## STATUTORY INSTRUMENTS

# 2023 No. 302

# The Export Control (Military and Dual-Use Lists) (Amendment) Regulations 2023

# Amendments to Council Regulation (EC) No 428/2009

- **5.**—(1) 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)(1) is amended as follows.
  - (2) In Annex I (list of dual-use items)—
    - (a) in the section headed "definitions of terms used in this Annex", after the definition of "Fusible", insert—

""Gate-All-Around Field-Effect Transistor" ("GAAFET") (3) means a device having a single or multiple semiconductor conduction channel element(s) with a common gate structure that surrounds and controls current in all of the semiconductor conduction channel elements.

Note: This definition includes nanosheet or nanowire field-effect and surrounding gate transistors and other "GAAFET" semiconductor channel element structures.";

- (b) in the section headed "Category 1 special materials and related equipment", for entry 1C006.b., substitute—
  - "b. Lubricating materials containing, as their principal ingredients, phenylene or alkylphenylene ethers or thio-ethers, or their mixtures, containing more than two ether or thio-ether functions or mixtures thereof;";
- (c) in the section headed "Category 2 materials processing"—
  - (i) in Note 2 to entry 2B352.f.2., for "abovementioned characteristics" substitute "characteristics specified in 2B352.f.2.";
  - (ii) after entry 2D351, insert—
  - "2D352 "Software" designed for nucleic acid assemblers and synthesisers, specified in 2B352.i., that is capable of designing and building functional genetic elements from digital sequence data.";
    - (iii) for entry 2E003.b., including the Technical Notes, substitute—
      - "b. Other "technology", as follows:
        - 1. "Technology" for the design of tools, dies or fixtures specially designed for any of the following processes:
          - a. "Superplastic forming";

- b. "Diffusion bonding"; or
- c. 'Direct-acting hydraulic pressing';

### Technical Note:

'Direct-acting hydraulic pressing' is a deformation process which uses a fluid-filled flexible bladder in direct contact with the workpiece.

- 2. Not used;
- N.B. For "technology" for metal-working manufacturing processes for gas turbine engines and components, see 9E003. SEE ALSO MILITARY GOODS CONTROLS.";
- (iv) in the Notes to the table (Deposition techniques), in paragraph 10, for "airfoils" substitute "aerofoils";
- (d) in the section headed "Category 3 electronics"—
  - (i) under the heading "3A Systems, Equipment and Components", in Note 1, for "or 3A001.a.12. to 3A001.a.14.," substitute "3A001.a.12. to 3A001.a.14., or 3A001.b.12.,";
  - (ii) in entry 3A001.b.4.b.1., for "(48,54 dBm)" substitute "(48,45 dBm)";
  - (iii) in entry 3A001.b.11.e., for "90 GHz; or" substitute "75 GHz;";
  - (iv) for entry 3A001.b.11.f., substitute—
    - "f. Less than 100  $\mu$ s for any frequency change exceeding 5,0 GHz within the synthesised frequency range exceeding 75 GHz but not exceeding 90 GHz; or";
  - (v) in entry 3A002.c.2., before "Displayed Average Noise Level" insert "a";
  - (vi) in entry 3A002.d.3.d., omit "or";
  - (vii) in entry 3A002.d.3.e., for "90 GHz;" substitute "75 GHz; or";
  - (viii) after entry 3A002.d.3.f., insert—
    - "g. Less than 100 μs for any frequency change exceeding 5,0 GHz within the frequency range exceeding 75 GHz but not exceeding 90 GHz;";
  - (ix) in entry 3A002.d.4., for "Single" substitute "A single";
  - (x) in entry 3A002.d.5.c., for "90 GHz; or" substitute "75 GHz";
  - (xi) after entry 3A002.d.5.c., before the Technical Note, insert—
    - "d. Exceeding 5,0 GHz within the frequency range exceeding 75 GHz but not exceeding 90 GHz; or";
  - (xii) in entry 3C001.c., omit "or";
  - (xiii) after the Note to entry 3C001.d., insert—
    - "e. Gallium oxide (Ga2O3); or
    - f. Diamond (C);";

