

II

(Non-legislative acts)

REGULATIONS

COUNCIL REGULATION (EU) No 509/2012

of 15 June 2012

amending Regulation (EU) No 36/2012 concerning restrictive measures in view of the situation in Syria

THE COUNCIL OF THE EUROPEAN UNION,

HAS ADOPTED THIS REGULATION:

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 215 thereof,

Article 1

Regulation (EU) No 36/2012 is hereby amended as follows:

Having regard to Council Decision 2011/782/CFSP of 1 December 2011 concerning restrictive measures against Syria ⁽¹⁾,

(1) the following articles are inserted:

Having regard to the joint proposal from the High Representative of the Union for Foreign Affairs and Security Policy and the European Commission,

Article 2a

1. It shall be prohibited:

Whereas:

(1) On 18 January 2012, the Council adopted Regulation (EU) No 36/2012 ⁽²⁾ with a view to giving effect to most of the measures provided for in Decision 2011/782/CFSP.

(a) to sell, supply, transfer or export, directly or indirectly, equipment, goods or technology which might be used for internal repression or for the manufacture and maintenance of products which might be used for internal repression, as listed in Annex IA, whether or not originating in the Union, to any person, entity or body in Syria or for use in Syria;

(2) In view of the continued brutal repression and violation of human rights by the Government of Syria, Council Decision 2012/206/CFSP ⁽³⁾, amending Decision 2011/782/CFSP, provides for additional measures, namely a prohibition or prior authorisation requirement on the sale, supply, transfer or export of goods and technology which might be used for internal repression, and a ban on exports of luxury goods to Syria.

(b) to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent the prohibitions referred to in point (a).

(3) Those measures fall within the scope of the Treaty and regulatory action at the level of the Union is therefore necessary in order to implement them, in particular with a view to ensuring their uniform application by economic operators in all Member States.

2. By way of derogation from paragraph 1, the competent authorities in the Member States, as identified on the websites listed in Annex III, may grant, under such terms and conditions as they deem appropriate, an authorisation for a transaction in relation to equipment, goods or technology as listed in Annex IA, provided that the equipment, goods or technology are for food, agricultural, medical or other humanitarian purposes.

(4) Therefore, Regulation (EU) No 36/2012 should be amended to give effect to the new measures,

Article 2b

1. A prior authorisation shall be required for the sale, supply, transfer or export, directly or indirectly, of equipment, goods or technology which might be used for internal repression or for the manufacture and maintenance of products which might be used for internal repression, as listed in Annex IX, whether or not originating in the Union, to any person, entity or body in Syria or for use in Syria.

⁽¹⁾ OJ L 319, 2.12.2011, p. 56.

⁽²⁾ OJ L 16, 19.1.2012, p. 1.

⁽³⁾ OJ L 110, 24.4.2012, p. 36.

2. The competent authorities in the Member States, as identified on the websites listed in Annex III, shall not grant any authorisation for any sale, supply, transfer or export of the equipment, goods or technology listed in Annex IX, if they have reasonable grounds to determine that the equipment, goods or technology the sale, supply, transfer or export of which is in question is or might be used for internal repression or for the manufacture and maintenance of products which might be used for internal repression.

3. The authorisation shall be granted by the competent authorities of the Member State where the exporter is established and shall be in accordance with the detailed rules laid down in Article 11 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 (*). The authorisation shall be valid throughout the Union.

(*) OJ L 134, 29.5.2009, p. 1.;

(2) Article 3 is replaced by the following:

Article 3

1. It shall be prohibited:

- (a) to provide, directly or indirectly, technical assistance related to the goods and technology listed in the Common Military List of the European Union (*) ("Common Military List") or related to the provision, manufacture, maintenance and use of goods included in that list, to any person, entity or body in Syria or for use in Syria;
- (b) to provide, directly or indirectly, technical assistance or brokering services related to equipment, goods or technology which might be used for internal repression as listed in Annexes I and IA, to any person, entity or body in Syria or for use in Syria;
- (c) to provide, directly or indirectly, financing or financial assistance related to the goods and technology listed in the Common Military List or in Annexes I and IA, including in particular grants, loans and export credit insurance, for any sale, supply, transfer or export of such items, or for any provision of related technical assistance to any person, entity or body in Syria or for use in Syria;
- (d) to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent the prohibitions referred to in points (a) to (c).

2. By way of derogation from paragraph 1, the prohibitions referred to therein shall not apply to the provision of technical assistance, financing and financial assistance related to:

- technical assistance intended solely for the support of the United Nations Disengagement Observer Force (UNDOF),
- non-lethal military equipment, or equipment which might be used for internal repression, intended solely for humanitarian purposes or protective use or for institution building programmes of the UN and the Union, or for Union or UN crisis management operations, or
- non-combat vehicles fitted with materials to provide ballistic protection, intended solely for the protective use of personnel of the Union and its Member States in Syria,

provided that such provision shall first have been approved by the competent authority of a Member State, as identified on the websites listed in Annex III.

3. By way of derogation from point (b) of paragraph 1, the competent authorities of the Member States, as identified on the websites listed in Annex III, may grant, under such terms and conditions as they deem appropriate, an authorisation for technical assistance or brokering services related to equipment, goods or technology, as listed in Annex IA, provided that the equipment, goods or technology are for food, agricultural, medical or other humanitarian purposes.

The Member State concerned shall inform the other Member States and the Commission, within four weeks, of any authorisation granted under the first subparagraph.

4. Prior authorisation from the competent authority of the relevant Member State, as identified on the websites listed in Annex III, shall be required for the provision of:

- (a) technical assistance or brokering services related to equipment, goods or technology listed in Annex IX, and to the provision, manufacture, maintenance and use of such equipment, goods or technology, directly or indirectly to any person, entity or body in Syria or for use in Syria;
- (b) financing or financial assistance related to goods and technology listed in Annex IX, including in particular grants, loans and export credit insurance, for any sale, supply, transfer or export of such goods and technology, or for any provision of related technical assistance to any person, entity or body in Syria or for use in Syria.

The competent authorities shall not grant any authorisation for the transactions referred to in the first subparagraph, if they have reasonable grounds to determine that those transactions are or may be intended to contribute to internal repression or for the manufacture and maintenance of products which might be used for internal repression.

(*) OJ C 86, 18.3.2011, p. 1.;

(3) the following article is inserted:

Article 11b

1. It shall be prohibited:

- (a) to sell, supply, transfer or export, directly or indirectly, luxury goods as listed in Annex X, to Syria;
- (b) to participate, knowingly and intentionally, in activities whose object or effect is, directly or indirectly, to circumvent the prohibition referred to in point (a).

2. By way of derogation from point (a) of paragraph 1, the prohibition referred to therein shall not apply to goods of a non-commercial nature, for personal use, contained in travellers' luggage.'

Article 2

The text set out in Annex I to this Regulation is added to Regulation (EU) No 36/2012 as Annex IA.

Article 3

The text set out in Annex II to this Regulation is added to Regulation (EU) No 36/2012 as Annex IX.

Article 4

The text set out in Annex III to this Regulation is added to Regulation (EU) No 36/2012 as Annex X.

Article 5

This Regulation shall enter into force on the day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Luxembourg, 15 June 2012.

For the Council
The President
M. LIDEGAARD

ANNEX I

'ANNEX Ia

LIST OF EQUIPMENT, GOODS AND TECHNOLOGY REFERRED TO IN ARTICLE 2a

PART 1

Introductory Notes

1. This Part comprises goods, software and technology listed in Annex I to Regulation (EC) No 428/2009 ⁽¹⁾.
2. Unless otherwise stated, the reference numbers used in the column below entitled "No" refer to the control list number and the column below entitled "Description" refers to the control descriptions of dual-use items set out in Annex I to Regulation (EC) No 428/2009.
3. Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

General Notes

1. The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components is/are the principal element of the goods and can feasibly be removed or used for other purposes.

