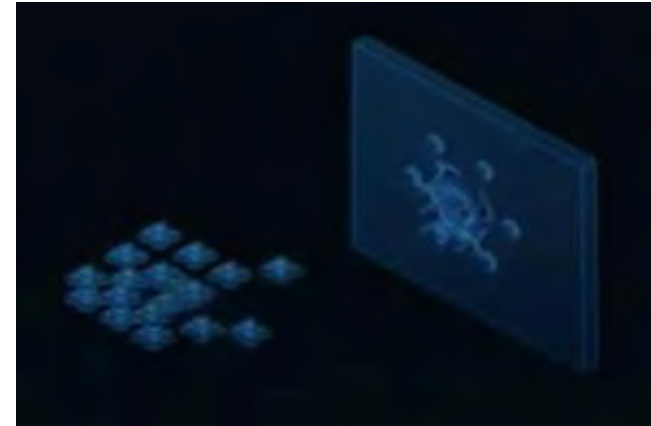
2. Having any of the following:

a. Incorporating an aerosol dispensing system/mechanism with a capacity greater than 20 litres; or

b. Designed or modified to incorporate an aerosol dispensing system/mechanism with a capacity greater than 20 litres.

WHEN THE NANO DRONES SWARMS, OR THEIR SOFTWARE, WILL BE CONTROLLED?

TODAY THIS TECHNOLOGY IS FREE



<https://www.youtube.com/watch?v=DK6IGG5zRU8>

Thank you

www.angelominotti.com

dualuse-armscontrol@angelominotti.com

info@angelominotti.com

+393282891745