



Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Determination 2008

as amended

made under subregulation 5 (2) of the

Charter of the United Nations (Sanctions — Iran) Regulations 2008

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taking into account amendments up to *Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Amendment Determination 2011 (No. 1)*

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1 **Name of Determination** [see Note 1]

This Determination is the *Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Determination 2008*.

2 **Commencement** [see Note 1]

This Determination commences on the day after it is registered.

3 **Definitions**

(1) In this Determination:

aircraft means a fixed wing, swivel wing, rotary wing, tilt rotor or tilt wing airborne vehicle.

Note Rotary wing airborne vehicles are also known as helicopters.

all compensations available means the maximum accuracy of a machine tool after all feasible measures available to the manufacturer to minimise systematic positioning errors for the particular model of machine tool are taken.

array stack means laser arrays stacked or otherwise assembled so that the centres of the emitted light beams are parallel with each other.

bare table means a flat surface, with no fixtures or fittings, capable of being used in a test of the strength of vibrations.

bias means an accelerometer output when no acceleration is applied.

carbon fibre preform means an ordered arrangement of coated or uncoated fibres intended to form the framework of a part before the matrix is introduced to form a composite.

carbon graphite means a material consisting of amorphous carbon and graphite in which the graphite content is 8% or more by weight.

CAS means a Chemical Abstract Number.

Circular Error Probable means, in a normal circular distribution, the radius of the circle:

- (a) containing 50% of the individual measurements being made; or
- (b) within which there is a 50% probability of being located.

composite means a matrix:

- (a) that has an additional phase or phases consisting of particles, whiskers, fibres, or any combination of those three; and
- (b) is present for a specific purpose or purposes.

data-based referenced navigation, or ***DBRN***, in relation to a hybrid inertial navigation system, means the use of various sources of previously measured geo-mapping data integrated to provide accurate navigation information in changing environments.

Note Sources of relevant geo-mapping data include bathymetric maps, stellar maps, gravity maps, magnetic maps and three-dimensional digital terrain maps.

Defence and Strategic Goods List means the Defence and Strategic Goods List mentioned in regulation 13E of the *Customs (Prohibited Exports) Regulations 1958*, as in force from time to time.

deformable mirror means a mirror with:

- (a) a single, continuous optical reflecting surface dynamically deformed by the application of individual torques or forces to compensate for distortions in the optical waveform incident upon the mirror; or
- (b) multiple optical reflecting elements that can be individually and dynamically repositioned by the application of torques or forces to compensate for distortions in the optical waveform incident upon the mirror;

and includes a bimorph mirror.

fibrous or filamentary materials include the following:

- (a) continuous monofilaments;
- (b) continuous yarns and rovings;
- (c) tapes, fabrics, random mats and braids;
- (d) chopped fibres, staple fibres and coherent fibre blankets;
- (e) whiskers of any length, whether monocrystalline or polycrystalline;
- (f) aromatic polyamide pulp.

goods has the same meaning as in the *Charter of the United Nations (Sanctions — Iran) Regulations 2008*.

Note At the time this Determination commenced, those Regulations define goods as including items, materials, equipment and technology.

Gy(silicon) means the energy in joules per kilogram absorbed by an unshielded silicon sample exposed to ionising radiation.

IEEE means Institute of Electrical and Electronic Engineers.

ISO 230/2 (1988) means the International Organization for Standardization's Standard ISO 230-2: 1988, *Acceptance code for machine tools – Part 2: Determination of accuracy and repeatability of positioning of numerically controlled machine tools*.

laser means an assembly of components capable of producing spatially and temporally coherent light that is amplified by stimulated emission of radiation.

laser array means multiple semiconductor laser emitters fabricated as a single chip so that the centres of the emitted light beams are parallel with each other.

materials resistant to corrosion by UF₆, in relation to a separation process, means one or more of the following materials as appropriate for that process:

- (a) copper;
- (b) stainless steel;
- (c) aluminium;
- (d) aluminium oxide;
- (e) aluminium alloys;
- (f) nickel;

(g) nickel alloys containing 60% or more nickel by weight;

(h) UF₆-resistant fluorinated hydrocarbon polymers.

matrix means the substantially continuous phase filling the space between particles, whiskers or fibres.

missile has the meaning given by subsections (3) and (4).

monofilament means the smallest increment of a fibre.

