File Ref: TRA CR 1506/2

LEGISLATIVE COUNCIL BRIEF

Import and Export Ordinance (Chapter 60)

IMPORT AND EXPORT (STRATEGIC COMMODITIES) REGULATIONS (AMENDMENT OF SCHEDULE 1) ORDER 2009

INTRODUCTION

The Director-General of Trade and Industry (DGTI) has made the Import and Export (Strategic Commodities) Regulations (Amendment of Schedule 1) Order 2009 ("the Order") to amend Schedule 1 to the Import and Export (Strategic Commodities) Regulations (Cap. 60 sub. leg. G) ("the Regulations") to reflect the latest changes adopted by various international non-proliferation regimes in their control lists of strategic commodities. The Order is at Annex A.

Annex A

JUSTIFICATIONS

- 2. The Regulations enable Hong Kong to impose licensing control on the import, export, transhipment, and in some cases, transit of strategic commodities. The licensing system is administered by the Trade and Industry Department (TID) and enforced by the Customs and Excise Department.
- 3. Schedule 1 to the Regulations sets out the strategic commodities under control, which include materials, equipment, software and technology capable of being used for both industrial and military purposes. The Schedule has been drawn up on the basis of the control lists adopted by various international non-proliferation regimes and convention, i.e. the Wassenaar Arrangement (WA), the Australia Group, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group, and the Chemical Weapons Convention. The Administration follows closely developments in the international scene with regard to the

control over strategic commodities. The Schedule is under regular review and, where appropriate, is amended to take into account the most up-to-date control lists adopted by relevant international regimes and convention. The last amendment of Schedule 1 to the Regulations came into effect in February 2009.

4. Under section 6B of the Import and Export Ordinance (Cap. 60), DGTI may, by order published in the Gazette, replace the Schedules to the Regulations or amend them to add or remove an article or class of articles to or from the Schedules to the Regulations.

THE ORDER

- 5. The Order amends Schedule 1 to the Regulations to reflect the revisions adopted by WA and MTCR to their respective control lists up to the end of 2008. The major changes are set out below -
- (a) the WA (which governs controls over dual-use industrial goods and conventional weapons) has revised its control over a number of items. The significant changes include the following -
 - (i) relaxation of control over certain wireless personal area network equipment devices with published or commercial cryptographic standard (including certain wireless routers, printers, etc.);
 - (ii) removal of control on certain field programmable logic devices (including certain high-technology integrated circuits with memory function);
 - (iii) imposition of control on certain electronic equipment for detecting presence of explosive residues, explosive charges, submersible vehicles, etc.; and
- (b) the MTCR (which focuses on controls of transfer of missile technology and equipment) has expanded its control over certain propellant additives and agents.

6. We also take the opportunity to make textual and editorial revisions to the Schedule. These changes do not affect the substance of the control list.

LEGISLATIVE TIMETABLE

7. The Order will be gazetted on 13 November 2009 and tabled at the Legislative Council on 18 November 2009.

IMPLICATIONS OF THE PROPOSAL

Annex B

8. The Order has economic implications as set out in Annex B. The Order is in conformity with the Basic Law, including the provisions concerning human rights. It will not affect the binding effect of the Regulations. It has no financial, civil service, productivity, environmental or sustainability implications.

PUBLIC CONSULTATION

9. The amendments made by the Order are technical in nature. Public consultation is considered not necessary.

PUBLICITY

10. A press release will be issued when the Order is published in the Gazette on 13 November 2009. TID will announce the revised control list through trade circulars, general advisory service and its web portal on the day of gazettal. A spokesman will be available for answering media enquiries.

ENQUIRIES

11. For any enquiries on this brief, please contact Mr. Billy AU, Principal Trade Officer of the TID, at 2398 5554.

Trade and Industry Department 11 November 2009

IMPORT AND EXPORT (STRATEGIC COMMODITIES) REGULATIONS (AMENDMENT OF SCHEDULE 1) ORDER 2009

A copy of the captioned order is attached.

IMPORT AND EXPORT (STRATEGIC COMMODITIES) REGULATIONS (AMENDMENT OF SCHEDULE 1) ORDER 2009

(Made by the Director-General of Trade and Industry under section 6B of the Import and Export Ordinance (Cap. 60))

1. Commencement

Subject to section 6B of the Ordinance, this Order comes into operation on a day to be appointed by the Director-General of Trade and Industry by notice published in the Gazette.

2. Strategic commodities

(1) Schedule 1 to the Import and Export (Strategic Commodities)
Regulations (Cap. 60 sub. leg. G) is amended by repealing –

"SCHEDULE 1"

and substituting -

"SCHEDULE 1

[reg. 2 & Sch. 2]".

- (2) Schedule 1 is amended, in the Munitions List, in ML1(a), in Note (3), by repealing the semicolon and substituting a full stop.
- (3) Schedule 1 is amended, in the Munitions List, in ML1(d), in the English text, by repealing "suppressers" and substituting "suppressors".
- (4) Schedule 1 is amended, in the Munitions List, in ML1(d), in the Chinese text, by repealing the full stop and substituting a semicolon.
 - (5) Schedule 1 is amended, in the Munitions List, in ML2(a)
 - (a) in Note 2(a), by repealing "and";
 - (b) in Note 2(b), by repealing the full stop and substituting "; and":
 - (c) in Note 2, by adding
 - "(c) Hand-held projectile launchers specially designed to launch tethered projectiles having no high

explosive charge or communications link, to a range of less than or equal to 500 m.".

