

Nuclear Trade Regulation in the European Union





I. International Trade Principle





Export control is an exception to international free trade principle established by the WTO

Organised by GATT, GATTS

Derogations to this principle are **exceptional** and strictly defined

- Founded on **economic** reasons: a step toward the achievement of the free movements
- Founded on **non-economic** reasons : national security interest





National security interest?

Not defined by the GATT: left to the understanding of each State Party

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;





Two potential interpretations of the "security interest"

- Minimum: only to face non-proliferation State's commitments NPT, NSG

- Maximum : could be used for all nuclear trade derogations

Nuclear trade could be limited to assurance/protection of national energy needs





II. International Nuclear Trade (Export) Control Regime





A constellation of several dedicated regimes

Trade control regimes are organised according to **potential end-uses**:

Nuclear: NPT, NSG and Wassenaar

Arrangement

Chemical: CWC and Australia Group

Biological: BWC and Australia Group

Missile: MTCR

Conventional: Wassenaar Arrangement





Essential principle regulating International Trade of sensitive items

The general trade principle is overturned

- Principle: Prohibition
- Trade: Exception

All transfers shall be submitted to authorisation

- Might even lead to the prohibition of specific technologies: suppliers "should restrain themselves" from transferring some "sensitive technologies"





An ongoing process dating back from 1921

1925 -1944: Prohibition of certain means of war: balancing the power of parties involved in the conflict: Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare

1944 - 1968: Restraining or regulating access to certain technologies

Mac Mahon Act, NPT

1944 - 1978: Avoiding unfair competition Zangger Committee and NSG





1978 -1991 : Facing **new proliferation** concerns Australia Group and MTCR

1991-2001: From *especially* designed to *dual-use* items

NSG

2001-2004: Fight against **terrorism** as an objective of export control regimes NSG, MTCR, Australia Group

Since 2004: From export to **trade** control: a global policy UNSCR 1540





Presently what do we have?

- Treaty on the Non-Proliferation of Nuclear Weapons
Cornerstone of the regime

- UNSC 1540 and 1887

Calls for the establishment of an efficient national export control regime

- Nuclear Suppliers Group (NSG):

- Guidelines for Nuclear Transfers (INFCIRC/254/Rev.10/Part.1)
- Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software, and Related Technology (INFCIRC/254/Rev.8/Part.2)
- Zangger 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





Export control commitments required by the NPT





Export of nuclear equipment and technology is essentially concerned 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 principles** 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 supplier States established an informal instrument known as **NSG** (1978)

- Adopted a **list** of materials, equipments and technologies (INFCIRC/254/Part 1 and 2)
- Defined that IAEA safeguards required by Article III of the NPT are those defined by the INFCIRC/153 also called Comprehensive Safeguards
- Defined common **Guidelines** to rule their nuclear transfers and avoiding *unfair* competition between suppliers





III. Principles of the EU (Nuclear) Export Control Regime





Implementation by the EU is a complex mechanism due to





Faculte de Droit et de Science Politique







Implementation by the European Union is a complex mechanism due to:

- Institutional framework of the European Union
- Division of competencies between the EU and its Member States





Trade control of dual-use items is an element of the **common commercial policy** and therefore should be ruled by EC (TFUE) and Euratom Treaties EU law: regulations

Except for certain nuclear materials trade control is not governed by **Euratom**Article 59 authorisation granted by the Commission





Understanding of the EU competency has been **challenged** by certain Member States

Presently includes in particular: lists of items, categories of authorisations, adoption and granting of General Authorisation, territorial validity, consultation mechanism, common market exceptions





Trade control is also an element of the EU **external policy** organised by the EU Treaty: the Common Foreign and Security Policy (CFSP)

EU WMD Strategy adopted by the European Council in December 2003 and the new lines for action for combating the proliferation of WMD and their delivery systems (2008)





Policy implemented by the Council Non-proliferation clause in cooperation agreement with third countries

EU (EAS) participation to different international export control regimes Adoption of political principle of restrictive measures against third countries (embargoes)





Consequently the implementation of UN embargoes by the EU requires two decisions:

- 1. External relations: non-proliferation concerns: EU Treaty (CFSP) provisions Council Decision 2010/413/CFSP of 26 July 2010 concerning restrictive measures against Iran (as amended)
- 2. External trade: export policy TFUE (common commercial provisions 133/207) Council Regulation (EU) No 961/2010 of 25 October 2010 concerning restrictive measures against Iran (as amended)





2. The division of competencies between EU Member States and EU/EC Institutions

Trade control principles and framework of the Regime are established by EU/EC Institutions through the adoption of Decisions and Regulations

Authorisations, exceptions, restrictions and sanctions: are adopted and decided essentially by Member States





From reactive to proactive

Up to 2001, the EU was essentially **responsive** to international export control regimes :

1957 Euratom to have access to technology and materials

1968 NPT ratification and attempt to **exempt** the EU from IAEA **safeguards**

1978 EC statement in the different export control regimes to exempt its common market from the guidelines adopted within those regimes

1994 Facing challenges of achievement of the common market





From reactive to proactive

Adoption of Regulation 1334/2001: the EU and its Member States became proactive by establishing **new principles** to face the new threats of proliferation Several proposals tabled in different international trade control regimes enhancing efficiency of their guidelines, in particular catch-all controls

Adoption of Regulation 428/2009: establishment of a **model of trade control regime** to meet UNSCR 1540 State commitments





The specificity of nuclear trade in the EU





Submitted to a dedicated Treaty: Euratom

First objective was to organise the free movement of certain nuclear items within the EC (Chapter IX):

« g. ... by the creation of a common market in specialized materials and equipment, by the free movement of capital for investment in the field of nuclear energy and by freedom of employment for specialists within the Community; »





But also EU nuclear related export control instruments

Legally binding instruments

- Council Regulation 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (as amended by Regulation 1234/2011)

- Council Regulation (EC) No 423/2007 of 19 April 2007 concerning restrictive measures against **Democratic People's Republic of Korea** (as amended)

- Council Regulation (EC) No 329/2007 of 19 April 2007 concerning restrictive measures against **Iran** (as amended)





But also EU nuclear related export control instruments

Politically binding instruments

- Council Joint Action of 22 June 2000 (2000/0401/CFSP) concerning the control of **technical assistance** related to certain military end-uses

Council Decision 2010/800/CFSP of 22 December 2010 concerning restrictive measures against **Democratic People's Republic of Korea** (as amended)

- Council Common Position 2007/140/CFSP of 27 February 2007 concerning restrictive measures against Iran (as amended)





The 1957 Nuclear Common Market

Member States shall abolish between themselves, one year after the entry into force of this Treaty, all customs duties on imports and exports or charges having equivalent effect, and all quantitative restrictions on imports and exports, in respect of:

a. products in List A1 and A2 b. products in List B





Uranium ores containing more than 5% by weight of natural uranium

Pitchblende containing more than 5% by weight of natural uranium

Uranium oxide

Inorganic compounds of natural uranium other than uranium oxide and uranium hexafluoride

Organic compounds of natural uranium

Crude or processed natural uranium

Alloys containing plutonium

Organic or inorganic compounds of uranium enriched in organic or inorganic compounds or uranium 235

Organic or inorganic compounds or uranium 233

Thorium enriched in uranium 233

Organic or inorganic compounds of plutonium





Deuterium and its compounds (including heavy water) in which the ratio of the number of deuterium atoms to normal hydrogen atoms exceeds 1:5 000 Heavy paraffin in which the ratio of the number of deuterium atoms to normal hydrogen atoms exceeds 1:5 000 Mixtures and solutions in which the ratio of the number of deuterium atoms to normal hydrogen atoms exceeds 1:5 000





Nuclear reactors

Equipment for the **separation** of uranium isotopes by gaseous diffusion or other methods

Equipment for the production of deuterium, its compounds (including heavy water) and derivates, and mixtures or solutions containing deuterium in which the ratio of the number of deuterium atoms to normal hydrogen atoms exceeds 1:5000

...





