Singapore Customs

Amendments to Strategic Goods (Control) Order (SGCO)

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Introduction

As part of Singapore's international obligation to prevent the proliferation of weapons of mass destruction, Singapore Customs regularly updates our Strategic Goods Control List ("Control List") prescribed in the Schedule to the Strategic Goods (Control) Order (SGCO). With effect from 1 December 2025, the SGCO 2025 will replace the SGCO 2024.

The SGCO 2025 updates our Control List to align with the 2024 Wassenaar Arrangement Munition List ("WAML") and the 2024 European Union List of Dual-Use Items ("EUDL").

This document outlines the amendments to the SGCO 2024, presenting a side-by-side comparison of the 2024 and 2025 versions in a table format.

List of Military Goods

Definitions

Category Code	SGCO 2024	SGCO 2025
"additives" (ML8)	"additives" (ML8) means substances used in explosive formulations to improve their properties;	-
"automated command and control systems" (ML11)	"automated command and control systems" (ML11) means electronic systems, through which information essential to the effective operation of the grouping, major formation, tactical formation, unit, ship, subunit or weapons under command is entered, processed and transmitted. This is achieved by the use of computer and other specialised hardware designed to support the functions of a military command and control organisation. The main functions of an automated command and control system are the efficient automated collection, accumulation, storage and processing of information; the display of the situation and the circumstances affecting the preparation and conduct of combat operations; operational and tactical calculations for the allocation of resources among force groupings or elements of the operational order of battle or battle deployment according to the mission or stage of the operation; the preparation of data for appreciation of the situation and decision-making at any point during operation or battle; and computer simulation of operations;	-
"biopolymers" (ML7)	"biopolymers" (ML7) means any of the following biological macromolecules: a. Enzymes for specific chemical or biochemical reactions; b. 'Anti idiotypic antibodies', 'monoclonal antibodies' or 'polyclonal antibodies'; or c. Specially designed or specially processed 'receptors'; *Technical Notes* *1. 'Anti idiotypic antibodies' means antibodies which bind to the specific antigen binding sites of other antibodies.* *2. 'Monoclonal antibodies' means proteins which bind to*	-

Category Code	SGCO 2024	SGCO 2025
	one antigenic site and are produced by a single clone of cells. 3. *'Polyclonal antibodies' means a mixture of proteins which bind to the specific antigen and are produced by more than one clone of cells.* 4. *'Receptors' means biological macromolecular structures capable of binding ligands, the binding of which affects physiological functions.*	
"expression vectors" (ML7)	"expression vectors" (ML7) means carriers (e.g. plasmid and virus) used to introduce genetic material into host cells;	-
"spacecraft" (ML11)	"spacecraft" (ML11) means active and passive satellites and space probes;	"spacecraft" (ML11) means a craft designed to operate in, persist in or transit through space in the form of a satellite, space probe or space vehicle; *Note* *"Spacecraft" does not include landers, rovers, or other craft, limited by design to operate on or beneath the surface of, or in the atmosphere of an extra-terrestrial celestial body, or "sub-orbital craft".*
"sub-orbital craft" (ML10)	-	"sub-orbital craft" (ML10) means a craft having an enclosure designed for the transport of people or cargo, which is designed to: a. Operate above the stratosphere; b. Only perform nonorbital trajectories; and c. Land back on Earth with the people or cargo intact;

ML7

ML7.h. *Technical Notes*	Chemical agents, "biological agents", "riot control agents", radioactive materials, related equipment, components and materials, as follows: --- h. "Biopolymers" specially designed or processed for the detection or identification of CW agents specified in Category Code ML7.b., and the cultures of specific cells used to produce them;	Chemical agents, "biological agents", "riot control agents", radioactive materials, related equipment, components and materials, as follows: --- h. 'Biopolymers' specially designed or processed for the detection or identification of CW agents specified in Category Code ML7.b., and the cultures of specific cells used to produce them;

		Technical Notes *For the purpose of Category Code ML7.h.:* *1. 'Biopolymers' are biological macromolecules as follows:* *a. Enzymes for specific chemical or biochemical reactions;* *b. 'Anti-idiotypic', 'monoclonal' or 'polyclonal' 'antibodies';* *c. Specially designed or specially processed 'receptors';* *2. 'Anti-idiotypic antibodies' means antibodies which bind to the specific antigen binding sites of other antibodies;* *3. 'Monoclonal antibodies' means proteins which bind to one antigenic site and are produced by a single clone of cells;* *4. 'Polyclonal antibodies' means a mixture of proteins which bind to the specific antigen and are produced by more than one clone of cells;* *5. 'Receptors' means biological macromolecular structures capable of binding ligands, the binding of which affects physiological functions.*
ML7.i.2.a. *Technical Note*	Chemical agents, "biological agents", "riot control agents", radioactive materials, related equipment, components and materials, as follows: --- i. "Biocatalysts" for the decontamination or degradation of CW agents, and biological systems therefor, as follows: 1. "Biocatalysts" specially designed for the decontamination or degradation of CW agents specified in Category Code ML7.b., and resulting from directed laboratory selection or genetic manipulation of biological systems; 2. Biological systems containing the genetic information specific to the production of "biocatalysts" specified in	Chemical agents, "biological agents", "riot control agents", radioactive materials, related equipment, components and materials, as follows: --- i. "Biocatalysts" for the decontamination or degradation of CW agents, and biological systems therefor, as follows: 1. "Biocatalysts" specially designed for the decontamination or degradation of CW agents specified in Category Code ML7.b., and resulting from directed laboratory selection or genetic manipulation of biological systems; 2. Biological systems containing the genetic information specific to the production of "biocatalysts" specified in

	Category Code ML7.i.1., as follows: a. "Expression vectors"; -	Category Code ML7.i.1., as follows: a. 'Expression vectors'; <u>*Technical Note*</u> *For the purpose of Category Code ML7.i.2.a., 'expression vectors' are carriers (e.g. plasmid or virus) used to introduce genetic material into host cells.*

ML8

ML8.f. *Technical Note*	"Energetic materials" and related substances, as follows: --- f. "Additives" as follows: -	"Energetic materials" and related substances, as follows: --- f. 'Additives' as follows: <u>*Technical Note*</u> *For the purpose of Category Code ML8.f., 'additives' are substances used in explosive formulations to improve their properties.*
ML8 *Note 1.k.*	"Energetic materials" and related substances, as follows: --- <u>*Note 1*</u> *Category Code ML8 does not apply to the following substances unless they are compounded or mixed with the "energetic material" specified in Category Code ML8.a. or powdered metals specified in Category Code ML8.c.:* --- *k. N-pyrrolidinone; 1-methyl-2-pyrrolidinone (872-50-4);*	"Energetic materials" and related substances, as follows: --- <u>*Note 1*</u> *Category Code ML8 does not apply to the following substances unless they are compounded or mixed with the "energetic material" specified in Category Code ML8.a. or powdered metals specified in Category Code ML8.c.:* --- *k. 1-methyl-2-pyrrolidinone (N-methyl-2-pyrrolidinone) (872-50-4);*

ML10

ML10, ML10.g.,	"Aircraft", "lighter than air vehicles", "unmanned aerial vehicles" ("UAVs"), aero-engines and "aircraft" equipment, related equipment	"Aircraft", "lighter-than-air vehicles", "unmanned aerial vehicles" ("UAVs"), aero-engines, "sub-orbital craft" and "aircraft" equipment,

ML10.j.	and components, as follows, specially designed or modified for military use: --- g. Aircrew life support equipment, aircrew safety equipment and other devices for emergency escape, not specified in Category Code ML10.a., designed for "aircraft" specified in Category Code ML10.a.; --- -	related equipment and components, as follows, specially designed or modified for military use: --- g. Aircrew life support equipment, aircrew safety equipment and other devices for emergency escape, not specified in Category Code ML10.a., designed for "aircraft" specified in Category Code ML10.a. or "sub-orbital craft" specified in Category Code ML10.j.; --- j. "Sub-orbital craft" and related equipment, as follows, and specially designed or modified components therefor: 1. "Sub-orbital craft"; 2. Launch equipment, recovery equipment and ground support equipment; 3. Equipment designed for command or control.
ML10 *Note 3,* ML10 *Note 4*	"Aircraft", "lighter than air vehicles", "unmanned aerial vehicles" ("UAVs"), aero-engines and "aircraft" equipment, related equipment and components, as follows, specially designed or modified for military use: --- *Note 3* *For the purposes of Category Codes ML10.a. and ML10.d., specially designed components and related equipment for non-military "aircraft" or aero engines modified for military use apply only to those military components and to military related equipment required for the modification to military use.* *Note 4* *For the purpose of Category Code ML10.a., military use includes: combat, military reconnaissance, assault, military training, logistics support, and transporting and airdropping troops or military*	"Aircraft", "lighter-than-air vehicles", "unmanned aerial vehicles" ("UAVs"), aero-engines, "sub-orbital craft" and "aircraft" equipment, related equipment and components, as follows, specially designed or modified for military use: --- *Note 3* *For the purposes of Category Codes ML10.a., ML10.d. and ML10.j., specially designed components and related equipment for non-military "aircraft", aero engines or "sub-orbital craft" modified for military use apply only to those military components and to military related equipment required for the modification to military use.* *Note 4* *For the purpose of Category Codes ML10.a. and ML10.j., military use includes: combat, military reconnaissance, assault, military training, logistics support, and transporting and airdropping troops or military*

	equipment.	*equipment.*

ML11

ML11.j. *Technical Note*	Electronic equipment, "spacecraft" and components, not specified elsewhere in any part of this Division, as follows: --- j. "Automated Command and Control Systems". -	Electronic equipment, "spacecraft" and components, not specified elsewhere in any part of this Division, as follows: --- j. 'Automated Command and Control Systems'. *Technical Note* *For the purpose of Category Code ML11.a. Note j., 'Automated Command and Control Systems' are electronic systems, through which information essential to the effective operation of the grouping, major formation, tactical formation, unit, ship, subunit or weapons under command is entered, processed and transmitted. This is achieved by the use of computer and other specialised hardware designed to support the functions of a military command and control organisation. The main functions of an automated command and control system are: the efficient automated collection, accumulation, storage and processing of information; the display of the situation and the circumstances affecting the preparation and conduct of combat operations; operational and tactical calculations for the allocation of resources among force groupings or elements of the operational order of battle or battle deployment according to the mission or stage of the operation; the preparation of data for appreciation of the situation and decision-making at any point during operation or battle; computer simulation of operations.*

ML18

ML18 *Note*	'Production' equipment, environmental test facilities and components, as follows:	'Production' equipment, environmental test facilities and components, as follows:

