(Acts adopted under Title V of the Treaty on European Union)

COUNCIL DECISION

of 26 January 1998

amending Decision 94/942/CFSP on the joint action adopted by the Council on the basis of Article J.3 of the Treaty on European Union concerning the control of exports of dual-use goods

(98/106/CFSP)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article J.3 thereof,

Having regard to the general guidelines given by the European Council held at Lisbon on 26 and 27 June 1992,

Having regard to Decision 94/942/CFSP [1],

Whereas Annex I to Decision 94/942/CFSP should be updated in order to take into account developments in the Nuclear Suppliers' Group and the Missile Technology Control Regime,

HAS DECIDED AS FOLLOWS:

Article 1

The list of dual-use goods in Annex I to Decision 94/942/CFSP, referred to in Article 2 of that Decision and in Article 3(1) of Council Regulation (EC) No 3381/94 of 19 December 1994 setting up a Community regime for the control of exports of dual-use goods [2], shall be amended in accordance with the Annex hereto.

Article 2

This Decision shall be published in the Official Journal.

Article 3

This Decision shall enter into force on the day of its publication.

It shall apply from the 30th day following the date of its publication.

Done at Brussels, 26 January 1998.

For the Council

The President

R. COOK

[1] OJ L 367, 31.12.1994, p. 8. Decision as last amended by Decision 97/633/CFSP (OJ L 266, 29.9.1997, p. 1).

[2] OJ L 367, 31.12.1994, p. 1. Regulation as amended by Regulation (EC) No 837/95 (OJ L 90, 21.4.1995, p. 1).

ANNEX

The list of dual-use goods in Annex I to Decision 94/942/CFSP, as last amended by Decision 97/633/CFSP, shall be amended as follows:

(1) Under the headling 'acronyms and abbreviations used in this index' the following acronyms and meanings shall be inserted:

'AVLIS Atomic vapour "laser" istope separation

CRISLA Chemical reaction by isotope selective "laser" activation

MLIS molecular "laser" isotope separation'.

(2) The nuclear technology note shall be replaced by the following:

'NUCLEAR TECHNOLOGY NOTE (NTN)

(To be read in conjunction with section E of Category 0)

The "technology" directly associated with any goods controlled in Category 0 is controlled according to the provisions of Category 0.

"Technology" for the "development" , "production" or "use" of goods under control remains under control even when applicable to non-controlled goods.

The approval of goods for export also authorises the export to the same end-user of the minimum "technology" required for the installation, operation, maintenance and repair of the goods.

Controls on "technology" transfer do not apply to information "in the pubic domain" or to "basic scientific research".

(3) Changes to definitions of terms

1. The definitions for the following terms shall be replaced as follows:

'"effective gramme" (0 1) of "special fissile material" means:

a. for plutonium isotopes and uranium-233, the isotope weight in grammes;

b. for uranium enriched 1 per cent or greater in the isotope uranium-235, the element weight in grammes multiplied by the square of its enrichment expressed as a decimal weight fraction;

c. for uranium enriched below 1 per cent in the isotope uranium-235, the element weight in grammes multiplied by 0,0001.

"Special fissile material" (0) means plutonium-239, uranium-233, "uranium enriched in the isotopes 235 or 233", and any material containing the foregoing.'

2. The following definitions of terms shall be inserted:

'"Materials resistant to corrosion by UF_6" (0) may be copper, stainless steel, aluminium, aluminium oxide, aluminium alloys, nickel or alloy containing 60 weight per cent or more nickel and UF_6-resistent fluorinated hydrocarbon polymers, as appropriate for the type of separation process.'

