### ANNEX I

#### Goods and technology referred to in Article 2

Note:

Where possible, the items in this Annex are defined by reference to the list of dual-use items set out in Annex I to Regulation (EC) No 1334/2000. If an item in this Annex is not identical to an item included in that Annex, the reference number taken from the list of dual-use items is preceded by 'ex' and the description of the goods or technology found in this Annex shall be decisive.

I.A. Goods

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I.B. Technology

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#### ANNEX II

### Goods and technology referred to in Article 3

Notes:

- 1. Unless otherwise stated, reference numbers used in the column below entitled 'Description' refer to the descriptions of dual-use items and technology set out in Annex I to Regulation (EC) No 1334/2000.
- 2. A reference number in the column below entitled 'Related item from Annex I to Regulation (EC) No 394/2006' means that the characteristics of the item described in the column 'Description' lie outside the parameters set out in the description of the dual-use entry referred to.
- 3. Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
- 4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 394/2006.
- II.A. GOODS

A0

# No Description Related item from Annex I to Regulation (EC) No 394/2006 II.A0.001 Hollow cathode lamps as follows: a. — a. Iodine hollow cathode lamps with windows in pure silicon or quartz —

## NUCLEAR MATERIALS, FACILITIES, AND EQUIPMENT

	b. Uranium hollow cathode lamps	
II.A0.002	Faraday isolators in the wavelength range 500–650 nm	
II.A0.003	Optical gratings in the wavelength range 500–650 nm	
II.A0.004	Optical fibres in the wavelength range 500– 650 nm coated with anti- reflecting layers in the wavelength range 500–650 nm and having core diameter greater than 0,4 mm but not exceeding 2 mm	
II.A0.005	Nuclear reactor vessel components and testing equipment, other than those specified in 0A001, as follows: 1. Seals 2. Internal components 3. Sealing, testing and measurement equipment	0A001
II.A0.006	Nuclear detection systems for detection, identification or quantification of radioactive materials and radiation of nuclear origin and specially designed components therefor, other than those specified in 0A001.j or 1A004c	0A001.j 1A004.c
II.A0.007	Bellows-sealed valves made of aluminium alloy or stainless steel type 304 or 316 L. Note: This item does not control bellow valves defined in 0B001.c.6 and 2A226	0B001.c.6 2A226
II.A0.008	Plane, convex and concave mirrors, coated with high- reflecting or controlled multi- layers in the wavelength range 500 nm-650 nm	0B001.g.5

II.A0.009	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 500–650 nm	0B001.g
II.A0.010	Pipes, piping, flanges, fittings made of, or lined with nickel or nickel alloy containing more than 40 % nickel by weight, other than those specified in 2B350.h.1.	2B350
II.A0.011	Vacuum pumps other than those specified in 0B002.f.2. or 2B231, as follows: — Turbomolecular pumps having a flowrate equal to or greater than 400 l/s — Roots-type vacuum roughing pumps having a volumetric aspiration flowrate greater than 200 m <sup>3</sup> / h Bellows-sealed, scroll, dry compressor, and bellows sealed, scroll, dry vacuum pumps	0B002.f.2 2B231
II.A0.012	Shielded enclosures for the manipulation, storage and handling of radioactive substances (hot cells).	0B006
II.A0.013	"Natural uranium" or "depleted uranium" or thorium in the form of metal, alloy, chemical compound or concentrate and any other material containing one or more of the foregoing, other than those specified in 0C001.	0C001

## A1

# MATERIALS, CHEMICALS, 'MICRO-ORGANISMS' AND 'TOXINS'

No	Description	Related item from Annex I to Regulation (EC) No 394/2006
II.A1.001	Bis(2-ethylhexyl) phosphoric acid (HDEHP or D2HPA) CAS 298-07-7 solvent in any quantity, with a purity greater than 90 %	
II.A1.002	Fluorine gas (Chemical Abstract Number (CAS) 7782-41-4), with a purity greater than 95 %	
П.А1.003	Seals and gaskets made of any of the following materialsa.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.Polychlorotrifluoroet (PCTFE, e.g. Kel-F ®);e.Viton fluoro- elastomers;f.Polytetrafluoroethyle (PTFE).	hylene
II.A1.004	Personal equipment for detecting radiation of nuclear origin, including personal dosimeters Note: This item does not control nuclear detection systems defined in item 1A004.c	1A004.c

