STATUTORY INSTRUMENTS

2025 No. 532

CUSTOMS

TRADE

The Export Control (Amendment) Regulations 2025

Made - - - -	*28th April 2025*
Laid before Parliament	*29th April 2025*
Coming into force - -	*20th May 2025*

The Secretary of State makes these Regulations in exercise of the powers conferred by sections 1(1) and (3), 2(1) and (3), 5(2) and (4) and 7(1)(g) of the Export Control Act 2002(**a**) and Article 15(1) of Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (Recast)(**b**).

PART 1
PRELIMINARY

Citation, commencement and extent

1.—(1) These Regulations may be cited as the Export Control (Amendment) Regulations 2025.

(2) These Regulations come into force on 20th May 2025.

(3) Parts 1 and 2 extend to England and Wales, Scotland and Northern Ireland.

(4) Part 3 extends to England and Wales, and Scotland.

(**a**) 2002 c. 28; see section 11 for defined terms used in these provisions. Sections 1, 2, 4, 5 were amended by article 6(2)(c) of the Treaty of Lisbon (Changes in Terminology) Order 2011 (S.I. 2011/1043); sections 5 and 11 were amended by regulation 2 of the Trade etc. in Dual-Use Items and Firearms etc. (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/771), as amended by regulation 9 of the Export Control (Amendment) (EU Exit) Regulations 2020 (S.I. 2020/1502).

(**b**) EUR 2009/428; Article 15 was substituted by regulation 3(15) of the Trade etc. in Dual-Use Items and Firearms etc. (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/771), as substituted by regulation 2(3) of the Trade etc. in Dual-Use Items and Firearms etc. (Amendment) (EU Exit) (No. 2) Regulations 2019 (S.I. 2019/806).

PART 2

AMENDMENTS TO THE EXPORT CONTROL ORDER 2008

Amendments to the Export Control Order 2008

2. The Export Control Order 2008(**a**) is amended in accordance with Regulations 3 to 5.

Amendments to Part 6 (Offences, Enforcement and Penalties)

3.—(1) In Article 34, in paragraph (1), for "level 3" substitute "level 4".

(2) In Article 35, in paragraphs (1), (6) and (7), for "level 3" substitute "level 4".

(3) In Article 36, in paragraphs (1), (4) and (7), for "level 3" substitute "level 4".

(4) In Article 36A, in paragraph (6), for "level 3" substitute "level 4".

Amendments to Schedule 2 (Military Goods, Software and Technology)

4.—(1) Schedule 2 (Military Goods, Software and Technology) is amended as follows.

(2) Omit the definition of "biopolymer", including the Technical Note to that definition.

(3) Omit the definition of "expression vectors".

(4) For the definition of "spacecraft", substitute—

> ""Spacecraft" 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".*".

(5) In the Technical Note to the definition of "technology", after "*formulae,*" insert "*algorithms,*".

(6) In paragraph f of the Note to entry ML1.a., for "*tranquilising*" substitute "*tranquillising*".

(7) In paragraph c of the Note to entry ML1.b., for "*Tranquilising*" substitute "*Tranquillising*".

(8) In paragraph d of the Note to entry ML2.a., for "*Tranquilising*" substitute "*Tranquillising*".

(9) In entry ML7—

(a) in entry ML7.h., for ""Biopolymers"" substitute "'Biopolymers'";

(b) at the end of entry ML7.h., insert—

> "*Technical Notes:*
>
> *For the purposes of 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'.*

(**a**) S.I. 2008/3231; relevant amending instruments are S.I. 2009/2151 and 1305, 2010/2007, 2012/1910, 2014/1069, 2015/940, 2017/85, 193, 697, 2018/165, 2018/939, 2019/137, 989, 1159, 2021/586, 2022/491, 500, 1042, 1300, 2023/149, 302, 2024/346 and 2025/82.

(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.*";

(c) in entry ML7.i.2.a., for ""'Expression vectors'"" substitute "'Expression vectors'";

(d) at the end of entry ML7.i.2.a., insert—

"*Technical Note:*

For the purposes of ML7.i.2.a., 'expression vectors' are carriers (e.g., plasmid or virus) used to introduce genetic material into host cells.".

(10) In entry ML10—

(a) after ", aero-engines", insert ", "sub-orbital craft"";

(b) in the Note to entry ML10.d., for "*does not apply to*" substitute "*does not control*";

(c) in entry ML10.f., for "'Ground equipment'" substitute "Ground equipment";

(d) in entry ML10.g., after ""aircraft" specified in ML10.a." insert "or "sub-orbital craft" specified in ML10.j.";

(e) in the N.B. to entry ML10.g., after "helmets" insert ",";

(f) after entry ML10.i., insert—

"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.".

(11) In entry ML13.c.3., for "ML13.c.1.." substitute "ML13.c.1.;".

(12) For entries ML19.a. to ML19.c., substitute—

"a. "Laser" 'weapon systems' not specified by ML19.f.;

b. Particle beam 'weapon systems';

c. High power Radio-Frequency (RF) 'weapon systems';".

(13) At the end of entry ML19.f., insert—

"*Technical note:*

For the purposes of ML19, 'weapon systems' are designed to damage, destroy or effect mission abort of a target.".

(14) In entry ML21.c., for the N.B. substitute—

"*N.B.: For general purpose "digital computers" with installed "software" specified by ML21.c., see systems, equipment or components specified in this schedule.*".

Amendments to Schedule 3 (UK Controlled Dual-Use Goods, Software and Technology)

5. In Schedule 3—

(a) for entry PL9013.a.3.a. to entry PL9013.a.3.f., at the end of each entry for "," substitute ";";

(b) for entry PL9013.a.4., including the Note, Technical Notes and the N.B., substitute—

"4. Integrated circuits having one or more digital processing units having a 'Total Processing Performance' ('TPP') of 6,000 or more.

N.B.: For "digital computers" and "electronic assemblies" containing integrated circuits specified in PL9013.a.4., see PL9014.a.2..

Technical Notes:

For the purposes of PL9013.a.4.:

1. 'Total processing performance' ('TPP') is 2 x 'MacTOPS' x 'bit length of the operation', aggregated over all processing units on the integrated circuit.

a. 'MacTOPS' is the theoretical peak number of Tera (10^{12}) operations per second for multiply-accumulate computation, D=AxB+C).

b. The 2 in the 'TPP' formula is based on the industry convention of counting one multiply-accumulate computation, D=AxB+C, as 2 operations for the purpose of datasheets. Therefore, 2 x MacTOPS may correspond to the reported TOPS or FLOPS on a datasheet.

c. 'Bit length of the operation' for a multiply-accumulate computation is the largest bit-length of the inputs to the multiply operation.

d. Aggregate the TPPs for each processing unit on the integrated circuit to arrive at a total. 'TPP' = TPP1 + TPP2 +... + TPPn (where n is the number of processing units on the integrated circuit).

