2024/2897

18.11.2024

COUNCIL REGULATION (EU) 2024/2897

of 18 November 2024

amending Regulation (EU) 2023/1529 concerning restrictive measures in view of Iran's military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea region

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 215 thereof,

Having regard to Council Decision (CFSP) 2024/2894 of 18 November 2024 amending Decision (CFSP) 2023/1532 concerning restrictive measures in view of Iran's military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea region [1],

Having regard to the joint proposal from the High Representative of the Union for Foreign Affairs and Security Policy and the European Commission,

Whereas:

(1) On 20 July 2023, the Council adopted Decision (CFSP) 2023/1532 [2] and Regulation (EU) 2023/1529 [3], concerning restrictive measures in view of Iran's military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea region.

(2) On 18 November 2024, the Council adopted Decision (CFSP) 2024/2894, which amended Decision (CFSP) 2023/1532. In view of Iran's continued military support to Russia's war of aggression against Ukraine and in particular Iran's supply of unmanned aerial vehicles (UAVs) and missiles to Russia, Decision (CFSP) 2024/2894 introduces further restrictive measures.

(3) The measures introduce a prohibition on the export, sale, transfer or supply from the Union to Iran of further components used in the development and production of UAVs and of components used in the development and production of missiles.

(4) In addition, the measures introduce a transaction ban prohibiting any transaction with ports and locks that are owned, operated or controlled by listed natural or legal persons, entities and bodies or are used for the transfer of Iranian UAVs or missiles or related technology or components thereof to Russia in support of its war of aggression against Ukraine. That includes access to facilities of the listed ports and locks and the provision of any services to vessels. An exemption for maritime safety is included.

(5) It is also appropriate to amend the listing criteria and provide for targeted exceptions.

(6) The measures provided for in this Regulation fall within the scope of the Treaty on the Functioning of the European Union. Therefore, in particular with a view to ensuring their uniform application in all Member States, regulatory action at the level of the Union is necessary.

(7) This Regulation should enter into force on the date of its publication in the *Official Journal of the European Union* in order not to jeopardise the effectiveness of the measures set out therein.

(8) Regulation (EU) 2023/1529 should therefore be amended accordingly,

[1] OJ L, 2024/2894, 18.11.2024, ELI: http://data.europa.eu/eli/dec/2024/2894/oj.

[2] Council Decision (CFSP) 2023/1532 of 20 July 2023 concerning restrictive measures in view of Iran's military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea Region (OJ L 186, 25.7.2023, p. 20, ELI: http://data.europa.eu/eli/dec/2023/1532/oj).

[3] Council Regulation (EU) 2023/1529 of 20 July 2023 concerning restrictive measures in view of Iran's military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea Region (OJ L 186, 25.7.2023, p. 1, ELI: http://data.europa.eu/eli/reg/2023/1529/oj).

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) 2023/1529 is amended as follows:

(1) in Article 2, paragraph 1 is replaced by the following:

'1. It shall be prohibited to sell, supply, transfer or export, directly or indirectly, goods and technology which might contribute to Iran's capability to manufacture Unmanned Aerial Vehicles (UAVs) or missiles as listed in Annex II, whether or not originating in the Union, to any natural or legal person, entity or body in Iran or for use in Iran.

The transit via the territory of Iran of the goods and technology, as referred to in the first subparagraph, exported from the Union, shall be prohibited.';

(2) the following article is inserted:

'*Article 2a*

1. It shall be prohibited to engage in any transaction, directly or indirectly, with ports and locks listed in Annex IV.

2. Annex IV shall include ports and locks that are:

(a) owned, operated or controlled by any natural or legal person, entity or body listed in Annex III;

(b) owned, operated, or controlled by a legal person, entity or body whose proprietary rights are directly or indirectly owned for 50 % or more by an entity listed in Annex III;

(c) owned, operated or controlled by a natural or legal person, entity or body acting on behalf or at the direction of an entity referred to in point (a) or (b) of this paragraph; or

(d) used for the transfer of Iranian UAVs or missiles or related technologies or components thereof to Russia in support of its war of aggression against Ukraine.