II.A1.005	Electrolytic cells for fluorine production with an output capacity greater than 100 g of fluorine per hour. Note: This item does not control electrolytic cells defined in item 1B225	1B225
II.A1.006	Platinised catalysts, other than those specified in 1A225, specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water and substitutes therefor.	1B231, 1A225
П.А1.007	Aluminium and its alloys, other than those specified in 1C002.b.4 or 1C202.a, in crude or semi-fabricated form having either of the following characteristics: 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).	1C002.b.4 1C202.a
II.A1.008	Magnetic metals, of all types and of whatever form, having an initial relative permeability of 120 000 or more and a thickness between 0,05 and 0,1 mm	1C003.a
II.A1.009	"Fibrous or filamentary materials" or prepregs, as follows: a. Carbon or aramid "fibrous or filamentary materials" having either of the following characteristics: 1. A "specific	1C010.a, 1C010.b, 1C210.a, 1C210.b

	$\begin{array}{c} \mbox{modulus"}\\ \mbox{exceeding}\\ 10 \times 10^6\\ \mbox{m; or}\\ 2. & A\\ \mbox{"specific}\\ \mbox{tensile}\\ \mbox{strength"}\\ \mbox{exceeding}\\ 17 \times 10^4\\ \mbox{m;}\\ \mbox{b.} & Glass "fibrous\\ \mbox{or filamentary}\\ \mbox{materials"}\\ \mbox{having either of}\\ \mbox{the following}\\ \mbox{characteristics:}\\ 1. & A\\ \mbox{"specific}\\ \mbox{modulus"}\\ \mbox{exceeding}\\ \mbox{3.18} \times 10^6\\ \mbox{m; or}\\ \mbox{2.} & A\\ \mbox{"specific}\\ \mbox{tensile}\\ \mbox{strength"}\\ \mbox{exceeding}\\ \mbox{3.18} \times 10^6\\ \mbox{m; or}\\ \mbox{2.} & A\\ \mbox{"specific}\\ \mbox{tensile}\\ \mbox{strength"}\\ \mbox{exceeding}\\ \mbox{3.18} \times 10^6\\ \mbox{m; or}\\ 3.18$	
	m; c. Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" with a width of 15 mm or less (prepregs), made from carbon or glass "fibrous or filamentary materials" other than those specified in II.A1.010.a. or b. Note: This item does not control fibrous or filamentary materials defined in items 1C010.a, 1C010.b, 1C210.a and 1C210.b	
II.A1.010	Resin-impregnated or pitch-impregnated fibres (prepregs), metal or carbon-	1C010.e, 1C210

	coated fibres (preforms) or "carbon fibre preforms", as follows: a. made from "fibrous or filamentary materials" specified in II.A1.009 above; b. Epoxy resin "matrix" impregnated carbon "fibrous or filamentary materials" (prepregs) specified in 1C010.a., 1C010.b. or 1C010.c., for the repair of aircraft structures or laminates, in which the size of individual sheets of prepreg does not exceed 50 cm × 90 cm; c. Prepregs specified in 1C010.a., 1C010.b. or 1C010.c., when impregnated with phenolic or epoxy resins having a glass transition temperature (Tg) less than 433 K (160 °C) and a cure temperature lower than the glass transition temperature. Note: This item does not control fibrous or filamentary materials defined in item 1C010.e	
II.A1.011	Reinforced silicon carbide ceramic composites usable for nose tips, re-entry vehicles, nozzle flaps, usable in "missiles", other than specified in 1C107.	1C107
II.A1.012	Maraging steels, other than those specified in 1C116 or 1C216, 'capable of' an	1C216

ui 05 (2 Te Ti 'ca m he	50 MPa or more, at 293 K 20 °C). echnical Note: he phrase maraging steel apable of encompasses maraging steel before or after eat treatment.	
II.A1.013 Tread all for a. b. N cco ca	ungsten, tantalum, tungsten arbide, tantalum carbide and lloys, having both of the ollowing characteristics: In forms having a hollow cylindrical or spherical symmetry (including cylinder segments) with an inside diameter between 50 mm and 300 mm; and A mass greater than 5 kg. lote: This item does not ontrol tungsten, tungsten arbide and alloys defined in	1C226