2. The rate of 'MacTOPS' is to be calculated at its maximum value theoretically possible. The rate of 'MacTOPS' is assumed to be the highest value the manufacturer claims

in a manual or brochure for the integrated circuit. For example, the 'TPP' threshold of 6,000 can be met with 750 tera integer operations (or 2 x 375 'MacTOPS') at 8 bits or 300 tera FLOPS (or 2 x 150 'MacTOPS') at 16 bits. If the IC is designed for MAC computation with multiple bit lengths that achieve different 'TPP' values, the highest 'TPP' value should be evaluated again parameters in PL9013.a.4..

3. For integrated circuits, specified in PL9013.a.4., that provide processing of both sparse and dense matrices, the 'TPP' values are the values for processing of dense matrices (e.g., without sparsity).";

(c) in entry PL9013.a.5.a and entry PL9013.a.5.b., at the end, for "," substitute ";";

(d) in entry PL9014.a.2., for the Note substitute—

"*Note: PL9014.a.2. includes "digital computers" and hybrid computers.*".

PART 3

AMENDMENTS TO COUNCIL REGULATION (EC) NO 428/2009

Amendments to Council Regulation (EC) No 428/2009

6. Annex I (list of dual-use items) to Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community Regime for the control of exports, transfer, brokering and transit of dual-use items (Recast)(**a**) is amended in accordance with Regulations 7 to 17.

Amendments to Definitions

7.—(1) The section headed Definitions of Terms used in this Annex is amended as follows.

(2) Omit the following definitions—

(a) "Basic gate propagation delay time", including the N.B.1. and the N.B.2. to that definition;

(b) "Camming";

(c) "Chemical laser";

(d) "Communications channel controller";

(e) "Film type integrated circuit", including the N.B. to that definition;

(f) "Network access controller";

(g) "Optical switching";

(h) "Overall current density";

(i) "Pulsed laser";

(j) "Radar frequency agility";

(**a**) EUR 2009/428; relevant amending instruments are S.I. 2019/771, 2022/410, 2023/302, 695 and 1048 and 2024/346.

(k) "Run out";

(l) "Spacecraft payload";

(m) "Symmetric algorithm", including the N.B. to that definition;

(n) "Three dimensional integrated circuit".

(3) In the definition of—

(a) ""Accuracy"", omit "8";

(b) ""Angle random walk"", omit "STD";

(c) ""Bias" (accelerometer)", omit "Std";

(d) ""Bias" (gyro)", omit "Std";

(e) ""Diffusion Bonding""—

(i) omit "9";

(ii) for "solid state" substitute "solid-state";

(f) ""Electronic Assembly""—

(i) for "'circuit elements'" substitute ""circuit elements"";

(ii) for "'discrete components'" substitute ""discrete components"";

(iii) omit the N.B.1.;

(iv) omit the N.B.2.;

(g) "Hybrid integrated circuit""—

(i) for "'circuit elements'" substitute ""circuit elements"";

(ii) for "'discrete components'" substitute ""discrete components"";

(iii) omit the N.B.1.;

(iv) omit the N.B.2.;

(h) ""Local area network""—

(i) for "'data devices'" substitute ""data devices"";

(ii) omit the N.B.;

(i) ""Monolithic integrated circuit""—

(i) for "'circuit elements'" substitute ""circuit elements"";

(ii) for "'chip'" substitute "chip";

(iii) omit the N.B.;

(j) ""Personal area network""—

(i) for "'data devices'" substitute ""data devices"";

(ii) in the Technical Note omit paragraph 1;

(k) ""Program"", omit "6";

(l) ""Repeatability"", omit "STD";

(m) ""Satellite navigation system"", for "satellites", in both places it occurs, substitute ""satellites"";

(n) ""Spacecraft bus"", for "spacecraft payload" substitute "spacecraft mission equipment";

(o) ""Sub-orbital craft"", for paragraph b substitute "Only perform non-orbital trajectories;";

(p) ""Substrate""—

(i) for "'discrete components'" substitute ""discrete components"";

(ii) omit the N.B.1.;

(iii) omit the N.B.2.;

(q) ““Technology””, in the N.B.2., after “*formulae,*” insert “*algorithms,*”.

(4) For the definition of ““Spacecraft”” substitute—

““Spacecraft” (5 9) 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”.”.

(5) Insert the following definitions in the appropriate places—

““Circuit element” is a single active or passive functional part of an electronic circuit, such as one diode, one transistor, one resistor, one capacitor, etc.”;

““Data device” (4) means equipment capable of transmitting or receiving sequences of digital information.”;

““Discrete component” is a separately packaged “circuit element” with its own external connections.”;

““Maintenance Level I” (7) means the failure of an inertial navigation unit is detected on the “aircraft” by indications from the Control and Display Unit (CDU) or by the status message from the corresponding sub-system. By following the manufacturer’s manual, the cause of the failure may be localised at the level of the malfunctioning Line Replaceable Unit (LRU). The operator then removes the LRU and replaces it with a spare.”;

““Maintenance Level II” (7) means the defective LRU is sent to the maintenance workshop (the manufacturer’s or that of the operator responsible for level II maintenance). At the maintenance workshop, the malfunctioning LRU is tested by various appropriate means to verify and localise the defective Shop Replaceable Assembly (SRA) module responsible for the failure. This SRA is removed and replaced by an operative spare. The defective SRA (or possibly the complete LRU) is then shipped to the manufacturer. “Maintenance Level II” does not include the disassembly or repair of specified accelerometers or gyro sensors.”;

““Non-repetitive pulsed” (6) means “lasers” that produce either a single output pulse or that have a time interval between pulses exceeding one minute.”;

““Satellite” (5 9) means a “spacecraft”, other than a “space vehicle”, designed to operate in orbit around Earth or another celestial body; “satellites” include orbital space stations.”;

““Spacecraft mission equipment” (9) means equipment, designed to be located on a “spacecraft bus”, and to perform a mission in space or to enable the “spacecraft” to perform its mission (e.g., communications, observation, science, transport). *Technical note: “Spacecraft mission equipment” is sometimes referred to as a spacecraft payload.”;*

““Space probe” (9) means a “spacecraft”, other than a “satellite” or “space vehicle”, designed not to return to Earth.”;

""Space vehicle" means "spacecraft" designed to provide transport for cargo or passengers.
Note: *"Space vehicles" include craft designed to safely return to Earth.";*

""Strong mechanical bond" (9) means a bond having a bond strength equal to or greater than propellant strength.";

""Wall-plug efficiency" (6) means the ratio of "laser" output power (or "average output power") to total electrical input power required to operate the "laser", including the power supply/conditioning and thermal conditioning/heat exchanger.".