NB: In judging whether the controlled component or components is/are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the goods being procured.

2. The items specified in this Annex include both new and used goods.

General Technology Note (GTN)

(To be read in conjunction with Section B of this Part)

1. The sale, supply, transfer or export of "technology" which is "required" for the "development", "production" or "use" of goods the sale, supply, transfer or export of which is controlled in Sections A, B, C and D of this Part, is controlled in accordance with the provisions of Section E.
2. The "technology" "required" for the "development", "production" or "use" of goods under control remains under control even when it is applicable to non-controlled goods.
3. Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not controlled or the export of which has been authorised in accordance with this Regulation.
4. Controls on "technology" transfer do not apply to information "in the public domain", to "basic scientific research" or to the minimum necessary information for patent applications.

A. EQUIPMENT

No	Description
I.B.1A004	Protective and detection equipment and components, other than those specified in military goods controls, as follows: <ol style="list-style-type: none"> a. Gas masks, filter canisters and decontamination equipment therefore, designed or modified for defence against any of the following, and specially designed components therefore:

⁽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 (OJ L 134, 29.5.2009, p. 1).

No	Description
	<ol style="list-style-type: none"> 1. Biological agents “adapted for use in war”; 2. Radioactive materials “adapted for use in war”; 3. Chemical warfare (CW) agents; or 4. “Riot control agents”, including: <ol style="list-style-type: none"> a. α-Bromobenzeneacetonitrile, (Bromobenzyl cyanide) (CA) (CAS 5798-79-8); b. [(2-chlorophenyl) methylene] propanedinitrile, (o-Chlorobenzylidenemalononitrile) (CS) (CAS 2698-41-1); c. 2-Chloro-1-phenylethanone, Phenylacetyl chloride (ω-chloroacetophenone) (CN) (CAS 532-27-4); d. Dibenz-(b,f)-1,4-oxazepine (CR) (CAS 257-07-8); e. 10-Chloro-5,10-dihydrophenarsazine, (Phenarsazine chloride), (Adamsite), (DM) (CAS 578-94-9); f. N-Nonanoylmorpholine, (MPA) (CAS 5299-64-9); b. Protective suits, gloves and shoes, specially designed or modified for defence against any of the following: <ol style="list-style-type: none"> 1. Biological agents “adapted for use in war”; 2. Radioactive materials “adapted for use in war”; or 3. Chemical warfare (CW) agents; c. Detection systems, specially designed or modified for detection or identification of any of the following, and specially designed components therefor: <ol style="list-style-type: none"> 1. Biological agents “adapted for use in war”; 2. Radioactive materials “adapted for use in war”; or 3. Chemical warfare (CW) agents; d. Electronic equipment designed for automatically detecting or identifying the presence of “explosives” residues and utilising ‘trace detection’ techniques (e.g. surface acoustic wave, ion mobility spectrometry, differential mobility spectrometry, mass spectrometry). <p><i>Technical Note:</i></p> <p><i>‘Trace detection’ is defined as the capability to detect less than 1 ppm vapour, or 1 mg solid or liquid.</i></p> <p><i>Note 1: 1A004.d. does not control equipment specially designed for laboratory use.</i></p> <p><i>Note 2: 1A004.d. does not control non-contact walk-through security portals.</i></p> <p><i>Note: 1A004 does not control:</i></p> <ol style="list-style-type: none"> a. Personal radiation monitoring dosimeters; b. Equipment limited by design or function to protect against hazards specific to residential safety or civil industries, including: <ol style="list-style-type: none"> 1. mining; 2. quarrying; 3. agriculture; 4. pharmaceutical; 5. medical;

No	Description
	<p>6. <i>veterinary</i>;</p> <p>7. <i>environmental</i>;</p> <p>8. <i>waste management</i>;</p> <p>9. <i>food industry</i>.</p> <p><i>Technical Notes:</i></p> <p><i>IA004 includes equipment and components that have been identified, successfully tested to national standards or otherwise proven effective, for the detection of or defence against radioactive materials “adapted for use in war”, biological agents “adapted for use in war”, chemical warfare agents, ‘simulants’ or “riot control agents”, even if such equipment or components are used in civil industries such as mining, quarrying, agriculture, pharmaceuticals, medical, veterinary, environmental, waste management, or the food industry.</i></p> <p><i>‘Simulant’ is a substance or material that is used in place of toxic agent (chemical or biological) in training, research, testing or evaluation.</i></p>
I.B.9A012	<p>“Unmanned aerial vehicles” (“UAVs”), associated systems, equipment and components, as follows:</p> <p>a. “UAVs” having any of the following:</p> <ol style="list-style-type: none"> 1. An autonomous flight control and navigation capability (e.g. an autopilot with an Inertial Navigation System); or 2. Capability of controlled-flight out of the direct vision range involving a human operator (e.g. televisual remote control); <p>b. Associated systems, equipment and components, as follows:</p> <ol style="list-style-type: none"> 1. Equipment specially designed for remotely controlling the “UAVs” specified in 9A012.a.; 2. Systems for navigation, attitude, guidance or control, other than those specified in 7A in Annex I to Regulation (EC) No 428/2009 and specially designed to provide autonomous flight control or navigation capability to “UAVs” specified in 9A012.a.; 3. Equipment and components, specially designed to convert a manned “aircraft” to a “UAV” specified in 9A012.a.; 4. Air breathing reciprocating or rotary internal combustion type engines, specially designed or modified to propel “UAVs” at altitudes above 50 000 feet (15 240 metres).
I.B.9A350	<p>Spraying or fogging systems, specially designed or modified for fitting to aircraft, “lighter-than-air vehicles” or unmanned aerial vehicles, and specially designed components therefor, as follows:</p> <p>Complete spraying or fogging systems capable of delivering, from a liquid suspension, an initial droplet ‘VMD’ of less than 50 µm at a flow rate of greater than two litres per minute;</p> <p>Spray booms or arrays of aerosol generating units capable of delivering, from a liquid suspension, an initial droplet ‘VMD’ of less than 50 µm at a flow rate of greater than two litres per minute;</p> <p>Aerosol generating units specially designed for fitting to systems specified in 9A350.a. and b.</p> <p><i>Note: Aerosol generating units are devices specially designed or modified for fitting to aircraft such as nozzles, rotary drum atomisers and similar devices.</i></p> <p><i>Note: 9A350 does not control spraying or fogging systems and components that are demonstrated not to be capable of delivering biological agents in the form of infectious aerosols.</i></p> <p><i>Technical Notes:</i></p> <ol style="list-style-type: none"> 1. Droplet size for spray equipment or nozzles specially designed for use on aircraft, “lighter-than-air vehicles” or unmanned aerial vehicles should be measured using either of the following:

No	Description
	a. <i>Doppler laser method</i> ; b. <i>Forward laser diffraction method</i> . 2. In 9A350 'VMD' means <i>Volume Median Diameter</i> and for water-based systems this equates to <i>Mass Median Diameter (MMD)</i> .