	--- *Note* *Category Codes ML18.a. and ML18.b. include the following equipment:* *a. Continuous nitrators;* *b. Centrifugal testing apparatus or equipment, having any of the following characteristics:* *1. Driven by a motor or motors having a total rated horsepower of more than 298 kW (400 hp);* *2. Capable of carrying a payload of 113 kg or more; or* *3. Capable of exerting a centrifugal acceleration of 8 g or more on a payload of 91 kg or more;* *c. Dehydration presses;* *d. Screw extruders specially designed or modified for military "explosive" extrusion;* *e. Cutting machines for the sizing of extruded "propellants";* *f. Sweetie barrels (tumblers) 1.85 m or more in diameter and having over 227 kg product capacity;* *g. Continuous mixers for solid "propellants";* *h. Fluid energy mills for grinding or milling the ingredients of military "explosives";* *i. Equipment to achieve both sphericity and uniform particle size in metal powder listed in Category Code ML8.c.8.;* *j. Convection current converters for the conversion of materials listed in Category Code ML8.c.3.*	--- -

ML19

ML19.a., ML19.b., ML19.c.	Directed Energy Weapon (DEW) systems, related or countermeasure equipment and test models, as follows, and specially designed components therefor: a. "Laser" systems specially designed for destruction or effecting mission abort of a target;	Directed Energy Weapon (DEW) systems, related or countermeasure equipment and test models, as follows, and specially designed components therefor: a. "Laser" 'weapon systems' not specified in Category Code ML19.f.;

	b. Particle beam systems capable of destruction or effecting mission abort of a target; c. High power Radio Frequency (RF) systems capable of destruction or effecting mission-abort of a target;	b. Particle beam 'weapon systems'; c. High power Radio-Frequency (RF) 'weapon systems';
ML19 *Technical Note*	Directed Energy Weapon (DEW) systems, related or countermeasure equipment and test models, as follows, and specially designed components therefor: --- -	Directed Energy Weapon (DEW) systems, related or countermeasure equipment and test models, as follows, and specially designed components therefor: --- *Technical Note* *For the purpose of Category Code ML19, 'weapon systems' are designed to damage, destroy or effect mission abort of a target.*

List of Dual-Use Goods

Definitions

Category Code	SGCO 2024	SGCO 2025
"charge multiplication" (Category 6)	-	"charge multiplication" (Category 6) means a form of electronic image amplification defined as the generation of charge carriers as a result of an impact ionisation gain process. "Charge multiplication" sensors may take the form of an image intensifier tube, solid state detector or "focal plane array";
"high output diesel engines" (Category 9)	-	"high output diesel engines" (Category 9) means diesel engines with a specified brake mean effective pressure of 1.8 MPa or more at a speed of 2,300 rpm, provided the rated speed is 2,300 rpm or more;
"insulation" (Category 9)	"insulation" (Category 9) means insulation that is applied to the components of a rocket motor, i.e. the case, nozzle, inlets, case closures, and includes cured or semicured compounded rubber sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps;	-

Acronyms and Abbreviations

Category Code	SGCO 2024	SGCO 2025	
AIP, GLONASS	-	*First column* *Acronym or Abbreviation*	*Second column* *Meaning*
		AIP	Air Independent Propulsion
		GLONASS	Global Navigation Satellite System

Category 0

0B004

Category Code	SGCO 2024	SGCO 2025
0B004.a.	Plant for the production or concentration of heavy water, deuterium and deuterium compounds and specially designed or prepared equipment and components therefor, as follows: a. Plant for the production of heavy water, deuterium or deuterium compounds, as follows: 1. Water-hydrogen sulphide exchange plants; 2. Ammonia-hydrogen exchange plants;	Plant for the production or concentration of heavy water, deuterium and deuterium compounds and specially designed or prepared equipment and components therefor, as follows: a. Plant for the production of heavy water, deuterium or deuterium compounds, as follows: 1. Water-hydrogen sulphide exchange plants; 2. Ammonia-hydrogen exchange plants; 3. Combined Electrolysis and Catalytic Exchange (CECE) plants; 4. Combined Industrial Reforming and Catalytic Exchange (CIRCE) plants; 5. Bithermal HydrogenWater exchange (BHW) plants;
0B004.b.2., 0B004.b.3., 0B004.b.6., 0B004.b.8., 0B004.b.10.	Plant for the production or concentration of heavy water, deuterium and deuterium compounds and specially designed or prepared equipment and components therefor, as follows: --- b. Equipment and components, as follows: --- 2. Single stage, low head (i.e. 0.2 MPa) centrifugal blowers or compressors for hydrogen sulphide gas circulation (i.e. gas containing more than 70% by weight of hydrogen sulphide, H_2S) with a throughput capacity greater than or equal to 56 m^3/s when operating at pressures greater than or equal to 1.8 MPa suction and having seals designed for wet H_2S service; 3. Ammonia-hydrogen exchange towers greater than or equal to 35 m in height with diameters of 1.5 m to 2.5 m capable of operating at pressures greater than 15 MPa; --- 6. Infrared absorption analysers capable of on-line	Plant for the production or concentration of heavy water, deuterium and deuterium compounds and specially designed or prepared equipment and components therefor, as follows: --- b. Equipment and components, as follows: --- 2. Single stage, low head (i.e. 0.2 MPa) centrifugal blowers or compressors for hydrogen sulphide gas circulation (i.e. gas containing more than 70% by weight of hydrogen sulphide, H_2S) with a throughput capacity greater than or equal to 5 m^3/s when operating at pressures greater than or equal to 1.8 MPa suction and having seals designed for wet H_2S service; 3. Ammonia-hydrogen exchange towers greater than or equal to 35 m in height with diameters of 1.5 m or greater capable of operating at pressures greater than 15 MPa; --- 6. Not used;

Category Code	SGCO 2024	SGCO 2025
	hydrogen/deuterium ratio analysis where deuterium concentrations are equal to or greater than 90% by weight; --- 8. Complete heavy water upgrade systems, or columns therefor, for the upgrade of heavy water to reactor-grade deuterium concentration; --- -	--- 8. Complete heavy water finishing units, upgrade systems, or columns with diameters of 0.1 m or greater therefor, for the upgrade of heavy water to reactor-grade deuterium concentration; --- 10. Complete columns or towers specially designed or prepared for hydrogen isotope exchange, having all of the following characteristics: a. Packed with random or structured wet proofed platinised catalysts; b. Constructed of carbon steel or stainless steel; c. Capable of operating with pressure in the range of 0.1 to 4 MPa; and d. Capable of operating at temperatures in the range of 293 K (20 °C) to 473 K (200 °C).

Category 1

1A003

Category Code	SGCO 2024	SGCO 2025
1A003 *Note*	Manufactures of non-"fusible" aromatic polyimides in film, sheet, tape or ribbon form having either of the following characteristics: --- *Note* *Category Code 1A003 does not include manufactures when coated or laminated with copper and designed for the production of electronic printed circuit boards.*	Manufactures of non-"fusible" aromatic polyimides in film, sheet, tape or ribbon form having either of the following characteristics: --- *Note* *Category Code 1A003 does not include manufactures when coated or laminated with copper and designed for the "production" of electronic printed circuit boards.*

1A007

Category Code	SGCO 2024	SGCO 2025
1A007 *Technical Note*	Equipment and devices, specially designed to initiate charges and devices containing "energetic materials", by electrical means, as follows: *N.B.* *See also Division 2 of Part 1 of this Schedule, and Category Codes 3A229 and 3A232.* *a. Explosive detonator firing sets designed to drive explosive detonators specified in Category Code 1A007.b.;* *b. Electrically driven explosive detonators as follows:* *1. Exploding Bridge (EB);* *2. Exploding Bridge Wire (EBW);* *3. Slapper;* *4. Exploding Foil Initiators (EFI).* *Technical Notes* *1. The word initiator or igniter is sometimes used in place of the word detonator.* *2. For the purpose of Category Code 1A007.b., the detonators of concern all utilise a small electrical conductor (bridge, bridge wire, or foil) that explosively vaporises when a fast, high-current electrical pulse is passed through it. In non slapper types, the exploding conductor starts a chemical detonation in a contacting high explosive material such as PETN (pentaerythritoltetranitrate). In slapper detonators, the explosive vaporisation of the electrical conductor drives a flyer or slapper across a gap, and the impact of the slapper on an explosive starts a chemical detonation. The slapper in some designs is driven by magnetic force. The term exploding foil detonator may refer to either an EB or a slapper-type detonator.*	Equipment and devices, specially designed to initiate charges and devices containing "energetic materials", by electrical means, as follows: *N.B.* *See also Division 2 of Part 1 of this Schedule, and Category Codes 3A229 and 3A232.* *Technical Note* *For the purpose of Category Code 1A007, the word initiator or igniter is sometimes used in place of the word detonator.* *a. Explosive detonator firing sets designed to drive explosive detonators specified in Category Code 1A007.b.;* *b. Electrically driven explosive detonators as follows:* *1. Exploding Bridge (EB);* *2. Exploding Bridge Wire (EBW);* *3. Slapper;* *4. Exploding Foil Initiators (EFI).* *Technical Note* *For the purpose of Category Code 1A007.b., the detonators of concern all utilise a small electrical conductor (bridge, bridge wire, or foil) that explosively vaporises when a fast, high-current electrical pulse is passed through it. In non slapper types, the exploding conductor starts a chemical detonation in a contacting high explosive material such as PETN (pentaerythritoltetranitrate). In slapper detonators, the explosive vaporisation of the electrical conductor drives a flyer or slapper across a gap, and the impact of the slapper on an explosive starts a chemical detonation. The slapper in some designs is driven by magnetic force. The term exploding foil detonator may refer to either an EB or a slapper-type detonator.*

1A202

Category Code	SGCO 2024	SGCO 2025
1A202	Composite structures, other than those specified in Category Code 1A002, in the form of tubes and having both of the following characteristics: --- a. An inside diameter of between 75 mm and 400 mm; and b. Made with any of the "fibrous or filamentary materials" specified in Category Code 1C010.a. or 1C010.b. or 1C210.a. or with carbon prepreg materials specified in Category Code 1C210.c.	Composite structures, other than those specified in Category Code 1A002, in the form of thin-walled tubes and having all of the following characteristics: --- a. An inside diameter of between 75 mm and 650 mm; b. A thickness of 12 mm or less; and c. Made with any of the "fibrous or filamentary materials" specified in Category Code 1C010.a. or 1C010.b. or 1C210.a. or with carbon prepreg materials specified in Category Code 1C210.c.