Amendments to Category 0 - Nuclear Materials, Facilities, and Equipment

8.—(1) The section headed Category 0 - Nuclear Materials, Facilities, and Equipment is amended as follows.

(2) In the section headed 0B Test, Inspection and Production Equipment—

(a) at the end of entry 0B004.a.2., insert—

"3. Combined Electrolysis and Catalytic Exchange (CECE) plants;

4. Combined Industrial Reforming and Catalytic Exchange (CIRCE) plants;

5. Bithermal Hydrogen-Water exchange (BHW) plants;";

(b) in entry 0B004.b.3., for "to 2,5 m" substitute "or greater";

(c) for entry 0B004.b.6., substitute "Not used;";

(d) in entry 0B004.b.8.—

(i) before "upgrade systems" insert "finishing units,";

(ii) for "therefor," substitute "with diameters of 0,1m or greater, specially designed or prepared";

(e) after entry 0B004.b.9., insert—

"10. Complete columns or towers specially designed or prepared for hydrogen isotope exchange and having all of the following:

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).".

Amendments to Category 1 - Special Materials and Related Equipment

9.—(1) The section headed Category 1 - Special Materials and Related Equipment is amended as follows.

(2) In the section headed 1A Systems, Equipment and Components—

(a) in Note 2 to entry 1A002, after "semi-finished items" omit ",";

(b) in the Technical Note to entry 1A007.b., for "vaporization" substitute "vaporisation";

(c) at the end of entry 1A008.a.2., insert—

"*Technical Note:*

For the purposes of 1A008.a., 'shaped charges' are explosive charges shaped to focus the effects of the explosive blast.";

(d) in entry 1A008.d., omit the Technical Note;

(e) in entry 1A202—

(i) after "form of" insert "thin-walled";

(ii) for "both" substitute "all";

(f) in entry 1A202.a.—

(i) for "400" substitute "650";

(ii) at the end, omit "and";

(g) in entry 1A202—

(i) after paragraph a insert—

"b. A thickness of 12mm or less; and";

(ii) renumber as paragraph c the paragraph starting with the words "Made with any";

(h) in entry 1A225—

(i) for "Platinized" substitute "Wet-proofed platinised";

(ii) after "tritium from" omit "heavy";

(iii) after "the production" insert "or upgrading";

(iv) at the end, insert—

"*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.".

(3) In the section headed 1B Test, Inspection and Production Equipment—

(a) in entry 1B001.e., for "prepegs" substitute "prepregs";

(b) in the Technical Notes to entry 1B001.g.—

(i) after the heading "*Technical Notes:*", on a new line insert "*For the purposes of 1B001.:*";

(ii) in paragraph 1—

(aa) for "*For the purposes of 1B001, 'primary*" substitute "*'Primary*";

(bb) for "*the position*" substitute "*is the positioning*";

(iii) in paragraph 2, for "*For the purposes of 1B001, a*" substitute "*A*";

(c) in entry 1B228.a., for "temperatures of 35 K (-238°C) or less" substitute "temperatures in the range of 15 K (-258°C) to 35 K (-238°C)";

(d) in entry 1B228.b., for "of 0,5 to 5 MPa" substitute "in the range of 0,1 MPa to 1 MPa";

(e) for entry 1B228.c.1., substitute "Austenitic stainless steel; or";

(f) in entry 1B228.c.2.—

(i) for "Equivalent materials" substitute "'Equivalent materials'";

(ii) after "hydrogen (H2)-compatible" insert "between 15 K (-258°C) and 35 K (-238°C)";

(g) for the Technical Note to entry 1B228, substitute—

"*Technical Notes:*

1. In 1B228.c.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.

2. In 1B228.d. 'effective length' means the active height of packing material in a packed-type column, or the active height of internal contractor plates in a plate-type column.".

(4) In the section headed 1C Materials—

(a) in paragraph a of the Technical Note in entry 1C, at the beginning, after "*i.e.*" omit "*:*";

(b) in the Note to entry 1C001.b., after "*materials*" omit ",";

(c) in entry 1C002.c.1.a.—

(i) after "i.e." insert ",";

(ii) at the end, insert—

"*Note:*

1C002.c.1.a. includes nickel alloys qualified for aero, aero-derivative, industrial or marine gas turbine engines.";

(d) in entry 1C002.c.2.g., omit "*or*";

(e) in entry 1C002.c.2.h. for "*and*" substitute "*or*";

(f) after entry 1C002.c.2.h., insert—

"i. 'Ultrasonic atomisation'; *and*";

(g) in the Technical Notes at the end of entry 1C002, for paragraph 10, substitute—

"*10.*

'Ultrasonic atomisation' is a process to reduce a molten stream of metal alloy to droplets of 500 μm diameter or less by ultrasonic vibration.

11.

For the purposes of 1C002 Technical Notes, 'solidify rapidly' is a process involving the solidification of molten material at cooling rates exceeding 1 000 K/s.";

(h) in entry 1C005.b.1., for "(-263,31°C)" substitute "(-263,3°C)";

(i) in entry 1C005.b.2., for "(-268,96°C)" substitute "(-268,95°C)";

(j) in entry 1C005.c., for "(-158,16°C)" substitute "(-158,15°C)";

(k) in the Note to entry 1C010.b., in paragraph a.3., for "*15 mm.*" substitute "*15 mm;*";

(l) in entry 1C010.e.2.c., for "phenolic resin;" substitute "phenolic resin.";

(m) in Note 2 to entry 1C010.e., in paragraph a, for "following;" substitute "following:";

(n) in the Technical Notes to entry 1C010.e.2., in paragraph 2, after "*7028-07*" omit "*,*";

(o) at the end of entry 1C011.d., for "." substitute ";";

(p) in the N.B. at the end of entry 1C011—

(i) for "*See also Military Goods Controls for*" substitute "*For*";

(ii) after "military purposes", insert "*, see Military Goods Controls*";

(q) in Technical Note 1 to entry 1C116, in paragraph 1, for "*nickel, very low carbon content*" substitute "*nickel content, carbon content of less than or equal to 0,03% by weight,*";

(r) in Note 3 to entry 1C350, for "*.88 and .89*" substitute "*.88, .89 and .90*";

(s) in entry 1C351.d.1., for "toxins" substitute "neurotoxins".