B. TEST AND PRODUCTION EQUIPMENT

No	Description
I.B.2B350	Chemical manufacturing facilities, equipment and components, as follows: <ol style="list-style-type: none"> a. Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0,1 m³ (100 litres) and less than 20 m³ (20 000 litres), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials: <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or 'alloys' with more than 40 % nickel by weight; 5. Tantalum or tantalum 'alloys'; 6. Titanium or titanium 'alloys'; 7. Zirconium or zirconium 'alloys'; or 8. Niobium (columbium) or niobium 'alloys'; b. Agitators for use in reaction vessels or reactors specified in 2B350.a.; and impellers, blades or shafts designed for such agitators, where all surfaces of the agitator that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials: <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining); 4. Nickel or 'alloys' with more than 40 % nickel by weight; 5. Tantalum or tantalum 'alloys'; 6. Titanium or titanium 'alloys'; 7. Zirconium or zirconium 'alloys'; or 8. Niobium (columbium) or niobium 'alloys'; c. Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0,1 m³ (100 litres) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials: <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining); 4. Nickel or 'alloys' with more than 40 % nickel by weight; 5. Tantalum or tantalum 'alloys'; 6. Titanium or titanium 'alloys';

No	Description
	<p>7. Zirconium or zirconium 'alloys'; or</p> <p>8. Niobium (columbium) or niobium 'alloys';</p> <p>d. Heat exchangers or condensers with a heat transfer surface area greater than 0,15 m², and less than 20 m²; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining); 4. Graphite or 'carbon graphite'; 5. Nickel or 'alloys' with more than 40 % nickel by weight; 6. Tantalum or tantalum 'alloys'; 7. Titanium or titanium 'alloys'; 8. Zirconium or zirconium 'alloys'; 9. Silicon carbide; 10. Titanium carbide; or 11. Niobium (columbium) or niobium 'alloys'; <p>e. Distillation or absorption columns of internal diameter greater than 0,1 m; and liquid distributors, vapour distributors or liquid collectors designed for such distillation or absorption columns, where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining); 4. Graphite or 'carbon graphite'; 5. Nickel or 'alloys' with more than 40 % nickel by weight; 6. Tantalum or tantalum 'alloys'; 7. Titanium or titanium 'alloys'; 8. Zirconium or zirconium 'alloys'; or 9. Niobium (columbium) or niobium 'alloys'; <p>f. Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; or 2. Nickel or 'alloys' with more than 40 % nickel by weight; <p>g. Valves with 'nominal sizes' greater than 10 mm and casings (valve bodies) or preformed casing liners designed for such valves, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining);

No	Description
	<p>4. Nickel or 'alloys' with more than 40 % nickel by weight;</p> <p>5. Tantalum or tantalum 'alloys';</p> <p>6. Titanium or titanium 'alloys';</p> <p>7. Zirconium or zirconium 'alloys';</p> <p>8. Niobium (columbium) or niobium 'alloys'; or</p> <p>9. Ceramic materials as follows:</p> <ol style="list-style-type: none"> a. Silicon carbide with purity of 80 % or more by weight; b. Aluminium oxide (alumina) with purity of 99,9 % or more by weight; c. Zirconium oxide (zirconia); <p><i>Technical Note:</i></p> <p><i>The 'nominal size' is defined as the smaller of the inlet and outlet diameters.</i></p> <p>h. Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 3. Glass (including vitrified or enamelled coatings or glass lining); 4. Graphite or 'carbon graphite'; 5. Nickel or 'alloys' with more than 40 % nickel by weight; 6. Tantalum or tantalum 'alloys'; 7. Titanium or titanium 'alloys'; 8. Zirconium or zirconium 'alloys'; or 9. Niobium (columbium) or niobium 'alloys'; <p>i. Multiple-seal and seal-less pumps, with manufacturer's specified maximum flow-rate greater than 0,6 m³/hour, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m³/hour (under standard temperature (273 K (0 °C)) and pressure (101,3 kPa) conditions); and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Ceramics; 3. Ferrosilicon (high silicon iron alloys); 4. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 5. Glass (including vitrified or enamelled coatings or glass lining); 6. Graphite or 'carbon graphite'; 7. Nickel or 'alloys' with more than 40 % nickel by weight; 8. Tantalum or tantalum 'alloys'; 9. Titanium or titanium 'alloys'; 10. Zirconium or zirconium 'alloys'; or 11. Niobium (columbium) or niobium 'alloys'; <p>j. Incinerators designed to destroy chemicals specified in entry 1C350, having specially designed waste supply systems, special handling facilities and an average combustion chamber temperature greater than 1 273 K (1 000 °C), in which all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with any of the following materials:</p>

No	Description
	<ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Ceramics; or 3. Nickel or 'alloys' with more than 40 % nickel by weight. <p><i>Technical Notes:</i></p> <ol style="list-style-type: none"> 1. 'Carbon graphite' is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight. 2. For the listed materials in the above entries, the term 'alloy' when not accompanied by a specific elemental concentration is understood as identifying those alloys where the identified metal is present in a higher percentage by weight than any other element.
I.B.2B351	<p>Toxic gas monitoring systems and their dedicated detecting components, other than those specified in 1A004, as follows; and detectors; sensor devices; and replaceable sensor cartridges therefor:</p> <ol style="list-style-type: none"> a. Designed for continuous operation and usable for the detection of chemical warfare agents or chemicals specified in 1C350, at concentrations of less than 0,3 mg/m³; or b. Designed for the detection of cholinesterase-inhibiting activity.
I.B.2B352	<p>Equipment capable of use in handling biological materials, as follows:</p> <ol style="list-style-type: none"> a. Complete biological containment facilities at P3, P4 containment level; <p><i>Technical Note:</i></p> <p><i>P3 or P4 (BL3, BL4, L3, L4) containment levels are as specified in the WHO Laboratory Biosafety manual (3rd edition Geneva 2004).</i></p> b. Fermenters capable of cultivation of pathogenic "micro-organisms", viruses or capable of toxin production, without the propagation of aerosols, and having a total capacity of 20 litres or more; <p><i>Technical Note:</i></p> <p><i>Fermenters include bioreactors, chemostats and continuous-flow systems.</i></p> c. Centrifugal separators, capable of continuous separation without the propagation of aerosols, having all the following characteristics: <ol style="list-style-type: none"> 1. Flow rate exceeding 100 litres per hour; 2. Components of polished stainless steel or titanium; 3. One or more sealing joints within the steam containment area; and 4. Capable of in-situ steam sterilisation in a closed state; <p><i>Technical Note:</i></p> <p><i>Centrifugal separators include decanters.</i></p> d. Cross (tangential) flow filtration equipment and components as follows: <ol style="list-style-type: none"> 1. Cross (tangential) flow filtration equipment capable of separation of pathogenic "micro-organisms", viruses, toxins or cell cultures, without the propagation of aerosols, having all of the following characteristics: <ol style="list-style-type: none"> a. A total filtration area equal to or greater than 1 m²; and b. Having either of the following characteristics: <ol style="list-style-type: none"> 1. Capable of being sterilised or disinfected in-situ; or 2. Using disposable or single-use filtration components;

No	Description
	<p><i>Technical Note:</i></p> <p><i>In 2B352.d.1.b. sterilised denotes the elimination of all viable microbes from the equipment through the use of either physical (e.g. steam) or chemical agents. Disinfected denotes the destruction of potential microbial infectivity in the equipment through the use of chemical agents with a germicidal effect. Disinfection and sterilisation are distinct from sanitisation, the latter referring to cleaning procedures designed to lower the microbial content of equipment without necessarily achieving elimination of all microbial infectivity or viability.</i></p> <p>2. Cross (tangential) flow filtration components (e.g. modules, elements, cassettes, cartridges, units or plates) with filtration area equal to or greater than 0,2 m² for each component and designed for use in cross (tangential) flow filtration equipment specified in 2B352.d.;</p> <p><i>Note: 2B352.d. does not control reverse osmosis equipment, as specified by the manufacturer.</i></p> <p>e. Steam sterilisable freeze drying equipment with a condenser capacity exceeding 10 kg of ice in 24 hours and less than 1 000 kg of ice in 24 hours;</p> <p>f. Protective and containment equipment, as follows:</p> <p>1. Protective full or half suits, or hoods dependent upon a tethered external air supply and operating under positive pressure;</p> <p><i>Note: 2B352.f.1. does not control suits designed to be worn with self-contained breathing apparatus.</i></p> <p>2. Class III biological safety cabinets or isolators with similar performance standards;</p> <p><i>Note: In 2B352.f.2., isolators include flexible isolators, dry boxes, anaerobic chambers, glove boxes and laminar flow hoods (closed with vertical flow).</i></p> <p>g. Chambers designed for aerosol challenge testing with “micro-organisms”, viruses or “toxins” and having a capacity of 1 m³ or greater.</p>