1A225

Category Code	SGCO 2024	SGCO 2025
1A225, 1A225 *Technical Note*	Platinised catalysts 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.	Wet-proofed platinised catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from water or for the production or upgrading of heavy water. *Technical Note* *In heavy water moderated reactors, upgraders maintain the heavy water concentration in the reactor core. Wet-proofed platinised catalysts can also be used to upgrade heavy water.*

1B001

Category Code	SGCO 2024	SGCO 2025
1B001	Equipment for the production or inspection of "composite" structures or laminates specified in Category Code 1A002 or "fibrous or	Equipment designed for the "production" of "composite" structures or laminates or "fibrous or filamentary materials", as follows, and

	filamentary materials" specified in Category Code 1C010, as follows, and specially designed components and accessories therefor:	specially designed components and accessories therefor:
1B001.d., 1B001.e., 1B001.e. *Technical Note*	Equipment for the production or inspection of "composite" structures or laminates specified in Category Code 1A002 or "fibrous or filamentary materials" specified in Category Code 1C010, as follows, and specially designed components and accessories therefor: --- d. Equipment specially designed or adapted for the production of reinforcement fibres, as follows: --- e. Equipment for producing prepregs specified in Category Code 1C010.e. by the hot melt method;	Equipment designed for the "production" of "composite" structures or laminates or "fibrous or filamentary materials", as follows, and specially designed components and accessories therefor: --- d. Equipment specially designed or modified for the "production" of "fibrous or filamentary materials" specified by Category Code 1C010, as follows: --- e. Equipment specially designed or modified for the production of prepregs by the 'hot melt method'; *Technical Note* *For the purpose of Category Code 1B001.e., the 'hot melt method' is the process of applying pressure and heat to impregnate "fibrous or filamentary materials" with resin that has been pre-laminated onto a carrier substrate, such as film or paper.*

1B228

Category Code	SGCO 2024	SGCO 2025
1B228, 1B228 *Technical Notes 1*, 1B228 *Technical Note 2*	Hydrogen-cryogenic distillation columns having all of the following characteristics: a. Designed for operation with internal temperatures of 35 K (-238 ºC) or less; b. Designed for operation at an internal pressure of 0.5 MPa to 5 MPa; c. Constructed of either: 1. Stainless steel of the Society of Automotive Engineers International (SAE) 300 series with low sulphur content and with an austenitic ASTM (or equivalent standard)	Hydrogen-cryogenic distillation columns having all of the following characteristics: a. Designed for operation with internal temperatures in the range of 15 K (-258 ºC) to 35 K (-238 ºC); b. Designed for operation at internal pressures in the range of 0.1 MPa to 1 MPa; c. Constructed of either: 1. Austenitic stainless steel; or 2. Equivalent materials which are both cryogenic and hydrogen (H_2)-compatible between 15 K (-258 ºC) and 35

	grain size number of 5 or greater; or 2. Equivalent materials which are both cryogenic and hydrogen (H2) compatible; and --- *Technical Note* *In Category Code 1B228, 'effective length' means the active height of packing material in a packed-type column, or the active height of internal contactor plates in a plate-type column.*	K (-238 ºC); and --- *Technical Note 1* *In Category Code 1B228, 'effective length' means the active height of packing material in a packed-type column, or the active height of internal contactor plates in a plate-type column.* *Technical Note 2* *Equivalent materials could include, but are not limited to, the following materials:* *a. aluminium;* *b. aluminium alloys;* *c. copper alloys;* *d. nickel alloys; and* *e. titanium alloys.*

1C011

Category Code	SGCO 2024	SGCO 2025
1C011.e.	Metals and compounds, as follows: --- d. Nitroguanidine (NQ) (556-88-7).	Metals and compounds, as follows: --- d. Nitroguanidine (NQ) (556-88-7). e. Iodine pentafluoride (7783-66-6).

1C350

Category Code	SGCO 2024	SGCO 2025
1C350.90.	Chemicals, which may be used as precursors for toxic chemical agents, as follows, and "chemical mixtures" containing one or more thereof: --- 89. N,N-Dipropylisobutanamidine (1342700-45-1).	Chemicals, which may be used as precursors for toxic chemical agents, as follows, and "chemical mixtures" containing one or more thereof: --- 89. N,N-Dipropylisobutanamidine (1342700-45-1);

		90. Dipropylamine (142-84-7).

1C351

Category Code	SGCO 2024	SGCO 2025
1C351.d.24.	Human and animal pathogens and "toxins", as follows: --- d. "Toxins", as follows, and "sub-unit of toxins" thereof: --- 23. Palytoxin;	Human and animal pathogens and "toxins", as follows: --- d. "Toxins", as follows, and "sub-unit of toxins" thereof: --- 23. Palytoxin; 24. Neosaxitoxin (NEO).

Category 2

2B116

Category Code	SGCO 2024	SGCO 2025
2B116.a., 2B116.a. *Technical Note*	Vibration test systems, equipment and components therefor, as follows: 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 while imparting forces equal to or greater than 50 kN, measured 'bare table';	Vibration test systems, equipment and components therefor, as follows: a. 'Vibration test systems incorporating a digital controller' and employing feedback or closed loop techniques, capable of vibrating a system at an acceleration equal to or greater than 10 g rms between 20 Hz and 2 kHz while imparting forces equal to or greater than 50 kN, measured 'bare table'; *Technical Note* *In Category Code 2B116.a., 'vibration test systems incorporating a digital controller' are those systems, the functions of which are, partly or entirely, automatically controlled by stored and digitally coded electrical signals.*
2B116.b., 2B116.c., 2B116.d.	Vibration test systems, equipment and components therefor, as follows: ---	Vibration test systems, equipment and components therefor, as follows: ---

	b. Digital controllers, combined with specially designed vibration test software, with a 'real time control bandwidth' greater than 5 kHz designed for use with vibration test systems specified in Category Code 2B116.a.;	b. Digital controllers, combined with specially designed vibration test software, with a 'real time control bandwidth' greater than 5 kHz designed for use with systems specified in Category Code 2B116.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 Category Code 2B116.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 systems specified in Category Code 2B116.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 equal to or greater than 50 kN, measured 'bare table', and usable in vibration systems specified in Category Code 2B116.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 equal to or greater than 50 kN, measured 'bare table', and usable in systems specified in Category Code 2B116.a.

2B351

Category Code	SGCO 2024	SGCO 2025
2B351.a., 2B351.a. *Technical Note*	Toxic gas monitors and monitoring systems and their dedicated detecting components, other than those specified in Category Code 1A004, as follows, and detectors, sensor devices, and replaceable sensor cartridges therefor: a. Designed for continuous operation and usable for the detection of Chemical Warfare (CW) agents or chemicals specified in Category Code 1C350, at concentrations of less than 0.3 mg/m^3; or	Toxic gas monitors and monitoring systems and their dedicated detecting components, other than those specified in Category Code 1A004, as follows, and detectors, sensor devices, and replaceable sensor cartridges therefor: a. Designed for continuous operation and usable for the detection of Chemical Warfare (CW) agents or chemicals specified in Category Code 1C350, with a 'minimum detection limit' of less than 0.3 mg/m^3; or *Technical Note* *The 'minimum detection limit' of toxic gas monitors or monitoring systems is the lowest detectable concentration of the analyte required to produce a signal greater than three times the standard deviation of the toxic gas monitor's or monitoring system's signal when measuring a blank sample. In the case of toxic gas monitors or monitoring systems having a deadband or programmed zero suppression, the 'minimum detection limit' is the lowest detectable*

		concentration required to produce a reading.

Category 3

3A001

Category Code	SGCO 2024	SGCO 2025
3A001.b.7.a., 3A001.b.7.b., 3A001.b.7.c.2., 3A001.b.7.c.3.	Electronic items as follows: --- b. Microwave or millimetre wave items, as follows: --- 7. Converters and harmonic mixers having any of the following characteristics: a. Designed to extend the frequency range of "signal analysers" beyond 90 GHz; b. Designed to extend the operating range of signal generators as follows: 1. Beyond 90 GHz; 2. To an output power greater than 100 mW (20 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 90 GHz; c. Designed to extend the operating range of network analysers as follows: --- 2. To an output power greater than 31.62 mW (15 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 90 GHz; 3. To an output power greater than 1 mW (0 dBm) anywhere within the frequency range exceeding 90 GHz but not exceeding 110 GHz; or	Electronic items as follows: --- b. Microwave or millimetre wave items, as follows: --- 7. Converters and harmonic mixers having any of the following characteristics: a. Designed to extend the frequency range of "signal analysers" beyond 110 GHz; b. Designed to extend the operating range of signal generators as follows: 1. Beyond 110 GHz; 2. To an output power greater than 100 mW (20 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 110 GHz; c. Designed to extend the operating range of network analysers as follows: --- 2. To an output power greater than 100 mW (20 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 110 GHz; 3. Not used; or
3A001.b.9. *Technical Notes*	Electronic items as follows: --- b. Microwave or millimetre wave items, as follows:	Electronic items as follows: --- b. Microwave or millimetre wave items, as follows:

	--- 9. Microwave Power Modules (MPM), consisting of, at least, a travelling-wave "vacuum electronic device", a "Monolithic Microwave Integrated Circuit" ("MMIC") and an integrated electronic power conditioner and having all of the following characteristics: --- *Technical Notes* *For the purpose of Category Code 3A001.b.9.:* *1. To calculate the volume in Category Code 3A001.b.9.b., the following example is provided: for a maximum rated power of 20 W, the volume would be: 20 W × 10 cm^3/W = 200 cm^3.* *2. The 'turn-on time' in Category Code 3A001.b.9.a. refers to the time from fully off to fully operational, i.e. it includes the warm-up time of the MPM.*	--- 9. Microwave Power Modules (MPM), consisting of, at least, a travelling-wave "vacuum electronic device", a "Monolithic Microwave Integrated Circuit" ("MMIC") and an integrated electronic power conditioner and having all of the following characteristics: --- *Technical Notes* *1. For the purpose of Category Code 3A001.b.9.a., the 'turn-on time' refers to the time from fully-off to fully operational, i.e. it includes the warm-up time of the MPM.* *2. To calculate the volume for the purpose of Category Code 3A001.b.9.b., the following example is provided: for a maximum rated power of 20 W, the volume would be: 20 W × 10 cm^3/W = 200 cm^3.*

3A002

Category Code	SGCO 2024	SGCO 2025
3A002.c.2., 3A002.c.3., 3A002.c.4.a., 3A002.c.4.b.	General purpose "electronic assemblies", modules and equipment, as follows: --- c. "Signal analysers", as follows: --- 2. "Signal analysers" having a Displayed Average Noise Level (DANL) less (better) than -150 dBm/Hz anywhere within the frequency range exceeding 43.5 GHz but not exceeding 90 GHz; 3. "Signal analysers" having a frequency exceeding 90 GHz; 4. "Signal analysers" having both of the following characteristics: a. 'Real time bandwidth' exceeding 170 MHz; and b. Having either of the following characteristics:	General purpose "electronic assemblies", modules and equipment, as follows: --- c. "Signal analysers", as follows: --- 2. "Signal analysers" having a Displayed Average Noise Level (DANL) less (better) than -160 dBm/Hz anywhere within the frequency range exceeding 43.5 GHz but not exceeding 110 GHz; 3. "Signal analysers" having a frequency exceeding 110 GHz; 4. "Signal analysers" having both of the following characteristics: a. 'Real time bandwidth' exceeding 520 MHz; and b. Having either of the following characteristics:

	1. 100% probability of discovery with less than a 3 dB reduction from full amplitude due to gaps or windowing effects of signals having a duration of 15 µs or less; or 2. A 'frequency mask trigger' function with 100% probability of trigger (capture) for signals having a duration of 15 µs or less;	1. 100% probability of discovery with less than a 3 dB reduction from full amplitude due to gaps or windowing effects of signals having a duration of 8 µs or less; or 2. A 'frequency mask trigger' function with 100% probability of trigger (capture) for signals having a duration of 8 µs or less;
3A002.d.1. *Technical Note*	General purpose "electronic assemblies", modules and equipment, as follows: --- d. Signal generators having any of the following characteristics: 1. Specified to generate pulse-modulated signals having both of the following characteristics, anywhere within the frequency range exceeding 31.8 GHz but not exceeding 37 GHz: --- -	General purpose "electronic assemblies", modules and equipment, as follows: --- d. Signal generators having any of the following characteristics: 1. Specified to generate pulse-modulated signals having both of the following characteristics, anywhere within the frequency range exceeding 31.8 GHz but not exceeding 37 GHz: --- *Technical Note* *For the purpose of Category Code 3A002.d.1.a., 'pulse duration' is defined as the time interval from the point on the leading edge that is 50% of the pulse amplitude to the point on the trailing edge that is 50 % of the pulse amplitude.*
3A002.d.2., 3A002.d.3.g., 3A002.d.4.a., 3A002.d.4.b., 3A002.d.5.d., 3A002.d.6., 3A002.d.6. *Note 1*, 3A002.d.6. *Technical Note*	General purpose "electronic assemblies", modules and equipment, as follows: --- d. Signal generators having any of the following characteristics: --- 2. An output power exceeding 100 mW (20 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 90 GHz; 3. A "frequency switching time" as specified by any of the following: ---	General purpose "electronic assemblies", modules and equipment, as follows: --- d. Signal generators having any of the following characteristics: --- 2. An output power exceeding 100 mW (20 dBm) anywhere within the frequency range exceeding 43.5 GHz but not exceeding 110 GHz; 3. A "frequency switching time" as specified by any of the following: ---

	g. Less than 100 µs for any frequency change exceeding 5.0 GHz within the frequency range exceeding 75 GHz but not exceeding 90 GHz;	g. Less than 100 µs for any frequency change exceeding 5.0 GHz within the frequency range exceeding 75 GHz but not exceeding 110 GHz;
	4. A Single Sideband (SSB) phase noise, in dBc/Hz, specified as being either of the following: a. Less (better) than $-(126 + 20\log_{10}F - 20\log_{10}f)$ anywhere within the range of 10 Hz ≤ F ≤ 10 kHz anywhere within the frequency range exceeding 3.2 GHz but not exceeding 90 GHz; or b. Less (better) than $-(206 - 20\log_{10}f)$ anywhere within the range of 10 kHz < F ≤ 100 kHz anywhere within the frequency range exceeding 3.2 GHz but not exceeding 90 GHz;	4. A Single Sideband (SSB) phase noise, in dBc/Hz, specified as being either of the following: a. Less (better) than $-(126 + 20\log_{10}F - 20\log_{10}f)$ anywhere within the range of 10 Hz ≤ F ≤ 10 kHz anywhere within the frequency range exceeding 3.2 GHz but not exceeding 110 GHz; or b. Less (better) than $-(206 - 20\log_{10}f)$ anywhere within the range of 10 kHz < F ≤ 100 kHz anywhere within the frequency range exceeding 3.2 GHz but not exceeding 110 GHz;
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	5. An 'RF modulation bandwidth' of digital baseband signals as specified by any of the following: a. Exceeding 2.2 GHz within the frequency range exceeding 4.8 GHz but not exceeding 31.8 GHz; b. Exceeding 550 MHz within the frequency range exceeding 31.8 GHz but not exceeding 37 GHz; c. Exceeding 2.2 GHz within the frequency range exceeding 37 GHz but not exceeding 75 GHz; or d. Exceeding 5.0 GHz within the frequency range exceeding 75 GHz but not exceeding 90 GHz; or	5. An 'RF modulation bandwidth' of digital baseband signals as specified by any of the following: a. Exceeding 2.2 GHz within the frequency range exceeding 4.8 GHz but not exceeding 31.8 GHz; b. Exceeding 550 MHz within the frequency range exceeding 31.8 GHz but not exceeding 37 GHz; c. Exceeding 2.2 GHz within the frequency range exceeding 37 GHz but not exceeding 75 GHz; or d. Exceeding 5.0 GHz within the frequency range exceeding 75 GHz but not exceeding 110 GHz; or
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	6. A maximum frequency exceeding 90 GHz; *Note 1* *For the purpose of Category Code 3A002.d., the term signal generators includes arbitrary waveform and function generators.*	6. A maximum frequency exceeding 110 GHz; *Note 1* *Category Code 3A002.d. includes arbitrary waveform and function generators.*
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	Technical Notes *1. For the purpose of Category Code 3A002.d., the maximum frequency of an arbitrary waveform or function generator is*	*Technical Note* *For the purpose of Category Code 3A002.d., the maximum output frequency of an arbitrary waveform or function*

	calculated by dividing the sample rate, in samples per second, by a factor of 2.5. 2. *For the purpose of Category Code 3A002.d.1.a., 'pulse duration' is defined as the time interval from the point on the leading edge that is 50% of the pulse amplitude to the point on the trailing edge that is 50% of the pulse amplitude.*	*generator is calculated by dividing the sample rate, in samples per second, by a factor of 2.5.*
3A002.e.1., 3A002.e.2.	General purpose "electronic assemblies", modules and equipment, as follows: --- e. Network analysers having any of the following characteristics: 1. An output power exceeding 31.62 mW (15 dBm) anywhere within the operating frequency range exceeding 43.5 GHz but not exceeding 90 GHz; 2. An output power exceeding 1 mW (0 dBm) anywhere within the operating frequency range exceeding 90 GHz but not exceeding 110 GHz;	General purpose "electronic assemblies", modules and equipment, as follows: --- e. Network analysers having any of the following characteristics: 1. An output power exceeding 100 mW (20 dBm) anywhere within the operating frequency range exceeding 43.5 GHz but not exceeding 110 GHz; 2. Not used;

3B001

Category Code	SGCO 2024	SGCO 2025
3B001.a.2.	Equipment for the manufacturing of semiconductor devices or materials, as follows and specially designed components and accessories therefor: --- a. Equipment designed for epitaxial growth, as follows: --- 2. Metal Organic Chemical Vapour Deposition (MOCVD) reactors designed for compound semiconductor epitaxial growth of material having two or more of the following elements: aluminium, gallium, indium, arsenic, phosphorus, antimony, or nitrogen;	Equipment for the manufacturing of semiconductor devices or materials, as follows and specially designed components and accessories therefor: --- a. Equipment designed for epitaxial growth, as follows: --- 2. Metal Organic Chemical Vapour Deposition (MOCVD) reactors designed for compound semiconductor epitaxial growth of material having two or more of the following elements: aluminium, gallium, indium, arsenic, phosphorus, antimony, oxygen or nitrogen;

3B001.e. *Technical Note 1,* 3B001.f.1.b., 3B001.f.1.b. *Technical Note*	Equipment for the manufacturing of semiconductor devices or materials, as follows and specially designed components and accessories therefor: --- e. Automatic loading multi-chamber central wafer handling systems, having both of the following characteristics: --- <u>*Technical Notes*</u> *1. For the purpose of Category Code 3B001.e.1., 'semiconductor process tools' refers to modular tools that provide physical processes for semiconductor production that are functionally different, such as deposition, implant or thermal processing.* --- f. Lithography equipment as follows: 1. Align and expose step and repeat (direct step on wafer) or step and scan (scanner) equipment for wafer processing using photo-optical or X-ray methods and having either of the following characteristics: a. A light source wavelength shorter than 193 nm; <u>or</u> b. Capable of producing a pattern with a "Minimum Resolvable Feature size" (MRF) of 45 nm or less; <u>*Technical Note*</u> *For the purpose of Category Code 3B001.f.1.b., the "Minimum Resolvable Feature size" (MRF) is calculated by the following formula:*	Equipment for the manufacturing of semiconductor devices or materials, as follows and specially designed components and accessories therefor: --- e. Automatic loading multi-chamber central wafer handling systems, having both of the following characteristics: --- <u>*Technical Notes*</u> *1. For the purpose of Category Code 3B001.e.1., 'semiconductor process tools' refers to modular tools that provide physical processes for semiconductor "production" that are functionally different, such as deposition, implant or thermal processing.* --- f. Lithography equipment as follows: 1. Align and expose step and repeat (direct step on wafer) or step and scan (scanner) equipment for wafer processing using photo-optical or X-ray methods and having either of the following characteristics: a. A light source wavelength shorter than 193 nm; <u>or</u> b. Capable of producing a pattern with a 'Minimum Resolvable Feature size' (MRF) of 45 nm or less; <u>*Technical Note*</u> *For the purpose of Category Code 3B001.f.1.b., the 'Minimum Resolvable Feature size' (MRF) is calculated by the following formula:*

	$MRF = \frac{\left[\begin{array}{c}\text{an exposure light source} \\ \text{wavelength in nm}\end{array}\right] \times [K\ factor]}{\text{numerical aperture}}$ *where the K factor = 0.35*	$MRF = \frac{\left[\begin{array}{c}\text{an exposure light source} \\ \text{wavelength in nm}\end{array}\right] \times [K\ factor]}{\text{numerical aperture}}$ *where the K factor = 0.35*

3C003

Category Code	SGCO 2024	SGCO 2025
3C003.a., 3C003.b.	Organo inorganic compounds as follows: a. Organo metallic compounds of aluminium, gallium or indium, having a purity (metal basis) better than 99.999%; b. Organo arsenic, organo antimony and organo phosphorus compounds, having a purity (inorganic element basis) better than 99.999%.	Organo inorganic compounds as follows: a. Organo metallic compounds of aluminium, gallium or indium, having a purity (metal basis) greater (better) than 99.999%; b. Organo arsenic, organo antimony and organo phosphorus compounds, having a purity (inorganic element basis) greater (better) than 99.999%.