3. Paragraph 1 shall not apply in the case of a vessel in need of assistance seeking a place of refuge, of an emergency port call for reasons of maritime safety, or for saving life at sea, or for humanitarian purposes, or for the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or the environment, or as a response to natural disasters.';

(3) in Article 3, paragraph 1 is replaced by the following:

'1. All funds and economic resources belonging to, or owned, held or controlled by natural or legal persons, entities or bodies:

(a) responsible for, supporting or involved in Iran's UAV or missile programme;

(b) supplying, selling or otherwise involved in transferring Iran's UAVs or missiles or related technologies or components thereof:

(i) to Russia in support of its war of aggression against Ukraine;

(ii) to armed groups and entities undermining peace and security in the Middle East and the Red Sea region;

(iii) to natural or legal persons, entities or bodies acting in breach of United Nations Security Council Resolution 2216 (2015); or,

(c) associated with natural or legal persons, entities or bodies referred to in point (a) or (b);

as listed in Annex III, shall be frozen.';

(4) the following article is inserted:

'*Article 3ca*

1. By way of derogation from Article 3 of this Regulation, the competent authorities may authorise the making available of certain funds or economic resources to entities listed under entry numbers 10, 11 and 12 in Annex III to this Regulation, under such conditions as the competent authorities deem appropriate and after having determined that such funds or economic resources are necessary for ground handling services as defined in Article 3, point (23), of Regulation (EU) 2018/1139 of the European Parliament and of the Council (*).

2. By way of derogation from Article 3, the competent authorities may authorise the release of certain frozen funds or economic resources, or the making available of certain funds or economic resources, under such conditions as they deem appropriate, after having determined that the funds or economic resources are necessary to deal with critical and clearly identified air safety matters and after prior consultation of the European Union Aviation Safety Agency.

3. The Member State concerned shall inform the other Member States and the Commission of any authorisations granted under this Article within 2 weeks of such authorisation.

(*) Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1).';

(5) the following Article is inserted:

'*Article 3f*

1. Article 3 shall not apply to funds or economic resources that are needed for:

(a) humanitarian purposes, the evacuation or repatriation of persons, or initiatives providing support to victims of natural, nuclear or chemical disasters;

(b) the operation of flights required for attending meetings with the objective of seeking a solution to the Iranian military support to Russia's war of aggression against Ukraine and to armed groups and entities in the Middle East and the Red Sea region, or of promoting the policy objectives of the restrictive measures;

(c) an emergency landing, take-off or overflight, or

(d) travel for official purposes of members of the diplomatic or consular missions of Member States in Iran or of international organisations enjoying immunities in accordance with international law.

2. Natural and legal persons, entities and bodies shall inform the competent authority of the Member State where they are resident, located, established or incorporated of the making available of funds or economic resources pursuant to paragraph 1 within 2 weeks of their being made available. The Member State concerned shall inform the other Member States and the Commission of any information received under this paragraph within 2 weeks of its receipt.';

(6) Article 4 is deleted;

(7) Annex II is amended in accordance with Annex I to this Regulation;

(8) Annex IV is added in accordance with Annex II to this Regulation.

Article 2

This Regulation shall enter into force on the date of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 18 November 2024.

For the Council

The President

J. BORRELL FONTELLES

ANNEX I

Annex II to Regulation (EU) 2023/1529 is replaced by the following:

'ANNEX II

LIST OF ITEMS REFERRED TO IN ARTICLE 2

INTRODUCTORY NOTES

1. Where "ex" precedes the HS/CN code, the goods covered by Regulation (EU) 2023/1529 constitute only a part of the scope of the HS/CN code and are determined by both the description given in this Annex and the scope of the HS/CN code.

2. Definitions of terms between "single quotation marks" are given in a technical note to the relevant item.

3. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EU) 2021/821.

Category 1 – Special materials and related equipment

Description	HS/CN code
Energetic materials as follows and mixtures thereof:	
Ammonium picrate (CAS 131-74-8);	ex 2908 99 00
Black powder;	ex 3601 00 00
Hexanitrodiphenylamine (CAS 131-73-7);	ex 2921 44 00
Difluoroamine(CAS 10405-27-3);	ex 2812 90 00
Nitrostarch (CAS 9056-38-6);	ex 3505 10 50
Tetranitronaphthalene (CAS 28995-89-3, CAS 4793-98-0);	ex 2902 90 00
Trinitroanisol (CAS 606-35-9);	ex 2909 30 90
Trinitronaphthalene (CAS 55810-17-8, CAS 2243-94-9);	ex 2902 90 00
Trinitroxylene (CAS 632-92-8);	ex 2902 41 00 ex 2902 42 00 ex 2902 43 00 ex 2902 44 00
N-methyl-2-pyrrolidinone; 1-methyl-2-pyrrolidinone (CAS 872-50-4);	ex 2939 79 90
Dioctylmaleate (CAS 142-16-5);	ex 2917 19 80
Ethylhexylacrylate (CAS 103-11-7);	ex 2916 12 00
Triethylaluminium (TEA) (CAS 97-93-8), trimethylaluminium (TMA) (CAS 75-24-1), and other pyrophoric metal alkyls and aryls of lithium, sodium, magnesium, zinc or boron;	ex 2931 90 00
Nitrocellulose (CAS 9004-70-0);	3912 20
Nitroglycerin (or glyceroltrinitrate, trinitroglycerine) (NG) (CAS 55-63-0);	ex 2920 90 70
2,4,6-trinitrotoluene (TNT) (CAS 118-96-7);	ex 2904 20 00