C. MATERIALS

No	Description
I.B.1C350	<p>Chemicals, which may be used as precursors for toxic chemical agents, as follows, and “chemical mixtures” containing one or more thereof:</p> <p>NB: SEE ALSO MILITARY GOODS CONTROLS AND 1C450.</p> <ol style="list-style-type: none"> 1. Thiodiglycol (111-48-8); 2. Phosphorus oxychloride (10025-87-3); 3. Dimethyl methylphosphonate (756-79-6); 4. SEE MILITARY GOODS CONTROLS FOR Methyl phosphonyl difluoride (676-99-3); 5. Methyl phosphonyl dichloride (676-97-1); 6. Dimethyl phosphite (DMP) (868-85-9); 7. Phosphorus trichloride (7719-12-2); 8. Trimethyl phosphite (TMP) (121-45-9); 9. Thionyl chloride (7719-09-7); 10. 3-Hydroxy-1-methylpiperidine (3554-74-3); 11. N,N-Diisopropyl-(beta)-aminoethyl chloride (96-79-7); 12. N,N-Diisopropyl-(beta)-aminoethane thiol (5842-07-9); 13. 3-Quinuclidinol (1619-34-7); 14. Potassium fluoride (7789-23-3); 15. 2-Chloroethanol (107-07-3); 16. Dimethylamine (124-40-3); 17. Diethyl ethylphosphonate (78-38-6); 18. Diethyl-N,N-dimethylphosphoramidate (2404-03-7); 19. Diethyl phosphite (762-04-9);

No	Description
	20. Dimethylamine hydrochloride (506-59-2);
	21. Ethyl phosphinyl dichloride (1498-40-4);
	22. Ethyl phosphonyl dichloride (1066-50-8);
	23. SEE MILITARY GOODS CONTROLS FOR Ethyl phosphonyl difluoride (753-98-0);
	24. Hydrogen fluoride (7664-39-3);
	25. Methyl benzilate (76-89-1);
	26. Methyl phosphinyl dichloride (676-83-5);
	27. N,N-Diisopropyl-(beta)-amino ethanol (96-80-0);
	28. Pinacolyl alcohol (464-07-3);
	29. SEE MILITARY GOODS CONTROLS FOR O-Ethyl-2-diisopropylaminoethyl methyl phosphonite (QL) (57856-11-8);
	30. Triethyl phosphite (122-52-1);
	31. Arsenic trichloride (7784-34-1);
	32. Benzilic acid (76-93-7);
	33. Diethyl methylphosphonite (15715-41-0);
	34. Dimethyl ethylphosphonate (6163-75-3);
	35. Ethyl phosphinyl difluoride (430-78-4);
	36. Methyl phosphinyl difluoride (753-59-3);
	37. 3-Quinuclidone (3731-38-2);
	38. Phosphorus pentachloride (10026-13-8);
	39. Pinacolone (75-97-8);
	40. Potassium cyanide (151-50-8);
	41. Potassium bifluoride (7789-29-9);
	42. Ammonium hydrogen fluoride or ammonium bifluoride (1341-49-7);
	43. Sodium fluoride (7681-49-4);
	44. Sodium bifluoride (1333-83-1);
	45. Sodium cyanide (143-33-9);
	46. Triethanolamine (102-71-6);
	47. Phosphorus pentasulphide (1314-80-3);
	48. Di-isopropylamine (108-18-9);
	49. Diethylaminoethanol (100-37-8);
	50. Sodium sulphide (1313-82-2);
	51. Sulphur monochloride (10025-67-9);
	52. Sulphur dichloride (10545-99-0);
	53. Triethanolamine hydrochloride (637-39-8);
	54. N,N-Diisopropyl-(Beta)-aminoethyl chloride hydrochloride (4261-68-1);
	55. Methylphosphonic acid (993-13-5);
	56. Diethyl methylphosphonate (683-08-9);

No	Description
	<p>57. N,N-Dimethylaminophosphoryl dichloride (677-43-0);</p> <p>58. Triisopropyl phosphite (116-17-6);</p> <p>59. Ethyldiethanolamine (139-87-7);</p> <p>60. O,O-Diethyl phosphorothioate (2465-65-8);</p> <p>61. O,O-Diethyl phosphorodithioate (298-06-6);</p> <p>62. Sodium hexafluorosilicate (16893-85-9);</p> <p>63. Methylphosphonothioic dichloride (676-98-2).</p> <p>Note 1: For exports to "States not Party to the Chemical Weapons Convention", IC350 does not control "chemical mixtures" containing one or more of the chemicals specified in entries IC350.1, .3, .5, .11, .12, .13, .17, .18, .21, .22, .26, .27, .28, .31, .32, .33, .34, .35, .36, .54, .55, .56, .57 and .63 in which no individually specified chemical constitutes more than 10 % by the weight of the mixture.</p> <p>Note 2: IC350 does not control "chemical mixtures" containing one or more of the chemicals specified in entries IC350.2, .6, .7, .8, .9, .10, .14, .15, .16, .19, .20, .24, .25, .30, .37, .38, .39, .40, .41, .42, .43, .44, .45, .46, .47, .48, .49, .50, .51, .52, .53, .58, .59, .60, .61 and .62 in which no individually specified chemical constitutes more than 30 % by the weight of the mixture.</p> <p>Note 3: IC350 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.</p>
I.B.IC351	<p>Human pathogens, zoonoses and "toxins", as follows:</p> <p>a. Viruses, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. Andes virus; 2. Chapare virus; 3. Chikungunya virus; 4. Choclo virus; 5. Congo-Crimean haemorrhagic fever virus; 6. Dengue fever virus; 7. Dobrava-Belgrade virus; 8. Eastern equine encephalitis virus; 9. Ebola virus; 10. Guanarito virus; 11. Hantaan virus; 12. Hendra virus (Equine morbillivirus); 13. Japanese encephalitis virus; 14. Junin virus; 15. Kyasanur Forest virus; 16. Laguna Negra virus; 17. Lassa fever virus; 18. Louping ill virus; 19. Lujjo virus; 20. Lymphocytic choriomeningitis virus;

No	Description
	21. Machupo virus;
	22. Marburg virus;
	23. Monkey pox virus;
	24. Murray Valley encephalitis virus;
	25. Nipah virus;
	26. Omsk haemorrhagic fever virus;
	27. Oropouche virus;
	28. Powassan virus;
	29. Rift Valley fever virus;
	30. Rocio virus;
	31. Sabia virus;
	32. Seoul virus;
	33. Sin nombre virus;
	34. St Louis encephalitis virus;
	35. Tick-borne encephalitis virus (Russian Spring-Summer encephalitis virus);
	36. Variola virus;
	37. Venezuelan equine encephalitis virus;
	38. Western equine encephalitis virus;
	39. Yellow fever virus;
	b. Rickettsiae, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:
	1. Coxiella burnetii;
	2. Bartonella quintana (Rochalimaea quintana, Rickettsia quintana);
	3. Rickettsia prowasecki;
	4. Rickettsia rickettsii;
	c. Bacteria, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:
	1. Bacillus anthracis;
	2. Brucella abortus;
	3. Brucella melitensis;
	4. Brucella suis;
	5. Chlamydia psittaci;
	6. Clostridium botulinum;
	7. Francisella tularensis;
	8. Burkholderia mallei (Pseudomonas mallei);
	9. Burkholderia pseudomallei (Pseudomonas pseudomallei);
	10. Salmonella typhi;
	11. Shigella dysenteriae;
	12. Vibrio cholerae;