3C004

Category Code	SGCO 2024	SGCO 2025
3C004	Hydrides of phosphorus, arsenic or antimony, having a purity better than 99.999%, even diluted in inert gases or hydrogen.	Hydrides of phosphorus, arsenic or antimony, having a purity greater (better) than 99.999%, even diluted in inert gases or hydrogen.

Category 5 Part 1

5A001

Category Code	SGCO 2024	SGCO 2025
5A001.b.2.b.	Telecommunications systems, equipment, components and accessories, as follows: ---	Telecommunications systems, equipment, components and accessories, as follows: ---

	b. Telecommunications systems and equipment, and specially designed components and accessories therefor, having any of the following characteristics, functions or features: --- 2. Being radio equipment operating in the 1.5 MHz to 87.5 MHz band and having both of the following characteristics: --- b. Incorporating a linear power amplifier configuration having a capability to support multiple signals simultaneously at an output power of 1 kW or more in the frequency range of 1.5 MHz or more but less than 30 MHz, or 250 W or more in the frequency range of 30 MHz or more but not exceeding 87.5 MHz, over an "instantaneous bandwidth" of one octave or more and with an output harmonic and distortion content of better than -80 dB;	b. Telecommunications systems and equipment, and specially designed components and accessories therefor, having any of the following characteristics, functions or features: --- 2. Being radio equipment operating in the 1.5 MHz to 87.5 MHz band and having both of the following characteristics: --- b. Incorporating a linear power amplifier configuration having a capability to support multiple signals simultaneously at an output power of 1 kW or more in the frequency range of 1.5 MHz or more but less than 30 MHz, or 250 W or more in the frequency range of 30 MHz or more but not exceeding 87.5 MHz, over an "instantaneous bandwidth" of one octave or more and with an output harmonic and distortion content of less (better) than -80 dB;

5A101

Category Code	SGCO 2024	SGCO 2025
5A101 *Note c.*	Telemetry and telecontrol equipment, including ground equipment, designed or modified for 'missiles'. --- *Note* *Category Code 5A101 does not include:* *a. Equipment designed or modified for manned aircraft or satellites;* *b. Ground based equipment designed or modified for terrestrial or marine applications;*	Telemetry and telecontrol equipment, including ground equipment, designed or modified for 'missiles'. --- *Note* *Category Code 5A101 does not include:* *a. Equipment designed or modified for manned aircraft or satellites;* *b. Ground based equipment designed or modified for terrestrial or marine applications;*

	c. *Equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) GNSS services.*	c. *Equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) navigation satellite systems services.*

5D001

5D001.e., 5D001.e.2.	"Software" as follows: --- e. "Software", other than that specified in Category Code 5D001.a. or 5D001.c., specially designed or modified for monitoring or analysis by law enforcement, having both of the following characteristics: --- 2. Mapping of the relational network or tracking the movement of targeted individuals based on the results of searches on content of communication or metadata or searches as described in Category Code 5D001.e.1.	"Software" as follows: --- e. "Software", other than that specified in Category Code 5D001.a. or 5D001.c., specially designed or modified for monitoring or analysis for law enforcement purposes, having both of the following characteristics: --- 2. Mapping of the relational network or tracking the movement or location of targeted individuals based on the results of searches on content of communication or metadata or searches as described in Category Code 5D001.e.1.

Category 5 Part 2

5A002

Category Code	SGCO 2024	SGCO 2025
5A002.a., 5A002.a. *Technical Note 1,* 5A002.a. *Technical Note 2*	"Information security" systems, equipment and components, as follows: --- a. Designed or modified to use 'cryptography for data confidentiality' having a 'described security algorithm', where that cryptographic capability is usable, has been activated, or can be activated by any means other than secure "cryptographic activation", as follows: ---	"Information security" systems, equipment and components, as follows: --- a. Designed or modified to use 'cryptography for data confidentiality' having a 'described security algorithm', as follows: ---

	Technical Notes *1. For the purpose of Category Code 5A002.a., 'cryptography for data confidentiality' means "cryptography" that employs digital techniques and performs any cryptographic function other than any of the following:* *a. "Authentication";* *b. Digital signature;* *c. Data integrity;* *d. Non repudiation;* *e. Digital rights management, including the execution of copy protected "software";* *f. Encryption or decryption in support of entertainment, mass commercial broadcasts or medical records management; or* *g. Key management in support of any function described in paragraphs a. to f. above.* ---	*Technical Notes* *1. For the purpose of Category Code 5A002.a., 'cryptography for data confidentiality' means "cryptography" that employs digital techniques for a cryptographic function or capability that is usable or can be made usable, other than any of the following:* *a. "Authentication";* *b. Digital signature;* *c. Data integrity;* *d. Non repudiation;* *e. Digital rights management, including the execution of copy protected "software";* *f. Encryption or decryption in support of entertainment, mass commercial broadcasts or medical records management;* *g. Wireless "personal area network" functionality implementing only published or commercial cryptographic standards;* *h. Cryptographic operations specially designed for and limited to banking use or money transactions, including the collection and settlement of fares or credit functions;* *i. Key management in support of and limited to functions and capabilities described in paragraph a. to h. above; or* *j. Cryptographic functions or capabilities that have not been activated or enabled, and can only be activated or enabled by means of secure "cryptographic activation".* *N.B.* *For 'cryptographic activation token' items, see Category Codes 5A002.b., 5D002.b. and 5E002.b.* ---

	Note 2 *Category Code 5A002.a. does not include any of the following items, or specially designed "information security" components therefor:*	*Note 2* *Category Code 5A002.a. does not include any of the following items, or specially designed "information security" components therefor:*
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	b. Cryptographic equipment specially designed and limited for banking use or 'money transactions'; *Technical Note* *For the purpose of Category Code 5A002.a. Note 2.b., 'money transactions' includes the collection and settlement of fares or credit functions.*	*b. Not used;*
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	e. Portable or mobile radiotelephones and similar client wireless devices for civil use, that implement only published or commercial cryptographic standards (except for anti-piracy functions, which may be non-published) and also meet the provisions of paragraphs a.2. and a.3. of the Cryptography Note (Note 3 in Category 5, Part 2), that have been customised for a specific civil industry application with features that do not affect the cryptographic functionality of these original non-customised devices;	*e. Portable or mobile radiotelephones and similar client wireless devices, designed for civil use, that have been customised for a specific civil industry application, having all of the following characteristics:* *1. The non-customised devices satisfy the provisions of the Cryptography Note (Note 3 in Category 5 — Part 2); and* *2. The 'cryptography for data confidentiality' having a 'described security algorithm' of the non-customised devices is not affected by the customisation, and implements only published or commercial cryptographic standards;*
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	f. Items, where the "information security" functionality is limited to wireless "personal area network" functionality, implementing only published or commercial cryptographic standards;	*f. Not used;*
	g. Mobile telecommunications Radio Access Network (RAN) equipment designed for civil use, which also meet the provisions of paragraphs a.2. and a.3. of the Cryptography Note (Note 3 to Category 5, Part 2), having an RF output power limited to 0.1 W (20 dBm) or less, and supporting	*g. Mobile telecommunications Radio Access Network (RAN) equipment designed for civil use, which also meet the provisions of paragraphs a.2. and a.3. of the Cryptography Note (Note 3 to Category 5, Part 2), having an RF output power limited to 0.1 W (20 dBm) or less, and supporting*

	16 or fewer concurrent users;	*32 or fewer concurrent users;*
	h. *Routers, switches, gateways or relays, where the "information security" functionality is limited to the tasks of "Operations, Administration or Maintenance" ("OAM") implementing only published or commercial cryptographic standards;*	h. *Routers, switches, gateways or relays, where the 'cryptography for data confidentiality' having a 'described security algorithm' is limited to the tasks of "Operations, Administration or Maintenance" ("OAM") implementing only published or commercial cryptographic standards;*
	i. *General purpose computing equipment or servers, where the "information security" functionality meets both of the following:*	i. *General purpose computing equipment or servers, where the 'cryptography for data confidentiality' having a 'described security algorithm' has all of the following characteristics:*
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	j. *Items specially designed for a 'connected civil industry application', meeting both of the following:*	j. *Items specially designed for a 'connected civil industry application', having both of the following characteristics:*
	1. *Being either of the following:* a. *A network capable endpoint device meeting either of the following:* 1. *The "information security" functionality is limited to securing 'non arbitrary data' or the tasks of "Operations, Administration or Maintenance" ("OAM"); or* 2. *The device is limited to a specific 'connected civil industry application'; or*	1. *Being either of the following:* a. *A network capable endpoint device meeting either of the following:* 1. *The 'cryptography for data confidentiality' having a 'described security algorithm' of the device is limited to securing 'non arbitrary data' or the tasks of "Operations, Administration or Maintenance" ("OAM"); or* 2. *The device is limited to a specific 'connected civil industry application'; or*
	b. *Networking equipment meeting both of the following:* 1. *Being specially designed to communicate with the devices*	b. *Networking equipment having both of the following characteristics:* 1. *Being specially designed to communicate with the devices specified*

	specified in paragraph j.1.a. above; and 2. *The "information security" functionality is limited to supporting the 'connected civil industry application' of devices specified in paragraph j.1.a. above, or the tasks of "OAM" of this networking equipment or of other items specified in paragraph j. of this Note; and* 2. *Where the "information security" functionality implements only published or commercial cryptographic standards, and the cryptographic functionality cannot easily be changed by the user.*	*in paragraph j.1.a. above; and* 2. *The 'cryptography for data confidentiality' having a 'described security algorithm' is limited to supporting the 'connected civil industry application' of devices specified in paragraph j.1.a. above, or the tasks of "OAM" of this networking equipment or of other items specified in paragraph j. of this Note; and* 2. *Where the 'cryptography for data confidentiality' having a 'described security algorithm' implements only published or commercial cryptographic standards, and the cryptographic functionality cannot easily be changed by the user.*