Description	HS/CN code
Ethylenediaminedinitrate (EDDN) (CAS 20829-66-7);	ex 2920 90 70
Pentaerythritoltetranitrate (PETN) (CAS 78-11-5);	ex 2920 90 70
Lead azide (CAS 13424-46-9), normal lead styphnate(CAS 15245-44-0) and basic lead styphnate (CAS 12403-82-6), and primary explosives or priming compositions containing azides or azide complexes;	ex 2850 00 60 ex 2908 99 00
Diethyldiphenylurea (CAS 85-98-3); dimethyldiphenylurea(CAS 611-92-7); methylethyldiphenyl urea	ex 2924 21 00
N,N-diphenylurea (unsymmetrical diphenylurea) (CAS 603-54-3);	ex 2924 21 00
Methyl-N,N-diphenylurea (methyl unsymmetrical diphenylurea) (CAS 13114-72-2);	ex 2924 21 00
Ethyl-N,N-diphenylurea (ethyl unsymmetrical diphenylurea) (CAS 64544-71-4);	ex 2924 21 00
4-Nitrodiphenylamine (4-NDPA)(CAS 836-30-6);	ex 2921 44 00
2,2-dinitropropanol (CAS 918-52-5);	ex 2905 59 98
Fibrous and filamentary materials, not controlled by 1C010 (1) or 1C210 (2), for use in "composite" structures and with a specific modulus of 3,18 x 10^6 m or greater and a specific tensile strength of 7,62 x 10^4 m or greater	ex 5402 11 ex 5501 11 ex 5503 11 ex 6815 11 ex 6815 12 ex 6815 19 ex 7019 19 10
Nanomaterials as follows: a. Semiconductor nanomaterials; b. Composite-based nanomaterials; or c. Any of the following carbon-based nanomaterials: 1. Carbon nanotubes; 2. Carbon nanofibres; 3. Fullerenes; 4. Graphenes; or 5. Carbon onions. Notes: *For the purposes of this control, nanomaterial means a material that meets at least one of the following criteria:* 1. *Consists of particles, with one or more external dimensions in the size range 1 - 100 nm for more than 1 % of their number size distribution;* 2. *Has internal or surface structures in one or more dimensions in the size range 1 - 100 nm; or* 3. *Has a specific surface area by volume greater than 60 m^2/cm^3, excluding materials consisting of particles with a size lower than 1 nm*	ex 2805 30 ex 2846 10 ex 2846 90 ex 5402 11 ex 5501 11 ex 5503 11 ex 6815 11 ex 6815 12 ex 6815 13 ex 6815 19 ex 7019 12 ex 7019 19

(1) Ref. Annex I to Regulation (EU) 2021/821
(2) Ref. Annex I to Regulation (EU) 2021/821

Description	HS/CN code
Tungsten, tungsten carbide and alloys, not controlled by 1C117 ([3]), 1C226 ([4]), II.A1.013 ([5]) or II.A1.017 ([6]), containing more than 90 % tungsten by weight. Note 1: *For the purposes of this control, wire is excluded* Note 2: *For the purposes of this control, surgical or medical instruments are excluded*	2849 90 30 ex 8101 10 ex 8101 94 ex 8101 97 ex 8101 99
Ultra-High-Molecular-Weight Polyethylene (UHMWPE), not controlled by 1C010 ([7]) or 1C210 ([8]), presented in any of the following forms: a. Primary forms; b. Filament yarn or monofilaments; c. Filament tows; d. Rovings; e. Staple or chopped fibres; f. Fabrics; g. Pulp or flocks.	ex 3901 20 10 ex 3901 20 90 ex 5402 39 ex 5402 49 ex 5402 59 ex 5402 69 ex 5404 90 90 ex 5407 20 11 ex 5407 20 19 ex 5501 90 ex 5503 90 ex 5506 90 ex 5601 30

Category 2 – Materials processing

Description	HS/CN code
Bearings and bearing systems not controlled by 2A001 ([9]) and 2A101 ([10]): a. Ball bearings or Solid ball bearings, having tolerances specified by the manufacturer in accordance with ABEC 7, ABEC 7P, or ABEC 7T or ISO Standard Class 4 or better (or equivalents) and having any of the following characteristics; 1. Manufactured for use at operating temperatures above 573 K (300 °C) either by using special materials or by special heat treatment; or 2. With lubricating elements or component modifications that, according to the manufacturer's specifications, are specially designed to enable the bearings to operate at speeds exceeding 2,3 million "DN";	ex 8482 10 ex 8482 20 ex 8482 30 ex 8482 40 ex 8482 50 ex 8482 80 ex 8482 91