No	Description
	<p>13. <i>Yersinia pestis</i>;</p> <p>14. <i>Clostridium perfringens</i> epsilon toxin producing types;</p> <p>15. Enterohaemorrhagic <i>Escherichia coli</i>, serotype O157 and other verotoxin producing serotypes;</p> <p>d. "Toxins", as follows, and "sub-unit of toxins" thereof:</p> <ol style="list-style-type: none"> 1. Botulinum toxins; 2. <i>Clostridium perfringens</i> toxins; 3. Conotoxin; 4. Ricin; 5. Saxitoxin; 6. Shiga toxin; 7. <i>Staphylococcus aureus</i> toxins; 8. Tetrodotoxin; 9. Verotoxin and shiga-like ribosome inactivating proteins; 10. Microcystin (Cyanginosin); 11. Aflatoxins; 12. Abrin; 13. Cholera toxin; 14. Diacetoxyscirpenol toxin; 15. T-2 toxin; 16. HT-2 toxin; 17. Modeccin; 18. Volkensin; 19. <i>Viscum album</i> Lectin 1 (Viscumin); <p><i>Note: IC351.d. does not control botulinum toxins or conotoxins in product form meeting all of the following criteria:</i></p> <ol style="list-style-type: none"> 1. <i>Are pharmaceutical formulations designed for human administration in the treatment of medical conditions;</i> 2. <i>Are pre-packaged for distribution as medical products;</i> 3. <i>Are authorised by a state authority to be marketed as medical products.</i> <p>e. Fungi, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. <i>Coccidioides immitis</i>; 2. <i>Coccidioides posadasii</i>. <p><i>Note: IC351 does not control "vaccines" or "immunotoxins".</i></p>
I.B.1C352	<p>Animal pathogens, as follows:</p> <p>a. Viruses, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. African swine fever virus; 2. Avian influenza virus, which are:

No	Description
	<p>a. Uncharacterised; or</p> <p>b. Defined in Annex I(2) to Directive 2005/94/EC ⁽¹⁾ as having high pathogenicity, as follows:</p> <ol style="list-style-type: none"> 1. Type A viruses with an IVPI (intravenous pathogenicity index) in six-week-old chickens of greater than 1,2; or 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; 3. Bluetongue virus; 4. Foot and mouth disease virus; 5. Goat pox virus; 6. Porcine herpes virus (Aujeszky's disease); 7. Swine fever virus (Hog cholera virus); 8. Lyssa virus; 9. Newcastle disease virus; 10. Peste des petits ruminants virus; 11. Porcine enterovirus type 9 (swine vesicular disease virus); 12. Rinderpest virus; 13. Sheep pox virus; 14. Teschen disease virus; 15. Vesicular stomatitis virus; 16. Lumpy skin disease virus; 17. African horse sickness virus; <p>b. Mycoplasmas, whether natural, enhanced or modified, either in the form of "isolated live cultures" or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. <i>Mycoplasma mycoides</i> subspecies <i>mycoides</i> SC (small colony); 2. <i>Mycoplasma capricolum</i> subspecies <i>capripneumoniae</i>. <p><i>Note: 1C352 does not control "vaccines".</i></p>
I.B.1C353	<p>Genetic elements and genetically modified organisms, as follows:</p> <ol style="list-style-type: none"> a. Genetically modified organisms or genetic elements that contain nucleic acid sequences associated with pathogenicity of organisms specified in 1C351.a., 1C351.b., 1C351.c., 1C351.e., 1C352 or 1C354; b. Genetically modified organisms or genetic elements that contain nucleic acid sequences coding for any of the "toxins" specified in 1C351.d. or "sub-units of toxins" thereof. <p><i>Technical Notes:</i></p> <ol style="list-style-type: none"> 1. <i>Genetic elements include, inter alia, chromosomes, genomes, plasmids, transposons and vectors whether genetically modified or unmodified.</i> 2. <i>Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms specified in 1C351.a., 1C351.b., 1C351.c., 1C351.e., 1C352 or 1C354 means any sequence specific to the specified micro-organism that:</i>

No	Description
	<p>a. <i>In itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or</i></p> <p>b. <i>Is known to enhance the ability of a specified micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to humans, animals or plant health.</i></p> <p>Note: 1C353 does not apply to nucleic acid sequences associated with the pathogenicity of enterohaemorrhagic <i>Escherichia coli</i>, serotype O157 and other verotoxin producing strains, other than those coding for the verotoxin, or for its sub-units.</p>
I.B.1C354	<p>Plant pathogens, as follows:</p> <p>a. Viruses, whether natural, enhanced or modified, either in the form of “isolated live cultures” or as material including living material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. Potato Andean latent tymovirus; 2. Potato spindle tuber viroid; <p>b. Bacteria, whether natural, enhanced or modified, either in the form of “isolated live cultures” or as material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. <i>Xanthomonas albilineans</i>; 2. <i>Xanthomonas campestris</i> pv. <i>citri</i> including strains referred to as <i>Xanthomonas campestris</i> pv. <i>citri</i> types A,B,C,D,E or otherwise classified as <i>Xanthomonas citri</i>, <i>Xanthomonas campestris</i> pv. <i>aurantifolia</i> or <i>Xanthomonas campestris</i> pv. <i>citrumelo</i>; 3. <i>Xanthomonas oryzae</i> pv. <i>Oryzae</i> (<i>Pseudomonas campestris</i> pv. <i>Oryzae</i>); 4. <i>Clavibacter michiganensis</i> subsp. <i>Sepedonicum</i> (<i>Corynebacterium michiganensis</i> subsp. <i>Sepedonicum</i> or <i>Corynebacterium Sepedonicum</i>); 5. <i>Ralstonia solanacearum</i> Races 2 and 3 (<i>Pseudomonas solanacearum</i> Races 2 and 3 or <i>Burkholderia solanacearum</i> Races 2 and 3); <p>c. Fungi, whether natural, enhanced or modified, either in the form of “isolated live cultures” or as material which has been deliberately inoculated or contaminated with such cultures, as follows:</p> <ol style="list-style-type: none"> 1. <i>Colletotrichum coffeanum</i> var. <i>virulans</i> (<i>Colletotrichum kahawae</i>); 2. <i>Cochliobolus miyabeanus</i> (<i>Helminthosporium oryzae</i>); 3. <i>Microcyclus ulei</i> (syn. <i>Dothidella ulei</i>); 4. <i>Puccinia graminis</i> (syn. <i>Puccinia graminis</i> f. sp. <i>tritici</i>); 5. <i>Puccinia striiformis</i> (syn. <i>Puccinia glumarum</i>); 6. <i>Magnaporthe grisea</i> (<i>pyricularia grisea/pyricularia oryzae</i>).
I.B.1C450	<p>Toxic chemicals and toxic chemical precursors, as follows, and “chemical mixtures” containing one or more thereof:</p> <p>NB: SEE ALSO ENTRY 1C350, 1C351.d. AND MILITARY GOODS CONTROLS.</p> <p>a. Toxic chemicals, as follows:</p> <ol style="list-style-type: none"> 1. Amiton: O,O-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate (78-53-5) and corresponding alkylated or protonated salts; 2. PFIB: 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene (382-21-8); 3. SEE MILITARY GOODS CONTROLS FOR BZ: 3-Quinuclidinyl benzilate (6581-06-2);

