

*Regulations made by the Secretary of State, laid before Parliament under section 55(3) of the Sanctions and Anti-Money Laundering Act 2018, for approval by resolution of each House of Parliament within twenty-eight days beginning with the day on which the instrument is made, subject to extension for periods of dissolution or prorogation or during which both Houses are adjourned for more than four days.*

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STATUTORY INSTRUMENTS

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**2022 No. 689**

**SANCTIONS**

**The Russia (Sanctions) (EU Exit) (Amendment) (No. 10)  
Regulations 2022**

<i>Made</i> - - - -	<i>20th June 2022</i>
<i>Laid before Parliament</i>	<i>22nd June 2022</i>
<i>Coming into force</i> - -	<i>23rd June 2022</i>

The Secretary of State(a), considering that the condition in section 45(2) of the Sanctions and Anti-Money Laundering Act 2018(b) is met, makes the following Regulations in exercise of the powers conferred by sections 1, 3(1)(b)(ii) and (d)(ii), 5(1) and 15(2)(a) and (b) and (6) of, and paragraphs 2(a)(ii) and (b), 4(a)(ii) and (b), (c) and (d), 5(a)(ii) and (b), 6(a)(ii) and (b), 7(a)(ii) and (b), 11(a)(ii), 13(b), (c), (g), (h), (k), (l), (n) and (q) and (w), 14(f), (g) and (k), 17(a), 19(a), 20(c) and (d), 21, 22 and 23 of Schedule 1 to, that Act.

**Citation and commencement**

1.—(1) These Regulations may be cited as the Russia (Sanctions) (EU Exit) (Amendment) (No. 10) Regulations 2022.

(2) These Regulations come into force on 23rd June 2022.

**Amendment of the Russia (Sanctions) (EU Exit) Regulations 2019**

2. The Russia (Sanctions) (EU Exit) Regulations 2019(c) are amended as set out in regulations 3 to 12.

**Interpretation of Part 5**

3.—(1) Regulation 21 is amended as follows.

(2) In paragraph (1), insert in the appropriate places—

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- (a) The power to make regulations under Part 1 of the Sanctions and Anti-Money Laundering Act 2018 (c. 13) is conferred on an appropriate Minister. Section 1(9)(a) of the Act defines an “appropriate Minister” as including the Secretary of State.
- (b) 2018 c. 13. Section 17(5)(b)(i) (enforcement) is amended by the Sentencing Act 2020 (c. 17), Schedule 24, paragraph 443(1). Sections 1 and 45 are amended by the Economic Crime (Transparency and Enforcement) Act 2022 (c. 10), sections 57 and 62.
- (c) S.I. 2019/855 as amended by S.I. 2020/590 and 951, 2022/123, 194, 195, 203, 205, 241, 395, 452 and 477 and by the Sentencing Act 2020 (c. 17).

“defence and security goods” means—

- (a) interception and monitoring goods,
- (b) internal repression goods, and
- (c) goods relating to chemical and biological weapons;”;

“defence and security technology” means—

- (a) interception and monitoring technology,
- (b) internal repression technology, and
- (c) technology relating to chemical and biological weapons;”;

“goods relating to chemical and biological weapons” means—

- (a) any thing specified in Part 4 of Schedule 3C, other than technology relating to chemical and biological weapons (but see paragraph (4A))(a), and
- (b) any tangible storage medium on which technology relating to chemical and biological weapons is recorded or from which it can be derived;”;

“interception and monitoring goods” means any item mentioned in paragraph (a) or (b), provided that it may be used for interception and monitoring services—

- (a) a relevant Part 2 item(b),
- (b) any tangible storage medium on which interception and monitoring technology is recorded or from which it can be derived;”;

“interception and monitoring technology” means any thing—

- (a) which is described as software in paragraph 2 of Part 2 of Schedule 3C provided that it may be used for interception and monitoring services, and
- (b) which is described as other software or other technology in paragraph 3 of Part 2 of Schedule 3C (but see paragraph (4C));”;

“internal repression goods” means—

- (a) any thing specified in Part 3 of Schedule 3C, other than—
  - (i) any thing which is internal repression technology,
  - (ii) any thing for the time being specified in Schedule 2 to the Export Control Order 2008(c), or
  - (iii) any thing for the time being specified in Annex I of the Dual-Use Regulation, and
- (b) any tangible storage medium on which internal repression technology is recorded or from which it can be derived;”;

“internal repression technology” means any thing which is described in Part 3 of Schedule 3C as software or technology;”;

“maritime goods” and “maritime technology” mean respectively any goods and technology specified in Chapter 4 (Navigation Equipment) and Chapter 5 (Radio-Communication Equipment) of Annex 1 of the Merchant Shipping Notice 1874(d) but not including any thing in those Chapters which is specified in—

- (a) Schedules 2 and 3 to the Export Control Order 2008,
- (b) Annex I to the Dual Use Regulation, or
- (c) Schedule 2A;”;

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(a) Inserted by paragraph (7) of this regulation.