3. The definition of the term 'Boron equivalent' shall be deleted.

4. The definition of the term 'Other fissile materials' shall be deleted.

(4) Category 0 shall be replaced by the following text:

'0A SYSTEMS, EQUIPMENT AND COMPONENTS

0A001 "Nuclear reactors" and specially designed or prepared equipment and components therefor, as follows:

a. "nuclear reactors" capable of operation so as to maintain a controlled self-sustaining fission chain reaction;

b. metal vessels, or major shop-fabricated parts therefor, specially designed or prepared to contain the core of a "nuclear reactor", including the reactor vessel head for a reactor pressure vessel;

c. manipulative equipment specially designed or prepared for inserting or removing fuel in a "nuclear reactor".

d. control rods specially designed or prepared for the control of the fission process in a "nuclear reactor", support or suspension structures therefor, rod drive mechanisms and rod guide tubes;

e. pressure tubes specially designed or prepared to contain fuel elements and the primary coolant in a "nuclear reactor" at an operating pressure in excess of 5,1 MPa;

f. zirconium metal and alloys in the form of tubes or assemblies of tubes in which the ratio of hafnium of zirconium is less than 1:500 parts by weight, specially designed or prepared for use in "nuclear reactor";

g. coolant pumps specially designed or prepared for circulating the primary coolant of "nuclear reactors";

h. "nuclear reactor internals" specially designed or prepared for use in a "nuclear reactor", including support columns for the core, fuel channels, thermal shields, baffles, core grid plates, and diffuser plates;

Note: In entry 0A001.h, "nuclear reactor internals" means any major structure within a reactor vessel which has one or more functions such as supporting the core, maintaining fuel alignment, directing primary coolant flow, providing radiation shields for the reactor vessel, and guiding in-core instrumentations.

i. heat exchangers (steam generators) specially designed or prepared for use in the primary coolant circuit of a "nuclear reactor";

j. neutron detection and measuring instruments specially designed or prepared for determining neutron flux levels within the core of a "nuclear reactor".

0B TEST, INSPECTION AND PRODUCTION EQUIPMENT

0B001 Plant for the separation of isotopes of "natural uranium", "depleted uranium" and "special fissile materials", and specially designed or prepared equipment and components therefor, as follows:

a. plant specially designed for separating isotopes of "natural uranium", "depleted uranium", and "special fissile materials", as follows:

1. gas centrifuge separation plant;
2. gaseous diffusion separation plant;
3. aerodynamic separation plant;
4. chemical exchange separation plant;

5. ion-exchange separation plant;

6. atomic vapour "laser" isotope separation (AVLIS) plant;

7. molecular "laser" isotope separation (MLIS) plant;

8. plasma separation plant;

9. electro magnetic separation plant;

b. gas centrifuges and assemblies and components, specially designed or prepared for gas centrifuge separation process, as follows:

Note: *In 0B001.b, "high strength-to-density ratio material" means any of the following:*

a. maraging steel capable of an ultimate tensile strength of 2 050 MPa more;

b. aluminium alloys capable of an ultimate tensile strength of 460 MPa or more; or

c. "fibrous or filamentary materials" with a "specific modulus" of more than 3,18 × 10^6 m and a "specific tensile strength" greater than 76,2 × 10^3 m;

1. gas centrifuges;

2. complete rotor assemblies;

3. rotor tube cylinders with a wall thickness of 12 mm or less, a diameter of between 75 mm and 400 mm, made from "high strength-to-density ratio matrials";

4. rings or bellows with a wall thickness of 3 mm or less and a diameter of between 75 mm and 400 mm and designed to give local support to a rotor tube or to join a number together, made from "high strength-to-density ratio materials";

5. baffles of between 75 mm and 400 mm diameter for mounting inside a rotor tube, made from "high strength-to-density ratio materials".