- (6) Schedule 1 is amended, in the Munitions List, in ML5(c), in the Chinese text, by repealing the full stop and substituting a semicolon.
- (7) Schedule 1 is amended, in the Munitions List, in ML7(e), by repealing "military use," and substituting "military use and designed or modified".
- (8) Schedule 1 is amended, in the Munitions List, in ML7(f), by repealing ", specially designed components therefor, and specially formulated chemical mixtures" and substituting "specially designed or modified for military use, components and chemical mixtures".
- (9) Schedule 1 is amended, in the Munitions List, by repealing ML7(f)(1) and substituting
 - "(1) Equipment designed or modified for defence against materials specified in ML7(a), ML7(b) or ML7(d), and specially designed components for the equipment;".
- (10) Schedule 1 is amended, in the Munitions List, in ML7(f)(2), by repealing "Equipment, specially designed or modified for military use, for the decontamination of objects contaminated with materials controlled by" and substituting "Equipment designed or modified for the decontamination of objects contaminated with materials specified in".
- (11) Schedule 1 is amended, in the Munitions List, in ML7(f)(3), by repealing "controlled by" and substituting "specified in".
- (12) Schedule 1 is amended, in the Munitions List, in ML7(g), by repealing ", specially designed or modified for military use, for the detection or identification of materials controlled by" and substituting "specially designed or modified for military use and designed or modified for the detection or identification of materials specified in".
- (13) Schedule 1 is amended, in the Munitions List, in ML7, in Note 2, by repealing "listed in" and substituting "specified in".

- (14) Schedule 1 is amended, in the Munitions List, in ML8(b)(6), by repealing "listed in" and substituting "specified in".
- (15) Schedule 1 is amended, in the Munitions List, in ML8(g)(5), in the English text, by repealing "1,3,5,7 tetraacetyl-1,3,5,7,-tetraaza cyclo-octane" and substituting "1,3,5,7-tetraacetyl-1,3,5,7-tetraaza cyclo-octane".
- (16) Schedule 1 is amended, in the Munitions List, in ML8, in Note 1, in the English text, by repealing "Aircraft" and substituting "Aircraft".
- (17) Schedule 1 is amended, in the Munitions List, in ML9, by repealing "Vessels of war, special naval equipment and accessories, as follows, and components therefor, specially designed for military use:" and substituting "Vessels of war (surface or underwater), special naval equipment, accessories, components and other surface vessels, as follows:".
- (18) Schedule 1 is amended, in the Munitions List, by repealing ML9(a) and substituting
 - "(a) Vessels and components, as follows:
 - or modified for military use, regardless of current state of repair or operating condition, and whether or not they contain weapon delivery systems or armour, and hulls or parts of hulls for those vessels, and components for those vessels specially designed for military use;
 - (2) Surface vessels, other than those specified in ML9(a)(1), having any of the following fixed or integrated into the vessel:
 - (a) Automatic weapons having a calibre of 12.7 mm or greater and specified in ML1, or weapons specified in ML2, ML4, ML12 or ML19, or 'mountings' or hard points for those weapons;

Technical Note:

The term 'mountings' means weapon mounts or structural strengthening for the purpose of installing weapons.

- (b) Fire control systems specified in ML5;
- (c) All of the following:
 - (1) 'Chemical, Biological,
 Radiological and Nuclear (CBRN)
 protection';
 - (2) 'Pre-wet or wash down system' designed for decontamination purposes;
- (d) Active weapon countermeasure systems specified in ML4(b), ML5(c) or ML11(a) and having any of the following:
 - (1) 'Chemical, Biological,
 Radiological and Nuclear (CBRN)
 protection';
 - (2) Hull and superstructure, specially designed to reduce the radar cross section;
 - (3) Thermal signature reduction devices (e.g. an exhaust gas cooling system), excluding those specially designed to increase overall power plant efficiency or to reduce the environmental impact;

(4) A degaussing system designed to reduce the magnetic signature of the whole vessel;

Technical Notes:

- 1. The 'Chemical, Biological, term (CBRN) Radiological and Nuclear protection' means a self-contained interior space containing features such as overpressurization, isolation of ventilation systems, limited ventilation openings with Chemical, Biological, Radiological and Nuclear (CBRN) filters and limited personnel access points incorporating airlocks.
- 2. The term 'pre-wet or wash down system' means a seawater spray system capable of simultaneously wetting the exterior superstructure and decks of a vessel.".
- (19) Schedule 1 is amended, in the Munitions List, in ML10(h)(1)(a), in the Chinese text, by repealing "著陸" and substituting "着陸".
- (20) Schedule 1 is amended, in the Munitions List, in ML10(h)(6), in the Chinese text, by repealing "著陸" and substituting "着陸".
- (21) Schedule 1 is amended, in the Munitions List, in ML10, in Note 2(a), in the Chinese text, by repealing "民航機"" and substituting "民用飛機"".
 - (22) Schedule 1 is amended, in the Munitions List, in ML11(a)
 - (a) in Note 8, by repealing "and";
 - (b) in Note 9, by repealing the full stop at the end and substituting "; and";

- (c) in the Note, by adding –"10. "Automated Command and Control Systems".".
- (23) Schedule 1 is amended, in the Munitions List, in ML17(e)(3), by adding at the end –

"Technical Note:

Electro-magnetic pulse does not refer to unintentional interference caused by electromagnetic radiation from nearby equipment (e.g. machinery, appliances or electronics) or lightning.".

- (24) Schedule 1 is amended, in the Munitions List, in ML21(b)(4), by adding "specially designed for military use and" after "Software".
- (25) Schedule 1 is amended, in the Dual-use Goods List, in Category 0, in 0C002, in the Chinese text, by adding a semicolon after "特別可裂變物料"".
- (26) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, by repealing "CATEGORY 1 MATERIALS, CHEMICALS, "MICROORGANISMS" AND "TOXINS"" and substituting "CATEGORY 1 SPECIAL MATERIALS AND RELATED EQUIPMENT".
- (27) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A002, in the Notes, by adding
 - "3. 1A002(b)(1) does not include finished or semi-finished items that contain a maximum of two dimensions of interwoven filaments and are specially designed for applications as follows:
 - (a) Metal heat-treatment furnaces for tempering metals; and
 - (b) Silicon boule production equipment.".
- (28) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A003, by repealing "Manufactures of non-fluorinated polymeric substances controlled by 1C008(a)(3) in film, sheet, tape or ribbon form:" and substituting "Manufactures of non-"fusible" aromatic polyimides in film, sheet, tape or ribbon form having any of the following:".

- (29) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A003, in the Note, in the Chinese text, by repealing "製造" and substituting "產品".
- (30) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A003, by adding at the end –

"N.B.:

For "fusible" aromatic polyimides in any form, see 1C008(a)(3).".