Note Monofilaments are usually only several micrometres in diameter.

MWD means measurement while drilling.

pressure transducer means a device that converts pressure measurements into electrical signals.

remote manipulator means a device capable of translating the actions of the person operating the device to a remote operating arm and terminal fixture.

Note Remote manipulators can be of a master/slave type or operated by a joystick or keypad.

repeatability has the same meaning as in IEEE standard 528-2001.

Note The IEEE standard explains that repeatability is the level of similarity between measurements of the same variable under the same operating conditions when changes in conditions or non-operating periods occur between measurements.

roving means a bundle of strands arranged approximately parallel with each other.

Note A roving typically consists of between 12 and 120 strands.

scale factor means the ratio of change in output to a change in the input intended to be measured.

Note Scale factor is generally evaluated as the slope of the straight line that can be fitted by the method of least squares to input-output data obtained by varying the input cyclically over the input range.

spacecraft means a satellite or space probe, whether active or passive.

specific modulus means Young's modulus in pascals, equivalent to N/m² divided by specific weight in N/m³, measured at a temperature of (296 ± 2) K ((23 ± 2) °C) and a relative humidity of (50 ± 5)%.

specific tensile strength means ultimate tensile strength in pascals, equivalent to N/m² divided by specific weight in N/m³, measured at a temperature of (296 ± 2) K ((23 ± 2) °C) and a relative humidity of (50 ± 5)%.

specified environment means a test environment meeting conditions described in one of the following paragraphs:

- (a) the test environment requires input of random vibration with an overall magnitude of 7.7 g rms in the first half hour and a total test duration of 1½ hours per axis in each of the three perpendicular axes, and which also meets the following requirements:
 - (i) a constant power spectral density value of 0.04 g²/Hz over a frequency interval of 15 to 1 000 Hz;
 - (ii) the power spectral density attenuates with frequency from 0.04 g²/Hz to 0.01 g²/Hz over a frequency interval from 1 000 to 2 000 Hz;

- (b) the test environment requires a roll and yaw rate equal to or greater than +2.62 radian (150°);
- (c) the test environment complies with a national standard equivalent to paragraph (a) or (b).

strand means a bundle of monofilaments arranged approximately parallel with each other.

Note A strand typically consists of over 200 monofilaments.

tape means a material formed by interlaced or unidirectional monofilaments, strands, rovings, tows or yarns.

Note Tape is usually impregnated with resin.

tow means a bundle of monofilaments.

Note The bundle of monofilaments forming a tow are usually approximately parallel with each other.

tunable, in relation to a laser, means capability of producing a continuous output at all wavelengths over a range of several laser transitions.

Note A line selectable laser produces discrete wavelengths within one laser transition and is therefore not tunable.

Wassenaar Arrangement means the multilateral arrangement for export controls on conventional arms and dual-use goods and technologies, first entered in 1996.

Note See <http://www.wassenaar.org/> for further information.

yarn means a bundle of twisted strands.

- (2) In item 11 of Division 2 of Schedule 1:

missile means a complete rocket system, or an unmanned aerial vehicle system, which is capable of delivering a payload of at least 500 kg to a range of at least 300 kilometres.

- (3) In item 8 of Division 3 of Schedule 1:

accuracy includes non-linearity, hysteresis and repeatability at ambient temperature.

- (4) In item 7 of Division 6 of Schedule 1:

missile means a complete rocket system, or an unmanned aerial vehicle system, which is capable of a range greater than 300 kilometres.

stability means the standard deviation (one sigma) of the variation of a particular parameter from its calibrated value measured under stable temperature conditions.

Note Stability can be expressed as a function of time.

4 Determination of export-controlled goods

For subregulation 5 (2) of the *Charter of the United Nations (Sanctions — Iran) Regulations 2008*, Schedule 1 lists goods determined to be export sanctioned goods.