Amendments to Category 2 - Materials Processing

10.—(1) The section headed Category 2 - Materials Processing is amended as follows.

(2) In the section headed 2B Test, Inspection and Production Equipment—

(a) in entry 2B001.b.4.a.—

(i) for ""run-out"" substitute "'run-out'";

(ii) for ""camming"" substitute "'camming'";

(b) after entry 2B001.b.4.b., insert—

"*Technical Notes:*

For the purposes of 2B001.b.4.a.:

1. *'Run-out' (out-of-true running) is the radial displacement in one revolution of the main spindle measured in a plane perpendicular to the spindle axis at a point on the external or internal revolving surface to be tested (ISO 230-1:2012).*

2. *'Camming' (axial displacement) is axial displacement of one revolution of the main spindle measured in a plane perpendicular to the spindle faceplate, at a point next to the circumference of the spindle faceplate (ISO 230-1:2012).*";

(c) in entry 2B001.c.2.c., for "4 m." substitute "4 m;";

(d) in the Note to entry 2B001.c.2.c., for "*length.*" substitute "*length;*" and for "*1,1 μm.*" substitute "*1,1 μm;*";

(e) in entry 2B001.d., for "Electrical discharge machines" substitute "Electrical Discharge Machines";

(f) in entry 2B002.d.—

(i) for "Magnetorheological finishing" substitute "'Magnetorheological finishing'";

(ii) for "Electrorheological finishing" substitute "'Electrorheological finishing'";

(g) in the N.B. at the end of entry 2B004, after "tooling" insert ",";

(h) in entry 2B006.b.3.c—

(i) for "*'measurement uncertainty'*" substitute "*'measurement uncertainty"*";

(ii) after "*0,01°C;*" omit "*or*";

(i) in the Note at the end of entry 2B006.d., for "*2B006*" substitute "*2B006.a.*";

(j) for entry 2B352.c., including the Technical Note, substitute—

"c. Centrifugal separators as follows:

1. Centrifugal separators, capable of continuous separation without the propagation of aerosols, having all the following:

a. Flow rate exceeding 100 litres per hour;

b. Components of polished stainless steel or titanium;

c. One or more sealing joints within the steam containment area; and

d. Capable of in-situ steam sterilisation in a closed state;

2. Single-use centrifugal separators, in which all components that come in direct contact with the substances being processed are disposable or single-use.

Technical Note:

Centrifugal separators and single-use centrifugal separators include decanters.";

(k) after entry 2B352.i., insert—

"j. Peptide synthesizers that are partly or entirely automated and capable of generating peptides at a 'system synthesis scale' of 1 mmol or greater.

Technical note:

'System synthesis scale' denotes the maximum amount of peptide (mmol) that can be produced by the instrument using the largest compatible reaction vessels. For multiple peptides produced in parallel, this is the sum of the largest compatible reaction vessels.

N.B.: For other chemical reaction vessels or reactors, see 2B350.".

(3) In the section headed 2D Software, in Note 2 to entry 2D002—

(a) for "*See 2D001 and 2D003 for*" substitute "*For*";

(b) after "*in 2B002*" insert "*, see 2D001 and 2D003*".

(4) In the section headed 2E Technology—

(a) in the Note to entry 2E001 for "*coordinate measurement machines*" substitute "*Coordinate Measuring Machines (CMM)*";

(b) in the Technical Note to the table (Deposition techniques) that appears after entry 2E301—

(i) in paragraph a—

(aa) for "*N.B.1*" substitute "*N.B.1.*";

(bb) for "*N.B.2*" substitute "*N.B.2.*";

(cc) for "*N.B.3*" substitute "*N.B.3.*";

(ii) in paragraphs d and f—

(aa) for "*N.B.1*" substitute "*N.B.1.*";

(bb) for "*N.B.2*" substitute "*N.B.2.*".

Amendments to Category 3 - Electronics

11.—(1) The section headed Category 3 - Electronics is amended as follows.

(2) In the section headed 3A Systems, Equipment and Components—

(a) in the Note to entry 3A001.a.—

(i) for "*"Film type integrated circuits"*" substitute "*'Film type integrated circuits'*";

(ii) for "*"Three dimensional integrated circuits"*" substitute "*'Three dimensional integrated circuits'*";

(iii) after "*("MMICs").*" insert—

"*Technical Notes:*

For the purposes of 3A001.a., Note:

1. 'Film type integrated circuit' is an array of "circuit elements" and metallic interconnections formed by deposition of a thick or thin film on an insulating "substrate".

2. 'Three dimensional integrated circuit' is a collection of semiconductor dies or active device layers, integrated together, and having through semiconductor via connections passing completely through an interposer, substrate, die or layer to establish interconnections between the device layers. An interposer is an interface that enables electrical connections.";

(b) in entry 3A001.a.2., for "analogue-to-digital converters, integrated circuits that contain analogue-to-digital converters and store or process the digitised data, digital-to-analogue converters" substitute "Analogue-to-Digital Converters (ADCs), integrated circuits that contain ADCs and store or process the digitised data, Digital-to-Analogue Converters (DACs)";

(c) in entry 3A001.a.5.b., for "Digital-to-Analogue Converters (DAC" substitute "DACs";

(d) in entry 3A001.a.5.b.1., after "10 bit or more" insert ",";

(e) in the Note to entry 3A001.a.7.—

(i) after "*(CPLDs)*" insert ";";

(ii) after "*(FPGAs)*" insert ";";

(iii) after "*(FPLAs)*" insert ";";

(iv) after "*(FPICs)*" insert ".";

(f) in entry 3A001.a.10.b., for ""basic gate propagation delay time"" substitute "'basic gate propagation delay time'";

(g) at the end of entry 3A001.a.10., insert—

"*Technical Notes:*

For the purposes of 3A001.a.10.b:

1. *'Basic gate propagation delay time' is the propagation delay time value corresponding to the basic gate used in a "monolithic integrated circuit". For a 'family' of "monolithic integrated circuits", this may be specified either as the propagation delay time per typical gate within the given 'family' or as the typical propagation delay time per gate within the given 'family'.*

2. *'Basic gate propagation delay time' is not to be confused with the input/output delay time of a complex "monolithic integrated circuit".*