- (31) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A004
 - (a) in 1A004(b)(3), by repealing "and";
 - (b) in 1A004(c)(3), by adding "and" at the end;
 - (c) by adding
 - "(d) Electronic equipment designed for automatically detecting or identifying the presence of "explosives" residues and utilizing 'trace detection' techniques (e.g. surface acoustic wave, ion mobility spectrometry, differential mobility spectrometry and mass spectrometry);

Technical Note:

The term 'trace detection' means the capability to detect less than 1 ppm vapour, or 1 mg solid or liquid.

Notes:

- 1. 1A004(d) does not include equipment specially designed for laboratory use.
- 2. 1A004(d) does not include non-contact walk-through security portals.".

- (32) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A004, in Note (b), by adding "residential safety and" before "civil industries".
- (33) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A007, in the N.B., by adding "See also 3A229 and 3A232." after "List.".
- (34) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1A, by adding –

"1A008 Charges, devices and components, as follows:

- (a) 'Shaped charges' having all of the following:
 - (1) Net Explosive Quantity (NEQ) greater than 90 g;
 - (2) Outer casing diameter equal to or greater than 75 mm;
- (b) Linear shaped cutting charges having all of the following, and specially designed components for those cutting charges:
 - (1) An explosive load greater than 40 g/m;
 - (2) A width of 10 mm or more;
- (c) Detonating cord with explosive core load greater than 64 g/m;
- (d) Cutters, other than those specified in 1A008(b), and severing tools, together having a Net Explosive Quantity (NEQ) greater than 3.5 kg;

Technical Note:

The term 'shaped charges' means explosive charges shaped to focus the effects of the explosive blast.".

- (35) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, by repealing 1B003(c) and substituting
 - "(c) Specially designed components for structures specified in 1B003(a) or for engines specified in 1B003(b);".

- (36) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1B101(a), by adding "or fibre placement machines," after "Filament winding machines".
- (37) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C, in the Technical Note, in the Chinese text, by repealing "金屬"和"合金"。
- (38) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C008(a), by repealing the Notes and substituting –

"Note:

1C008(a) includes substances in liquid or solid "fusible" form, including resin, powder, pellet, film, sheet, tape and ribbon.".

(39) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C008(a), by adding at the end –

"*N.B.*.:

For non-"fusible" aromatic polyimides in film, sheet, tape or ribbon form, see 1A003.".

(40) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C010(b), by repealing the Technical Note and substituting –

"Technical Note:

Properties for materials described in 1C010(b) should be determined using Suppliers of Advance Composite Materials Association (SACMA) recommended methods SRM 12 to 17, ISO 10618(2004) 10.2.1 Method A or national equivalent tow tests and based on lot average."

- (41) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C101, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (42) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C111(a)(4), by adding under "(4) Hydrazine derivatives as follows:" –

"N.B.:

See also Munitions List.".

- (43) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, by repealing 1C111(a)(4)(j) and substituting
 - "(j) Hydrazinium dinitrate;".
- (44) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C111(c), by adding
 - "(7) 4,5 diazidomethyl-2-methyl-1,2,3-triazole (iso-DAMTR);".
- (45) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C116, by repealing "Maraging steels (steels generally characterized by high nickel, very low carbon content and the use of substitutional elements or precipitates to produce age-hardening) having an ultimate tensile strength equal to or greater than 1.5 GPa, measured at 293 K (20°C), in the form of sheet, plate or tubing with a wall or plate thickness equal to or less than 5 mm;" and substituting "Maraging steels having an ultimate tensile strength of 1 500 MPa or greater, measured at 293 K (20°C), in the form of sheet, plate or tubing with a wall or plate thickness equal to or less than 5 mm;".
- (46) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C116, in the N.B., by adding a full stop at the end.
- (47) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C116, in the Technical Note, in the Chinese text, by repealing "高勒度" and substituting "高韌度".
- (48) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1C352(a)(2)(b), by repealing "Directive 92/40/EEC (O.J.L. 167, 22.6.1992, p.1)" and substituting "Annex I(2) EC Directive 2005/94/EC (O.J.L. 10, 14.1.2006, p.16)".
- (49) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, by repealing 1C352(a)(2)(b)(2) and substituting –

- "(2) Type A viruses of the subtypes H5 or H7 with genome sequences codified for multiple basic amino acids at the cleavage site of the haemagglutinin molecule similar to that observed for other HPAI viruses, indicating that the haemagglutinin molecule can be cleaved by a host ubiquitous protease;".
- (50) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1D003, by adding "or 1A004(d)" after "1A004(c)".
- (51) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1E001, by adding "1A006(b), 1A007," after "1A005,".
- (52) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1E002(g), by adding "or 1A004(d)" after "1A004(c)".
- (53) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1E, in the English text, by repealing "E102" and substituting "1E102".
- (54) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1E201, by repealing "controlled by 1A002, 1A202, 1A225 to 1A227, 1B201, 1B225 to 1B233, 1C002(a)(2)(c) or (d)" and substituting "specified in 1A002, 1A007, 1A202, 1A225 to 1A227, 1B201, 1B225 to 1B233, 1C002(b)(3) or (b)(4)".
- (55) Schedule 1 is amended, in the Dual-use Goods List, in Category 1, in 1E202, by repealing "controlled by" and substituting "specified in 1A007,".
- (56) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, in 2B001(*f*), in the Chinese text, by repealing "5,000" and substituting "5 000".
- (57) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, in 2B116(b), by repealing "real-time bandwidth" and substituting "real-time control bandwidth".
- (58) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, in 2B116(b), by adding at the end –

"Technical Note:

- In 2B116(b), the term 'real-time control bandwidth' means the maximum rate at which a controller can execute complete cycles of sampling, processing data and transmitting control signals.".
- (59) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, in 2B116, in the Note, in the Chinese text, by repealing "附著物" and substituting "附着物".
- (60) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, by repealing 2B120(b) and substituting
 - "(b) Designed or modified to incorporate slip rings or integrated non-contact devices capable of transferring electrical power or signal information, or both;".
- (61) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, in 2B120, by repealing the Note and substituting –

"Notes:

Note:

- 1. 2B120 does not include rotary tables designed or modified for machine tools or for medical equipment. For machine tool rotary tables, see 2B008.
- 2. Motion simulators or rate tables specified in 2B120 remain so specified whether or not slip rings or integrated non-contact devices are fitted at time of export.".
- (62) Schedule 1 is amended, in the Dual-use Goods List, in Category 2, by repealing 2B122 and substituting
 - "2B122 Centrifuges capable of imparting accelerations above
 100 g and designed or modified to incorporate slip rings or
 integrated non-contact devices capable of transferring
 electrical power or signal information, or both;

Centrifuges specified in 2B122 remain so specified whether or not slip rings or integrated non-contact devices are fitted at time of export.".