Schedule 1 List of goods

(section 4)

Part 1 Goods

Division 1 Nuclear materials, facilities and equipment

Item	Description
1	The following hollow cathode lamps: <ul style="list-style-type: none">(a) iodine hollow cathode lamps with windows in pure silicon or quartz;(b) uranium hollow cathode lamps
2	Faraday isolators in the wavelength range 500 nm–650 nm
3	Optical gratings in the wavelength range 500 nm–650 nm
4	Optical fibres in the wavelength range 500 nm–650 nm coated with anti-reflecting layers in the wavelength range 500 nm–650 nm and having core diameter greater than 0.4 mm but not exceeding 2 mm
5	The following nuclear reactor vessel components and testing equipment that are not specified in the Defence and Strategic Goods List: <ul style="list-style-type: none">(a) seals;(b) internal components;(c) sealing, testing and measurement equipment
6	Nuclear detection systems for the detection, identification or quantification of radioactive materials and radiation of nuclear origin, that are not specified in the Defence and Strategic Goods List
	<i>Note</i> Item 6 does not include liquid scintillation counters specially designed for medical use.
7	Specially designed components for nuclear detection systems specified in item 6, that are not specified in the Defence and Strategic Goods List
8	Bellows-sealed valves made of aluminium alloy or stainless steel type 304 or 316 L, that are not specified in the Defence and Strategic Goods List
9	Plane, convex and concave mirrors coated with high-reflecting or controlled multi-layers in the wavelength range 500 nm–650 nm
10	Lenses, polarisers, half-wave retarder plates ($\lambda/2$ plates), quarter-wave retarder plates ($\lambda/4$ plates), laser windows in silicon or quartz, and rotators, coated with anti-reflecting layers in the wavelength range 500 nm–650 nm
11	Pipes, piping, flanges and fittings made of or lined with: <ul style="list-style-type: none">(a) nickel; or(b) nickel alloy with a nickel content of 40% or more by weight; that are not specified in the Defence and Strategic Goods List

Item	Description
12	The following vacuum pumps that are not specified in the Defence and Strategic Goods List: <ul style="list-style-type: none"> (a) turbomolecular pumps having a flow-rate equal to or greater than 400 l/s; (b) roots-type roughing pumps having a volumetric aspiration flow-rate greater than 200 m³/hr; (c) bellows-sealed, scroll, dry pumps; (d) bellows-sealed, scroll, dry compressor pumps
13	Shielded enclosures for the manipulation, storage and handling of radioactive substances (hot cells)
14	Any material containing or consisting of one or more of natural uranium, depleted uranium or thorium, including in the form of metal, alloy, chemical compound or concentrate

Division 2 Nuclear materials, chemicals, micro-organisms and toxins

Item	Description
1	Bis(2-ethylhexyl) phosphoric acid (HDEHP or D2HPA) (CAS 298-07-7) solvent in any quantity, with a purity greater than 90%
2	Fluorine gas (CAS 7782-41-4) with a purity greater than 95%
3	Seals and gaskets made of any of the following materials: <ul style="list-style-type: none"> (a) copolymers of vinylidene fluoride having 75% or more beta crystalline structure without stretching; (b) fluorinated polyimides containing 10% by weight or more of combined fluorine; (c) fluorinated phosphazene elastomers containing 30% by weight or more of combined fluorine; (d) polychlorotrifluoroethylene (PCTFE); (e) viton fluoro-elastomers; (f) polytetrafluoroethylene (PTFE)
4	Personal equipment for detecting radiation of nuclear origin, including personal dosimeters, that is not specified in the Defence and Strategic Goods List
5	Electrolytic cells: <ul style="list-style-type: none"> (a) for fluorine production; and (b) with an output capacity greater than 100 g of fluorine per hour; that are not specified in the Defence and Strategic Goods List
6	Catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water to: <ul style="list-style-type: none"> (a) recover tritium from heavy water; or (b) produce heavy water; that are not specified in the Defence and -Strategic Goods List
7	Aluminium and its alloys, in crude or semi-fabricated form, and either: <ul style="list-style-type: none"> (a) capable of an ultimate tensile strength of 460 MPa or more at 293 K (20 °C); or (b) having a tensile strength of 415 MPa or more at 298 K (25 °C); that are not specified in the Defence and Strategic Goods List