Lithium ores and concentrates Nuclear grade metals Boron trifluoride Anhydrous hydrofluoric acid Chlorine trifluoride Bromine trifluoride Lithium hydroxide

Nuclear grade beryllium oxide Refractory bricks of nuclear grade beryllium oxide Other refractory products of nuclear grade beryllium oxide Artificial graphite ...





Magnets specially designed and constructed for the abovementioned machines and equipment (cyclotrons etc.)

Accelerating and focusing tubes of the type used in mass spectrometers and mass spectrographs

Intense electronic sources of positive ions intended for use with particle accelerators, mass spectrometers and similar devices

Airtight clothing affording protection against radiation or radioactive contamination Diphenyl (when it is in fact the aromatic hydrocarbon C6H5C6H5)

Terphenyl



Nevertheless since 1957

Nuclear Common market has been informally **absorbed** by the common market established by EEC Treaty

Presently essentially (if not exclusively only) ruled by the TFUE

Free movement of nuclear items have been restrained indirectly by the first set of EC export control instruments (Regulation 3381/94 and Common Action 94/942)





Even if certain exports of nuclear materials are still **formally** submitted to Chapter VI of the Euratom Treaty

Article 57

Every producer shall offer to the (Supply)
Agency the ores, source materials or special fissile materials which he produces within the territories of Member States

Defined by Article 192:

1. 'Special fissile materials' means plutonium 239; uranium 233; uranium enriched in uranium 235 or uranium 233; (...); the expression special fissile materials' does not, however, include source materials





Article 59

If the Agency does not exercise its right of option on the whole or any part of the output of a producer, the latter: (...)

b. shall be authorized by a decision of the Commission to dispose of his available production outside the Community, (...).

However, special fissile materials may be exported only through the Agency and in accordance with the provisions of Article 62





The Commission may not grant such authorization if the recipients of the supplies fail to satisfy it that the general interests of the Community will be safeguarded or if the terms and conditions of such contracts are contrary to the objectives of this Treaty





Available production?

Concerns only the **production within** the EU

- Uranium mined or enriched in the EU and plutonium produced in the EU?
- Transit, operation of conversion, reprocessing in the EU of nuclear material not produced in the EU are in principle not considered as EU production





General interests of the Community?

Non-proliferation assessment of the proposed export?

NPT, NSG and other EU and Member States international commitments to be considered?

How Indian exports might be considered?





Presently EU nuclear trade control regime is mostly organised by two instruments





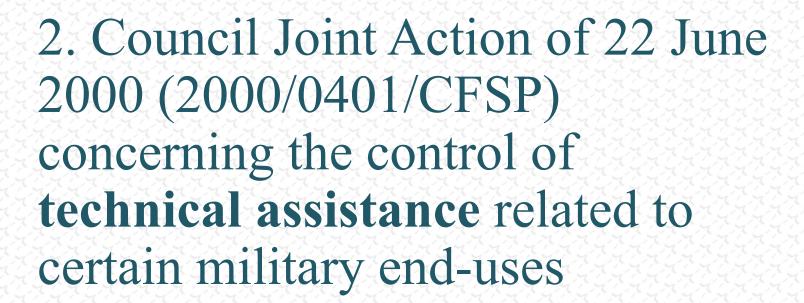
Council Regulation 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items

Even:

- if it is a Regulation, it is drafted more like a Directive
- it is called a Community regime, it does not substitute national export control regimes for an EU Trade Control Regime. It intends essentially to harmonise Member States' national practices.











IV. Main elements of the Regulation 428/2008 as amended by 1232/2011

Attempt to define common understanding





1. The list of items to be controlled:

- Nuclear items have been included in a more generic term: dual-use items
- Dual-use items are items which can be used for both civil and military purposes

Not necessary limited to WMD





1. The list of items to be controlled:

- But to match more accurately the definition of nuclear items which are not necessary "military related" the following definition has been added: All goods that can be employed for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices

- Concerns equipments, materials, tangible and intangible technologies





1. The list of items to be controlled:

- One list of dual-use items requiring export or transfer authorisation

Specific system of references (10 categories, nuclear items essentially listed in category 0)

- First international **compilation** of the lists of 5 International Export Control Regimes Wassenaar Arrangement, MTCR, **NSG**, Australia Group and CWC.