([3]) Ref. Annex I to Regulation (EU) 2021/821
([4]) Ref. Annex I to Regulation (EU) 2021/821
([5]) Ref. Annex II to Regulation (EU) No 267/2012
([6]) Ref. Annex II to Regulation (EU) No 267/2012
([7]) Ref. Annex I to Regulation (EU) 2021/821
([8]) Ref. Annex I to Regulation (EU) 2021/821
([9]) Ref. Annex I to Regulation (EU) 2021/821
([10]) Ref. Annex I to Regulation (EU) 2021/821

Description	HS/CN code
b. Solid tapered roller bearings, having tolerances specified by the manufacturer in accordance with ANSI/ABMA Class 00 (inch) or Class A (metric) or better (or equivalents) and having either of the following characteristics: 1. With lubricating elements or component modifications that, according to the manufacturer's specifications, are specially designed to enable the bearings to operate at speeds exceeding 2,3 million "DN"; or 2. Manufactured for use at operating temperatures below 219 K (-54 °C) or above 423 K (150 °C); c. Gas-lubricated foil bearing manufactured for use at operating temperatures of 561 K (288 °C) or higher and a unit load capacity exceeding 1 MPa; d. Active magnetic bearing systems; e. Fabric-lined self-aligning or fabric-lined journal sliding bearings manufactured for use at operating temperatures below 219 K (-54 °C) or above 423 K (150 °C). *Technical Notes:* *1. "DN" is the product of the bearing bore diameter in mm and the bearing rotational velocity in rpm.* *2. Operating temperatures include those temperatures obtained when a gas turbine engine has stopped after operation*	
Concealed object detection equipment operating in the frequency range from 30 GHz to 3 000 GHz and having a spatial resolution of 0,1 mrad (milliradian) up to and including 1 mrad (milliradian) at a standoff distance of 100 m; and components, other than those specified in the CML or in Regulation (EU) 2021/821. *Note: Concealed object detection equipment includes but is not limited to equipment for screening people, documents, baggage, other personal effects, cargo and/or mail.* *Technical Note:* *The range of frequencies span what is generally considered as the millimetre-wave, submillimetre-wave and terahertz frequency regions.*	ex 8526 10 ex 8526 92 ex 8482 10 90
"Numerical control" units for machine tools and "numerically controlled" machine tools, other than those specified in the CML or in Regulation (EU) 2021/821 (see List of Items Controlled): a. "Numerical control" units for machine tools: 1. Having four interpolating axes that can be coordinated simultaneously for contouring control; or 2. Having two or more axes that can be coordinated simultaneously for contouring control and a minimum programmable increment better (less) than 0,001 mm; 3. "Numerical control" units for machine tools having two, three or four interpolating axes that can be coordinated simultaneously for contouring control, and capable of receiving directly (on-line) and processing computer-aided-design (CAD) data for internal preparation of machine instructions; or b. Motion control boards specially designed for machine tools and having any of the following characteristics: 1. Interpolation in more than four axes;	ex 8537 10 10 ex 8537 10 98 ex 8456 30 ex 8457 10 ex 8457 20 ex 8457 30 ex 8458 11 ex 8458 91 ex 8459 10 ex 8459 31 ex 8459 51

Description	HS/CN code
2. Capable of real-time processing of data to modify tool path, feed rate and spindle data, during the machining operation, by any of the following:	ex 8459 61 ex 8460 12
a. Automatic calculation and modification of part program data for machining in two or more axes by means of measuring cycles and access to source data; or	ex 8460 22 ex 8460 23
b. Adaptive control with more than one physical variable measured and processed by means of a computing model (strategy) to change one or more machining instructions to optimize the process; or	ex 8460 24
3. Capable of receiving and processing CAD data for internal preparation of machine instructions;	
c. "Numerically controlled" machine tools that, according to the manufacturer's technical specifications, can be equipped with electronic devices for simultaneous contouring control in two or more axes and that have both of the following characteristics:	
1. Two or more axes that can be coordinated simultaneously for contouring control; and	
2. Positioning accuracies according to ISO 230/2 (2006), with all compensations available:	
a. Better than 15 μm along any linear axis (overall positioning) for grinding machines;	
b. Better than 15 μm along any linear axis (overall positioning) for milling machines; or	
c. Better than 15 μm along any linear axis (overall positioning) for turning machines; or	
d. Machine tools, as follows, for removing or cutting metals, ceramics or "composites", that, according to the manufacturer's technical specifications, can be equipped with electronic devices for simultaneous contouring control in two or more axes:	
1. Machine tools for turning, grinding, milling or any combination thereof, having two or more axes that can be coordinated simultaneously for contouring control and having any of the following characteristics:	
a. One or more contouring "tilting spindles";	
Note: *this applies to machine tools for grinding or milling only.*	
b. "Camming" (axial displacement) in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR);	
Note: *this applies to machine tools for turning only.*	
c. "Run-out" (out-of-true running) in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR); or	
d. The positioning accuracies, with all compensations available, are less (better) than: 0,001° on any rotary axis;	
2. Electrical discharge machines (EDM) of the wire feed type that have five or more axes that can be coordinated simultaneously for contouring control.	