No	Description
	<p>4. Phosgene: Carbonyl dichloride (75-44-5);</p> <p>5. Cyanogen chloride (506-77-4);</p> <p>6. Hydrogen cyanide (74-90-8);</p> <p>7. Chloropicrin: Trichloronitromethane (76-06-2);</p> <p><i>Note 1: For exports to "States not Party to the Chemical Weapons Convention", IC450 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C450.a.1. and .a.2. in which no individually specified chemical constitutes more than 1 % by the weight of the mixture.</i></p> <p><i>Note 2: IC450 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C450.a.4., .a.5., .a.6. and .a.7. in which no individually specified chemical constitutes more than 30 % by the weight of the mixture.</i></p> <p><i>Note 3: IC450 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.</i></p> <p>b. Toxic chemical precursors, as follows:</p> <p>1. Chemicals, other than those specified in the Military Goods Controls or in 1C350, containing a phosphorus atom to which is bonded one methyl, ethyl or propyl (normal or iso) group but not further carbon atoms;</p> <p><i>Note: IC450.b.1 does not control Fonofos: O-Ethyl S-phenyl ethylphosphonothiolothionate (944-22-9);</i></p> <p>2. N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] phosphoramidic dihalides, other than N,N-Dimethylaminophosphoryl dichloride;</p> <p><i>NB: See 1C350.57. for N,N-Dimethylaminophosphoryl dichloride.</i></p> <p>3. Dialkyl [methyl, ethyl or propyl (normal or iso)] N,N-dialkyl [methyl, ethyl or propyl (normal or iso)]-phosphoramidates, other than Diethyl-N,N-dimethylphosphoramidate which is specified in 1C350;</p> <p>4. N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] aminoethyl-2-chlorides and corresponding protonated salts, other than N,N-Diisopropyl-(beta)-aminoethyl chloride or N,N-Diisopropyl-(beta)-aminoethyl chloride hydrochloride which are specified in 1C350;</p> <p>5. N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] aminoethane-2-ols and corresponding protonated salts, other than N,N-Diisopropyl-(beta)-aminoethanol (96-80-0) and N,N-Diethylaminoethanol (100-37-8) which are specified in 1C350;</p> <p><i>Note: IC450.b.5. does not control the following:</i></p> <p style="padding-left: 20px;">a. N,N-Dimethylaminoethanol (108-01-0) and corresponding protonated salts;</p> <p style="padding-left: 20px;">b. Protonated salts of N,N-Diethylaminoethanol (100-37-8).</p> <p>6. N,N-Dialkyl [methyl, ethyl or propyl (normal or iso)] aminoethane-2-thiols and corresponding protonated salts, other than N,N-Diisopropyl-(beta)-aminoethane thiol which is specified in 1C350;</p> <p>7. See 1C350 for ethyldiethanolamine (139-87-7);</p> <p>8. Methyldiethanolamine (105-59-9).</p> <p><i>Note 1: For exports to "States not Party to the Chemical Weapons Convention", IC450 does not control "chemical mixtures" containing one or more of the chemicals specified in entries 1C450.b.1., .b.2., .b.3., .b.4., .b.5. and .b.6. in which no individually specified chemical constitutes more than 10 % by the weight of the mixture.</i></p> <p><i>Note 2: IC450 does not control "chemical mixtures" containing one or more of the chemicals specified in entry 1C450.b.8. in which no individually specified chemical constitutes more than 30 % by the weight of the mixture.</i></p> <p><i>Note 3: IC450 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.</i></p>

(¹) Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza (OJ L 10, 14.1.2006, p. 16).

D. SOFTWARE

No	Description
I.B.1D003	"Software" specially designed or modified to enable equipment to perform the functions of equipment specified in 1A004.c. or 1A004.d.
I.B.2D351	"Software", other than that specified in 1D003, specially designed for "use" of equipment specified in 2B351.
I.B.9D001	"Software" specially designed or modified for the "development" of equipment or "technology", specified in 9A012.
I.B.9D002	"Software" specially designed or modified for the "production" of equipment specified in 9A012.

E. TECHNOLOGY

No	Description
I.B.1E001	"Technology" according to the General Technology Note for the "development" or "production" of equipment or materials specified in 1A004, 1C350 to 1C354 or 1C450.
I.B.2E001	"Technology" according to the General Technology Note for the "development" of equipment or "software" specified in 2B350, 2B351, 2B352 or 2D351.
I.B.2E002	"Technology" according to the General Technology Note for the "production" of equipment specified in 2B350, 2B351 or 2B352.
I.B.2E301	"Technology" according to the General Technology Note for the "use" of goods specified in 2B350 to 2B352.
I.B.9E001	"Technology" according to the General Technology Note for the "development" of equipment or "software", specified in 9A012 or 9A350.
I.B.9E002	"Technology" according to the General Technology Note for the "production" of equipment specified in 9A350.
I.B.9E101	"Technology" according to the General Technology Note for the "production" of 'UAVs' specified in 9A012. <i>Technical Note:</i> <i>In 9E101.b. 'UAV' means unmanned aerial vehicle systems capable of a range exceeding 300 km.</i>
I.B.9E102	"Technology" according to the General Technology Note for the "use" 'UAVs' specified in 9A012. <i>Technical Note:</i> <i>In 9E101.b. 'UAV' means unmanned aerial vehicle systems capable of a range exceeding 300 km.</i>

PART 2

Introductory Notes

1. Unless otherwise stated, reference numbers used in the column below entitled "Description" refer to the descriptions of dual-use items set out in Annex I to Regulation (EC) No 428/2009.
2. A reference number in the column below entitled "Related item from Annex I to Regulation (EC) No 428/2009" means that the characteristics of the item described in the "Description" column lie outside the parameters set out in the description of the dual-use entry referred to.
3. Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

General Notes

1. The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components is/are the principal element of the goods and can feasibly be removed or used for other purposes.

NB: *In judging whether the controlled component or components is/are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the goods being procured.*

2. The items specified in this Annex include both new and used goods.

General Technology Note (GTN)

(To be read in conjunction with Section B of Part 1)

1. The sale, supply, transfer or export of "technology" which is "required" for the "development", "production" or "use" of goods the sale, supply, transfer or export of which is controlled in Section I.C.A of this Part, is controlled in accordance with the provisions of Section I.C.B of this Part.
2. The "technology" "required" for the "development", "production" or "use" of goods under control remains under control even when it is applicable to non-controlled goods.
3. Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not controlled or the export of which has been authorised in accordance with this Regulation.
4. Controls on "technology" transfer do not apply to information "in the public domain", to "basic scientific research" or to the minimum necessary information for patent applications.