Item	Description
8	Magnetic metals, of all types and of whatever form, with: <ul style="list-style-type: none">(a) an initial relative permeability of 120 000 or more; and(b) a thickness between 0.05 mm and 0.10 mm
9	The following fibrous or filamentary materials or preregs that are not specified in the Defence and Strategic Goods List: <ul style="list-style-type: none">(a) carbon or aramid fibrous or filamentary materials having either:<ul style="list-style-type: none">(i) a specific modulus exceeding 10×10^6 m; or(ii) a specific tensile strength exceeding 17×10^4 m;(b) glass fibrous or filamentary materials having either:<ul style="list-style-type: none">(i) a specific modulus exceeding 3.18×10^6 m; or(ii) a specific tensile strength exceeding 76.2×10^3 m;(c) thermoset resin-impregnated continuous yarns, rovings, tows and tapes with a width of 15 mm or less (preregs), made from carbon or glass fibrous or filamentary materials
10	The following resin-impregnated or pitch-impregnated fibres (preregs), metal or carbon-coated fibres (preforms) and carbon fibre preforms: <ul style="list-style-type: none">(a) those made from fibrous or filamentary materials specified in item 9;(b) epoxy resin matrix impregnated carbon fibrous or filamentary materials (preregs) meeting the following criteria:<ul style="list-style-type: none">(i) usable for the repair of aircraft structures or laminates;(ii) in individual sheets of prepreg not exceeding 50 cm x 90 cm;(c) preregs impregnated with phenolic or epoxy resins having:<ul style="list-style-type: none">(i) a glass transition temperature (T_g) less than 433 K (160 °C); and(ii) a cure temperature lower than the glass transition temperature that are not specified in the Defence and Strategic Goods List
11	Reinforced silicon carbide ceramic composites usable for nose tips, re-entry vehicles or nozzle flaps usable in missiles, that are not specified in the Defence and Strategic Goods List
12	Maraging steels capable of an ultimate tensile strength of 2 050 MPa or more at 293 K (20 °C), whether before or after heat treatment, that are not specified in the Defence and Strategic Goods List
13	Tungsten, tungsten alloys, tantalum, tantalum alloys, tungsten carbide or tantalum carbide, with the following characteristics: <ul style="list-style-type: none">(a) in a form with:<ul style="list-style-type: none">(i) a hollow cylindrical or spherical symmetry (including cylinder segments); and(ii) an inside diameter between 50 mm and 300 mm;(b) a mass greater than 5 kg that are not specified in the Defence and Strategic Goods List

Division 3 Materials processing

Item	Description
1	<p>The following vibration test systems and equipment that are not specified in the Defence and Strategic Goods List:</p> <ul style="list-style-type: none"> (a) vibration test systems employing feedback or closed loop techniques and incorporating a digital controller, capable of vibrating a system at an acceleration equal to or greater than 10 g rms between 20 Hz and 2 kHz and imparting forces equal to or greater than 50 kN, measured bare table; (b) digital controllers, combined with specially designed vibration test software, with a real-time bandwidth greater than 5 kHz designed for use with vibration test systems specified in paragraph (a); (c) vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force equal to or greater than 50 kN, measured bare table, and usable in vibration test systems specified in paragraph (a); (d) test piece support structures and electronic units designed to combine multiple shaker units in a system capable of providing an effective combined force of 50 kN or greater, measured bare table, and usable in vibration systems specified paragraph (a). <p>and components, that are not specified in the Defence and Strategic Goods List, for those vibration test systems and equipment</p>
2	Machine tools for grinding that have positioning accuracies which, all compensations available, are equal to or less than 15 µm along any linear axis according to ISO 230/2 (1988), that are not specified in the Defence and Strategic Goods List
3	Components and numerical controls specially designed for machine tools specified in category 2.B of the Defence and Strategic Goods List or specified in item 2
4	<p>The following balancing machines and related equipment:</p> <ul style="list-style-type: none"> (a) balancing machines meeting all of the following criteria: <ul style="list-style-type: none"> (i) not designed or modified for dental or other medical equipment; (ii) not capable of balancing rotors or assemblies which have a mass greater than 3 kg; (iii) capable of balancing rotors or assemblies at speeds greater than 12 500 rpm; (iv) capable of correcting imbalance in two planes or more; (v) capable of balancing to a residual specific imbalance of 0.2 g mm/kg of rotor mass; (b) indicator heads designed or modified for use with machines specified in paragraph (a)
5	<p>Remote manipulators:</p> <ul style="list-style-type: none"> (a) usable for remote actions in radiochemical separation operations or hot cells; and (b) capable of: <ul style="list-style-type: none"> (i) penetrating 300 mm or more of hot cell wall (in through the wall operation); or (ii) bridging over the top of a hot cell wall with a thickness of 300 mm or more (in over the wall operation) <p>that are not specified in the Defence and Strategic Goods List</p>
6	Controlled-atmosphere heat treatment furnaces capable of operation at temperatures above 400 °C