- (63) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A, in Note 2, in the N.B., by repealing the second paragraph.
- (64) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, by repealing 3A001(a)(7) and substituting
 - "(7) 'Field programmable logic devices' having any of the following:
 - (a) A maximum number of digital input/output greater than 200;
 - (b) A system gate count of greater than 230 000; Note:

3A001(a)(7) includes:

- Simple Programmable Logic Devices (SPLDs)
- Complex Programmable Logic Devices (CPLDs)
- Field Programmable Gate Arrays (FPGAs)
- Field Programmable Logic Arrays (FPLAs)
- Field Programmable Interconnects (FPICs)

Technical Notes:

- 'Field programmable logic devices' are also known as field programmable gate or field programmable logic arrays.
- 2. Maximum number of digital input/output in 3A001(a)(7)(a) is also referred to as the maximum user input/output or maximum available input/output, whether the integrated circuit is packaged or bare die.".
- (65) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(a)(10)(a), by repealing "1 000" and substituting "1 500".

- (66) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(a)(10)(b), by repealing "0.1" and substituting "0.02".
- (67) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(b)(3), in the Chinese text, by repealing "電晶體管" where it twice appears and substituting "晶體管".
- (68) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(b)(8)(b), by repealing "power density" and substituting "power density to mass ratio".
- (69) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(b), by adding
 - "(10) Oscillators or oscillator assemblies, designed to operate with all of the following:
 - (a) A single sideband (SSB) phase noise, in dBc/Hz, better than -($126 + 20 \log_{10} F 20 \log_{10} f$) for 10 Hz < F < 10 kHz;
 - (b) A single sideband (SSB) phase noise, in dBc/Hz, better than -(114 + 20 $\log_{10}F$ 20 $\log_{10}f$) for 10 kHz $\leq F < 500$ kHz;

Technical Note:

In 3A001(b)(10), F is the offset from the operating frequency in Hz and f is the operating frequency in MHz.".

- (70) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(1), by repealing "(i.e., "signal processing" devices employing elastic waves in materials)".
- (71) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(1)(b)(1), by repealing "A frequency side-lobe rejection exceeding 55 dB" and substituting "A 'frequency side-lobe rejection' exceeding 65 dB".

- (72) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(1)(c)(3), by repealing "A frequency side-lobe rejection exceeding 55 dB" and substituting "A 'frequency side-lobe rejection' exceeding 65 dB".
- (73) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(1), by adding at the end –

"Technical Note:

The term 'frequency side-lobe rejection' means the maximum rejection value specified in data sheet.".

- (74) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(2), by repealing "(i.e., "signal processing" devices employing elastic waves)".
- (75) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c)(2), by repealing "2.5 GHz" and substituting "6 GHz".
- (76) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001(c), by adding at the end –

"Note:

3A001(c) does not include acoustic wave devices that are limited to a single band pass, low pass, high pass or notch filtering, or resonating function.".

- (77) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, by repealing 3A001(f) and substituting
 - "(f) Rotary input type absolute position encoders having an accuracy equal to or less (better) than ± 1.0 second of arc;".
- (78) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A001, by adding
 - "(h) Solid-state power semiconductor switches, diodes, or 'modules', having all of the following:
 - (1) Rated for a maximum operating junction temperature greater than 488 K (215°C);

- (2) Repetitive peak off-state voltage (blocking voltage) exceeding 300 V;
- (3) Continuous current greater than 1 A;

Notes:

- 1. Repetitive peak off-state voltage in 3A001(h) includes drain to source voltage, collector to emitter voltage, repetitive peak reverse voltage and peak repetitive off-state blocking voltage.
- 2. 3A001(h) includes:
 - Junction Field Effect Transistors (JFETs)
 - Vertical Junction Field Effect Transistors (VJFETs)
 - Metal Oxide Semiconductor Field Effect
 Transistors (MOSFETs)
 - Double Diffused Metal Oxide Semiconductor
 Field Effect Transistor (DDMOSFET)
 - Insulated Gate Bipolar Transistor (IGBT)
 - High Electron Mobility Transistors (HEMTs)
 - Bipolar Junction Transistors (BJTs)
 - Thyristors and Silicon Controlled Rectifiers (SCRs)
 - Gate Turn-Off Thyristors (GTOs)
 - Emitter Turn-Off Thyristors (ETOs)
 - PiN Diodes
 - Schottky Diodes
- 3. 3A001(h) does not include switches, diodes, or 'modules' incorporated into equipment designed for civil automobile, civil railway or "civil aircraft" applications.

Technical Note:

For the purposes of 3A001(h), 'modules' contain one or more solid-state power semiconductor switches or diodes.".

- (79) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A002(d)(3)(a), by repealing "10 ns" and substituting "312 ps".
- (80) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, by repealing 3A002(d)(4) and substituting
 - "(4) A maximum synthesised frequency exceeding 3.2 GHz and having all of the following:
 - (a) A single sideband (SSB) phase noise, in dBc/Hz, better than -($126 + 20 \log_{10}F 20 \log_{10}f$) for 10 Hz < F < 10 kHz;
 - (b) A single sideband (SSB) phase noise, in dBc/Hz, better than -(114 + 20 $\log_{10}F$ 20 $\log_{10}f$) for 10 kHz $\leq F < 500$ kHz;

Technical Note:

In 3A002(d)(4), F is the offset from the operating frequency in Hz and f is the operating frequency in MHz.".

- (81) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A101(b), in the Chinese text, by repealing "'飛彈'" wherever it appears and substituting "'導彈'".
- (82) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A102, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (83) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A229, by repealing "Firing sets and equivalent high-current pulse generators as follows:" and substituting "High-current pulse generators as follows:".