Description	HS/CN code
Assemblies, circuit boards or inserts specially designed for machine tools controlled in this annex: a. Spindle assemblies, consisting of spindles and bearings as a minimal assembly, with radial ("run-out") or axial ("camming") axis motion in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR); b. Single point diamond cutting tool inserts, having all of the following characteristics: 1. Flawless and chip-free cutting edge when magnified 400 times in any direction; 2. Cutting radius from 0,1 to 5 mm inclusive; and 3. Cutting radius out-of-roundness less (better) than 0,002 mm TIR. c. Specially designed printed circuit boards with mounted components capable of upgrading, according to the manufacturer's specifications, "numerical control" units, machine tools or feed-back devices to or above the levels specified in this Annex. <u>*Technical Note:*</u> *This entry does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine-tools, dimensional inspection machines or similar equipment*.	ex 8207 19 ex 8207 20 ex 8207 50 ex 8207 60 ex 8207 90 ex 8466 10 ex 8466 20 20 ex 8466 20 91 ex 8466 20 98 ex 8466 30 ex 8466 93
"Software" specially designed for the "development", "production", or "use" of the machine tools controlled in this Annex	
"Numerical controlled" machine tools, having one or more linear axis with a travel length greater than 8 000 mm.	ex 8456 ex 8457 ex 8458 ex 8459 ex 8460

Category 3 – Electronics

Description	HS/CN code
Integrated circuits as follows: Field Programable Gate Array (FPGA), microcontrollers, microprocessors, signal processors, signal analysers, Analogue-to-Digital Converters (ADC), voltage regulators, video encoders and DC-DC converters	ex 8542 31 ex 8542 39
"Monolithic Microwave Integrated Circuits" ("MMIC") amplifiers and devices	ex 8542 33 8543 70 02
RF filters or Electromagnetic Interference (EMI) filters	ex 8548 00
Tantalum capacitors	8532 21
Aluminium electrolytic capacitors	8532 22

Description	HS/CN code
Ceramic dielectric multilayer capacitors	8532 24
Storage integrated circuits, as follows: a. Electrically erasable programmable read-only memories (EEPROMs) with a storage capacity; 1. Exceeding 16 Mbits per package for flash memory types; or 2. Exceeding either of the following limits for all other EEPROM types: a. Exceeding 1 Mbit per package; or b. Exceeding 256 kbit per package and a maximum access time of less than 80 ns; b. Static random access memories (SRAMs) with a storage capacity: 1. Exceeding 1 Mbit per package; or 2. Exceeding 256 kbit per package and a maximum access time of less than 25 ns	ex 8542 32
Mounted piezo-electric crystals	8541 60
"Semiconductor devices" fulfilling the military standard MIL-STD-750D or other equivalent standard. *Technical note: For the purposes of this control "semiconductor devices" are electronic components that rely on the electronic properties of a semiconductor material, such as diodes, transducers, photosensitive devices, thyristors, diacs, triacs or transistors, including metal–oxide–semiconductor field-effect transistors (MOSFETs), FETs, FINFETs, IGBT, etc*	ex 8541 10 ex 8541 21 ex 8541 29 ex 8541 30 ex 8541 49 ex 8541 51 ex 8541 59
Electrical plugs, connectors, jacks, jumpers, terminals, sockets or adapters, having any of the following: a. Rated for operation at an ambient temperature above 398K (125 °C); b. Rated for operation at an ambient temperature below 218K (-55 °C); or c. Rated for operation over the entire ambient temperature range from 218K (-55 °C) to 398K (125 °C).	ex 8536 69 ex 8536 90
Equipment for the manufacture of Printed Circuit Boards (PCBs) and specially designed components and accessories therefor, as follows: a. Film processing equipment; b. Solder mask coating equipment; c. Photo plotter equipment; d. Plating or electroplating deposition equipment; e. Vacuum chambers and presses; f. Roll laminators; g. Alignment equipment; or h. Etching equipment.	ex 8424 89 40 ex 8479 89 70 ex 8543 30 40 ex 8486 40 ex 8420 10 81 ex 8479 90 15