Item	Description
7	Oxidation furnaces capable of operation at temperatures above 400 °C
8	Pressure transducers: <ul style="list-style-type: none">(a) with pressure-sensing elements made of, or protected by, materials resistant to corrosion by UF₆; and(b) capable of measuring absolute pressures of up to 200 kPa; and(c) having either:<ul style="list-style-type: none">(i) a full scale of less than 200 kPa and an accuracy of better than $\pm 1\%$ of full scale; or(ii) a full scale of 200 kPa or greater and an accuracy of better than 2 kPa; that are not specified in the Defence and Strategic Goods List
9	Liquid–liquid contacting equipment (including mixer–settlers, pulsed columns and centrifugal contactors), if all surfaces that may come into direct contact with liquids being processed consist of: <ul style="list-style-type: none">(a) alloys having, by weight:<ul style="list-style-type: none">(i) more than 25% nickel; and(ii) more than 20% chromium; or(b) fluoropolymers; or(c) glass (including vitrified or enamelled coatings or glass lining); or(d) graphite or carbon graphite; or(e) nickel or alloys with more than 40% nickel by weight; or(f) tantalum or tantalum alloys; or(g) titanium or titanium alloys; or(h) zirconium or zirconium alloys; or(i) stainless steel; or(j) a combination of the materials specified in paragraphs (a) to (i)
10	Liquid distributors, vapour distributors and liquid collectors designed for equipment specified in item 9, if all surfaces that may come into direct contact with liquids being processed consist of: <ul style="list-style-type: none">(a) alloys having, by weight:<ul style="list-style-type: none">(i) more than 25% nickel; and(ii) more than 20% chromium; or(b) fluoropolymers; or(c) glass (including vitrified or enamelled coatings or glass lining); or(d) graphite or carbon graphite; or(e) nickel or alloys with more than 40% nickel by weight; or(f) tantalum or tantalum alloys; or(g) titanium or titanium alloys; or(h) zirconium or zirconium alloys; or(i) stainless steel; or(j) a combination of the materials specified in paragraphs (a) to (i)

Item	Description
11	<p>Heat exchangers or condensers with a heat transfer surface area greater than 0.05 m² and less than 30 m², if all surfaces that may come into direct contact with fluids consist of:</p> <ul style="list-style-type: none">(a) alloys having, by weight:<ul style="list-style-type: none">(i) more than 25% nickel; and(ii) more than 20% chromium; or(b) fluoropolymers; or(c) glass (including vitrified or enamelled coatings or glass lining); or(d) graphite or carbon graphite; or(e) nickel or alloys with more than 40% nickel by weight; or(f) tantalum or tantalum alloys; or(g) titanium or titanium alloys; or(h) zirconium or zirconium alloys; or(i) silicon carbide; or(j) titanium carbide; or(k) stainless steel; or(l) a combination of the materials specified in paragraphs (a) to (k); <p>that are not specified in the Defence and Strategic Goods List</p>
12	<p>Tubes, plates, coils and blocks (cores) designed for heat exchangers or condensers specified in item 11, if all surfaces that may come into direct contact with fluids consist of:</p> <ul style="list-style-type: none">(a) alloys having, by weight:<ul style="list-style-type: none">(i) more than 25% nickel; and(ii) more than 20% chromium; or(b) fluoropolymers; or(c) glass (including vitrified or enamelled coatings or glass lining); or(d) graphite or carbon graphite; or(e) nickel or alloys with more than 40% nickel by weight; or(f) tantalum or tantalum alloys; or(g) titanium or titanium alloys; or(h) zirconium or zirconium alloys; or(i) silicon carbide; or(j) titanium carbide; or(k) stainless steel; or(l) a combination of the materials specified in paragraphs (a) to (k); <p>that are not specified in the Defence and Strategic Goods List</p>