3. *'Family' consists of all integrated circuits to which all of the following are applied as their manufacturing methodology and specifications except their respective functions:*

   a. *The common hardware and software architecture;*

   b. *The common design and process technology; and*

   c. *The common basic characteristics.*";

(h) in the N.B.1. to entry 3A001.a.14., for "*analogue-to-digital converter integrated circuits*" substitute "*Analogue-to-Digital Converter (ADC) integrated circuits,*";

(i) in the N.B.2. to entry 3A001.a.14., after "*devices*" insert ",";

(j) in entry 3A001.b.1.d., for "'dual mode'." substitute "'dual mode';";

(k) in the N.B. to entry 3A001.b.2., after " *shifter*" insert ",";

(l) in Note 1 to entry 3A001.b.3., for "*through*" substitute "*to*";

(m) in entry 3A001.b.4., for "solid state", in both places it occurs, substitute "solid-state";

(n) in entry 3A001.b.4.e.3., for "90 GHz; or" substitute "90 GHz.";

(o) in the N.B.1. to entry 3A001.b.4., after "*amplifiers*" insert ",";

(p) in the N.B.2. to entry 3A001.b.4., after "*'transmit modules'*" insert ",";

(q) in entry 3A001.b.7.c.2., after "GHz;", insert "or";

(r) in entry 3A001.b.7.c.3., omit "or";

(s) in entry 3A001.b.11., including the Technical Note, for "synthesiser", in both places it occurs, substitute "synthesizer";

(t) in entry 3A001.c.1.b., after "1 GHz" omit ",";

(u) in the Technical Notes to entry 3A001.e.1., for "*Ohms*" substitute "*ohms*";

(v) in entry 3A001.e.3.c.—

(i) for ""overall current density"" substitute "'overall current density'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 3.A001.e.3.c., 'overall current density' is the total number of ampere-turns in the coil (i.e., the sum of the number of turns multiplied by the maximum current carried by each turn) divided by the total cross-section of the coil (comprising the superconducting filaments, the metallic matrix in which the superconducting filaments are embedded, the encapsulating material, any cooling channels, etc.).";

(w) in Note 1 to entry 3A001.g.—

(i) after "*(SCRs)*" insert "*;*";

(ii) after "*(ETTs)*" insert "*;*";

(iii) after "*(LTTs)*" insert "*;*";

(iv) after "*(IGCTs)*" insert "*;*"

(v) after "*(GTOs)*" insert "*;*";

(vi) after "*(MCTs)*" insert "*;*";

(vii) after "*Solidtrons*" insert ".";

(x) in Note 2 to entry 3A001.h.—

(i) after "*(JFETs)*" insert "*;*";

(ii) after "*(VJFETs)*" insert "*;*";

(iii) after "*(MOSFETs)*" insert "*;*";

(iv) for "*(DMOSFET)*" substitute "*(DMOSFETs);*";

(v) for "*(IGBT)*" substitute "*(IGBTs);*";

(vi) after "*(HEMTs)*" insert "*;*";

(vii) after "*(BJTs)*" insert "*;*";

(viii) after "*(SCRs)*" insert "*;*";

(ix) after "*(GTOs)*" insert "*;*";

(x) after "*(ETOs)*" insert "*;*"

(xi) after "*PiN Diodes*" insert "*;*"

(xii) after "*Schottky Diodes*" insert ".";

(y) for entry 3A002.a.7., including the Note, substitute—

"7. Real-time oscilloscopes having all of the following:

a. A vertical root-mean-square (rms) noise voltage of less than 2% of full-scale at the vertical scale setting that provides the greatest noise value; and

b. An 'upper 3dB frequency' greater than 90 GHz on any channel.

Note: 3A002.a.7 does not control equivalent-time sampling oscilloscopes.

Technical Notes:

For the purposes of 3A002.a.7.b.:

1. 'Upper 3dB frequency' is the greater of:

a. The specified 3dB bandwidth of the oscilloscope; or

b. The maximum upper end of the frequency range of any 'movable bandwidth window'.

2. 'Movable bandwidth window' is a bandpass filter with a user-definable centre frequency or span.";

(z) in entry 3A002.h.1.d., after "14 bit or more" insert ",".

(3) In the section headed 3B Test, Inspection and Production Equipment—

(a) in the Technical Note to entry 3B001.f.1.b., after "*0,35*" insert ".";

(b) in the Note to entry 3B001.f.2—

(i) after "*printing tools*" insert ";";

(ii) after "*embossing tools*" insert ";";

(iii) after "*lithography tools*" insert ";";

(iv) after "*(S-FIL) tools*" insert ".".

(4) In the section headed 3C Materials, in entry 3C005.b., at the end insert—

"*N.B.* *For materials consisting of a 'substrate' specified in 3C005 with at least one epitaxial layer, see 3C001 or 3C006.*".

(5) In the section headed 3E Technology—

(a) in entry 3E003.b., for "high electron mobility transistors (HEMT), hetero-bipolar transistors (HBT)" substitute "High Electron Mobility Transistors (HEMTs), Heterojunction Bipolar Transistors (HBTs)";

(b) in the Note to entry 3E003.b. —

(i) for "*high electron mobility transistors (HEMT)*" substitute "*HEMTs*";

(ii) for "*hetero junction bipolar transistors (HBT)*" substitute "*HBTs*".

Amendments to Category 4 - Computers

12.—(1) The section headed Category 4 - Computers is amended as follows.

(2) In the section headed 4A Systems, Equipment and Components, in entry 4A003.g.—

(a) in the Note—

(i) for "*"network access controllers'"*" substitute "*'network access controllers"*";

(ii) for "*"communications channel controllers'"*" substitute "*'communications channel controllers"*";

(iii) at the end, insert—

"*Technical Notes:*

For the purposes of 4A003.g. Note:

1. *A 'network access controller' is a physical interface to a distributed switching network. It uses a common medium which operates throughout at the same "digital transfer rate" using arbitration (e.g., token or carrier sense) for transmission. Independently from any other, it selects data packets or data groups (e.g., IEEE 802) addressed to it. It is an assembly that can be integrated into computer or telecommunications equipment to provide communications access.*

2. *A 'communications channel controller' is the physical interface which controls the flow of synchronous or asynchronous digital information. It is an assembly that can be integrated into computer or telecommunications equipment to provide communications access.*".

(3) In the section headed 4E Technology—

(a) in entry 4E001.a., for "4D." substitute "4D;";

(b) in Note 6 to the section headed Technical Note on "Adjusted Peak Performance ("APP")", for "*memory;*" substitute "*memory.*".