Category 6

6A001

Category Code	SGCO 2024	SGCO 2025
6A001.a.1.d., 6A001.a.1.d. *Note*	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed components therefor, as follows: 1. Active (transmitting or transmitting-and-receiving) systems, equipment and specially designed components therefor, as follows: --- d. Acoustic systems and equipment, designed to determine the position of surface vessels or	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed components therefor, as follows: 1. Active (transmitting or transmitting-and-receiving) systems, equipment and specially designed components therefor, as follows: --- d. Acoustic systems and equipment, designed to determine the position of surface vessels or

	underwater vehicles and having both of the following characteristics, and specially designed components therefor: --- *Note* *Category Code 6A001.a.1.d. includes:* *a. Equipment using coherent "signal processing" between two or more beacons and the hydrophone unit carried by the surface vessel or underwater vehicle;*	submersible vehicles and having both of the following characteristics, and specially designed components therefor: --- *Note* *Category Code 6A001.a.1.d. includes:* *a. Equipment using coherent "signal processing" between two or more beacons and the hydrophone unit carried by the surface vessel or submersible vehicle;*
6A001.a.2.a.4., 6A001.a.2.a.6.	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed components therefor, as follows: --- 2. Passive systems, equipment and specially designed components therefor, as follows: --- a. Hydrophones having any of the following characteristics: --- 4. A 'hydrophone sensitivity' better than 180 dB at any depth with no acceleration compensation; --- 6. Designed for operation at depths exceeding 1,000 m and having a 'hydrophone sensitivity' better than 230 dB below 4 kHz;	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed components therefor, as follows: --- 2. Passive systems, equipment and specially designed components therefor, as follows: --- a. Hydrophones having any of the following characteristics: --- 4. A 'hydrophone sensitivity' greater (better) than 180 dB at any depth with no acceleration compensation; --- 6. Designed for operation at depths exceeding 1,000 m and having a 'hydrophone sensitivity' greater (better) than 230 dB below 4 kHz;
6A001.a.2.b. *Technical Note,* 6A001.a.2.d.1.,	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed	Acoustic systems, equipment and components, as follows: a. Marine acoustic systems, equipment and specially designed

6A001.a.2.g.2.	components therefor, as follows: --- 2. Passive systems, equipment and specially designed components therefor, as follows: --- b. Towed acoustic hydrophone arrays having any of the following characteristics: --- 1. Hydrophone group spacing of less than 12.5 m or 'able to be modified' to have hydrophone group spacing of less than 12.5 m; 2. Designed or 'able to be modified' to operate at depths exceeding 35 m; *Technical Note* *For the purpose of Category Code 6A001.a.2.b.2., 'able to be modified' in Category Codes 6A001.a.2.b.1. and 2. means having provisions to allow a change of the wiring or interconnections to alter hydrophone group spacing or operating depth limits. These provisions are: spare wiring exceeding 10% of the number of wires, hydrophone group spacing adjustment blocks or internal depth limiting devices that are adjustable or that control more than one hydrophone group.* 3. Heading sensors specified in Category Code 6A001.a.2.d.; 4. Longitudinally reinforced array hoses; 5. An assembled array of less than 40 mm in diameter; 6. Not used; 7. Hydrophone characteristics specified in Category Code 6A001.a.2.a.; or	components therefor, as follows: --- 2. Passive systems, equipment and specially designed components therefor, as follows: --- b. Towed acoustic hydrophone arrays having any of the following characteristics: --- 1. Hydrophone group spacing of less than 12.5 m or 'able to be modified' to have hydrophone group spacing of less than 12.5 m; 2. Designed or 'able to be modified' to operate at depths exceeding 35 m; 3. Heading sensors specified in Category Code 6A001.a.2.d.; 4. Longitudinally reinforced array hoses; 5. An assembled array of less than 40 mm in diameter; 6. Not used; 7. Hydrophone characteristics specified in Category Code 6A001.a.2.a.; or 8. Accelerometer based hydro acoustic sensors specified in Category Code 6A001.a.2.g.; *Technical Note* *For the purpose of Category Code 6A001.a.2.b., 'able to be modified' means having provisions to allow a change of the wiring or interconnections to alter hydrophone group spacing or operating depth limits. These provisions are: spare wiring exceeding 10% of the number of wires, hydrophone group spacing adjustment blocks or internal depth limiting devices that are adjustable or that control more than one hydrophone group.*

	8. Accelerometer based hydro acoustic sensors specified in Category Code 6A001.a.2.g.; --- d. Heading sensors having both of the following characteristics: 1. An "accuracy" of better than 0.5º; and --- g. Accelerometer-based hydro-acoustic sensors having all of the following characteristics: --- 2. Having an overall 'acceleration sensitivity' better than 48 dB (reference 1,000 mV rms per 1 g);	--- d. Heading sensors having both of the following characteristics: 1. An "accuracy" of less (better) than 0.5º; and --- g. Accelerometer-based hydro-acoustic sensors having all of the following characteristics: --- 2. Having an overall 'acceleration sensitivity' greater (better) than 48 dB (reference 1,000 mV rms per 1 g);
6A001.b.1.b., 6A001.b.2.	Acoustic systems, equipment and components, as follows: --- b. Correlation-velocity and Doppler-velocity sonar log equipment, designed to measure the horizontal speed of the equipment carrier relative to the seabed, as follows: 1. Correlation-velocity sonar log equipment having either of the following characteristics: --- b. Having speed "accuracy" better than 1% of speed; --- 2. Doppler-velocity sonar log equipment having speed "accuracy" better than 1% of speed;	Acoustic systems, equipment and components, as follows: --- b. Correlation-velocity and Doppler-velocity sonar log equipment, designed to measure the horizontal speed of the equipment carrier relative to the seabed, as follows: 1. Correlation-velocity sonar log equipment having either of the following characteristics: --- b. Having speed "accuracy" less (better) than 1% of speed; --- 2. Doppler-velocity sonar log equipment having speed "accuracy" less (better) than 1% of speed;

6A002

Category Code	SGCO 2024	SGCO 2025
6A002.a.2. *Technical Note*,	Optical sensors or equipment and components therefor, as follows: ---	Optical sensors or equipment and components therefor, as follows: ---

6A002.a.2.a.2.b.	a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- *Technical Note* *For the purpose of Category Code 6A002.a.2., 'charge multiplication' is a form of electronic image amplification and is defined as the generation of charge carriers as a result of an impact ionisation gain process. 'Charge multiplication' sensors may take the form of an image intensifier tube, solid state detector or "focal plane array".* --- a. Image intensifier tubes having all of the following characteristics: --- 2. Electron image amplification using either of the following: --- b. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve 'charge multiplication' other than by a microchannel plate; and	a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- - --- a. Image intensifier tubes having all of the following characteristics: --- 2. Electron image amplification using either of the following: --- b. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve "charge multiplication" other than by a microchannel plate; and
6A002.a.2.b.2.b.	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- b. Image intensifier tubes having all of the following characteristics:	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- b. Image intensifier tubes having all of the following characteristics:

	--- 2. Electron image amplification using either of the following: --- b. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve 'charge multiplication' other than by a microchannel plate; and	--- 2. Electron image amplification using either of the following: --- b. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve "charge multiplication" other than by a microchannel plate; and
6A002.a.2.c.2.	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- c. Specially designed components as follows --- 2. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve 'charge multiplication' other than by a microchannel plate;	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 2. Image intensifier tubes and specially designed components therefor, as follows: --- c. Specially designed components as follows --- 2. An electron sensing device with a non-binned pixel pitch of 500 µm or less, specially designed or modified to achieve "charge multiplication" other than by a microchannel plate;
6A002.a.3. *Note 2c.*, 6A002.a.3. *Note 2d. Technical Note*	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 3. Non-"space-qualified" "focal plane arrays" as follows: --- <u>*Note 2*</u> *Category Code 6A002.a.3. does not include:* --- *c. "Focal plane arrays" specially designed or*	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 3. Non-"space-qualified" "focal plane arrays" as follows: --- <u>*Note 2*</u> *Category Code 6A002.a.3. does not include:* --- *c. "Focal plane arrays" specially designed or*

	modified to achieve 'charge multiplication' and limited by design to have a maximum "radiant sensitivity" of 10 mA/W or less for wavelengths exceeding 760 nm, having both of the following characteristics: --- *d. Thermopile arrays having less than 5,130 elements.* *Technical Note* *'Charge multiplication' is a form of electronic image amplification and is defined as the generation of charge carriers as a result of an impact ionisation gain process. 'Charge multiplication' sensors may take the form of an image intensifier tube, solid state detector or "focal plane array".*	*modified to achieve "charge multiplication" and limited by design to have a maximum "radiant sensitivity" of 10 mA/W or less for wavelengths exceeding 760 nm, having both of the following characteristics:* --- *d. Thermopile arrays having less than 5,130 elements.* -
6A002.a.3.a.2.b., 6A002.a.3.b.2.b.	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 3. Non-"space-qualified" "focal plane arrays" as follows: a. Non-"space-qualified" "focal plane arrays" having both of the following characteristics: --- 2. Either of the following characteristics: --- b. Specially designed or modified to achieve 'charge multiplication' and having a maximum "radiant sensitivity" exceeding 10 mA/W; --- b. Non-"space-qualified" "focal plane arrays" having both of the following characteristics: ---	Optical sensors or equipment and components therefor, as follows: --- a. Optical detectors as follows: --- 3. Non-"space-qualified" "focal plane arrays" as follows: a. Non-"space-qualified" "focal plane arrays" having both of the following characteristics: --- 2. Either of the following characteristics --- b. Specially designed or modified to achieve "charge multiplication" and having a maximum "radiant sensitivity" exceeding 10 mA/W; --- b. Non-"space-qualified" "focal plane arrays" having both of the following characteristics: ---

	2. Have either of the following characteristics: --- b. Specially designed or modified to achieve 'charge multiplication' and having a maximum "radiant sensitivity" exceeding 10 mA/W;	2. Have either of the following characteristics: --- b. Specially designed or modified to achieve "charge multiplication" and having a maximum "radiant sensitivity" exceeding 10 mA/W;
6A002.b. *Note*	Optical sensors or equipment and components therefor, as follows: --- b. "Monospectral imaging sensors" and "multispectral imaging sensors", designed for remote sensing applications and having either of the following characteristics: --- *Note* *Category Code 6A002.b.1. does not include "monospectral imaging sensors" with a peak response in the wavelength range exceeding 300 nm but not exceeding 900 nm and only incorporating either of the following non "space qualified" detectors or non "space qualified" "focal plane arrays":* *a. Charge Coupled Devices (CCD) not designed or modified to achieve 'charge multiplication'; or* *b. Complementary Metal Oxide Semiconductor (CMOS) devices not designed or modified to achieve 'charge multiplication'.*	Optical sensors or equipment and components therefor, as follows: --- b. "Monospectral imaging sensors" and "multispectral imaging sensors", designed for remote sensing applications and having either of the following characteristics: --- *Note* *Category Code 6A002.b.1. does not include "monospectral imaging sensors" with a peak response in the wavelength range exceeding 300 nm but not exceeding 900 nm and only incorporating either of the following non "space qualified" detectors or non "space qualified" "focal plane arrays":* *a. Charge Coupled Devices (CCD) not designed or modified to achieve "charge multiplication"; or* *b. Complementary Metal Oxide Semiconductor (CMOS) devices not designed or modified to achieve "charge multiplication".*