- (84) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A229, in the N.B., by adding "See 1A007(a) for explosive detonator firing sets." after "List.".
- (85) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, by repealing 3A229(a).
- (86) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A232, by repealing "Detonators and multipoint initiation system, as follows:" and substituting "Multipoint initiation systems, other than those specified in 1A007, as follows:".
- (87) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A232, in the N.B., by adding "See 1A007(b) for detonators." after "List.".
- (88) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, by repealing 3A232(a).
- (89) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3A232, by repealing the Technical Note.
- (90) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3B001(a)(1), by adding at the end –

"Note:

3B001(a)(1) includes Atomic Layer Epitaxy (ALE) equipment.".

- (91) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3B001(f)(1)(b), in the Chinese text, by repealing "圖型" and substituting "圖形".
- (92) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3B001(f)(3)(b)(2), in the Chinese text, by repealing "圖型" and substituting "圖形".
- (93) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3B002(a), in the Chinese text, by repealing "電晶體" and substituting "晶體管".

- (94) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3D003, in the Chinese text, by repealing "圖型" where it twice appears and substituting "圖形".
- (95) Schedule 1 is amended, in the Dual-use Goods List, in Category 3, in 3E003(b), in the Chinese text, by repealing "電晶體" wherever it appears and substituting "晶體管".
- (96) Schedule 1 is amended, in the Dual-use Goods List, in Category 4, in 4A001, in the N.B., in the English text, by repealing "N.B." and substituting "N.B.".
- (97) Schedule 1 is amended, in the Dual-use Goods List, in Category 4, in 4A003(a), in the Note, in the English text, by repealing "utilize" and substituting "utilize".
- (98) Schedule 1 is amended, in the Dual-use Goods List, in Category 4, in 4D001(b)(1), by repealing "0.04" and substituting "0.1".
- (99) Schedule 1 is amended, in the Dual-use Goods List, in Category 4, by repealing 4D003 and substituting
 - "4D003 "Software" having characteristics or performing functions exceeding the limits in Category 5, Part 2 ("Information Security");

Note:

4D003 does not include "software" that accompanies its user for the user's personal use.".

- (100) Schedule 1 is amended, in the Dual-use Goods List, in Category 4, in 4E001(b)(1), by repealing "0.04" and substituting "0.1".
- (101) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5A001(b)(4)(b), by repealing the full stop and substituting a semicolon.

- (102) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5A001(d), in the Note, in the Chinese text, by repealing "著陸" where it twice appears and substituting "着陸".
- (103) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5A001(f)
 - (a) by repealing "having any of the following characteristics" and substituting "to perform any of the following functions";
 - (b) in 5A001(f)(1), by repealing "or";
 - (c) by adding
 - "(3) Exploiting specific characteristics of the mobile telecommunications protocol employed (e.g. GSM);".
- (104) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5A001, by adding
 - "(h) Electronic equipment designed or modified to prematurely activate or prevent the initiation of Radio Controlled Improvised Explosive Devices (RCIEDs);

 N.B.:

See also the Munitions List.".

- (105) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5A101, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (106) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5B001(a), by repealing "controlled by Category 5 Part 1" and substituting ", specified in 5A001".
- (107) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5B001(b)(2)(b), by repealing "Performing "optical amplification""

and substituting "Performing "optical amplification" using praseodymium-doped fluoride fibre amplifiers (PDFFA)".

- (108) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5D001(a), by repealing "controlled by Category 5 Part 1" and substituting ", specified in 5A001".
- (109) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5E001(a), by repealing "or "software" controlled by Category 5 Part 1" and substituting "specified in 5A001 or "software" specified in 5D001(a)".
- (110) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5E001(c)(2)(d), by repealing "exceeding 8 optical carriers in a single optical window" and substituting "of optical carriers at less than 100 GHz spacing".
- (111) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5E001(c)(2), by adding at the end –

"*N.B.*.:

For "technology" for the "development" or "production" of non-telecommunications equipment employing a laser, see 6E.".

- (112) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5E001(c), by adding
 - "(6) Mobile equipment, as follows:
 - (a) Operating at an optical wavelength greater than or equal to 200 nm and less than or equal to 400 nm; and
 - (b) Operating as a "local area network";".
- (113) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 1, in 5E001, by adding
 - "(d) "Technology" according to the General Technology Note for the "development" or "production" of Microwave Monolithic Integrated Circuit (MMIC) power amplifiers

specially designed for telecommunications and having any of the following:

- (1) Rated for operation at frequencies exceeding 3.2 GHz up to and including 6 GHz and with an average output power greater than 4 W (36 dBm) with a "fractional bandwidth" greater than 15%;
- (2) Rated for operation at frequencies exceeding 6
 GHz up to and including 16 GHz and with an
 average output power greater than 1 W (30 dBm)
 with a "fractional bandwidth" greater than 10%;
- (3) Rated for operation at frequencies exceeding 16
 GHz up to and including 31.8 GHz and with an average output power greater than 0.8 W (29 dBm) with a "fractional bandwidth" greater than 10%;
- (4) Rated for operation at frequencies exceeding 31.8 GHz up to and including 37.5 GHz;
- (5) Rated for operation at frequencies exceeding 37.5 GHz up to and including 43.5 GHz and with an average output power greater than 0.25 W (24 dBm) with a "fractional bandwidth" greater than 10%;
- (6) Rated for operation at frequencies exceeding 43.5 GHz;
- (e) "Technology" according to the General Technology Note for the "development" or "production" of electronic devices and circuits, specially designed for telecommunications and containing components manufactured from "superconductive" materials, specially designed for operation at temperatures below the "critical

temperature" of at least one of the "superconductive" constituents, and having any of the following:

- (1) Current switching for digital circuits using "superconductive" gates with a product of delay time per gate (in seconds) and power dissipation per gate (in watts) of less than 10⁻¹⁴ J;
- (2) Frequency selection at all frequencies using resonant circuits with Q-values exceeding 10 000;".
- (114) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in Note 1, in the English text, by repealing ""Software" and substituting "software".
- (115) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, by repealing 5A002(a)(7) and substituting
 - "(7) Non-cryptographic information and communications technology (ICT) security systems and devices evaluated to an assurance level exceeding class EAL-6 (evaluation assurance level) of the Common Criteria (CC) or equivalent;".
- (116) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5A002(a)
 - (a) in Note (g), by repealing the full stop and substituting a semicolon;
 - (b) in the Note, by adding
 - "(h) Equipment specially designed for the servicing of portable or mobile radiotelephones and similar client wireless devices that meet all the provisions of the Cryptography Note (Note 3 in Category 5, Part 2), where the servicing equipment meets all of the following:

- (1) The cryptographic functionality of the servicing equipment cannot easily be changed by the user of the equipment;
- (2) The servicing equipment is designed for installation without further substantial support by the supplier;
- (3) The servicing equipment cannot change the cryptographic functionality of the device being serviced;
- (i) Wireless "personal area network" equipment that implement only published or commercial cryptographic standards, where the cryptographic capability is limited to a nominal operating range not exceeding 30 metres according to the manufacturer's specifications.".
- (117) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, by repealing 5B002 and substituting
 - "5B002 "Information security" test, inspection and "production" equipment, as follows:
 - (a) Equipment specially designed for the "development" or "production" of equipment specified in 5A002 or 5B002(b);
 - (b) Measuring equipment specially designed to evaluate and validate the "information security" functions of the equipment specified in 5A002 or "software" specified in 5D002(a) or 5D002(c);".
- (118) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5D002(a), by repealing "or "software" controlled by Category 5 Part 2" and substituting "specified in 5A002 or "software" specified in 5D002(c)".

- (119) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5D002(b), by repealing "controlled by 5E2" and substituting "specified in 5E002".
- (120) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5D002(c)(1), by repealing "equipment controlled by 5A002 or 5B002" and substituting "equipment, specified in 5A002".
- (121) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5D002(c)(2), by repealing "controlled by" and substituting "specified in".
- (122) Schedule 1 is amended, in the Dual-use Goods List, in Category 5, in Part 2, in 5E002(a), by repealing "or "software" controlled by Category 5 Part 2" and substituting "specified in 5A002 or 5B002 or "software" specified in 5D002(a) or 5D002(c)".
- (123) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A001, by adding
 - "(c) Diver deterrent acoustic systems specially designed or modified to disrupt divers and having a sound pressure level equal to or exceeding 190 dB (reference 1 μPa at 1 m) at frequencies of 200 Hz and below;

Notes:

- 1. 6A001(c) does not include diver deterrent systems based on underwater explosive devices, air guns or combustible sources.
- 2. 6A001(c) includes diver deterrent acoustic systems that use spark gap sources, also known as plasma sound sources.".
- (124) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A002(a)(1)
 - (a) in 6A002(a)(1)(b)(2), by repealing "and";
 - (b) in 6A002(a)(1)(c), by adding "and" at the end;

- (c) by adding
 - "(d) "Space qualified" "focal plane arrays" having more than 2 048 elements per array and having a peak response in the wavelength range exceeding 300 nm but not exceeding 900 nm;".
- (125) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A002(a)(1), by adding at the end –

"Note:

For the purpose of 6A002(a)(1), solid-state detectors include "focal plane arrays".".

- (126) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A002(a)(2)(a)(3)(a) and substituting
 - "(a) Multialkali photocathodes (e.g. S-20 and S-25) having a luminous sensitivity exceeding 350 μA/lm;".
- (127) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A002(a)(2)(a)(3)(c) and substituting
 - "(c) Other "III/V compound" semiconductor photocathodes having a maximum radiant sensitivity exceeding 10 mA/W;".
- (128) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A002(a)(2)(b)(3) and substituting
 - "(3) "III/V compound" semiconductor (e.g. GaAs or GaInAs) photocathodes and transferred electron photocathodes, having a maximum radiant sensitivity exceeding 15 mA/W; and".
- (129) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A002(b)(1), by adding at the end –

"Note:

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 any of the following non-"space qualified" detectors or non-"space qualified" "focal plane arrays":

- 1. Charge Coupled Devices (CCD) not designed or modified to achieve 'charge multiplication';
- 2. Complementary Metal Oxide Semiconductor (CMOS) devices not designed or modified to achieve 'charge multiplication'.".
- (130) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A002(c)(2), by repealing "or 6A002(e)".
- (131) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A002(d)(2), in the Chinese text, by repealing "(攝氏-55°度)" and substituting "(攝氏-55度)".
- (132) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A002(e).
- (133) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A003(b)(4)(d).
- (134) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A003(b)(4), in Note 3(c)(2), by repealing the semicolon and substituting a full stop.
- (135) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A004(c)(1), by repealing "Lightweighted" and substituting "Components lightweighted".
- (136) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A004(c)(4), by repealing "Manufactured" and substituting "Components manufactured".
- (137) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A004(d)(1), by repealing "Specially designed to maintain the surface figure or orientation of the "space qualified" components controlled by" and

substituting "Equipment specially designed to maintain the surface figure or orientation of the "space qualified" components specified in".

- (138) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A004(d)(2), by repealing "Having" and substituting "Equipment having".
- (139) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A005(b)(6)(b), by repealing ""Pulse duration" and substituting ""Pulse duration" equal to or".
- (140) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A006(a)(1), by repealing "Using" and substituting "Magnetometers" using".
- (141) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A006(a)(1)(a) and 6A006(a)(1)(b), by repealing "noise level" (sensitivity)" and substituting "sensitivity".
- (142) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by repealing 6A006(a)(2) and substituting
 - "(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;".
- (143) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A006(a)(3), by repealing "Using" and substituting ""Magnetometers" using".
- (144) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A006(a)(3), 6A006(a)(4), 6A006(a)(5), 6A006(b), 6A006(c)(2) and 6A006(c)(3), by repealing "noise level" (sensitivity)" and substituting "sensitivity".
- (145) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A006, by adding at the end –

"Technical Note:

For the purposes of 6A006, the term 'sensitivity' (noise level) means the root mean square of the device-limited noise floor which is the lowest signal that can be measured.".