Amendments to Category 5 - Telecommunications and "Information Security"

13.—(1) The section headed Category 5 - Telecommunications and "Information Security" is amended as follows.

(2) In the section headed 5A1 Systems, Equipment and Components—

(a) in Note 2 to entry 5A001.a., for "*satellites*" substitute "*"spacecraft"*";

(b) in the Note to entry 5A001.b.3.b., for "*satellite*" substitute "*"satellite"*";

(c) in entry 5A001.b.6., for "700 bit/s." substitute "700 bit/s;";

(d) in entry 5A001.d.1., after "31,8 GHz" omit ",";

(e) in entry 5A001.d.2., after "57 GHz" omit ",";

(f) in entry 5A001.d.3., after "66 GHz" omit ",";

(g) in Note 2 to 5A001.d., for "*satellite*" substitute "*"satellite"*";

(h) in the N.B.2. to entry 5A001.f., after "*receivers*" insert "*,*".

(3) In the section headed 5D1 Software, in entry 5D001.d.4., for "level 1 024." substitute "level 1 024;".

(4) In the section headed 5E1 Technology—

(a) in entry 5E001.b.1., for "satellites" substitute ""spacecraft"";

(b) in entry 5E001.c.3.—

(i) for ""optical switching"" substitute "'optical switching'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 5E001.c.3., 'optical switching' is the routing of or switching of signals in optical form without conversion to electrical signals.".

(5) In the section headed 5A2 Systems, Equipment and Components—

(a) in the N.B. to entry 5A002—

(i) after "*7A005*" insert ",";

(ii) after "*"technology"*" insert ",";

(b) in the Technical Notes to entry 5A002.a.—

(i) in paragraph 1.g—

(aa) for "*"personal area network"*" substitute "*'personal area network'*";

(bb) at the end, insert—

"*Technical Notes:*

For the purposes of 5A002.a. Technical Note 1.g.:

1. 'Personal area network' is a data communication system having all of the following characteristics:

a. *Allows an arbitrary number of independent and interconnected "data devices" to communicate directly with each other; and*

b. *Is confined to the communication between devices within the immediate physical vicinity of an individual person or device controller (e.g., single room, office or automobile).*

2. *The "local area network" extends beyond the geographical area of the 'personal area network'.*";

(ii) in paragraph 2.a—

(aa) for "*"symmetric algorithm"*" substitute "*'symmetric algorithm"*";

(bb) at the end, insert—

"*Technical Notes:*

For the purposes of 5A002.a. Technical Note 2.a.:

1. *'Symmetric algorithm' is a cryptographic algorithm using an identical key for both encryption and decryption.*

2. *A common use of 'symmetric algorithms' is confidentiality of data.*";

(c) in Note 2 to entry 5A002.a.—

(i) in paragraph c, for "*radiotelophones*" substitute "*radiotelephones*";

(ii) in paragraph e, after "*civil use,*" insert "*that have been customised for a specific civil industry application,*".

Amendments to Category 6 - Sensors and Lasers

14.—(1) The section headed Category 6 - Sensors and Lasers is amended as follows.

(2) In the section headed 6A Systems, Equipment and Components—

(a) in entry 6A001.a.1.a.—

(i) before entry 6A001.a.1.a.1., insert—

"*Technical Note:*

For the purposes of 6A001.a.1.a., 'enhancement' includes the ability to compensate by external means.";

(ii) at the end of entry 6A001.a.1.a.1., for the Technical Notes, substitute—

"*Technical Note:*

For the purposes of 6A001.a.1.a.1.c., 'sounding resolution' is the swath width (degrees) divided by the maximum number of soundings per swath.";

(b) in entry 6A001.a.2.b.2., omit the Technical Note;

(c) at the end of entry 6A001.a.2.b.8., for the Technical Note, substitute—

"*Technical Notes:*

For the purposes of 6A001.a.2.b.:

1. Hydrophone arrays consist of a number of hydrophone providing multiple acoustic output channels.

2. '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.";

(d) in entry 6A002.a.2.b.2.b., for "'charge multiplication'" substitute ""charge multiplication"";

(e) in Note 2 to entry 6A002.a.3., in paragraph c.2., for "*in place.*" substitute "*in place;*";

(f) after paragraph d to Note 2 of entry 6A002.a.3, omit the Technical Note;

(g) in entry 6A002.b.1., for "Instantaneous-Field-Of-View" substitute "Instantaneous Field of View";

(h) in entry 6A002.c.3., for "Solid state " substitute "Solid-state";

(i) in the Technical Note to entry 6A002.f., after "*"focal plane array"*" omit "*("FPA")*";

(j) in entry 6A003.b.1. —

(i) for "solid state sensors" substitute "solid-state sensors";

(ii) after "10 nm" omit ",";

(k) in entry 6A003.b.1.a., for "solid state", in each place it occurs, substitute "solid-state";

(l) in entry 6A003.b.2.a., after "10 nm" omit ",";

(m) in Note 3 to entry 6A003.b.4.—

(i) in paragraph b.1. for "*Instantaneous-Field-of-View*" substitute "*Instantaneous Field of View*";

(ii) at the end of paragraph b.1., insert—

"*Technical Note:*

For the purposes of 6A003.b.4. Note 3.b.1., 'Instantaneous Field of View (IFOV) is the lesser figure of the 'Horizontal IFOV' or the 'Vertical IFOV'.

'Horizontal IFOV' = horizontal Field of View (FOV)/number of horizontal detector elements

'Vertical IFOV' = vertical Field of View (FOV)/number of vertical detector elements.";

(iii) at paragraph b.4.a., for "*field-of-view*" substitute "*Field of View*";

(iv) omit the Technical Notes;

(n) in Note 4 to entry 6A003.b.4., at paragraph a.1.d., after "*equipment;*" omit "*and*";

(o) at the end of Note 4 to entry 6A003.b.4., insert—

"*Technical Note:*

For the purposes of 6A003.b.4., 'direct view' refers to an imaging camera operating in the infrared spectrum that presents a visual image to a human

observer using a near-to-eye micro display incorporating any light-security mechanism.";

(p) in entry 6A004.a.1., for "*Technical Note:*" substitute "*Technical Notes:*";

(q) in entry 6A005—

(i) in Note 2, for "*'non-repetitive pulsed'*" substitute "*"non-repetitive pulsed"*";

(ii) omit the Technical Note to Note 2;

(iii) for Note 6, substitute—

"*Technical Note:*

For the purposes of 6A005.a. and 6A005.b., 'single transverse mode' refers to "lasers" with a beam profile having an M^2-factor of less than 1,3, while 'multiple transverse mode' refers to "lasers" with a beam profile having an M^2-factor equal to or greater than 1,3.";