6A003

Category Code	SGCO 2024	SGCO 2025
6A003.a.3.	Cameras, systems or equipment, and components therefor, as follows: --- a. Instrumentation cameras and specially designed components therefor, as follows: --- 3. Electronic streak cameras having temporal resolution better	Cameras, systems or equipment, and components therefor, as follows: --- a. Instrumentation cameras and specially designed components therefor, as follows: --- 3. Electronic streak cameras having temporal resolution less

	than 50 ns;	(better) than 50 ns;

6A005

Category Code	SGCO 2024	SGCO 2025
6A005.f.3.a., 6A005.g.2., 6A005.g.4.	"Lasers", other than those specified in Category Code 0B001.g.5. or 0B001.h.6., components and optical equipment, as follows: --- f. Optical equipment as follows: --- 3. Optical equipment and components, specially designed for coherent beam combination in a phased-array "SHPL" system and having either of the following characteristics: a. An "accuracy" of 0.1 µm or less, for wavelengths greater than 1 µm; or --- g. 'Laser acoustic detection equipment' having all of the following characteristics: --- 2. "Laser" frequency stability equal to or better (less) than 10 MHz; --- 4. Optical system resolution better (less) than 1 nm; and	"Lasers", other than those specified in Category Code 0B001.g.5. or 0B001.h.6., components and optical equipment, as follows: --- f. Optical equipment as follows: --- 3. Optical equipment and components, specially designed for coherent beam combination in a phased-array "SHPL" system and having either of the following characteristics: a. An "accuracy" of 0.1 µm or less (better), for wavelengths greater than 1 µm; or --- g. 'Laser acoustic detection equipment' having all of the following characteristics: --- 2. "Laser" frequency stability equal to or less (better) than 10 MHz; --- 4. Optical system resolution less (better) than 1 nm; and

6A006

Category Code	SGCO 2024	SGCO 2025
6A006.a., 6A006.b., 6A006.c.	"Magnetometers", "magnetic gradiometers", "intrinsic magnetic gradiometers", underwater electric field sensors, "compensation systems", and specially designed components therefor, as follows: --- a. "Magnetometers" and sub systems, as follows:	"Magnetometers", "magnetic gradiometers", "intrinsic magnetic gradiometers", underwater electric field sensors, "compensation systems", and specially designed components therefor, as follows: --- a. "Magnetometers" and sub systems, as follows:

	1. "Magnetometers" using "superconductive" (SQUID) "technology" and having either of the following: a. SQUID systems designed for stationary operation, without specially designed sub systems designed to reduce in motion noise, and having a 'sensitivity' equal to or lower (better) than 50 fT (rms) per square root Hz at a frequency of 1 Hz; or b. SQUID systems having an in-motion magnetometer 'sensitivity' lower (better) than 20 pT (rms) per square root Hz at a frequency of 1 Hz and specially designed to reduce in motion noise; 2. "Magnetometers" using optically pumped or nuclear precession (proton/Overhauser) "technology" having a 'sensitivity' lower (better) than 20 pT (rms) per square root Hz at a frequency of 1 Hz; 3. "Magnetometers" using fluxgate "technology" having a 'sensitivity' equal to or lower (better) than 10 pT (rms) per square root Hz at a frequency of 1 Hz; 4. Induction coil "magnetometers" having a 'sensitivity' lower (better) than any of the following: a. 0.05 nT (rms) per square root Hz at frequencies of less than 1 Hz; b. 1×10^{-3} nT (rms) per square root Hz at frequencies of 1 Hz or more but not exceeding 10 Hz; or c. 1×10^{-4} nT (rms) per square root Hz at frequencies exceeding 10 Hz; 5. Fibre optic "magnetometers" having a 'sensitivity' lower (better) than 1 nT (rms) per square root Hz; b. Underwater electric field sensors having a 'sensitivity' lower (better) than 8 nanovolt per metre per square root Hz when measured at 1 Hz; c. "Magnetic gradiometers" as follows: 1. "Magnetic gradiometers" using multiple "magnetometers"	1. "Magnetometers" using "superconductive" (SQUID) "technology" and having either of the following: a. SQUID systems designed for stationary operation, without specially designed sub systems designed to reduce in motion noise, and having a 'sensitivity' equal to or less (better) than 50 fT (rms) per square root Hz at a frequency of 1 Hz; or b. SQUID systems having an in-motion magnetometer 'sensitivity' less (better) than 20 pT (rms) per square root Hz at a frequency of 1 Hz and specially designed to reduce in motion noise; 2. "Magnetometers" using optically pumped or nuclear precession (proton/Overhauser) "technology" having a 'sensitivity' less (better) than 20 pT (rms) per square root Hz at a frequency of 1 Hz; 3. "Magnetometers" using fluxgate "technology" having a 'sensitivity' equal to or less (better) than 10 pT (rms) per square root Hz at a frequency of 1 Hz; 4. Induction coil "magnetometers" having a 'sensitivity' less (better) than any of the following: a. 0.05 nT (rms) per square root Hz at frequencies of less than 1 Hz; b. 1×10^{-3} nT (rms) per square root Hz at frequencies of 1 Hz or more but not exceeding 10 Hz; or c. 1×10^{-4} nT (rms) per square root Hz at frequencies exceeding 10 Hz; 5. Fibre optic "magnetometers" having a 'sensitivity' less (better) than 1 nT (rms) per square root Hz; b. Underwater electric field sensors having a 'sensitivity' less (better) than 8 nanovolt per metre per square root Hz when measured at 1 Hz; c. "Magnetic gradiometers" as follows: 1. "Magnetic gradiometers" using multiple

	specified in Category Code 6A006.a.; 2. Fibre optic "intrinsic magnetic gradiometers" having a magnetic gradient field 'sensitivity' lower (better) than 0.3 nT/m (rms) per square root Hz; 3. "Intrinsic magnetic gradiometers", using "technology" other than fibre optic "technology", having a magnetic gradient field 'sensitivity' lower (better) than 0.015 nT/m (rms) per square root Hz;	"magnetometers" specified in Category Code 6A006.a.; 2. Fibre optic "intrinsic magnetic gradiometers" having a magnetic gradient field 'sensitivity' less (better) than 0.3 nT/m (rms) per square root Hz; 3. "Intrinsic magnetic gradiometers", using "technology" other than fibre optic "technology", having a magnetic gradient field 'sensitivity' less (better) than 0.015 nT/m (rms) per square root Hz;

6B004

Category Code	SGCO 2024	SGCO 2025
6B004.a.	Optical equipment as follows: a. Equipment for measuring absolute reflectance to an "accuracy" of equal to or better than 0.1% of the reflectance value;	Optical equipment as follows: a. Equipment for measuring absolute reflectance to an "accuracy" of equal to or less (better) than 0.1% of the reflectance value;

6C005

Category Code	SGCO 2024	SGCO 2025
6C005.b. *Note*, 6C005.b. *Technical Note*	"Laser" materials as follows: --- b. Rare-earth-metal doped double-clad fibres having either of the following characteristics: --- *Technical Notes* *1. For the purpose of Category Code 6C005.b.1.b., the core 'Numerical Aperture' ('NA') is measured at the emission wavelengths of the fibre.* *2. Category Code 6C005.b. includes fibres assembled with end caps.*	"Laser" materials as follows: --- b. Rare-earth-metal doped double-clad fibres having either of the following characteristics: --- *Note* *Category Code 6C005.b. includes fibres assembled with end caps.* *Technical Note* *For the purpose of Category Code 6C005.b., the core 'Numerical Aperture' ('NA') is measured at the emission wavelengths of the fibre.*

6E003

Category Code	SGCO 2024	SGCO 2025
6E003.a.2.	Other "technology", as follows: a. "Technology" as follows: --- 2. "Technology" for the fabrication of optics using single point diamond turning techniques to produce surface finish "accuracies" of better than 10 nm rms on non-planar surfaces exceeding 0.5 m^2;	Other "technology", as follows: a. "Technology" as follows: --- 2. "Technology" for the fabrication of optics using single point diamond turning techniques to produce surface finish "accuracies" of less (better) than 10 nm rms on non-planar surfaces exceeding 0.5 m^2;

Category 7

7A

Category Code	SGCO 2024	SGCO 2025
7A *N.B.*	**Systems, Equipment and Components** *N.B.* *For automatic pilots for underwater vehicles, see Category 8. For radar, see Category 6.*	**Systems, Equipment and Components** *N.B.* *For automatic pilots for submersible vehicles, see Category 8. For radar, see Category 6.*

7A003

Category Code	SGCO 2024	SGCO 2025
7A003.b. *Note*	'Inertial measurement equipment or systems', having any of the following characteristics: --- b. Designed for "aircraft", land vehicles or vessels, with an embedded 'positional aiding reference' and providing position after loss of all 'positional aiding references' for a period of up to 4 minutes, having an "accuracy" of less (better) than 10 meters "CEP"; *Technical Note* *For the purpose of Category Code 7A003.b., this entry refers to systems in which 'inertial measurement equipment or systems' and other independent 'positional aiding references' are built*	'Inertial measurement equipment or systems', having any of the following characteristics: --- b. Designed for "aircraft", land vehicles or vessels, with an embedded 'positional aiding reference' and providing position after loss of all 'positional aiding references' for a period of up to 4 minutes, having an "accuracy" of less (better) than 10 meters "CEP"; *Note* *Category Code 7A003.b. refers to systems in which 'inertial measurement equipment or systems' and other independent 'positional aiding references' are built into a single unit*

	into a single unit (i.e. embedded) in order to achieve improved performance.	*(i.e. embedded) in order to achieve improved performance.*

7A105

Category Code	SGCO 2024	SGCO 2025
7A105 *Notes*	Receiving equipment for 'navigation satellite systems', other than those specified in Category Code 7A005, having either of the following characteristics, and specially designed components therefor: --- *Note* *Category Codes 7A105.b.2. and 7A105.b.3. do not include equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) 'navigation satellite system' services.* *Technical Note* *In Category Code 7A105, 'navigation satellite system' includes Global Navigation Satellite Systems (GNSS; e.g. GPS, GLONASS, Galileo or BeiDou) and Regional Navigation Satellite Systems (RNSS; e.g. NavIC, QZSS).*	Receiving equipment for 'navigation satellite systems', other than those specified in Category Code 7A005, having either of the following characteristics, and specially designed components therefor: --- *Notes* *1. Category Codes 7A105.b.2. and 7A105.b.3. do not include equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) navigation satellite system services.* *2. In Category Code 7A105, 'navigation satellite system' includes Global Navigation Satellite Systems (GNSS; e.g. GPS, GLONASS, Galileo or BeiDou) and Regional Navigation Satellite Systems (RNSS; e.g. NavIC, QZSS).*