# A2

# MATERIALS PROCESSING

No	Description	Related item from Annex I to Regulation (EC) No 394/2006
II.A2.001	Vibration test systems, equipment and components therefor, other than those specified in 2B116: 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 0,1g rms between 0,1 Hz and 2 kHz and imparting	2B116

	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 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	
	d. Test piece support structures and electronic units designed to combine multiple shaker units in a system capable of providing an effective combined force equal to or greater than 50 kN, measured 'bare table', and usable in vibration systems specified in a. Technical note: 'bare table' means a flat table, or surface, with no fixture or fittings.	
II.A2.002	Machine tools for grinding having positioning accuracies with 'all compensations available' equal to or less	2B201.b, 2B001.c

	(better) than to ISO 230/2 national equi any linear ax Note: This it control mach grinding defi 2B201.b and	15 μm according 2 (1988) (1) or ivalents along its. em does not nine tools for ined in items 2 2B001.c	
II.A2.002a	Components controls, spe for machine in 2B001, 2E II.A2.002 ab	and numerical cially designed tools specified 3201, or in ove.	
П.А2.003	Balancing m related equip a. Bal or 1 for oth equ all cha 1. 2. 3. 4.	achines and ment as follows: lancing chines, designed modified dental or er medical upment, having the following the following tracteristics: Not capable of balancing rotors/ assemblies having a mass greater than 3 kg; Capable of balancing rotors/ assemblies at speeds greater than 12 500 rpm; Capable of correcting unbalance in two planes or more; and Capable of balancing to a residual specific unbalance	2B119

	of 0,2 g mm per kg of rotor mass; b. Indicator heads designed or modified for use with machines specified in a. above. Technical note: Indicator heads are sometimes known as balancing instrumentation.	
П.А2.004	Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating 0,3 m or more of hot cell wall (through the wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). Technical note: Remote manipulators provide translation of human operator actions to a remote operating arm and terminal fixture. They may be of 'master/slave' type or operated by joystick or keypad.	2B225
II.A2.005	Controlled atmosphere heat treatment furnaces, as follows: Furnaces capable of operation at temperatures above 400 °C.	2B226, 2B227
II.A2.006	Oxidation furnaces capable of operation at temperatures above 400 °C	2B226, 2B227

II.A2.007	'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by "Materials resistant to corrosion by UF <sub>6</sub> ", and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than $\pm$ 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than $\pm$ 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. Technical note: For the purposes of 2B30, 'accuracy' includes non- linearity, hysteresis and repeatability at ambient temperature.	2B230
II.A2.008	Liquid-liquid contacting equipment (mixer-settlers, pulsed columns, centrifugal contactors); and liquid distributor, vapour distributor or liquid collectors designed for such equipment, where all surfaces that come in direct contact with the chemical(s) being processed are made	2B350.e

	from any of the following materials:	
	1. Alloys with more than 25 % nickel and 20 % chromium by weight:	
	<ol> <li>Fluoropolymers;</li> <li>Glass (including vitrified or enamelled coating on glass lining);</li> </ol>	
	4. Graphite or 'carbon graphite':	
	<ul> <li>5. Nickel or alloys with more than 40 % nickel by weight:</li> </ul>	
	6. Tantalum or tantalum alloys;	
	<ol> <li>7. Titanium or titanium alloys;</li> <li>8. Zirconium or</li> </ol>	
	<ul> <li>a. Zheomum of zirconium alloys; or</li> <li>9. Stainless steel.</li> <li>Technical note:</li> <li>'Carbon graphite' is a composition consisting of amorphous carbon and graphite, in which the graphite content is 8 % or more by weight.</li> </ul>	
II.A2.009	Industrial equipment and components, other than those specified in 2B350.d, as follows: Heat exchangers or condensers with a heat transfer surface area greater than $0,05 \text{ m}^2$ , and less than $30 \text{ m}^2$ ; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the fluid(s) are made from any of the following materials: 1. Alloys with more	2B350.d
	than 25 % nickel and 20 % chromium by weight;	