6. top or bottom caps of between 75 mm and 400 mm diameter to fit the ends of a rotor tube, made from "high strength-to-density ratio materials";

7. magnetic suspension bearings consisting of an annular magnet suspended within a housing made of or protected by "materials resistant to corrosion by UF_6" containing a damping medium and having the magnet coupling with a pole piece or second magnet fitted to the top cap of the rotor;

8. specially prepared bearings comprising a pivot-cup assembly mounted on a damper;

9. molecular pumps comprised of cylinders having internally machined or extruded helical grooves and internally machined bores;

10. ring-shaped motor stators for multiphase AC hysteresis (or reluctance) motors for synchronous operation within a vacuum in the frequency range of 600 to 2 000 Hz and a power range of 50 to 1 000 Volt-Amps;

11. centrifuge housing/recipients to contain the rotor tube assembly of a gas centrifuge, consisting of a rigid cylinder of wall thickness up to 30 mm with precision machined ends and made of or protected by "materials resistant to corrosion by UF_6";

12. scoops consisting of tubes of up to 12 mm internal diameter for the extraction of UF_6 gas from within a centrifuge rotor tube by a Pitot tube action, made of or protected by "materials resistant to corrosion by UF_6";

13. frequency changers (converters or inverters) specially designed or prepared to supply motor stators for gas centrifuge enrichment, having all of the following characteristics, and specially designed components therefor:

    a. multiphase output of 600 to 2 000 Hz;

    b. frequency control better than 0,1 %;

    c. harmonic distortion of less than 2 %; and

    d. an efficiency greater than 80 %;

c. equipment and components, specially designed or prepared for gaseous diffusion separation process, as follows:

    1. gaseous diffusion barriers made of porous metallic, polymer or ceramic "materials resistant to corrosion by UF_6" with a pore size of 10 to 100 nm, a thickness of 5 mm or less, and, for tubular forms, a diameter of 25 mm or less;

    2. gaseous diffuser housings made of or protected by "materials resistant to corrosion by UF_6";

    3. compressors (positive displacement, centrifugal and axial flow types) or gas blowers with a suction volume capacity of 1 m^3/min or more of UF_6, and discharge pressure up to 666,7 kPa, made of or protected by "materials resistant to corrosion by UF_6";

    4. rotary shaft seals for compressors or blowers specified in 0B001.c.3. and designed for a buffer gas in-leakage rate of less than 1 000 cm^3/min.;

    5. heat exchangers made of aluminium, copper, nickel, or alloys containing more than 60 per cent nickel, or combinations of these metals as clad tubes, designed to operate at sub-atmospheric pressure with a leak rate that limits the pressure rise to less than 10 Pa per hour under a pressure differential of 100 kPa;

    6. bellow valves made of or protected by "materials resistant to corrosion by UF_6", with a diamater of 40 mm to 1 500 mm;

d. equipment and components, specially designed or prepared for aerodynamic separation process, as follows:

    1. separation nozzles consisting of slit-shaped, curved channels having a radius of curvature less than 1 mm, resistant to corrosion by UF_6, and having a knife-edge contained within the nozzle which separates the gas flowing through the nozzle into two streams;

    2. tangential inlet flow-driven cylindrical or conical tubes (vortex tubes), made of or protected by "materials resistant to corrosion by UF_6", with a diameter of between 0,5 cm and 4 cm and a length to diameter ratio of 20:1 or less and with one or more tangential inlets;

    3. compressors (positive displacement, centrifugal and axial flow types) or gas blowers with a suction volume capacity of 2 m^3/min, made of or protected by "materials resistant to corrosion by UF_6", and rotary shaft seals therefor;

    4. heat exchangers made of or protected by "materials resistant to corrosion by UF_6";

    5. aerodynamic separation element housings, made of or protected by "materials resistant to corrosion by UF_6" to contain vortex tubes or separation nozzles;

6. bellows valves made of or protected by "materials resistant to corrosion by UF_6", with a diameter of 40 to 1 500 mm;

7. process systems for separating UF_6 from carrier gas (hydrogen or helium) to 1 ppm UF_6 content or less, inlcuding:

   a. cryogenic heat exchangers and cryoseparators capable of temperatures of 153 K (–120 °C) or less;

   b. cryogenic refrigeration units capable of temperatures of 153 K (–120 °C) or less;

   c. separation nozzle or vortex tube units for the separation of UF_6 from carrier gas;

   d. UF_6 cold traps capable of temperatures of 253 K (–20 °C) or less;

e. equipment and components, specially designed or prepared for chemical exchange separation process, as follows:

1. fast-exchange liquid-liquid pulse columns with stage residence time of 30 seconds or less and resistant to concentrated hydrochloric acid (e. g. made of or protected by suitable plastic materials such as fluorocarbon polymers or glass);

2. fast-exchange liquid-liquid centrifugal contactors with stage residence time of 30 seconds or less and resistant to concentrated hydrochloric acid (e.g. made of or protected by suitable plastic materials such as fluorocarbon polymers or glass);

3. electrochemical reduction cells resistant to concentrated hydrochloric acid solutions, for reduction of uranium from one valence state to another;

4. electrochemical reduction cells feed equipment to take U^{+4} from the organic stream and, for those parts in contact with the process stream, made of or protected by suitable materials (e.g. glass, fluorocarbon polymers, polyphenyl sulphate, polyether sulfone and resin-impregnated graphite);

5. feed preparation systems for producing high purity uranium chloride solution consisting of dissolution, solvent extraction and/or ion exchange equipment for purification and electrolytic cells for reducing the uranium U^{+6} or U^{+4} to U^{+3};

6. uranium oxidation systems for oxidation of U^{+3} to U^{+4};

f. equipment and components, specially designed or prepared for ion-exchange separation process, as follows:

1. fast reacting ion-exchange resins, pellicular or porous macro-reticulated resins in which the active chemical exchange groups are limited to a coating on the surface of an inactive porous support structure, and other composite structures in any suitable form, including particles or fibres, with diameters of 0,2 mm or less, resistant to concentrated hydrochloric acid and designed to have an exchange rate half-time of less than 10 seconds and capable of operating at temperatures in the range of 373 K (100 °C) to 473 K (200 °C);

2. ion exchange columns (cylindrical) with a diameter greater than 1 000 mm, made of or protected by materials resistant to concentrated hydrochloric acid (e.g. titanium or fluorocarbon plastics) and capable of operating at temperatures in the range of 373 K (100 °C) to 473 K (200 °C) and pressures above 0,7 MPa;

3. ion exchange reflux systems (chemical or electrochemical oxidation or reduction systems) for regeneration of the chemical reducing or oxidising agents used in ion exchange enrichment cascades;

g. equipment and components, specially designed or prepared for atomic vapour "laser" isotope separation process (AVLIS), as follows:

1. high power strip or scanning electron beam guns with a delivered power of more than 2,5 kW/cm for use in uranium vaporisation systems;

2. liquid uranium metal handling systems for molten uranium or uranium alloys, consisting of crucibles, made of or protected by suitable corrosion and heat resistant materials (e.g. tantalum, yttria-coated graphite, graphite coated with other rare earth oxides or mixtures thereof), and cooling equipment for the crucibles;

NB: SEE ALSO 2A225

3. product and tails collector systems made of or lined with materials resistant to the heat and corrosion of uranium metal vapour or liquid, such as yttria-coated graphite or tantalum;

4. separator module housings (cylindrical or rectangular vessels) for containing the uranium metal vapour source, the electron beam gun and the product and tails collectors;

5. "lasers" or "laser" systems for the separation of uranium isotopes with a spectrum frequency stabiliser for operation over extended periods of time;

NB: SEE ALSO 6A005 AND 6A205

h. equipment and components, specially designed or prepared for molecular "laser" isotope separation process (MLIS) or chemical reaction by isotope selective laser activation (CRISLA), as follows:

1. supersonic expansion nozzles for cooling mixtures of UF_6 and carrier gas to 150 K (–123 °C) or less and made from "materials resistant to corrosion by UF_6";

2. uranium pentafluoride (UF_5), product collectors consisting of filter, impact or cyclone-type collectors or combinations thereof, and made of "materials resistant to corrosion by UF_5/UF_6";