Some EU MS are not members of all regimes (Wassenaar Arrangement: Cyprus and MTCR: Cyprus, Estonia, Latvia, Lithuania, Malta,

Slovenia, Slovakia and Romania)





2. The Catch-all clause

- The possibility for Member States to control not listed
- Two are **compulsory** for Member States' Authorities
 - 1. Member States' Authorities require, through a **notification to exporters**, an export authorisation for an item not listed if there is risk that this item might be used in weapons of mass destruction program
 - 2. Obligation for the exporter to notify to his National Authorities if he is aware that an item he intends to export ...





2. The Catch-all clause

One is optional for Member States:

"Suspicion clause", establishes the
possibility for EU Member States to impose
an export authorisation if the exporter has
grounds for suspecting that the item ...

Has been adopted by Austria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Luxembourg, Malta, Poland, Slovakia, Spain and United Kingdom





3. A security exception

Possibility for Member State to prohibit or impose an authorisation requirement for not listed dual-use items for reasons of public security or human rights considerations (Article 8)

Implemented by France, Germany, United Kingdom





4. Operations to be controlled

The Regulation considers two different operations:

4.1. Dual-use items transferred to an enduser established outside of the EU

Export, external transit and brokering activities

4.2. Dual-use items transferred to an enduser established in another MS

Intra-union trade movements





4.1. Dual-use items transferred to an end-user established outside of the EU





1. Exportation

- An export or a re-export as defined by the Community Customs **Code** (article 161, 182);
- The transmission of software by **intangible means** to a destination **outside** the European Community
- Uploading and downloading from a website from a third country
- Oral transmission of technology when the technology is described over the telephone;





1. Exportation

One of the main question is to define who is the exporter?

Essential to determine the Member State who will have to consider the export application and who might issued the authorisation





1. Exportation

Exporter is the one

- On whose behalf an export declaration is made

- Holds the contract with the consignee

- If no export contract the person who has the power for determining the sending of the item out of the customs territory of the Community;

- Decides to transmit or make available software or technology by any other electronic means to a destination outside the Community.





2. External transit: a possibility to control

- Decided individually by Member States
- Double conditions to submit transit to prohibition and/or authorisation: listed items (Annex I) and if it does or may contribute to WMD
- Control could be **extended by** Member State to non-listed items and to listed dual-use items intended for military enduse or for countries under embargoes





2. External transit: a possibility to control

- Territorial validity limited
The authorisation/prohibition is valid only for the Member State who has decided or issued the transit authorisation or prohibition





3. Brokering: possibility to control

- Brokering services: the selling, buying, negotiation or arrangement of transactions for supply of dual-use items from a third country to any other third country

- Authorisation granted by Member States

- Authorisations shall be valid throughout the Community.

- Authorisation requirement for brokering services and **not to exercise** brokering activities





3. Brokering: possibility to control

Authorisation will be required if

- the broker has been informed by his authorities that **listed** items must be submitted to authorisation
- the broker is aware that the listed items...
 Possibilities for Member States to extend an authorisation requirement for brokering services
 - to non-listed items
 - in case the broker has grounds for suspecting that listed and non listed items...





4.2 Dual-use items transferred to an end-user established in another MS







- Concern only dual-use items considered as more **sensitive** in terms of potential contribution to the elaboration of weapons of mass destruction (Items are listed in Annex IV)

Most NSG items are covered by Annex IV

 Possibilities for Member States to control items not listed in Annex IV France (cryptography), Germany (helicopters) and United Kingdom





5. Transfers not ruled by the Regulation

Import: Import authorisation could be required unilaterally by a Member State

Counterproductive measure which could be easily countered by importing the item through another Member State





Export authorisation granted by Member State

- Principle of **mutual recognition** of authorisation granted by each Member State

Harmonisation of documents has been initiated: Model for Individual or Global Export authorisation, End-User Certificates





Three types of authorisations

Individual authorisation is granted to one specific exporter for one end-user covering a number of items (one or several);

Global authorisation, also called open individual licence, is granted to one specific exporter in respect of a type or category of dual-use items which may be valid for exports to one or more specified countries;

National **general** authorisation is valid for all national exporters to one or several specified countries covering a number of determined items.