Description	HS/CN code
Automated optical inspection equipment for testing Printed Circuit Boards (PCBs), based on optical or electrical sensors, and capable to detect any of the following quality defects: a. Spacing, area, volume or height; b. Bill boarding; c. Components (presence, absence, flipped, offset, polarity, or skew); d. Solder (bridging, insufficient solder joints); e. Leads (insufficient paste, lifting); f. Tombstoning; or g. Electrical (shorts, opens, resistance, capacitance, power, grid performance).	ex 9030 31 ex 9030 32 ex 9030 33 20 ex 9030 33 70 ex 9030 39 00 ex 9030 84 ex 9030 89 ex 9031 49 10 ex 9031 49 90 ex 9031 80 20 ex 9031 80 80
Chemicals and materials of the type used in the production of Printed Circuit Boards (PCBs), as follows: a. PCB "composite" substrates made of glass fibre or cotton (e.g. FR-4, FR-2, FR 6, CEM-1, G-10, etc.); b. Multilayer PCB substrates, containing at least one layer of any of the following materials: 1. Aluminium; 2. Polytetrafluoroethylene (PTFE); or 3. Ceramic materials (e.g. alumina, titanium oxide, etc.); c. Etchant chemicals; 1. Ferric chloride (7705-08-0); 2. Cupric chloride (7447-39-4); 3. Ammonium persulphate (7727-54-0); 4. Sodium persulphate (7775-27-1); or 5. Chemical preparations specially designed for etching and containing any of the chemicals included in points 1 to 4. Note: *This control does not control "chemical mixtures" containing one or more of the chemicals specified in this entry in which no individually specified chemical constitutes more than 10 % by the weight of the mixture.* d. Copper foil with a minimum purity 95 % and of a thickness less than 100 μm; e. Polymeric substances and films thereof of less than 0,5 mm of thickness, as follows: 1. Aromatic polyimides; 2. Parylenes; 3. Benzocyclobutenes (BCBs); or 4. Polybenzoxazoles.	ex 3921 90 55 ex 8534 00 ex 2827 39 20 ex 2827 39 85 ex 2833 40 ex 3824 99 96 ex 7410 11 ex 7410 21 ex 3919 10 80 ex 3919 90 80

Description	HS/CN code
"Software" specially designed for the test, "development" or "production" of Printed Circuit Boards (PCBs).	N/A
Radio frequency systems and equipment not included in Regulation (EU) 2021/821, components and accessories, specially designed or modified to develop any of the following functions: a. Take control and command of UAVs. b. Deliberately and selectively interfere with, deny, inhibit, degrade or deceive radio frequency signals for the control and command of unmanned aircraft. c. Use the specific features of the radio frequency protocol used by drones to interfere with their operation.	ex 8517 62 ex 8517 71 ex 8517 79 ex 8525 50 ex 8526 92 ex 8529 10 ex 8543 70 90

Category 4 – Computers

Description	HS/CN code
Electronic computers and related equipment, and "electronic assemblies" and specially designed components therefor, rated for operation at an ambient temperature above 343 K (70 °C)	ex 8471
"Digital computers", including equipment of "signal processing" or "image enhancement", having an "Adjusted Peak Performance" ("APP") equal to or greater than 0,0128 Weighted TeraFLOPS (WT);	ex 8471
Hybrid computers and "electronic assemblies" and specially designed components therefor containing analogue-to-digital converters having all of the following characteristics: a. 32 channels or more; and b. A resolution of 14 bit (plus sign bit) or more with a conversion rate of 200 000 Hz or more	ex 8471

Category 5 – Telecommunications and information security

Description	HS/CN code
Telecommunications apparatus, devices or machines, for "aircraft"	ex 8517 62 ex 8517 69