Item	Description
13	<p>Multiple-seal and seal-less pumps:</p> <ul style="list-style-type: none">(a) suitable for corrosive fluids; and(b) with a maximum flow-rate greater than 0.6 m³/hr; and(c) in which all surfaces that may come into direct contact with fluids consist of:<ul style="list-style-type: none">(i) stainless steel; or(ii) aluminium alloy; or(iii) a combination of the materials specified in subparagraphs (i) and (ii); <p>that are not specified in the Defence and Strategic Goods List</p>
14	<p>Vacuum pumps:</p> <ul style="list-style-type: none">(a) suitable for corrosive fluids; and(b) with a maximum flow-rate greater than 5 m³/hr, measured under standard temperature and pressure conditions of 273 K (0 °C) and 101.3 kPa, respectively; and(c) in which all surfaces that may come into direct contact with fluids consist of:<ul style="list-style-type: none">(i) stainless steel; or(ii) aluminium alloy; or(iii) a combination of the materials specified in subparagraphs (i) and (ii); <p>that are not specified in the Defence and Strategic Goods List</p>
15	<p>Casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for pumps specified in items 13 and 14, if all surfaces that may come into direct contact with fluids consist of:</p> <ul style="list-style-type: none">(a) stainless steel; or(b) aluminium alloy; or(c) a combination of the materials specified in paragraphs (a) and (b); <p>that are not specified in the Defence and Strategic Goods List</p>
16	<p>Centrifugal separators capable of continuous separation without the propagation of aerosols and manufactured from:</p> <ul style="list-style-type: none">(a) alloys having, by weight:<ul style="list-style-type: none">(i) more than 25% nickel; and(ii) more than 20% chromium; or(b) fluoropolymers; or(c) glass (including vitrified or enamelled coatings or glass lining); or(d) nickel or alloys with more than 40% nickel by weight; or(e) tantalum or tantalum alloys; or(f) titanium or titanium alloys; or(g) zirconium or zirconium alloys; or(h) a combination of the materials specified in paragraphs (a) to (g); <p>that are not specified in the Defence and Strategic Goods List</p>
17	<p>Sintered metal filters made of:</p> <ul style="list-style-type: none">(a) nickel; or(b) nickel alloy with a nickel content of 40% or more by weight; <p>that are not specified in the Defence and Strategic Goods List</p>

Item	Description
18	Nickel and its alloys, in crude or semi-fabricated form, with either: <ul style="list-style-type: none"> (a) a nickel content of 25% or more by weight; or (b) a nickel and cobalt content of 30% or more by weight

Division 4 Electronics

Item	Description
1	High voltage direct current power supplies: <ul style="list-style-type: none"> (a) capable of continuously producing 10 kV or more over a period of 8 hours, with output power of 5 kW or more with or without sweeping; and (b) with current or voltage stability better than 0.1% over a period of 4 hours; that are not specified in the Defence and Strategic Goods List
2	The following mass spectrometers, when capable of measuring ions of 200 atomic mass units or more and having a resolution of better than 2 parts in 200: <ul style="list-style-type: none"> (a) inductively coupled plasma mass spectrometers (ICP/MS); (b) glow discharge mass spectrometers (GDMS); (c) thermal ionisation mass spectrometers (TIMS); (d) electron bombardment mass spectrometers with a source chamber constructed from, lined with or plated with, materials resistant to corrosion by UF₆; (e) molecular beam mass spectrometers with either: <ul style="list-style-type: none"> (i) a source chamber constructed from, lined with or plated with, stainless steel or molybdenum and equipped with a cold trap capable of cooling to 193 K (– 80 °C) or less; or (ii) a source chamber constructed from, lined with or plated with, materials resistant to corrosion by UF₆; (f) mass spectrometers equipped with a microfluorination ion source designed for actinides or actinide fluorides; that are not specified in the Defence and Strategic Goods List
3	Ion sources for mass spectrometers specified in item 2, that are not specified in the Defence and Strategic Goods List