- (xiv) in entry 3C005.a., for "(AlN) or aluminium gallium nitride (AlGaN) semiconductor" substitute "(AlN), aluminium gallium nitride (AlGaN), gallium oxide (Ga2O3) or diamond semiconductor";
- (xv) in entry 3C005.b., for "(AlN), or aluminium gallium nitride (AlGaN) on" substitute "(AlN), aluminium gallium nitride (AlGaN), gallium oxide (Ga2O3) or diamond on";
- (xvi) in entry 3C006, for "aluminium nitride or aluminium gallium nitride" substitute "aluminium nitride, aluminium gallium nitride, gallium oxide (Ga2O3) or diamond";
- (xvii) after entry 3D005, insert—
- "3D006 'Electronic Computer-Aided Design' ('ECAD') "software" specially designed for the "development" of integrated circuits having any "Gate-All-Around Field-Effect Transistor" ("GAAFET") structure, and having any of the following:
  - a. Specially designed for implementing 'Register Transfer Level' ('RTL') to 'Geometrical Database Standard II' ('GDSII') or equivalent standard; or
  - b. Specially designed for optimisation of power or timing rules.

### Technical Notes

- 1. 'Electronic Computer-Aided Design' ('ECAD') is a category of "software" tools used for designing, analysing, optimising, and validating the performance of integrated circuit or printed circuit board.
- 2. 'Register Transfer Level' ('RTL') is a design abstraction which models a synchronous digital circuit in terms of the flow of digital signals between hardware registers, and the logical operations performed on those signals.
- 3. 'Geometrical Database Standard II' ('GDSII') is a database file format for data exchange of integrated circuit or integrated circuit layout artwork.";

(xviii) for entry 3E003.d., substitute—

- "d. Substrates of diamond for electronic components;";
- (xix) in entry 3E003.g., for "higher." substitute "higher;";
- (xx) after entry 3E003.g., insert—
  - "h. Substrates of gallium oxide for electronic components.";
- (e) in the section headed "Category 4 computers", in entry 4A003.b., for "29" substitute "70";
- (f) in the section headed "Category 5 telecommunications and information security", in Part 2 (information security), in entry 5A003.a., for "using" substitute "to use";
- (g) in the section headed "Category 6 sensors and lasers"—
  - (i) in entry 6A005.d.1.b.1., for "15W" substitute "25W";
  - (ii) in entry 6A008—

- (aa) omit the Note to entry 6A008.1.4.;
- (bb) in paragraph 1 of the Technical Notes immediately before entry 6A102, for "used" substitute "designed";
- (cc) after the Technical Notes, insert—

"Note: 6A008.1. does not control systems, equipment and assemblies designed for 'vessel traffic services'.";

- (iii) in entry 6D003.h.1., omit "application "programs";
- (h) in the section headed "Category 7 navigation and avionics"—
  - (i) in entry 7D003.e., for "circulation controlled" substitute "circulation-controlled";
  - (ii) in entry 7E004.c.3., including the Technical Note, in each instance, for "airfoils" substitute "aerofoils";
- (i) in the section headed "Category 9 aerospace and propulsion"—
  - (i) in entry 9A004, for "and air-launch platforms" substitute "air-launch platforms and "sub-orbital craft";
  - (ii) in entry 9A004.g., after "vehicles" insert "or "sub-orbital craft"";
  - (iii) in entry 9A115.a., immediately before the Technical Note, insert—

"Note: Apparatus and devices specified in 9A115.a. include those installed on a manned aircraft or an unmanned aerial vehicle.".

- (iv) for entry 9B001.c., substitute—
  - "c. Directional-solidification or single-crystal additive-manufacturing equipment designed for "superalloys";";
- (v) in entry 9B004, for "airfoil" substitute "aerofoil";
- (vi) in entry 9E003.a.2.c., after "shells;", omit "or";
- (vii) in entry 9E003.a.2.d., after "9E003.c.;", insert "or";
- (viii) after entry 9E003.a.2.d.—
  - (aa) before the Note, insert—
    - "e. Utilisation of 'pressure gain combustion'";
  - (bb) after the Technical Notes, insert—
    - "3. In 'pressure gain combustion' the bulk average stagnation pressure at the combustor outlet is greater than the bulk average stagnation pressure at the combustor inlet due primarily to the combustion process, when the engine is running in a "steady state mode" of operation.";
- (ix) in entry 9E003.a.6., for "Airfoil" substitute "Aerofoil";