	<ol> <li>Glass (including vitrified or enamelled coatings or glass lining);</li> <li>Graphite or 'carbon graphite';</li> <li>Nickel or alloys with more than 40 % nickel by weight;</li> <li>Tantalum or tantalum alloys;</li> <li>Titanium or titanium alloys;</li> <li>Zirconium or zirconium alloys;</li> <li>Silicon carbide;</li> <li>Titanium carbide; or 11. Stainless steel.</li> <li>Note: This item does not control vehicle radiators.</li> </ol>	
П.А2.010	Multiple-seal, and seal-less pumps, other than those specified in 2B350i, suitable for corrosive fluids, with manufacturer's specified maximum flow-rate greater than 0,6 m <sup>3</sup> /hour, or vacuum pumps with manufacturer's specified maximum flow- rate greater than 5 m <sup>3</sup> /hour (measured under standard temperature (273 K (0 °C)) and pressure (101,3 kPa) conditions); and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials: 1. Stainless steel, 2. Aluminium alloy.	2B350.i
II.A2.011	Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from:	2B352.c

	1. 2. 3.	Alloys with more than 25 % nickel and 20 % chromium by weight; Fluoropolymers; Glass (including vitrified or enamelled coating	
	4.	or glass lining); Nickel or alloys with more than 40	
	5.	Tantalum or tantalum allovs	
	6.	Titanium or titanium alloys; or	
	7.	Zirconium or zirconium alloys.	
	Note: The control of defined	nis item does not centrifugal separators in item 2B352.c.	
II.A2.012	Sintered of nickel a nickel more by Note: Th control f 2B352.d	metal filters made l or nickel alloy with content of 40 % or weight. his item does not filters defined in item l.	2B352.d

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А	3

## ELECTRONICS

No	Descri	ption	Related item from Annex I to Regulation (EC) No 394/2006
II.A3.001	High vo power s both of characte a. b.	bltage direct current supplies having the following eristics: Capable of continuously producing, over a time period of eight hours, 10 kV or greater, with output power of 5 kW or greater with or without sweeping; and Current or voltage stability better	3A227

	than 0,1 % over a time period of four hours. Note: This item does not control power supplies defined in items 0B001.j.5 and 3A227.	
П.АЗ.002	Mass spectrometers, other than those specified in 3A233 or 0B002g, capable of measuring ions of 200 atomic mass units or greater and having a resolution of better than 2 parts in 200, as follows, and ion sources therefor: 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 which have a source chamber constructed from, lined with or plated with "Materials resistant to corrosion by UF <sub>6</sub> "; e. Molecular beam mass spectrometers having either of the following characteristics: 1. A source chamber constructed from, lined with or plated with	3A233
	with stainless steel or molybdenu	n

		and	
		equipped	
		with a	
		cold trap	
		capable	
		of cooling	
		to 193 K	
		(-80 °C)	
		or less; or	
	2.	A source	
		chamber	
		constructed	
		from,	
		lined with	
		or plated	
		with	
		"Materials	
		resistant to	
		corrosion	
		by $UF_6$ ";	
f.	Mass spe	ectrometers	
	equipped	with a	
	microflu	orination	
	ion sourc	e designed	
	for actini	des or	
	actinide f	fluorides.	

### A6

## SENSORS AND LASERS

No	Description	Related item from Annex I to Regulation (EC) No 394/2006
II.A6.001	Yttrium aluminium garnet (YAG) rods	
II.A6.002	Infrared optics in the wavelength range 9–17 µm and components therefor, including cadmium telluride (CdTe) components. Note: This item does not control cameras and components defined in item 6A003	6A003
II.A6.003	Wave front corrector systems for use with a laser beam having a diameter exceeding 4 mm, and specially designed components therefor, including control systems,	6A004.a, 6A005.e, 6A005.f

	phase front sensors and "deformable mirrors" including bimorph mirrors. Note: This item does not control mirrors defined in 6A004.a, 6A005.e and 6A005.f	
II.A6.004	Argon ion "lasers" having an average output power equal to or greater than 5 W Note: This item does not control argon ion "lasers" defined in items 0B001.g.5., 6A005 and 6A205.a	6A005.a.6, 6A205.a
П.Аб.005	<ul> <li>Semiconductor "lasers" and components therefor, as follows: <ul> <li>a.</li> <li>Individual semiconductor "lasers" with an output power greater than 200 mW each, in quantities larger than 100;</li> <li>b.</li> <li>Semiconductor "laser" arrays having an output power greater than 20 W.</li> </ul> </li> <li>Notes: <ul> <li>Semiconductor "lasers" are commonly called "laser" diodes.</li> </ul> </li> <li>2. This item does not control "lasers" defined in items 0B001.g.5, 0B001.h.6 and 6A005b.</li> <li>3. This item does not control "laser" diodes with a wavelength in the range 1 200–2 000 nm</li> </ul>	6A005.b
II.A6.006	Tunable semiconductor "lasers" and tunable	6A005.b