I.C.A. GOODS**(Materials and chemicals)**

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
I.C.A.001	Chemicals at 95 % concentration or greater, as follows: 1. Ethylene dichloride, (CAS 107-06-2)	
I.C.A.002	Chemicals at 95 % concentration or greater, as follows: 1. Nitromethane, (CAS 75-52-5) 2. Picric acid, (CAS 88-89-1)	
I.C.A.003	Chemicals at 95 % concentration or greater, as follows: 1. Aluminum chloride, (CAS 7446-70-0) 2. Arsenic, (CAS 7440-38-2) 3. Arsenic trioxide, (CAS 1327-53-3) 4. Bis(2-chloroethyl)ethylamine hydrochloride, (CAS 3590-07-6) 5. Bis(2-chloroethyl)methylamine hydrochloride, (CAS 55-86-7) 6. Tris(2-chloroethyl)amine hydrochloride, (CAS 817-09-4)	

I.C.B. TECHNOLOGY

B.001	'Technology' required for the "development", "production" or "use" of the items in Section I.C.A. <i>Technical Note:</i> <i>The term 'technology' includes "software".</i>	
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ANNEX II

ANNEX IX

LIST OF EQUIPMENT, GOODS AND TECHNOLOGY REFERRED TO IN ARTICLE 2b

Introductory Notes

1. Unless otherwise stated, reference numbers used in the column below entitled "Description" refer to the descriptions of dual-use items set out in Annex I to Regulation (EC) No 428/2009.
2. A reference number in the column below entitled "Related item from Annex I to Regulation (EC) No 428/2009" means that the characteristics of the item described in the "Description" column lie outside the parameters set out in the description of the dual-use entry referred to.
3. Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

General Notes

1. The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components is/are the principal element of the goods and can feasibly be removed or used for other purposes.

NB: *In judging whether the controlled component or components is/are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the goods being procured.*

2. The items specified in this Annex include both new and used goods.

General Technology Note (GTN)

(To be read in conjunction with Section B of this Annex)

1. The sale, supply, transfer or export of "technology" which is "required" for the "development", "production" or "use" of goods the sale, supply, transfer or export of which is controlled in Section IX.A of this Annex, is controlled in accordance with the provisions of Section B.
2. The "technology" "required" for the "development", "production" or "use" of goods under control remains under control even when it is applicable to non-controlled goods.
3. Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not controlled or the export of which has been authorised in accordance with this Regulation.
4. Controls on "technology" transfer do not apply to information "in the public domain", to "basic scientific research" or to the minimum necessary information for patent applications.

IX.A. GOODS

IX.A1. Materials, chemicals, 'micro-organisms' and 'toxins'

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
IX.A1.001	Chemicals at 95 % concentration or greater, as follows: Tributylphosphite, (CAS 102-85-2) Isocyanatomethane, (CAS 624-83-9) Quinaldine, (CAS 91-63-4) 2-bromochloroethane, (CAS 107-04-0)	

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
IX.A1.002	Chemicals at 95 % concentration or greater, as follows: Benzil, (CAS 134-81-6) Diethylamine, (CAS 109-89-7) Diethyl ether, (CAS 60-29-7) Dimethyl ether, (CAS 115-10-6) Dimethylaminoethanol, (CAS 108-01-0)	
IX.A1.003	Chemicals at 95 % concentration or greater, as follows: 2-methoxyethanol, (CAS 109-86-4) Butyrylcholinesterase (BCHE) Diethylenetriamine, (CAS 111-40-0) Dichloromethane, (CAS 75-09-3) Dimethylaniline, (CAS 121-69-7) Ethyl bromide, (CAS 74-96-4) Ethyl chloride, (CAS 75-00-3) Ethylamine, (CAS 75-04-7) Hexamine, (CAS 100-97-0) Isopropyl bromide, (CAS 75-26-3) Isopropyl ether, (CAS 108-20-3) Methylamine, (CAS 74-89-5) Methyl bromide, (CAS 74-83-9) Monoisopropylamine, (CAS 75-31-0) Obidoxime chloride, (CAS 114-90-9) Potassium bromide, (CAS 7758-02-3) Pyridine, (CAS 110-86-1) Pyridostigmine bromide, (CAS 101-26-8) Sodium bromide, (CAS 7647-15-6) Sodium metal, (CAS 7440-23-5) Tributylamine, (CAS 102-82-9) Triethylamine, (CAS 121-44-8) Trimethylamine, (CAS 75-50-3)	

IX.A2. Materials Processing

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
IX.A2.001	Floor-mounted fume hoods (walk-in-style) with a minimum nominal width of 2,5 meters.	
IX.A2.002	Full face-mask air-purifying and air-supplying respirators other than those specified in 1A004 or 2B352f1.	1A004.a
IX.A2.003	Class II biological safety cabinets or isolators with similar performance standards.	2B352.f.2

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
IX.A2.004	Batch centrifuges with a rotor capacity of 4 litres or greater, usable with biological materials.	
IX.A2.005	<p>Fermenters capable of cultivation of pathogenic "micro-organisms", viruses or for toxin production, without the propagation of aerosols, having a capacity of 5 litres or more but less than 20 litres.</p> <p><i>Technical Note:</i></p> <p><i>Fermenters include bioreactors, chemostats and continuous-flow systems.</i></p>	2B352.b
IX.A2.007	Conventional or turbulent air-flow clean-air rooms and self contained fan-HEPA or ULPA filter units that may be used for P3 or P4 (BSL 3, BSL 4, L3, L4) containments facilities.	2B352.a
IX.A2.008	<p>Chemical manufacturing facilities, equipment and components, other than those specified in 2B350 or A2.009 as follows:</p> <p>a. Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0,1 m³ (100 litres) and less than 20 m³ (20 000 litres), where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon;</p> <p>b. Agitators for use in reaction vessels or reactors specified in 2B350.a.; where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon;</p> <p>c. Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0,1 m³ (100 litres) where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon;</p> <p>d. Heat exchangers or condensers with a heat transfer surface area greater than 0,05 m², and less than 30 m²; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the fluid(s) being processed are made from the following materials:</p> <p>1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon;</p> <p><i>Technical Note:</i></p> <p><i>The materials used for gaskets and seals and other implementation of sealing functions do not determine the control status of the heat exchanger.</i></p> <p>e. Distillation or absorption columns of internal diameter greater than 0,1 m; where all surfaces that come in direct contact with the fluid(s) being processed are made from the following materials:</p> <p>1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon;</p>	<p>2B350.a-e</p> <p>2B350.g</p> <p>2B350.i</p>

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
	<p>f. Valves with 'nominal sizes' greater than 10 mm and casings (valve bodies) designed for such valves where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <ol style="list-style-type: none"> 1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon; <p><i>Technical Note:</i></p> <ol style="list-style-type: none"> 1. <i>The materials used for gaskets and seals and other implementation of sealing functions do not determine the control status of the valve.</i> 2. <i>The 'nominal size' is defined as the smaller of the inlet and outlet diameters.</i> <p>g. Multiple-seal and seal-less pumps, with manufacturer's specified maximum flow-rate greater than 0,6 m³/hour, in which all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:</p> <ol style="list-style-type: none"> 1. Stainless steels with more than or equal to 10,5 % chromium and less than or equal to 1,2 % carbon. <p>h. Vacuum pumps with a manufacturer's specified maximum flow-rate greater than 1 m³/h (under standard temperature (273 K (0 °C)) and pressure (101,3 kPa) conditions), and casings (pump bodies) and preformed casing-liners, impellers, rotors and jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemicals being processed are made from any of the following materials:</p> <ol style="list-style-type: none"> 1. 'Alloys' with more than 25 % nickel and 20 % chromium by weight; 2. Ceramics; 3. 'Ferrosilicon'; 4. Fluoropolymers (polymeric or elastomeric materials with more than 35 % fluorine by weight); 5. Glass (including vitrified or enamelled coatings or glass lining); 6. Graphite or 'carbon graphite'; 7. Nickel or 'alloys' with more than 40 % nickel by weight; 8. Stainless steel with 20 % nickel and 19 % chromium or more by weight; 9. Tantalum or tantalum 'alloys'; 10. Titanium or titanium 'alloys'; 11. Zirconium or zirconium 'alloys'; or 12. Niobium (columbium) or niobium 'alloys'. <p><i>Technical Notes:</i></p> <ol style="list-style-type: none"> 1. <i>The materials used for diaphragms or gaskets and seals and other implementation of sealing functions do not determine the status of control of the pump.</i> 	