Division 5 Sensors and lasers

Item	Description
1	Yttrium aluminium garnet (YAG) rods
2	Infrared optics in the wavelength range 9 µm–17 µm, and components for such optics, including cadmium telluride (CdTe) components, that are not specified in the Defence and Strategic Goods List
3	Wave front corrector systems for use with a laser beam of a diameter greater than 4 mm, and specially designed components for such systems, including control systems, phase front sensors and deformable mirrors, that are not specified in the Defence and Strategic Goods List
4	Argon ion lasers with an average output power equal to or greater than 5 W, that are not specified in the Defence and Strategic Goods List

Item	Description
5	The following semiconductor lasers, when outside the wavelength range 1 200 nm–2 000 nm, and components for those lasers: <ul style="list-style-type: none">(a) individual semiconductor lasers with an output power greater than 200 mW;(b) semiconductor laser arrays with an output power greater than 20 W;(c) components for lasers specified in paragraphs (a) and (b); that are not specified in the Defence and Strategic Goods List
6	Tunable semiconductor lasers and tunable semiconductor laser arrays, of a wavelength range 9 µm–17 µm, that are not specified in the Defence and Strategic Goods List
7	Array stacks of semiconductor lasers containing at least one tunable semiconductor laser array of a wavelength range 9 µm–17 µm, that are not specified in the Defence and Strategic Goods List
8	The following solid state tunable lasers: <ul style="list-style-type: none">(a) titanium-sapphire lasers;(b) alexandrite lasers; that are not specified in the Defence and Strategic Goods List
9	Components for solid state tunable lasers specified in item 8, that are not specified in the Defence and Strategic Goods List
10	Neodymium-doped (other than glass) lasers with: <ul style="list-style-type: none">(a) an output wavelength greater than 1 000 nm but no greater than 1 100 nm; and(b) an output energy greater than 10 J per pulse; that are not specified in the Defence and Strategic Goods List
11	The following components of acousto-optics: <ul style="list-style-type: none">(a) framing tubes and solid-state imaging devices with a recurrence frequency equal to or greater than 1 kHz;(b) recurrence frequency supplies;(c) pockels cells
12	Radiation-hardened cameras specially designed or rated as radiation-hardened to withstand a total radiation dose greater than 50 x 10 ³ Gy(silicon) (5 x 10 ⁶ rad (silicon)) without operational degradation, that are not specified in the Defence and Strategic Goods List
13	Lenses for radiation-hardened cameras specified in item 12, that are not specified in the Defence and Strategic Goods List
14	Tunable pulsed dye laser amplifiers and oscillators other than single mode oscillators, with all of the following characteristics: <ul style="list-style-type: none">(a) operating at wavelengths between 300 nm and 800 nm;(b) an average output power greater than 10 W but no greater than 30 W;(c) a repetition rate greater than 1 kHz;(d) pulse width of less than 100 ns; that are not specified in the Defence and Strategic Goods List

Item	Description
15	<p>Pulsed carbon dioxide lasers with all of the following characteristics:</p> <ul style="list-style-type: none"> (a) operating at wavelengths between 9 000 nm and 11 000 nm; (b) an average output power greater than 100 W but no greater than 500 W; (c) a repetition rate greater than 250 Hz; (d) pulse width of less than 200 ns; <p>that are not specified in the Defence and Strategic Goods List</p>