	semiconductor "laser" arrays, of a wavelength between 9 µm and 17 µm, as well as array stacks of semiconductor "lasers" containing at least one tunable semiconductor "laser array" of such wavelength. Notes:	
	1. Semiconductor "lasers" are commonly called "laser" diodes.	
	2. This item does not control semiconductor "lasers" defined in items 0B001.h.6 and 6A005.b.	
II.A6.007	Solid state "tunable""lasers" as follows, and specially designed components therefor: a. Titanium-sapphire lasers; b. Alexandrite lasers. Note: This item does not control titanium-sapphire and alexandrite lasers defined in items 0B001.g.5, 0B001.h.6 and 6A005.c.1	6A005.c.1
II.A6.008	Neodymium-doped (other than glass) "lasers", having an output wavelength exceeding 1 000 nm but not exceeding 1 100 nm and output energy exceeding 10 J per pulse. Note: This item does not control neodymium-doped (other than glass) "lasers" defined in item 6A005.c.2.b	6A005.c.2
II.A6.009	Components of acousto- optics, as follows: a. Framing tubes and solid-state imaging devices having a recurrence frequency equal to or exceeding 1kHz;	6A203.b.4.c

	<ul><li>b. Recurrence frequency supplies;</li><li>c. Pockels cells.</li></ul>	
П.Аб.010	Radiation-hardened cameras, or lenses therefor, other than those specified in 6A203c, specially designed or rated as radiation hardened to withstand a total radiation dose greater than $50 \times 10^3$ Gy(silicon) (5 × 10 <sup>6</sup> rad (silicon)) without operational degradation. Technical note: The term Gy(silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionising radiation.	6A203.c
II.A6.011	Tunable pulsed dye laser amplifiers and oscillators, having all of the following characteristics:1.Operating at wavelengths between 300 nm and 800 nm;2.An average output power greater than 10 W but not exceeding 30 W;3.A repetition rate greater than 1 kHz; and4.Pulse width less than 100 ns.Notes:Votes:	6A205.c
	1. This item does not control single mode oscillators.	
	2. This item does not control tunable pulsed dye laser amplifiers and oscillators defined in item 6A205.c, 0B001.g.5 and 6A005	

II.A6.012	Pulsed carbon dioxide	6A205.d
	"lasers" having all of the	
	following characteristics:	
	1. Operating at	
	wavelengths	
	between 9 000 nm	
	and 11 000 nm:	
	2. A repetition rate	
	greater than 250	
	Hz:	
	3. An average output	
	power greater than	
	100 W but not	
	exceeding 500 W;	
	and	
	4. Pulse width of less	
	than 200 ns.	
	Note: This item does not	
	control pulsed carbon	
	dioxide laser amplifiers and	
	oscillators defined in item	
	6A205.d, 0B001.h.6 and	
	6A005d.	

A7

## NAVIGATION AND AVIONICS

No	Description	Related item from Annex I to Regulation (EC) No 394/2006
П.А7.001	Inertial systems and specially designed components, as follows: I. Inertial navigation systems which are certified for use on "civil aircraft" by civil authorities of a State participating in the Wassenaar Arrangement, and specially designed components, as follows: a. Inertial navigation systems (INS) (gimballed or strapdown)	7A003, 7A103

and inertial equipment designed for "aircraft", land vehicle, vessels (surface or underwater) or "spacecraft" for attitude, guidance or control, having any of the following characteristics, and specially designed components therefor: 1. Navigation error (free inertial) subsequent to normal alignment of 0,8 nautical mile per hour (nm/ hr) 'Circular Error Probable' (CEP) or less (better); or 2. Specified to function at

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	systems	
	embedded	
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	Global	
	Navigation	
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	Systems(s)	
	(GNSS)	
	or with	
	"Data-	
	Based	
	Referenced	
	Navigation'	" ("DBRN")
	System(s)	
	for	
	attitude.	
	guidance	
	or control.	
	subsequent	
	to normal	
	alignment	
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	accuracy,	
	loss of	
	GNSS or	
	DDKIN for a	
	101 a	
	period of	
	up to four	
	minutes,	
	or less	
	(better)	
	than 10	
	metres	
	'Cırcular	
	Error	
	Probable' (	CEP);
C.	Inertial	
	Equipment	
	for	