- (146) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A008(i), in Note (c), by repealing the semicolon and substituting a full stop.
- (147) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A008(j)
 - (a) in 6A008(j)(1), by repealing "or";
 - (b) by adding
 - "(3) Designed for carrying out airborne bathymetric littoral surveys to International Hydrographic Organization (IHO) Order 1a Standard (5th Edition February 2008) for Hydrographic Surveys or better, and using one or more lasers with a wavelength exceeding 400 nm but not exceeding 600 nm;".
- (148) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A008(*j*), by repealing the Note and substituting –

"Notes:

- 1. LIDAR equipment specially designed for surveying is only specified in 6A008(j)(3).
- 2. 6A008(j) does not include LIDAR equipment specially designed for meteorological observation.
- 3. Parameters in the IHO Order 1a Standard (5th Edition February 2008) are summarized as follows:
 - Horizontal Accuracy (95% confidence level) = 5 m + 5% of depth
 - Depth Accuracy for Reduced Depths (95% confidence level) = $\pm \sqrt{(a^2 + (b^*d)^2)}$, where:

a = 0.5 m = constant depth error,

(i.e. the sum of all constant depth errors)

b = 0.013 = factor of depth dependent error

b*d = depth dependent error,

(i.e. the sum of all depth dependent errors)d = depth

 Feature Detection = Cubic features > 2 m in depths up to 40 m;

10% of depth beyond 40 m.".

- (149) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A108(b), in the Chinese text, by repealing "'辩彈'" and substituting "'導彈'".
- (150) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A108(b)(2), by repealing the Technical Note.
- (151) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A108(b), by adding at the end –

"Technical Note:

In 6A108(b), the term 'missiles' means complete rocket systems and "unmanned aerial vehicle" systems capable of a range exceeding 300 km.".

(152) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6A205, by adding at the end –

"*N.B.* :

For copper vapour lasers, see 6A005(b).".

- (153) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, by renumbering 6D003(b) and 6D003(c) as 6D003(f) and 6D003(g) respectively.
- (154) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6D003(d)
 - (a) by renumbering 6D003(d) as 6D003(h);
 - (b) in 6D003(h)(2)(b), in the Technical Note, by repealing "6D003(d)(2)(b)" and substituting "6D003(h)(2)(b)".
- (155) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6D003, by adding –

- "(b) Deleted;
- (c) "Software" designed or modified for cameras incorporating "focal plane arrays" specified in 6A002(a)(3)(f) and designed or modified to remove a frame rate restriction and allow the camera to exceed the frame rate specified in 6A003(b)(4) Note 3(a);
- (d) Deleted;
- (e) Deleted;".
- (156) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6D103, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (157) Schedule 1 is amended, in the Dual-use Goods List, in Category 6, in 6E101, in the Note, in the Chinese text, by repealing the semicolon and substituting a full stop.
- (158) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A003(c), in the English text, by repealing the comma after "equipment for heading".
- (159) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A003(c)(1), in the English text, by repealing the comma after "have heading".
- (160) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A003(c)(1), by repealing "equivalent to 6 arc minutes rms at 45 degrees latitude" and substituting "(equivalent to 6 arc minutes rms at 45 degrees latitude)".
- (161) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A004, in the Chinese text, by repealing "衛星" and substituting "衞星".
- (162) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A005, in the Chinese text, by repealing "衛星" and substituting "衞星".
- (163) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, by repealing 7A101 and substituting –

- "7A101 Linear accelerometers, other than those specified in 7A001, designed for use in inertial navigation systems or in guidance systems of all types, usable in 'missiles', having all the following characteristics, and specially designed components for those linear accelerometers:
 - (a) A "bias" "repeatability" of less (better) than 1 250 micro g;
 - (b) A "scale factor" "repeatability" of less (better) than 1 250 ppm;

Note:

7A101 does not specify accelerometers which are specially designed and developed as MWD (Measurement While Drilling) Sensors for use in downhole well service operations.

Technical Notes:

- 1. In 7A101, the term 'missile' means complete rocket systems and unmanned aerial vehicle systems capable of a range exceeding 300 km.
- 2. In 7A101, the measurement of "bias" and "scale factor" refers to a one sigma standard deviation with respect to a fixed calibration over a period of one year.".
- (164) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A102, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (165) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, by repealing 7A103(a) and substituting
 - "(a) Inertial or other equipment, using accelerometers or gyros as follows, and systems incorporating the equipment:

- (1) Accelerometers specified in 7A001(a)(3), 7A001(b) or 7A101 or gyros specified in 7A002 or 7A102; or
- (2) Accelerometers specified in 7A001(a)(1) or 7A001(a)(2) and having all of the following:
 - (a) Designed for use in inertial navigation systems or in guidance systems of all types and usable in 'missiles';
 - (b) A "bias" "repeatability" of less (better) than 1 250 micro g;
 - (c) A "scale factor" "repeatability" of less (better) than 1 250 ppm;

Note:

7A103(a) does not include equipment containing accelerometers specified in 7A001 where such accelerometers are specially designed and developed as MWD (Measurement While Drilling) sensors for use in down-hole well services operations.".

- (166) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7A103, in the Chinese text, by repealing "'飛彈'" wherever it appears and substituting "'導彈'".
- (167) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7D103, in the Note, in the English text, by repealing ""software"" and substituting ""Software"".
- (168) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7E003, in the Note, in the Chinese text, by repealing "民航機""and substituting ""民用飛機"".

- (169) Schedule 1 is amended, in the Dual-use Goods List, in Category 7, in 7E004(b)(5), in Note 2, in the Chinese text, by repealing "著陸" where it twice appears and substituting "着陸".
- (170) Schedule 1 is amended, in the Dual-use Goods List, in Category 8, by repealing 8A001(b)(3) and substituting
 - "(3) Having all of the following:
 - (a) Designed to continuously 'operate autonomously' for 10 hours or more;
 - (b) 'Range' of 25 nautical miles or more;".
- (171) Schedule 1 is amended, in the Dual-use Goods List, in Category 8, in 8A001(b), in Technical Note 2, by repealing "cover" and substituting "operate autonomously".
- (172) Schedule 1 is amended, in the Dual-use Goods List, in Category 8, by repealing 8A002(f) and substituting
 - "(f) Electronic imaging systems specially designed or modified for underwater use and having any of the following:
 - (1) Image intensifier tubes specified in 6A002(a)(2)(a) or 6A002(a)(2)(b), and using electron image amplification other than by microchannel plate;
 - (2) Non-"space qualified" "focal plane arrays" specified in 6A002(a)(3)(g);".
- (173) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A006(a), in the Chinese text, by repealing "飛行真空瓶," and substituting "飛行真空瓶、".
- (174) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, by repealing 9A012(b)(2) and substituting
 - "(2) Systems for navigation, attitude, guidance or control, other than those specified in 7A and specially designed to

provide autonomous flight control or navigation capability to "UAVs" specified in 9A012(a);".