Six authorisations granted directly by the EU Regulation: Union General Export Authorisation (UGEA)

- Export after repair;
- Temporary export for exhibition;
- Certain categories of items: chemicals, telecommunication and information security;
- Certain categories of items to certain defined destinations;





Should not be submitted to complementary MS authorisation Not fully respected by MS Valid for a defined list of items to list of countries





7. Defining common criteria

No common conditions

Establishment of common **criteria** to be considered by Member State when granting or not the authorisation (Article 12):

Commitments and obligations taken in the relevant international non-proliferation regimes

- Obligations under sanctions imposed by the CFSP, OSCE or a binding resolution of UN Security Council
- Consideration of **national foreign and security policies**, including those covered by the European Union Code of Conduct on Arms Exports
- Consideration of intended end-use and risk of diversion





8. Establishing exchange of information and no-undercut mechanism

- Before a Member State grants an authorisation for export or brokering services or decide on a transit it shall examine all valid denials or decisions to prohibit a transit
- Consultation required with the one who issued the denial for an essentially identical transaction

Concerns all denials including catch-all ones

- -Does not extend the implementation field of the MS catch-all clause to other MS
- Decision of the consulted Member State is not legally binding





Not to be mixed up with the consultation requirement established by Article 11

Consultation is required when the dual-use items are or will be located in one or more Member States other than the one where the application has been made.

Obligation concerns only a limited number of items submitted to authorisations for certain destinations

Decision of the consulted Member State

delineates the decision of the Member State
where the application has been made





V. The Council Joint Action of 22 June 2000 (2000/0401/CFSP) concerning the control of technical assistance related to certain military end-uses





Principles

- Not a Regulation : a Council Joint Action
- Intergovernmental cooperation instrument set up by the Treaty on European Union (EU Treaty)

Role of the Court of Justice is limited

- To enter into force, it has to be **implemented by**Member States into their national legislations
- No **formal link** with the Dual-Use Regulation Negotiated and adopted at the same time





Controlling exports of Technical Assistance

- Controlling the movement of persons providing services like instruction, training, transmission of working knowledge
- Related to the "international export control regimes, bodies and treaties" has to be understood as the five international export control regimes

 WMD and certain military items

 (Munitions list of the WA)



Transactions to be controlled

Two categories of transactions:

1. where it is provided **outside** the EU and it is **intended**, or the **provider is aware** that it is intended, for use in connection with WMD 2. Where it is related to **military end-uses** and is **provided** in countries of destination

Catch-all clause drafting

subject to an arms embargo





Exceptions

Article 2 does not apply to the "technical assistance":

(a) where it is provided in a **country listed** in Part 3 of Annex II to Regulation (EC) No 1334/2000:

Australia, Canada, United States of America, Japan, Norway, New-Zealand, Switzerland





Exceptions

(b) where it takes the form of transfer of information that is "in the **public domain**" or "**basic scientific research**" as these terms are respectively **defined** in international export control regimes, bodies and treaties; or





Exceptions

(c) where it is in **oral form** and **not related to items** required to be controlled by one or more of the international export control regimes, bodies and treaties.

Not related to Annex I of the Dual-Use Regulation, direct reference to the lists established by international export control regimes









Case studies on Nuclear Trade Or how to transform an exercice into a presentation





ropean Studies Unit

In March 2012, company A, which is a manufacturer of nuclear related equipment located in **Romania**, received an order for 2 heat exchangers (steam generator) from company B acting as a broker, located in **Italy**. The order has to be delivered to the **South Korean Nuclear Institute**, established in Seoul (D).

In May company A informs company B that the items have been manufactured and that they are stored in a facility owned by their branch C, located in **Malta**.







Is such export submitted to authorisation(s)? If yes, which authority is competent for delivering it (them) and for which transactions?





You are the **licensing authority** and you have informed company A in April 2011 that an authorisation is required.