3. compressors made of or protected by "materials resistant to corrosion by UF_6, and rotary shaft seals therefor;

4. equipment for fluorinating UF_5 (solid) to UF_6 (gas);

5. process systems for separating UF_6 from carrier gas (e. g. nitrogen or argon) including:

a. cryogenic heat exchangers and cryoseparators capable of temperatures 153 K (–120 °C) or less;

b. cryogenic refrigeration units capable of temperatures of 153 K (–120 °C) or less;

c. UF_6 cold traps capable of temperatures of 253 K (–20 °C) or less;

6. "lasers" or "laser" systems for the separation of uranium isotopes with a spectrum frequency stabiliser for operation over extended periods of time;

NB: SEE ALSO 6A005 AND 6A205

i. equipment and components, specially designed or prepared for plasma separation process, as follows:

1. microwave power sources and antennae for producing or accelerating ions, with an output frequency greater than 30 GHz and mean power output greater than 50 kW;

2. radio frequency ion excitation coils for frequencies of more than 100 kHz and capable of handling more than 40 kW mean power;

3. uranium plasma generation systems;

4. liquid metal handling systems for molten uranium or uranium alloys, consisting of crucibles, made of or protected by suitable corrosion and heat resistant materials (e.g. tantalum, yttria-coated graphite, graphite coated with other rare earth oxides or mixtures thereof), and cooling equipment for the crucibles;

NB: SEE ALSO 2A225

5. product and tails collectors made of or protected by materials resistant to the heat and corrosion of uranium vapour such as yttria-coated graphite or tantalum;

6. separator module housings (cylindrical) for containing the uranium plasma source, radio-frequency drive coil and the product and tails collectors and made of a suitable non-magnetic material (e.g. stainless steel);

j. equipment and components, specially designed or prepared for electromagnetic separation process, as follows:

1. ion sources, single or multiple, consisting of a vapour source, ioniser, and beam accelerator made of suitable non-magnetic materials (e.g. graphite, stainless steel, or copper) and capable of providing a total ion beam current of 50 mA or greater;

2. ion collector plates for collection of enriched or depleted uranium ion beams, consisting of two or more slits and pockets and made of suitable non-magnetic materials (e.g. graphite or stainless steel);

3. vacuum housings for uranium electromagnetic separators made of non-magnetic materials (e.g. stainless steel) and designed to operate at pressures of 0,1 Pa or lower;

4. magnet pole pieces with a diameter greater than 2 m;

5. high voltage power supplies for ion sources, having all of the following characteristics:

a. capable of continuous operation;

b. output voltage of 20 000 V or greater;

c. output current of 1 A or greater; and

d. voltage regulation of better than 0,01 % over a period of 8 hours;

NB: SEE ALSO 3A227

6. magnet power supplies (high power, direct current) having all of the following characteristics:

a. capable of continuous operation with a current output of 500 A or greater at a voltage of 100 V or greater; and

b. current or voltage regulation better than 0,01 % over a period of 8 hours.

NB: SEE ALSO 3A 226

0B002 Specially designed or prepared auxiliary systems, equipment and components, as follows, for isotope separation plant specified in 0B001, made of or protected by "materials resistant to corrosion by UF_6":

a. feed autoclaves, ovens or systems used for passing UF_6 to the enrichment process;

b. desublimers or cold traps, used to remove UF_6 from the enrichment process for subsequent transfer upon heating;

c. product and tails stations for transferring UF_6 into containers;

d. liquefaction or solidification stations used to remove UF_6 from the enrichment process by compressing, cooling and converting UF_6 to a liquid or solid form;

e. piping systems and header systems specially designed for handling UF_6 within gaseous diffusion, centrifuge or aerodynamic cascades;

f. 1. vacuum manifolds or vacuum headers having a suction capacity of 5 m^3/minute or more; or

2. vacuum pumps specially designed for use in UF_6 bearing atmospheres;

g. UF_6 mass spectrometers/ion sources specially designed or prepared for taking on-line samples of feed, product or tails from UF_6 gas streams and having all of the following characteristics:

1. unit resolution for mass of more than 320 amu;

2. ion sources constructed of or lined with nichrome or monel, or nickel plated;

3. electron bombardment ionisation sources; and

4. collector system suitable for isotopic analysis.