Azimuth, Heading, or North Pointing having any of the following characteristics, and specially designed components therefor: Designed 1. to have an Azimuth, Heading, or North Pointing accuracy equal to or less (better) than 6 arc minutes RMS at 45 degrees latitude; or 2. Designed to have а nonoperating shock level of 900 g or greater at a

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Note: Th	e	gı	eater.
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La. and I	b. are		
applicabl	e with an	y	
of the fol	lowing	-	
environm	iental		
condition	IS:		
1.	Input		
	random		
	with an		
	overall		
	magnitud	łe	
	of 7,7 g		
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2.	A roll and yaw rate of equal to c more than +2,62 radian/s	H: or n	z;
3. Technica	(150 deg/ s); or Accordin to nationa standards equivalen to 1. or 2. above.	g al nt	
1	Th refer		
1.	to system in which an INS and other	is	

II.

independent navigation aids are built into a single unit (embedded) in order to achieve improved performance. 2. 'Circular Error Probable' (CEP) — In a circular normal distribution the radius of the circle containing 50 % of the individual measurements being made, or the radius of the circle within which there is a 50 % probability of being located. Theodolite systems incorporating inertial equipment specially designed for civil surveying purposes and designed to have an Azimuth, Heading, or North Pointing accuracy equal to, or less (better) than 6 arc minutes RMS at 45 degrees latitude, and specially designed

	components	
	therefor.	
III.	Inertial or other	
	equipment using	
	accelerometers	
	specified in 7A001	
	or 7A101 where	
	such accelerometers	
	such acceleronieters	
	are specially	
	designed and	
	developed as MWD	
	(Measurement	
	While Drilling)	
	sensors for use	
	in downhole well	
	services operations.	

## II.B. TECHNOLOGY

No	Description	Related item from Annex I to Regulation (EC) No 394/2006
II.B.001	Technology required for the development, production or use of the items in Part A (Goods) above.	

### ANNEX III

Websites for information on the competent authorities referred to in Articles 3(4), 3(5), 5(3), 6, 8, 9, 10(1), 10(2), 13(1) and 17 and address for notifications to the European Commission BELGIUM

http://www.diplomatie.be/eusanctions BULGARIA

http://www.mfa.government.bg CZECH REPUBLIC

http://www.mfcr.cz/mezinarodnisankce DENMARK

http://www.um.dk/da/menu/Udenrigspolitik/FredSikkerhedOgInternationalRetsorden/ Sanktioner/ GERMANY

http://www.bmwi.de/BMWi/Navigation/Aussenwirtschaft/Aussenwirtschaftsrecht/ embargos.html ESTONIA

http://web-visual.vm.ee/est/kat 622/

### GREECE

http://www.ypex.gov.gr/www.mfa.gr/en-US/Policy/Multilateral+Diplomacy/International +Sanctions/

SPAIN

www.mae.es/es/MenuPpal/Asuntos/Sanciones+Internacionales FRANCE

http://www.diplomatie.gouv.fr/autorites-sanctions/ IRELAND

http://www.dfa.ie/un\_eu\_restrictive\_measures\_ireland/competent\_authorities ITALY

http://www.esteri.it/UE/deroghe.html CYPRUS

http://www.mfa.gov.cy/sanctions LATVIA

http://www.mfa.gov.lv/en/security/4539 LITHUANIA

http://www.urm.lt LUXEMBOURG

http://www.mae.lu/sanctions HUNGARY

http://www.kulugyminiszterium.hu/kum/hu/bal/nemzetkozi\_szankciok.htm MALTA

 $http://www.doi.gov.mt/EN/bodies/boards/sanctions\_monitoring.asp NETHERLANDS$ 

http://www.minbuza.nl/sancties AUSTRIA

http://www.bmeia.gv.at/view.php3?f\_id=12750&LNG=en&version=POLAND

http://www.msz.gov.pl PORTUGAL

http://www.min-nestrangeiros.pt ROMANIA

http://www.mae.ro/index.php?unde=doc&id=32311&idlnk=1&cat=3 SLOVENIA

http://www.mzz.gov.si/si/zunanja\_politika/mednarodna\_varnost/omejevalni\_ukrepi/SLOVAKIA

http://www.foreign.gov.sk FINLAND

http://formin.finland.fi/kvyhteistyo/pakotteet SWEDEN

UNITED KINGDOM http://www.fco.gov.uk/competentauthorities Address for notifications to the European Commission: European Commission DG External Relations Directorate A. Crisis Platform and Policy Coordination in CFSP Unit A.2. Crisis Management and Conflict Prevention CHAR 12/106 B-1049 Bruxelles/Brussel (Belgium) E-mail: relex-sanctions@ec.europa.eu Tel.: (32 2) 295 55 85, 299 11 76 Fax: (32 2) 299 08 73