Category 8

8A002

Category Code	SGCO 2024	SGCO 2025
8A002.a.4. *Technical Note,* 8A002.d.1., 8A002.o., 8A002.o.2.d., 8A002.o.3.	Marine systems, equipment and components, as follows: --- a. Systems, equipment and components, specially designed or modified for submersible vehicles and designed to operate at depths exceeding 1,000 m, as follows: --- 4. Components manufactured from material specified in	Marine systems, equipment and components, as follows: --- a. Systems, equipment and components, specially designed or modified for submersible vehicles and designed to operate at depths exceeding 1,000 m, as follows: --- 4. Components manufactured from material specified in

	Category Code 8C001; *Technical Note* *For the purpose of Category Code 8A002.a.4., this entry includes 'syntactic foam' specified in Category Code 8C001 when an intermediate stage of manufacture has been performed and it is not yet in the final component form.*	Category Code 8C001; -
	--- d. Underwater vision systems, having both of the following characteristics: 1. Specially designed or modified for remote operation with an underwater vehicle; and	--- d. Underwater vision systems, having both of the following characteristics: 1. Specially designed or modified for remote operation with a submersible vehicle; and
	--- o. Propellers, power transmission systems, power generation systems and noise reduction systems, as follows:	--- o. Propellers, power transmission systems, power generation systems and noise reduction systems and related equipment, as follows:
	--- 2. Water-screw propeller, power generation systems or transmission systems, designed for use on vessels, as follows:	--- 2. Water-screw propeller, power generation systems or transmission systems, designed for use on vessels, as follows:
	--- d. Power transmission shaft systems incorporating "composite" material components and capable of transmitting more than 2 MW;	--- d. Power transmission systems incorporating "composite" shafts and designed to transmit power exceeding 10 MW;
	--- 3. Noise reduction systems designed for use on vessels of 1,000 tonnes displacement or more, as follows:	--- 3. Noise reduction systems and related equipment, designed for use on vessels of 1,000 tonnes displacement or more, as follows:

Category 9

9A006

Category Code	SGCO 2024	SGCO 2025
9A006.a., 9A006.b.	Systems and components, specially designed for liquid rocket propulsion systems, as follows: --- a. Cryogenic refrigerators, flightweight dewars, cryogenic heat pipes or cryogenic systems, specially designed for use in space vehicles and capable of restricting cryogenic fluid losses to less than 30% per year; b. Cryogenic containers or closed-cycle refrigeration systems, capable of providing temperatures of 100 K (-173 ºC) or less for "aircraft" capable of sustained flight at speeds exceeding Mach 3, launch vehicles or "spacecraft";	Systems and components, specially designed for liquid rocket propulsion systems, as follows: --- a. Cryogenic refrigerators, flightweight dewars, cryogenic heat pipes or cryogenic systems, designed to restrict cryogenic fluid losses to less than 30% per year; b. Cryogenic containers or closed-cycle refrigeration systems, designed to maintain or produce temperatures less than or equal to 100 K (-173.15 °C);

9A108

Category Code	SGCO 2024	SGCO 2025
9A108.a. *N.B.*, 9A108.a. *Note*	Components, other than those specified in Category Code 9A008, as follows, specially designed for solid and hybrid rocket propulsion systems: a. Rocket motor cases and "insulation" components therefor, usable in sub-systems specified in Category Code 9A007, 9A009, 9A107 or 9A109.a.;	Components, other than those specified in Category Code 9A008, as follows, specially designed for solid and hybrid rocket propulsion systems: a. Rocket motor cases and "insulation" components therefor, usable in sub-systems specified in Category Code 9A007, 9A009, 9A107 or 9A109.a.; *N.B.* *For insulation material in bulk or sheet form, see also Category Code 9C108.* *Note* *In Category Code 9A108, insulation intended to be applied to the components of a rocket motor, i.e. the case, nozzle inlets, case closures, includes cured or semi-cured compounded rubber components comprising sheet stock containing an*

		insulating or refractory material. It may also be incorporated as stress relief boots or flaps.

9A121

Category Code	SGCO 2024	SGCO 2025
9A121 *Note*	Umbilical and interstage electrical connectors specially designed for "missiles", space launch vehicles specified in Category Code 9A004 or sounding rockets specified in Category Code 9A104. *Technical Note* *Interstage connectors referred to in Category Code 9A121 also include electrical connectors installed between the "missile", space launch vehicle or sounding rocket and their payload.*	Umbilical and interstage electrical connectors specially designed for "missiles", space launch vehicles specified in Category Code 9A004 or sounding rockets specified in Category Code 9A104. *Note* *In Category Code 9A121, interstage electrical connectors also include electrical connectors installed between the "missile", space launch vehicle or sounding rocket and their payload.*

9B009

Category Code	SGCO 2024	SGCO 2025
9B009 *Note*	Tooling specially designed for producing gas turbine engine powder metallurgy rotor components having both of the following characteristics: --- *Note* *Category Code 9B009 does not include tooling for the production of powder.*	Tooling specially designed for producing gas turbine engine powder metallurgy rotor components having both of the following characteristics: --- *Note* *Category Code 9B009 does not include tooling for the "production" of powder.*

9B010

Category Code	SGCO 2024	SGCO 2025
9B010	Equipment specially designed for the production of items specified in Category Code 9A012.	Equipment specially designed for the "production" of items specified in Category Code 9A012.

9B105

Category Code	SGCO 2024	SGCO 2025
9B105 *Notes*, 9B105 *Technical Notes*	'Aerodynamic test facilities' for speeds of Mach 0.9 or more, usable for 'missiles' and their sub-systems. --- *Note* *Category Code 9B105 does not include wind tunnels for speeds of Mach 3 or less with dimension of the 'test cross section size' equal to or less than 250 mm.* *Technical Notes* *1. In Category Code 9B105, 'aerodynamics test facilities' includes wind tunnels and shock tunnels for the study of airflow over objects.* *2. In Note to Category Code 9B105, 'test cross section size' means the diameter of the circle, or the side of the square, or the longest side of the rectangle, or the major axis of the ellipse at the largest 'test cross section' location. 'Test cross section' is the section perpendicular to the flow direction.* *3. In Category Code 9B105, 'missile' means complete rocket systems and unmanned aerial vehicle systems capable of a range exceeding 300 km.*	Aerodynamic test facilities for speeds of Mach 0.9 or more, usable for 'missiles' and their sub-systems. --- *Notes* *1. Category Code 9B105 includes wind tunnels and shock tunnels for the study of airflow over objects.* *2. Category Code 9B105 does not include wind tunnels for speeds of Mach 3 or less and having a 'test cross section size' equal to or less than 250 mm.* *Technical Notes* *1. In Note to Category Code 9B105, 'test cross section size' means the diameter of the circle, or the side of the square, or the longest side of the rectangle, or the major axis of the ellipse at the largest 'test cross section' location. 'Test cross section' is the section perpendicular to the flow direction.* *2. In Category Code 9B105, 'missile' means complete rocket systems and unmanned aerial vehicle systems, capable of a range exceeding 300 km.*

9B107

Category Code	SGCO 2024	SGCO 2025
9B107 *Notes*	'Aerothermodynamic test facilities', usable for 'missiles', 'missile' rocket propulsion systems, and re-entry vehicles and equipment specified in Category Code 9A116, having either of the following characteristics: --- *Technical Notes*	Aerothermodynamic test facilities, usable for 'missiles', 'missile' rocket propulsion systems, and re-entry vehicles and equipment specified in Category Code 9A116, having either of the following characteristics: --- *Notes*

	1. *'Aerothermodynamic test facilities' include plasma arc jet facilities and plasma wind tunnels for the study of thermal and mechanical effects of airflow on objects.* 2. *In Category Code 9B107, 'missile' means complete rocket systems and unmanned aerial vehicle systems capable of a range exceeding 300 km.*	1. *Category Code 9B107 includes plasma arc jet facilities and plasma wind tunnels for the study of thermal and mechanical effects of airflow on objects.* 2. *In Category Code 9B107, 'missile' means complete rocket systems and unmanned aerial vehicle systems, capable of a range exceeding 300 km.*

9C108

Category Code	SGCO 2024	SGCO 2025
9C108, 9C108 *Note*	"Insulation" material in bulk form and "interior lining", other than those specified in Category Code 9A008, for rocket motor cases usable in "missiles" or specially designed for solid propellant rocket engines specified in Category Code 9A007 or 9A107.	Insulation material in bulk form and "interior lining", other than those specified in Category Code 9A008, for rocket motor cases usable in "missiles" or specially designed for solid propellant rocket engines specified in Category Code 9A007 or 9A107. *Note* *In Category Code 9C108, insulation intended to be applied to the components of a rocket motor, i.e. the case, nozzle inlets or case closures, includes cured or semi-cured compounded rubber sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps specified in Category Code 9A108.*

9D004

Category Code	SGCO 2024	SGCO 2025
9D004.b. *Note*	Other "software" as follows: --- b. "Software" for testing aero gas turbine engines, assemblies or components, having both of the following characteristics: --- *Note* *Category Code 9D004.b. does not include software for*	Other "software" as follows: --- b. "Software" for testing aero gas turbine engines, assemblies or components, having both of the following characteristics: --- *Note* *Category Code 9D004.b. does not include software for*

	operation of the test facility or operator safety (e.g. overspeed shutdown, fire detection and suppression), or production, repair or maintenance acceptance-testing limited to determining if the item has been properly assembled or repaired.	*operation of the test facility or operator safety (e.g. overspeed shutdown, fire detection and suppression), or "production", repair or maintenance acceptance-testing limited to determining if the item has been properly assembled or repaired.*

9E003

Category Code	SGCO 2024	SGCO 2025
9E003.f., 9E003.g., 9E003.g. *Technical Note*	Other "technology" as follows: --- f. "Technology" "required" for the "production" of specially designed components for high output diesel engines, as follows: --- g. "Technology" "required" for the "development" or "production" of 'high output diesel engines' for solid, gas phase or liquid film (or combinations thereof) cylinder wall lubrication and permitting operation to temperatures exceeding 723 K (450 ºC), measured on the cylinder wall at the top limit of travel of the top ring of the piston; *Technical Note* *For the purpose of Category Code 9E003.g., 'high output diesel engines' are diesel engines with a specified brake mean effective pressure of 1.8 MPa or more at a speed of 2,300 rpm, provided the rated speed is 2,300 rpm or more.*	Other "technology" as follows: --- f. "Technology" "required" for the "production" of specially designed components for "high output diesel engines", as follows: --- g. "Technology" "required" for the "development" or "production" of "high output diesel engines" for solid, gas phase or liquid film (or combinations thereof) cylinder wall lubrication and permitting operation to temperatures exceeding 723 K (450 ºC), measured on the cylinder wall at the top limit of travel of the top ring of the piston; -

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