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
	<p>2. 'Carbon graphite' is a composition consisting of amorphous carbon and graphite, in which the graphite content is 8 % or more by weight.</p> <p>3. 'Ferro-silicons' are silicon iron alloys with more than 8 % silicon by weight or more.</p> <p><i>For the listed materials in the above entries, the term 'alloy' when not accompanied by a specific elemental concentration is understood as identifying those alloys where the identified metal is present in a higher percentage by weight than any other element.</i></p>	
IX.A2.009	<p>Chemical manufacturing facilities, equipment and components, other than specified in 2B350 or A2.008 as follows:</p> <p>Reaction vessels or reactors, with or without agitators, with a total internal (geometric) volume greater than 0,1 m³ (100 litres) and less than 20 m³ (20 000 litres) where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p>Agitators for use in reaction vessels or reactors specified in a. where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p>Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0,1 m³ (100 litres) where all surfaces that come in direct contact with the fluid(s) being processed or contained are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p>Heat exchangers or condensers with a heat transfer surface area greater than 0,05 m², and less than 30 m²; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the fluid(s) being processed are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p><i>Technical Note:</i></p> <p><i>The materials used for gaskets and seals and other implementation of sealing functions do not determine the control status of the heat exchanger.</i></p> <p>Distillation or absorption columns of internal diameter greater than 0,1 m; and liquid distributors, vapour distributors or liquid collectors, in which all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p>Valves having a nominal diameter of 10 mm or more, and casings (valve bodies), balls or plugs designed for such valves, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p>	

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
	<p><i>Technical note:</i></p> <p>The 'nominal size' is defined as the smaller of the inlet and outlet port diameters.</p> <p>Multiple-seal and seal-less pumps with manufacturer's specified maximum flow-rate greater than 0,6 m³/hour (measured under standard temperature (273 K or 0 °C) and pressure (101,3 kPa) conditions); and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:</p> <p>Ceramics;</p> <p>Ferrosilicon (silicon iron alloys with more than 8 % silicon by weight or more);</p> <p>Stainless steel with 20 % nickel and 19 % chromium or more by weight;</p> <p><i>Technical Notes:</i></p> <p>The materials used for diaphragms or gaskets and seals and other implementation of sealing functions do not determine the control status of the pump.</p> <p>For the listed materials in the above entries, the term 'alloy' when not accompanied by a specific elemental concentration is understood as identifying those alloys where the identified metal is present in a higher percentage by weight than any other element.</p>	

B. TECHNOLOGY

No	Description	Related item from Annex I to Regulation (EC) No 428/2009
IX.B.001	<p>'Technology' required for the "development", "production" or "use" of the items in Section IX.A.</p> <p><i>Technical Note:</i></p> <p>The term 'technology' includes "software".</p>	

ANNEX III

ANNEX X

LIST OF LUXURY GOODS REFERRED TO IN ARTICLE 11B

1. Pure-bred horses
CN Codes: 0101 21 00
2. Caviar and caviar substitutes; in the case of caviar substitutes, if the sales prices exceed EUR 20 per 100 grams
CN Codes: ex 1604 31 00, ex 1604 32 00
3. Truffles
CN Codes: 2003 90 10
4. Wines (including sparkling wines) exceeding a sales price of EUR 50 per litre, spirits exceeding and spirituous beverages exceeding a sales price of EUR 50 per litre
CN Codes: ex 2204 21 to ex 2204 29, ex 2208, ex 2205
5. Cigars and cigarillos exceeding a sales price of EUR 10 each cigar or cigarillo
CN Codes: ex 2402 10 00
6. Perfumes and toilet waters exceeding a sales price of EUR 70 per 50 ml and cosmetics, including beauty and make-up products exceeding a sales price of EUR 70 each
CN Codes: ex 3303 00 10, ex 3303 00 90, ex 3304, ex 3307, ex 3401
7. Leather, saddlery and travel goods, handbags and similar articles exceeding a sales price of EUR 200 each
CN Codes: ex 4201 00 00, ex 4202, ex 4205 00 90
8. Garments, clothing accessories and shoes (regardless of their material) articles exceeding a sales price of EUR 600 per item
CN Codes: ex 4203, ex 4303, ex 61, ex 62, ex 6401, ex 6402, ex 6403, ex 6404, ex 6405, ex 6504, ex 6605 00, ex 6506 99, ex 6601 91 00, ex 6601 99, ex 6602 00 00
9. Pearls, precious and semi-precious stones, articles of pearls, jewellery, gold or silversmith articles
CN Codes: 7101, 7102, 7103, 7104 20, 7104 90, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7113, 7114, 7115, 7116
10. Coins and banknotes, not being legal tender
CN Codes: ex 4907 00, 7118 10, ex 7118 90
11. Cutlery of precious metal or plated or clad with precious metal
CN Codes: ex 7114, ex 7115, ex 8214, ex 8215, ex 9307
12. Tableware of porcelain, china, stone- or earthenware or fine pottery exceeding a sales price of EUR 500 each
CN Codes: ex 6911 10 00, ex 6912 00 30, ex 6912 00 50
13. Lead crystal glassware exceeding a sales price of EUR 200 each
CN Codes: ex 7009 91 00, ex 7009 92 00, ex 7010, ex 7013 22, ex 7013 33, ex 7013 41, ex 7013 91, ex 7018 10, ex 7018 90, ex 7020 00 80, ex 9405 10 50, ex 9405 20 50, ex 9405 50, ex 9405 91
14. Luxury vehicles for the transport of persons on earth, air or sea, as well as their accessories; in the case of new vehicles, if the sales prices exceeds EUR 25 000; in the case of used vehicles, if the sales price exceeds EUR 15 000
CN Codes: ex 8603, ex 8605 00 00, ex 8702, ex 8703, ex 8711, ex 8712 00, ex 8716 10, ex 8716 40 00, ex 8716 80 00, ex 8716 90, ex 8801 00, ex 8802 11 00, ex 8802 12 00, ex 8802 20 00, ex 8802 30 00, ex 8802 40 00, ex 8805 10, ex 8901 10, ex 8903

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15. Clocks and watches and their parts if the individual item exceeds a sales price of EUR 500
CN Codes: ex 9101, ex 9102, ex 9103, ex 9104, ex 9105, ex 9108, ex 9109, ex 9110, ex 9111, ex 9112, ex 9113, ex 9114
16. Works of art, collectors' pieces and antiques
CN Codes: 97
17. Articles and equipment for skiing, golf and water sports, if the individual item exceeds a sales price of EUR 500
CN Codes: ex 4015 19 00, ex 4015 90 00, ex 6112 20 00, ex 6112 31, ex 6112 39, ex 6112 41, ex 6112 49, ex 6113 00, ex 6114, ex 6210 20 00, ex 6210 30 00, ex 6210 40 00, ex 6210 50 00, ex 6211 11 00, ex 6211 12 00, ex 6211 20, ex 6211 32 90, ex 6211 33 90, ex 6211 39 00, ex 6211 42 90, ex 6211 43 90, ex 6211 49 00, ex 6402 12, ex 6403 12 00, ex 6404 11 00, ex 6404 19 90, ex 9004 90, ex 9020, ex 9506 11, ex 9506 12, ex 9506 19 00, ex 9506 21 00, ex 9506 29 00, ex 9506 31 00, ex 9506 32 00, ex 9506 39, ex 9507
18. Articles and equipment for billiard, automatic bowling, casino games and games operated by coins or banknotes, if the individual item exceeds a sales price of EUR 500
CN Codes: ex 9504 20, ex 9504 30, ex 9504 40 00, ex 9504 90 80'.
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