(r) before entry 6A005.a., omit the Technical Note beginning with "*For the purposes of 6A005., 'wall-plug*";

(s) in entry 6A005.a.6.b.1., for "'Wall-plug efficiency'" substitute ""Wall-plug efficiency"";

(t) in Note 1 to entry 6A005.a.6.b., for "*note*" substitute "*Note*";

(u) in entry 6A005.b.—

(i) for ""pulsed lasers"" substitute "'pulsed lasers'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 6A005.b., a 'pulsed laser' is a "laser" having a "pulse duration" that is less than or equal to 0,25 seconds.";

(v) in entry 6A005.b.6., for "'Wall-plug efficiency'", in each place it occurs, substitute ""Wall-plug efficiency"";

(w) at the end of entry 6A005.d.1., insert—

"*Technical Notes:*

For the purposes of 6A005.d.1.:

1. *Semiconductor "lasers" are commonly called "laser" diodes.*

2. *A 'bar' (also called a semiconductor "laser" 'bar', a "laser" diode 'bar' or diode 'bar') consists of multiple semiconductor "lasers" in a one-dimensional array.*

3. *A 'stacked array' consists of multiple 'bars' forming a two-dimensional array of semiconductor "lasers".*";

(x) in entry 6A005.d.1.b.1.—

(i) for "1 400" substitute "780";

(ii) after "power" omit ",";

(y) for entries 6A005.d.1.b.2 and 6A005.d.1.b.3., substitute—

"2. Wavelength equal to or greater than 780 nm and less than 1 100 nm and average or CW output power exceeding 30 W;

3. Wavelength equal to or greater than 1 100 nm and less than 1 400 nm and average or CW output power exceeding 25 W;

4. Wavelength equal to or greater than 1 400 nm and less than 1 900 nm and average or CW output power exceeding 2,5 W; or

5. Wavelength equal to or greater than 1 900 nm and average or CW output power exceeding 1 W;".

(z) in entry 6A005.d.1.e., omit the Technical Notes;

(z1) in entry 6A005.d.5.—

(i) for ""Chemical lasers"" substitute "'Chemical lasers'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 6A005.d.5., 'chemical laser' is a "laser" in which the excited species is produced by the output energy from a chemical reaction.";

(z2) in entry 6A005.d.6., for "'Non-repetitive pulsed'" substitute ""Non-repetitive pulsed"" and for "Nd: glass" substitute "Nd:glass";

(z3) in entry 6A005.e.3.c.2., for "10 kW/cm^2." substitute "10 kW/cm^2;";

(z4) in the N.B. to entry 6A005.f., for "*Super-High*" substitute "*Super High*";

(z5) in entry 6A008.h.2.—

(i) for ""Radar frequency agility"" substitute "'Radar frequency agility'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 6A008.h., 'radar frequency agility' applies to any technique which changes, in a pseudo-random sequence, the carrier frequency of a pulsed radar transmitter between pulses or between groups of pulses by an amount equal to or larger than the pulse bandwidth.";

(z6) in the Technical Notes to entry 6A008—

(i) after the heading "*Technical Notes:*", on a new line insert "*For the purposes of 6A008:*";

(ii) in paragraph 1, for "*For the purposes of 6A008, 'marine*" substitute "*'Marine*";

(iii) in paragraph 2, for "*For the purposes of 6A008, 'vessel*" substitute "*'Vessel*";

(iv) in the Note to entry 6A225, for "*Interferometers) and PDV*" substitute "*Interferometers), PDV*";

(v) at the end, insert "*and microwave velocity interferometers, including optic-microwave mixing velocimeters*".

(3) In the section headed 6C Materials—

(a) in entry 6C004.b.4., after "diphosphide);" omit "or";

(b) in the Technical Note to entry 6C005.b., at the end, omit "1.".

(4) In the section headed 6D Software, in entry 6D003.c., after "Note 3.a." insert ";".

Amendments to Category 7 - Navigation and Avionics

15.—(1) The section headed Category 7 - Navigation and Avionics is amended as follows.

(2) In the section headed 7A Systems, Equipment and Components—

(a) in the Technical Notes to entry 7A003—

(i) after the heading "*Technical Notes:*", on a new line insert "*For the purposes of 7A003:*";

(ii) in paragraph 1, for "*For the purposes of 7A003., 'inertial*" substitute "*'Inertial*";

(iii) in paragraph 2, for "*For the purposes of 7A003., 'positional*" substitute "*'Positional*";

(b) in the Technical Note to entry 7A004, for "*7A004.a.*" substitute "*7A004*";

(c) for the N.B. to entry 7A008, substitute—

"*N.B.:*

For acoustic systems, see 6A001.a., and for correlation-velocity and Doppler-velocity sonar log equipment, see 6A001.b.

For other marine systems, see 8A002.";

(3) In the section headed 7B Test, Inspection and Production Equipment—

(a) in the Note to entry 7B001—

(i) for "*'Maintenance Level I'*" substitute "*"Maintenance Level I"*";

(ii) for "*'Maintenance Level II'*" substitute "*"Maintenance Level II"*";

(b) in entry 7B001 omit the Technical Notes.

(4) In the section headed 7E Technology—

(a) in entry 7E003—

(i) in the Note, for "*'Maintenance Level I'* or *'Maintenance Level II'*" substitute "*"Maintenance Level I" or "Maintenance Level II"*";

(ii) omit the N.B.;

(b) in the Technical Note to entry 7E004.a.5., after "i.e." insert ",".

Amendments to Category 8 - Marine

16.—(1) The section headed Category 8 - Marine is amended as follows.

(2) In the section headed 8A Systems, Equipment and Components—

(a) in the Technical Notes to entry 8A001.b., at paragraph 2, for "*8A0001.b.*" substitute "*8A001.b.3.b.*";

(b) for entry 8A001.c.1.c., substitute "Not used;";

(c) for entry 8A002.a.2., substitute—

"Direct current electric propulsion thrusters and specially designed motors therefor;

Technical Note:

For the purposes of 8A002.a.2., brushless direct current motors may be referred to as Permanent Magnet Alternating Current (PMAC) motors.";

(d) in entry 8A002.b.3.—

(i) for "automated control" substitute "'automated control'";

(ii) at the end, insert—

"*Technical Note:*

For the purposes of 8A002.b., 'automated control' systems apply to systems onboard submersible vehicles.";

(e) in entry 8A002.d.2.b., for "laser" substitute ""laser"".