Category 6 – Sensors and lasers

Description	HS/CN code
Cameras for aerial survey	ex 9006 30

Description	HS/CN code
Optical Sensors as follows: a. Image intensifier tubes and specially designed components therefor, as follows: 1. Image intensifier tubes having all the following: a. A peak response in wavelength range exceeding 400 nm, but not exceeding 1 050 nm; b. A microchannel plate for electron image amplification with a hole pitch (centre-to-centre spacing) of less than 25 μm; and c. Having any of the following: 1. An S-20, S-25 or multialkali photocathode; or 2. A GaAs or GaInAs photocathode; 2. Specially designed microchannel plates having both of the following characteristics: a. 15 000 or more hollow tubes per plate; and b. Hole pitch (centre-to-centre spacing) of less than 25 μm b. Direct view imaging equipment operating in the visible or infrared spectrum, incorporating image intensifier tubes having the characteristics of the image intensifier tube included in this control.	ex 8529 90 ex 8542 39 ex 9006 91 ex 9013 80 ex 9025 80 ex 9025 90 ex 9026 80 ex 9026 90 ex 9027 50 ex 9032 10
Night vision cameras	8525 83
Cameras that meet the criteria of Note 3 to 6A003.b.4 ([11])	ex 8525 89 ex 9006 30
Airborne laser rangefinders	ex 9013 20 00 ex 9013 80 00 ex 9013 90 80 ex 9015 10 ex 9015 80 ex 9015 90 ex 9031 80 20 ex 9031 80 80 ex 9031 90 00 ex 9033 00 90
“Primary cells” or batteries and components having an energy density of 150 Wh/kg or more at 293 K (20 °C)	ex 8506

([11]) Ref. Annex I to Regulation (EU) 2021/821

Description	HS/CN code
Technical Notes: 1. *For the purposes of this control, "energy density" (Wh/kg) is calculated from the nominal voltage multiplied by the nominal capacity in ampere-hours (Ah) divided by the mass in kilograms. If the nominal capacity is not stated, energy density is calculated from the nominal voltage squared then multiplied by the discharge duration in hours divided by the discharge load in ohms and the mass in kilograms.* 2. *For the purposes of this control, a "cell" is defined as an electrochemical device, which has positive and negative electrodes, an electrolyte, and is a source of electrical energy. It is the basic building block of a battery.* 3. *For the purposes of this control, a "primary cell" is a "cell" that is not designed to be charged by any other source.*	
Radar systems, equipment and major components, other than those specified in the CML or in Regulation (EU) 2021/821, and specially designed components therefor, as follows: a. Airborne radar equipment, other than those specified in the CML or in Regulation (EU) 2021/821, and specially designed components therefor; b. "Space-qualified" "laser" radar or Light Detection and Ranging (LIDAR) equipment specially designed for surveying or for meteorological observation; c. Millimeter wave enhanced vision radar imaging systems specially designed for rotary wing aircraft and having all of the following: 1. Operates at a frequency of 94 GHz; 2. An average output power of less than 20 mW; 3. Radar beam width of 1 degree; and 4. Operating range equal to or greater than 1 500 m	ex 8526 10 ex 8529 90 ex 9015 10 ex 90
"Magnetometers", "Superconductive" electromagnetic sensors, and specially designed components therefor, as follows: a. "Magnetometers", other than those specified in the CML or in Regulation (EU) 2021/821, having a "sensitivity" lower (better) than 1,0 nT (rms) per square root Hz *Technical Note: For the purposes of this control, "sensitivity" (noise level) is the root mean square of the device-limited noise floor which is the lowest signal that can be measured* b. "Superconductive" electromagnetic sensors, components manufactured from "superconductive" materials: 1. Designed for operation at temperatures below the "critical temperature" of at least one of their "superconductive" constituents (including Josephson effect devices or "superconductive" quantum interference devices (SQUIDS)); 2. Designed for sensing electromagnetic field variations at frequencies of 1 kHz or less; and 3. Having any of the following characteristics: a. Incorporating thin-film SQUIDS with a minimum feature size of less than 2 μm and with associated input and output coupling circuits; b. Designed to operate with a magnetic field slew rate exceeding 1 x 10^6 magnetic flux quanta per second;	ex 9015 80 ex 9031 80

Description	HS/CN code
c. Designed to function without magnetic shielding in the earth's ambient magnetic field; or d. Having a temperature coefficient less (smaller) than 0,1 magnetic flux quantum/K	
Gravity meters (gravimeters) designed or modified for ground use, other than those specified in the CML or in Regulation (EU) 2021/821, as follows: a. Having a static accuracy of less (better) than 100 μGal; or b. Being of the quartz element (Worden) type	ex 9015 80
"Software", other than those specified in the CML or in Regulation (EU) 2021/821, specially designed for the "development", "production", or "use" of goods controlled by 6A002 ([12]), 6A003 ([13]), and radars, magnetometers and gravity meters included in Category 6 of this Regulation.	N/A