## ANNEX IV

List of persons, entities and bodies referred to in Article 7(1)

- A. Legal persons, entities and bodies
  - (1) Atomic Energy Organisation of Iran (AEOI). Other information: Involved in Iran's nuclear programme.
  - (2) Defence Industries Organisation (DIO). Other information: (a) Overarching MODAFL-controlled entity, some of whose subordinates have been involved in the centrifuge programme making components, and in the missile programme, (b) Involved in Iran's nuclear programme.
  - (3) Fajr Industrial Group. Other information: (a) Formerly Instrumentation Factory Plant, (b) Subordinate entity of AIO, (c) Involved in Iran's ballistic missile programme.
  - (4) Farayand Technique. Other information: (a) Involved in Iran's nuclear programme (centrifuge programme), (b) Identified in IAEA reports.
  - (5) Kala-Electric (alias Kalaye Electric). Other information: (a) Provider for PFEP Natanz, (b) Involved in Iran's nuclear programme.
  - (6) Mesbah Energy Company. Other information: (a) Provider for A40 research reactor Arak, (b) Involved in Iran's nuclear programme.
  - (7) Pars Trash Company. Other information: (a) Involved in Iran's nuclear programme (centrifuge programme), (b) Identified in IAEA reports.

- (8) 7th of Tir. Other information: (a) Subordinate of DIO, widely recognized as being directly involved in Iran's nuclear programme, (b) Involved in Iran's nuclear programme.
- (9) Shahid Bagheri Industrial Group (SBIG). Other information: (a) Subordinate entity of AIO, (b) Involved in Iran's ballistic missile programme.
- (10) Shahid Hemmat Industrial Group (SHIG). Other information: (a) subordinate entity of AIO, (b) Involved in Iran's ballistic missile programme.

### B. Natural persons

- (1) Dawood Agha-Jani. Function: Head of the PFEP (Natanz). Other information: Person involved in Iran's nuclear programme.
- (2) Behman Asgarpour. Function: Operational Manager (Arak). Other information: Person involved in Iran's nuclear programme.
- (3) Bahmanyar Morteza Bahmanyar. Function: Head of Finance & Budget Dept, AIO. Other information: Person involved in Iran's ballistic missile programme.
- (4) Ahmad Vahid Dastjerdi. Function: Head of the AIO. Other information: Person involved in Iran's ballistic missile programme.
- (5) Reza-Gholi Esmaeli. Function: Head of Trade & International Affairs Dept, AIO. Other information: Person involved in Iran's ballistic missile programme.
- (6) Ali Hajinia Leilabadi. Function: Director General of Mesbah Energy Company. Other information: Person involved in Iran's nuclear programme.
- (7) Jafar Mohammadi. Function: Technical Adviser to the AEOI (in charge of managing the production of valves for centrifuges). Other information: Person involved in Iran's nuclear programme.
- (8) Ehsan Monajemi. Function: Construction Project Manager, Natanz. Other information: Person involved in Iran's nuclear programme.
- (9) Mohammad Mehdi Nejad Nouri. Title: Lt Gen. Function: Rector of Malek Ashtar University of Defence Technology. Other information: The chemistry department of Ashtar University of Defence Technology is affiliated to MODALF and has conducted experiments on beryllium). Person involved in Iran's nuclear programme.
- (10) Mohammad Qannadi. Function: AEOI Vice President for Research & Development. Other information: Person involved in Iran's nuclear programme.
- (11) Yahya Rahim Safavi. Title: Maj Gen. Function: Commander, IRGC (Pasdaran). Other information: Person involved in both Iran's nuclear and ballistic missile programmes.
- (12) Hosein Salimi. Title: General. Function: Commander of the Air Force, IRGC (Pasdaran). Other information: Person involved in Iran's ballistic missile programme.

ANNEX V

List of persons, entities and bodies referred to in Article 7(2)