0B003 Plant for the conversion of uranium and equipment specially designed or prepared therefor, as follows:

a. systems for the conversion of uranium ore concentrates to UO_3;

b. systems for the conversion of UO_3 to UF_6;

c. systems for the conversion of UO_3 to UO_2;

d. systems for the conversion of UO_2 to UF_4;

e. systems for the conversion of UF_4 to UF_6;

f. systems for the conversion of UF_4 to uranium metal;

g. systems for the conversion of UF_6 to UO_2;

h. systems for the conversion of UF_6 to UF_4;

0B004 Plant for the production or concentration of heavy water, deuterium and deuterium compounds and specially designed or prepared equipment and components therefor, as follows:

a. plant for the production of heavy water, deuterium or deuterium compounds, as follows:

1. water-hydrogen sulphide exchange plants;

2. ammonia-hydrogen exchange plants;

b. equipment and components, as follows:

1. water-hydrogen sulphide exchange towers fabricated from fine carbon steel (e.g. ASTM A516) with diameters of 6 m to 9 m, capable of operating at pressures greater than or equal to 2 MPa and with a corrosion allowance of 6 mm or greater;

2. single stage, low head (i.e. 0,2 MPa) centrifugal blowers or compressors for hydrogen sulphide gas circulation (i.e. gas containing more than 70 % H_2S) with a throughput capacity greater than or equal to 56 m^3/second when operating at pressures greater than or equal to 1,8 MPa suction and having seals designed for wet H_2 service;

3. ammonia-hydrogen exchange towers greater than or equal to 35 m in height with diameters of 1,5 m to 2,5 m capable of operating at pressures greater than 15 MPa;

4. tower internals, including stage contactors, and stage pumps, including those which are submersible, for heavy water production utilizing the ammonia-hydrogen exchange process;

5. ammonia crackers with operating pressures greater than or equal to 3 MPa for heavy water production utilising the ammonia-hydrogen exchange process;

6. infrared absorption analysers capable of on-line hydrogen/deuterium ratio analysis where deuterium concentrations are equal to or greater than 90 %;

7. catalytic burners for the conversion of enriched deuterium gas into heavy water utilising the ammonia-hydrogen exchange process;

8. complete heavy water upgrade systems, or columns therefor, for the upgrade of heavy water to reactor-grade deuterium concentration.

0B005 Plant specially designed for the fabrication of "nuclear reactor" fuel elements and specially designed or prepared equipment therefor.

Note: *A plant for the fabrication of "nuclear reactor" fuel elements includes equipment which:*

a. normally comes into direct contact with or directly processes or controls the production flow of nuclear materials;

b. seals the nuclear materials within the cladding;

c. checks the integrity of the cladding or the seal; or

d. checks the finish treatment of the solid fuel.

0B006 Plant for the reprocessing of irradiated "nuclear reactor" fuel elements, and specially designed or prepared equipment and components therefor.

Note: *0B006 includes:*

a. plant for the reprocessing of irradiated "nuclear reactor" fuel elements including equipment and components which normally come into direct contact with and directly control the irradiated fuel and the major nuclear material and fission product processing streams;

b. fuel element chopping or shredding machines, i.e. remotely operated equipment to cut, chop, shred or shear irradiated "nuclear reactor" fuel assemblies, bundles or rods;

c. dissolvers, critically safe tanks (e.g. small diameter, annular or slab tanks) specially designed or prepared for the dissolution of irradiated "nuclear reactor" fuel, which are capable of withstanding hot, highly corrosive liquids, and which can be remotely loaded and maintained;

d. counter-current solvent extractors and ion-exchange processing equipment specially designed or prepared for use in a plant for the reprocessing of irradiated "natural uranium", "depleted uranium" or "special fissile materials";

e. holding or storage vessels specially designed to be critically safe and resistant to the corrosive effects of nitric acid;