(3) In the section headed 8E Technology, in entry 8E002.b., after "8A002.p." insert ";".

Amendments to Category 9 - Aerospace and Propulsion

17.—(1) The section headed Category 9 - Aerospace and Propulsion is amended as follows.

(2) In the section headed 9A Systems, Equipment and Components—

(a) in entry 9A001.a., after "9E003.i." omit ";";

(b) in entry 9A004—

(i) for "payloads" substitute "mission equipment";

(ii) after entry 9A004.b., insert—

"*N.B.* *For "sub-orbital craft", see 9A004.h.*";

(iii) in entry 9A004.d., for "payloads" substitute "mission equipment";

(iv) for entry 9A004.e.1. to entry 9A004.e.3. substitute—

"1. Command and telemetry data handling;

Note: *9A004.e.1. includes bus data management, storage, and processing.*

2. Payload data handling; or

Note: *9A004.e.2. includes management, storage, and processing of "spacecraft mission equipment" data.*

3. Attitude and orbit control;

Note: *9A004.e.3. includes sensing and actuation to determine and control the position and orientation of a "spacecraft".*";

(c) in entry 9A007.e.—

(i) for "'strong mechanical bond'" substitute ""strong mechanical bond"";

(ii) omit the Technical Note;

(d) in entry 9A008.a., for "'strong mechanical bond'" substitute ""strong mechanical bond"";

(e) in the Technical Notes to entry 9A012.a.—

(i) after the heading "*Technical Notes:*" on a new line insert "*For the purposes of 9A012.a.:*";

(ii) in paragraph 1, for "*For the purposes of 9A012.a., 'operator'*" substitute "'*Operator*"";

(iii) in paragraph 2, for "*For the purposes of 9A012.a., 'endurance'*" substitute "'*Endurance*"";

(iv) in paragraph 3, for "*For the purposes of 9A012.a., 'natural*" substitute "'*Natural*".

(3) In the section headed 9B Test, Inspection and Production Equipment—

(a) after the heading, on a new line insert—

"Note: *9B includes test, inspection and production equipment applicable to aero, aero-derivative, industrial or marine gas turbine engines.*";

(b) in entry 9B003 after "turbine" insert "engine";

(c) in entry 9B004—

(i) for "solid state" substitute "solid-state";

(ii) for "turbines" substitute "turbine engines".

(4) In the section headed 9D Software—

(a) in the N.B. to entry 9D005—

(i) for "listed" substitute "specified";

(ii) for "*payloads'*" substitute "*mission equipment'*";

(b) in entry 9D101, after "9B106," insert "9B107,".

(5) In the section headed 9E Technology—

(a) in entry 9E003, after "Other "technology" as follows:" insert—

"Note: *9E003 includes technology applicable to aero, aero-derivative, marine or industrial gas turbine engines.*";

(b) in entry 9E003.a.1., for "Gas turbine" substitute "Turbine";

(c) in entry 9E003.a.2.e., for "Utilisation of 'pressure" substitute "'Pressure";

(d) in the Technical Notes to entry 9E003.a.2.—

(i) in paragraph 2, after "*purposes of*" insert "*9E003.a.2.a. and*";

(ii) in paragraph 3—

(aa) after "*9E003.a.2.e.,*" omit "*in*";

(bb) after "*'pressure gain combustion'*" insert "*refers to a combustor where*";

(e) in the N.B. to entry 9E003.a.2.—

(i) for "*See 9E003.e. for "technology" "required" for*" substitute "*For*";

(ii) after "*holes*" insert "*, see 9E003.c. for "technology" "required'*"";

(f) in the Technical Note to entry 9E003.a.5., after "*purposes of*" insert "*9E003.a.4. and*";

(g) in entry 9E003.a.6., for "solid state" substitute "solid-state";

(h) in entry 9E003.a.8., after "tolerant'" omit "gas turbine engine";

(i) in the Technical Notes to entry 9E003.c.—

(i) after the heading "*Technical Notes:*" on a new line insert "*For the purposes of 9E003.c.:*";

(ii) in paragraph 1, for "For the purposes of 9E003.c., the" substitute "The";

(iii) in paragraph 2, for "For the purposes of 9E003.c., 'hole" substitute "'Hole";

(iv) in paragraph 3, for "For the purposes of 9E003.c., 'incidence" substitute "'Incidence";

(v) in paragraph 4, for "For the purposes of 9E003.c., methods" substitute "Methods" and for "Electrical Discharge Machining (EDM)" substitute "electrical discharge machining";

(j) in the Technical Note to entry 9E003.e., for "*widest*" substitute "*largest*";

(k) in entry 9E003.i., after ""Technology" for" insert "gas turbine engine";

(l) in entry 9E003.i.3., for "stability." substitute "stability;";

(m) in entry 9E003.k.—

(i) in the N.B.1. for "*See 9E003.h. for*" substitute "*For*" and for "*technology.*" substitute "*technology, see 9E003.h.*";

(ii) in the N.B.2. for "*See 9E003.i. for*" substitute "*For*" and for "*technology.*" substitute "*technology, see 9E003.i.*";

(n) in entry 9E102, after "9B106," insert "9B107,".

Douglas Alexander
Minister of State
28th April 2025 Department for Business and Trade

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Export Control Order 2008 (S.I. 2008/3231) ("the 2008 Order") and assimilated Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (Recast) (EUR 2009/428) ("the assimilated Dual-Use Regulation").

Part 2 of these Regulations amends the 2008 Order. Regulation 3 amends the provisions in Part 6 of the 2008 Order relating to offences and penalties. The amendments increase the maximum level of fine that may be imposed under the 2008 Order for certain offences on summary conviction, from level 3 on the standard scale to level 4 on the standard scale. Regulation 4 amends the control lists set out in Schedule 2 to the 2008 Order, to reflect updates to controls on the exports of conventional weapons agreed through the multilateral export control regime known as the Wassenaar Arrangements. Regulation 5 makes administrative amendments to the technical parameters of controls on emerging technology in Schedule 3 to the 2008 Order.

Part 3 amends Annex I to the assimilated Dual-Use Regulation, which lists dual-use goods, software and technology subject to export controls. These amendments reflect changes to the Wassenaar Arrangement dual-use list as well as changes to the control lists administered by other multilateral export control regimes, including the Australia Group, Nuclear Suppliers Group and the Missile Technology Control Regime, in line with UK's commitments as a member of these regimes.

An impact assessment has not been produced for this instrument as no, or no significant impact on the private, voluntary or public sectors is foreseen.

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