- (175) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A106, by repealing "usable in "missiles" or sounding rockets specified in 9A104,".
- (176) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A106(a), by adding ", usable in "missiles", space launch vehicles specified in 9A004 or sounding rockets specified in 9A104" after "chambers".
- (177) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A106(b), by adding ", usable in "missiles", space launch vehicles specified in 9A004 or sounding rockets specified in 9A104" after "nozzles".
- (178) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A106(c), by adding ", usable in "missiles" after "sub-systems".
- (179) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A106(d), by adding "usable in "missiles" and "after "components therefor,".
- (180) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9A109, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (181) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9B117, in the Chinese text, by repealing "'飛彈'" where it twice appears and substituting "'導彈'".
- (182) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, by repealing 9E101 and substituting
 - "9E101 (a) "Technology" according to the General Technology Note for the "development" of goods specified in 9A101, 9A102, 9A104 to 9A111 or 9A115 to 9A119;
 - (b) "Technology" according to the General Technology Note for the "production" of 'UAV's

specified in 9A012 or goods specified in 9A101, 9A102, 9A104 to 9A111 or 9A115 to 9A119; *Technical Note:*

In 9E101(b), the term 'UAV' means unmanned aerial vehicle systems capable of a range exceeding 300 km.".

- (183) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9E102, by adding "UAV's specified in 9A012 or goods specified in" after "goods specified in 9A005 to 9A011,".
- (184) Schedule 1 is amended, in the Dual-use Goods List, in Category 9, in 9E102, by adding at the end –

"Technical Note:

In 9E102, the term 'UAV' means unmanned aerial vehicle systems capable of a range exceeding 300 km.".

(185) Schedule 1 is amended, in the Definitions of Terms, in the definition of "Explosives", by repealing –

"ML8

ML18"

and substituting –

"1

ML8".

- (186) Schedule 1 is amended, in the Definitions of Terms, in the English text, in the definition of ""Full Authority Digital Engine Control" ("FADEC")", by repealing "utilising" and substituting "utilizing".
- (187) Schedule 1 is amended, in the Definitions of Terms, in the definition of "Local area network", by repealing "4" and substituting "4 5".
- (188) Schedule 1 is amended, in the Definitions of Terms, by repealing the definition of "Multi-data-stream processing".
- (189) Schedule 1 is amended, in the Definitions of Terms, by repealing the definition of "Noise level".

- (190) Schedule 1 is amended, in the Definitions of Terms, in the definition of "Personalized smart card", by adding "or an electronically readable personal document (e.g. e-passport)," after "A smart card".
- (191) Schedule 1 is amended, in the Definitions of Terms, in the definition of ""Source code" (or source language)", by repealing "4 5 6" and substituting "4 6".
- (192) Schedule 1 is amended, in the Definitions of Terms, in the English text, in the definition of "Specific modulus", by repealing the semicolon and substituting a full stop.
- (193) Schedule 1 is amended, in the Definitions of Terms, in the English text, in the definition of "Specific tensile strength", by repealing the semicolon and substituting a full stop.
- (194) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "電子控向相位陣列天線", by repealing "藉著" and substituting "藉着".
- (195) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "圓徑概率誤差", by repealing "彈著" and substituting "彈着".
- (196) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "機械人", in Note (4), by repealing "藉著" and substituting "藉着".
- (197) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "ASTM", by adding a full stop at the end.
- (198) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "可變形鏡面", by repealing "藉著" where it twice appears and substituting "藉着".
- (199) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "ISO", by adding a full stop at the end.

- (200) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "帶狀", by repealing "'線束, "絞線"," and substituting "、 '線束'、 "絞線"、".
- (201) Schedule 1 is amended, in the Definitions of Terms, in the Chinese text, in the definition of "飛機", by repealing " '民航機"" and substituting " '民用飛機"".
 - (202) Schedule 1 is amended, in the Definitions of Terms, by adding "ML11 "Automated Command and Control Systems" (自動化指揮及控制系統)

Electronic systems, through which information essential to the effective operation of the grouping, major formation, tactical formation, unit, ship, sub-unit 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 organization. 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.

1 "Fusible" (熔融)

Capable of being cross-linked or polymerized further (cured) by the use of heat, radiation, catalysts, etc. or capable of being melted without pyrolysis (charring).

5 "Personal area network" (個人區域網絡)

A data communication system having all of the following:

- (a) Allows an arbitrary number of independent or interconnected 'data devices' to communicate directly with each other;
- (b) Is confined to the communication between devices within the immediate vicinity of an individual person or device controller (e.g. single room, office, or automobile).

Technical Note:

The term 'data device' means equipment capable of transmitting or receiving sequences of digital information.".

Oloa.

Director-General of Trade and Industry

5 November 2009

Explanatory Note

This Order revises Schedule 1 to the Import and Export (Strategic Commodities) Regulations (Cap. 60 sub. leg. G) to reflect the latest changes in the control lists of strategic commodities adopted by various international non-proliferation regimes. The Order also rectifies certain textual errors in the Schedule.

ECONOMIC IMPLICATIONS

The Order will facilitate external trade without compromising the integrity of our control system as the amendments reflect the latest control lists adopted by relevant international non-proliferation regimes. In particular, the relaxation of control over certain field programmable logic devices and certain wireless personal area network equipment will relieve relevant traders from the burden of applying for import and export licences for trading such products. This will help raise operational efficiency and indirectly lower the cost of operation. On the other hand, the imposition of new control over items concerned should not have significant effects on the import/export trade as these items are not commonly traded in Hong Kong.