Division 6 Navigation and avionics

Item	Description
1	<p>The following inertial navigation systems when not certified for use on civil aircraft by a State participating in the Wassenaar Arrangement:</p> <ul style="list-style-type: none"> (a) inertial navigation systems (INS) (gimballed or strapdown) designed for the attitude, guidance or control of aircraft, surface or underwater vessels, land vehicles or spacecraft, having either of the following characteristics in a specified environment: <ul style="list-style-type: none"> (i) navigation error (free inertial), after normal alignment, of 0.8 nm/hr or less Circular Error Probable (CEP); (ii) specified to function at linear acceleration levels greater than 10 g; (b) inertial equipment designed for the attitude, guidance or control of aircraft, surface or underwater vessels, land vehicles or spacecraft, having either of the following characteristics in a specified environment: <ul style="list-style-type: none"> (i) navigation error (free inertial), after normal alignment, of 0.8 nm/hr or less Circular Error Probable (CEP); (ii) specified to function at linear acceleration levels greater than 10 g; (c) hybrid inertial navigation systems embedded with: <ul style="list-style-type: none"> (i) one or more global navigation satellite systems (GNSS); or (ii) one or more DBRN systems; <p>for the attitude, guidance or control of aircraft, surface or underwater vessels, land vehicles or spacecraft, and, after normal alignment, having an inertial navigation system (INS) navigation position accuracy of less than 10 metres Circular Error Probable (CEP) after loss of global navigation satellite systems (GNSS) or DBRN systems for a period of up to 4 minutes;</p> (d) inertial equipment for azimuth, heading, or north pointing and with either of the following characteristics: <ul style="list-style-type: none"> (i) designed to have an azimuth, heading, or north pointing accuracy equal to or less than 6 arc minutes rms at 45° latitude; (ii) designed to have a non-operating shock level of 900 g or more over a duration of 1 msec or longer
2	<p>Specially designed components for inertial navigation systems specified in paragraph (a) of item 1</p>
3	<p>Specially designed components for inertial equipment specified in paragraph (b) of item 1</p>

Item	Description
4	Specially designed components for inertial equipment specified in paragraph (d) of item 1
5	Theodolite systems incorporating inertial equipment designed to have an azimuth, heading, or north pointing accuracy equal to or less than 6 arc minutes rms at 45° latitude, that are not specially designed for civil surveying purposes
6	Specially designed components for theodolite systems specified in item 5
7	Inertial or other equipment using: <ul style="list-style-type: none">(a) linear accelerometers designed for use in inertial navigation systems or guidance systems and having either:<ul style="list-style-type: none">(i) a bias stability of less than 130 micro g in relation to a fixed calibration value over a period of one year; or(ii) a scale factor stability of less than 130 ppm in relation to a fixed calibration value over a period of one year; and(b) linear accelerometers specified to function at linear acceleration levels greater than 100 g; and(c) linear accelerometers (other than a linear accelerometer that is specially designed and developed as an MWD sensor for use in downhole well services operations), designed for use in inertial navigation systems or in guidance systems of all types, and usable in missiles, having both of the following characteristics:<ul style="list-style-type: none">(i) a bias repeatability of less than 1 250 micro g, with one sigma standard deviation in relation to a fixed calibration over a period of one year;(ii) a scale factor repeatability of less than 1 250 ppm, with one sigma standard deviation in relation to a fixed calibration over a period of one year; and(d) continuous output accelerometers
8	Specially designed components for accelerometers specified in paragraph (c) of item 7

Part 2 Technology

Item	Description
1	Technology required for the development, production or use of any item specified in Part 1

Part 3 Further dual-use goods of utility in a nuclear program

Item	Description
1	Radiometric ore sorters
2	Prompt gamma neutron activation analysers (PGNAA)
3	The following spectrometers: <ul style="list-style-type: none">(a) visible;(b) infrared (IR);(c) ultraviolet (UV);(d) atomic absorption (AA);(e) optical emission (OE);(f) Raman;(g) X-ray fluorescence (XRF)

Table of Instruments

Notes to the *Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Determination 2008*

Note 1

The *Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Determination 2008* (in force under subregulation 5 (2) of the *Charter of the United Nations (Sanctions — Iran) Regulations 2008*) as shown in this compilation is amended as indicated in the Tables below.

Table of Instruments

Title	Date of FRLI registration	Date of commencement	Application, saving or transitional provisions
<i>Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Determination 2008</i>	1 May 2008 (see F2008L01286)	2 May 2008	
<i>Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Amendment Determination 2009 (No. 1)</i>	18 Mar 2009 (see F2009L00923)	19 Mar 2009	—
<i>Charter of the United Nations (Sanctions — Iran) (Export Sanctioned Goods) List Amendment Determination 2011 (No. 1)</i>	23 Nov 2011 (see F2011L02403)	24 Nov 2011	—

Table of Amendments

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
Schedule 1	
Part 1	
Division 1	
Div. 1.....	am. 2011 No. 1
Division 2	
Div. 2.....	am. 2009 No. 1
Division 3	
Div. 3.....	am. 2009 No. 1