Category 7 – Navigation and avionics

Description	HS/CN code
Inertial Navigation systems, Inertial Measuring Units (IMU), accelerometers or gyros, and parts and accessories thereof	ex 9014 20 ex 9014 80 ex 9014 90
Aerials and aerial reflectors for "aircraft" or guidance systems, parts suitable for use therewith	ex 8517 71 ex 8529 10
"Satellite navigation system" equipment, including aerials and antennas suitable for the reception of GNSS signals, and parts thereof	ex 8526 91 ex 8529 90 ex 8526 10 ex 8526 92 ex 8517 71 ex 8529 10
Digital flight data recorders *Note: This control does not cover those digital flight data recorders which meet all of the following:* *a. Certified by the civil aviation authorities of one or more EU Member States or Wassenaar Arrangement Participating States; and* *b. Intended for non-military "aircraft" for which any of the following has been issued by civil aviation authorities of one or more EU Member States or Wassenaar Arrangement Participating States for the "aircraft" with this specific engine type:* *1. A civil type certificate; or* *2. An equivalent document recognised by the International Civil Aviation Organization (ICAO).*	8543 70 04

([12]) Ref. Annex I to Regulation (EU) 2021/821
([13]) Ref. Annex I to Regulation (EU) 2021/821

Description	HS/CN code
Radio navigational aid apparatus for “aircraft” and specially designed components thereof	ex 8526 91 ex 8529 90
Flight control units for “Unmanned Aerial Vehicles” (“UAVs”), and parts thereof	ex 8537 10 ex 8807 30
Remote control units for “Unmanned Aerial Vehicles” (“UAVs”), and parts thereof	ex 8517 61 ex 8526 92 ex 8537 10 ex 8543 70 90 ex 8807 30

Category 9 – Aerospace and propulsion

Description	HS/CN code
“Unmanned aerial vehicles” (“UAVs”) other than those designed for carrying passengers, and parts thereof	8806 21 8806 22 8806 23 8806 24 8806 29 8806 91 8806 92 8806 93 8806 94 8806 99 ex 8807 30
Aero gas turbine engines (turboprop, turbojet and turbofan) for “aircraft”, and specially designed components thereof	ex 8411 11 ex 8411 12 ex 8411 21 ex 8411 22 ex 8411 91
Spark-ignition reciprocating or rotary internal combustion piston engines for “aircraft”	8407 10
Parts suitable for use solely or principally with internal combustion piston engine for “aircraft”	8409 10

Description	HS/CN code
Compression-ignition internal combustion piston engines for “aircraft”	ex 8408 90
Servomotor for “Unmanned Aerial Vehicles” (“UAVs”)	ex 8501 ex 8807 30
Launch systems for “UAVs”, and parts thereof	ex 8805 10 ex 8807 30
Ground support equipment for “UAVs”	ex 8805 10
Testing equipment for aerospace and propulsion, and specially designed components therefor, other than those specified in the CML or in Regulation (EU) 2021/821. *Note: this control includes the following items, and the related “software”:* — *Load release test bench and other facilities to simulate safe separation from the “aircraft” or launch system.* — *Salt spray chambers for temperature and humidity ranges to perform oxidation tests.* — *Chambers to perform fungus tests.* — *Devices for acceleration, shock and transport shock tests.* — *Vibration chambers with altitude, temperature and humidity ranges.* — *Chambers for explosive decompression tests.* — *Chambers for temperature, humidity and solar radiation tests.* — *Devices to estimate the captured solar radiation for solar radiation tests.* — *Vibrators for sinusoidal, random and shock tests, combinable with altitude, temperature and humidity tests.* — *Vibration table for longitudinal and lateral tests combined with temperature chambers.* — *Overpressure chambers.*	ex 9031 20 ex 9031 80
“Flight termination” systems and specifically designed components . *Note: this control covers digital and analogic communications standards for Flight Termination Systems, including encrypted operational modes.* *Technical notes:* *1. For the purposes of this control, “flight termination” can involve a controlled descent, self-destruction, or detonation of the warhead to minimize the risk of collateral damage* *2. For the purposes of this control, components include ground and on board equipment, command exciters, encoders, amplifier controllers, command verification receivers, amplifiers, transmitters, decoders and receivers.*	ex 8526 92 ex 8529 90

Category 10 – Technology

"Technology", designed or specifically adapted for the test, development or production of equipment controlled in this Annex

"Technology" for the "use" of machine tools controlled in this Annex.'

ANNEX II

The following Annex is added to Regulation (EU) 2023/1529:

'ANNEX IV

List of ports and locks as referred to in Article 2a

	Name	Grounds for inclusion	Date of application
1.	Amirabad Port, Iran	Article 2a(1), point (d): used for the transfer of Iranian UAVs or missiles or related technologies or components thereof to Russia in support of its war of aggression against Ukraine	18.11.2024
2.	Anzali Port, Iran	Article 2a(1), point (d): used for the transfer of Iranian UAVs or missiles or related technologies or components thereof to Russia in support of its war of aggression against Ukraine	18.11.2024'