Note: *holding or storage vessels may have the following features:*

1. walls or intenal structures with a boron equivalent (calculated for all constituent elements as defined in the note to 0C004) of at least two %;

2. a maximum diameter or 175 mm for cylindrical vessels; or

3. a maximum width of 75 mm for either a slab or annular vessel.

f. complete systems specially designed or prepared for the conversion of plutonium nitrate to plutonium oxide;

g. complete systems specially designed or prepared for the production of plutonium metal;

h. process control instrumentation specially designed or prepared for monitoring or controlling the reprocessing of irradiated "natural uranium", "depleted uranium" or "special fissile materials".

0C MATERIALS

0C001 "Natural uranium" or "depleted uranium" or thorium in the form of metal, alloy, chemical compound or concentrate and any other material containing one or more of the foregoing;

Note: 0C001 does not control the following:

a. four grammes or less of "natural uranium" or "depleted uranium" when contained in a sensing component in insruments;

b. "depleted uranium" specially fabricated for the following civil non-nuclear applications:

1. shielding;

2. packaging;

3. ballasts having a mass not greater than 100 kg;

4. counter-weights having a mass not greater than 100 kg;

c. alloys containing less than 5 % thorium;

d. ceramic products containing thorium, which have been manufactured for non-nuclear use.

0C002 "Special fissile materials".

Note: 0C002 does not control four "effective grammes" or less when contained in a sensing component in instruments.

0C003 Deuterium, heavy water (deuterium oxide) and other compounds of deuterium, and mixtures and solutions containing deuterium, in which the isotopic ratio of deuterium to hydrogen exceeds 1:5 000.

0C004 Graphite, nuclear grade, having a purity level of less than 5 parts per million "boron equivalent" and with a density greater than 1,5 g/cm^3.

Note: In 0C004, 'boron equivalent' (BE) is defined as the sum of BE_Z for impurities (excluding BE_{carbon} since carbon is not considered an impurity) including boron, where:

BE_Z (ppm) = CF × concentration of element Z in ppm;

where CF is the conversion factor $= \frac{\sigma_Z A_B}{\sigma_B A_Z}$

and σ_B and σ_Z are the thermal neutron capture cross sections, (in barns) for naturally occurring boron and element Z respectively; and A_B and A_Z are the atomic masses of naturally occurring boron and element Z respecively.

0C005 Specially prepared compounds or powders for the manufacture of gaseous diffusion barriers, resistant to corrosion by UF_6 (e.g. nickel or alloy containing 60 weight per cent or more nickel, aluminium oxide and fully fluorinated hydrocarbon polymers), having a purity of 99.9 weight per cent or more and a mean particle size of less than 10 micrometres measured by American Society for Testing and Materials (ASTM) B330 standard and a high degree of particle size uniformity.

0D SOFTWARE

0D001 "Software" specially designed or modified for the "development", "production" or "use" of goods specified in this category.

0E TECHNOLOGY

0E001 "Technology" according to the Nuclear Technology Note for the "development", "production" or "use" of goods specified in this category.'

(5) After sub-entry 1C111.c.5 the following sub-entry shall be inserted:

'6. Ferrocene derivatives other than those specified in the Military Goods Controls.'

(6) Entry 6A107 shall be replaced as follows:

'6A107 Gravity meters (gravimeters) and components for gravity meters and gravity gradiometers, as follows:

a. Gravity meters, other than those specified in 6A007.b, designed or modified for airborne or marine use, and having a static or operational accuracy of 0,7 mgal or less (better), and having a time-to-steady-state registration of two minutes or less;

b. Specially designed components for gravity meters specified in 6A007.b or 6A107.a and gravity gradiometers specified in 6A007.c'