Quickly, company A submits an **individual export** application that contains a description of the **technical specifications** of the vacuum pumps. In addition, company A provides an **end-user statement** received from the South Korean Nuclear Institute.







According to your national law, you have to consult several agencies during the assessment of this application. Two weeks later you receive documents and opinions from various agencies and ministries: The Intelligence Services inform you that the enduser is known for its connection to South Korean's nuclear-related programmes and activities.

The Ministry of defence inform you that the items cannot be used for WMD purposes and that they are not even listed in Annex I of the EU Regulation 428/2009.





The Ministry for Foreign and European affairs communicates its country profile stating: "South Korea has conducted in the past several activities related to weapons of mass destruction. South Korea hassigned and ratified the Chemical Weapons Convention, is a party to the Nuclear Non-Proliferation Treaty and maintains a civil nuclear program. South Korea is an active member of the five export control regimes".





Furthermore, you are informed by the **Department** for European Affairs that in 1995 Denmark has already denied an export authorisation for the same end-user. The Department sends you the elements used by the Danish authority to justify its denial.











Answers

Operations

Items manufactured by A (Romania) through its branch C (Malta), export B (Italy) to South Korea (D)

Regulation(s)

Romania, Malta and Italy: NPT+NSG+EU EU Regulation 428/2009 and not the Joint Action 421/2000





Is the item submitted to export authorisation?

EU 428/2009 Annex I

"Heat exchangers": 0A001i

It depends on the technical specifications of the items

If not in Annex I: catch-all clause (art. 4 and 8 428/2009) could be considered and the exporter may be required to submit an application depending on political analysis





Is the item submitted to transfer authorisation between Romania and Malta?

EU 428/2009 Annex IV: "Heat exchangers": 0A001i

It depends on the technical specifications of the items

If yes an transfer authorisation shall be delivered (article 22)

If not an transfer authorisation could be imposed by Romania considering the three criteria of article 22.2





Who is the exporter?

Regulation 428/2009 (article 2)

C (**Malta**): Art. 2 para.3. does not have the control. C not the exporter.

A (Romania): Art. 2 para 3: export contract concluded with B and not with D. A might be the exporter if C acts only as broker (does not have the property of the item). Even if item not listed, art. 4 and 8 (catch-all) apply.





Who is the exporter?

B (Italy): Art.2 para 3: an export contract has been concluded with D (Korea) and B could be considered as the exporter. Brokering transactions is only covered if between two third countries





Conditions to be considered before granting the export authorisation:

- Korea has ratified NPT
- NSG guidelines (INFCIRC/254/Part.2)
- Safeguards: South Korea has a CSA agreement in force





Conditions to be considered before granting the export authorisation:

- Assurances with regard to re-transfers (same conditions as transfers)
- Effective physical protection
- -End-use certificate submitted by the exporter





Criteria for granting an export: (art. 12, 13 of 428/2009)

- 4 criteria: (d) might be an argument against the export
- MoD says that no risk of diversion for WMD purpose
 - No-undercut and prior denial:

 Denmark has to be consulted?





Criteria for granting an export: (art. 12, 13 of 428/2009)

- -Item is not listed in Annex I (MoD says)
- Obligation of consulting DK only if transaction is essentially identical and Member State concerned has decided to submit to authorisation





Who else has to be consulted? Article 11.1

If the dual-use items in respect of which an application has been made for an individual export authorisation to a destination not listed in Annex IIa or to any destination in the case of dual-use items listed in Annex IV are or will be located in one or more Member States other than the one where the application has been made, that fact shall be indicated in the application.



Who else has to be consulted? Article 11.1

The competent authorities of the Member State to which the application for authorisation has been made shall immediately consult the competent authorities of the Member State or States in question and provide the relevant information. The Member State or States consulted shall make known within 10 working days any objections it or they may have to the granting of such an authorisation, which shall bind the Member State in which the application has been made.



Therefore

Malta (C) has to be consulted by Italy (B) or Romania (A) before issuing the authorisation. The Maltese decision will delineate the possibility to grant or not the export authorisation. (art.11 para1)