(b) “Relevant Part 2 item” is defined in regulation 21(4B) which is inserted by paragraph (7) of this regulation.

(c) S.I. 2008/3231.

(d)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1042678/MSN\\_1874\\_Amendment\\_5.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1042678/MSN_1874_Amendment_5.pdf). Hard copies can be obtained from the Department for International Trade, Old Admiralty Building, London, SW1A 2BL.

““medical device” means—

- (a) a medical device within the meaning given in regulation 2 of the Medical Devices Regulations 2002<sup>(a)</sup> in so far as those Regulations apply to England, Wales and Scotland, and
- (b) a medical device within the meaning given in—
  - (i) article 2 of Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC, and
  - (ii) article 2 of Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU,

in so far as those Regulations apply to Northern Ireland;”;

““technology relating to chemical and biological weapons” means any thing specified as technology or software in Part 4 of Schedule 3C, other than technology which is—

- (a) the minimum necessary for—
  - (i) the installation, operation, maintenance and repair of any goods which are not subject to a prohibition under this Part, or
  - (ii) patent applications,
- (b) in the public domain,
- (c) a medical device, or
- (d) used for basic scientific research;”.

(3) In the definition of “critical-industry goods”, in paragraph (a)(ii)—

- (a) at the end of (aa) omit “or”;
- (b) at the end of (bb) for “and” substitute “or”;
- (c) after (bb) insert—

“(cc) Part 3 of Schedule 3C, and”.

(4) In the definition of “critical-industry technology”—

- (a) at the end of paragraph (a) omit “or”;
- (b) at the end of paragraph (b) insert “or”
- (c) after paragraph (b) insert—

“(c) Part 3 of Schedule 3C.”.

(5) At the end of the definition of “restricted goods” insert—

- “(g) defence and security goods;
- (h) maritime goods;”.

(6) At the end of the definition of “restricted technology” insert—

- “(g) defence and security technology;
- (h) maritime technology;”.

(7) After paragraph (4) insert—

“(4A) The definition of “goods relating to chemical and biological weapons” does not apply to anything specified in Part 4 of Schedule 3C—

- (a) which is—
  - (i) a pharmaceutical formulation designed for human administration in the treatment of a medical condition; and

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(a) S.I. 2002/618.

(ii) pre-packaged for distribution as a medicinal product; or

(b) which is a medical device.

(4B) For the purpose of the definition of “interception and monitoring goods” in paragraph (1) “a relevant Part 2 item” means any thing described in Part 2 of Schedule 3C, other than—

(a) any thing which is interception and monitoring technology, or

(b) any thing for the time being specified in—

(i) Schedule 2 to the Export Control Order 2008, or

(ii) Annex I of the Dual-Use Regulation.

(4C) The definition of “interception and monitoring technology” does not apply to software which is—

(a) generally available to the public, or

(b) in the public domain.”.

#### **Definition of “interception and monitoring services”**

4. In Chapter 1 of Part 5, after regulation 21, insert—

##### **“Definition of interception and monitoring services**

**21A.**—(1) For the purposes of this Part, “interception and monitoring services” means any service that has as its object or effect the interception of a communication in the course of its transmission by means of a telecommunication system.

(2) A person intercepts a communication in the course of its transmission by means of a telecommunication system if, and only if—

(a) the person does a relevant act in relation to the system; and

(b) the effect of the relevant act is to make any content of the communication available, at a relevant time, to a person who is not the sender or intended recipient of the communication.

(3) In paragraph (2) a “relevant act”, in relation to a telecommunication system, means—

(a) modifying, or interfering with, the system or its operation;

(b) monitoring transmissions made by means of the system;

(c) monitoring transmissions made by wireless telegraphy to or from apparatus that is part of the system.

(4) In paragraph (2), a “relevant time”, in relation to a communication transmitted by means of a telecommunication system, means—

(a) any time while the communication is being transmitted; and

(b) any time when the communication is stored in or by the system (whether before or after its transmission).

(5) For the purpose of paragraph (2), the cases in which any content of a communication is to be taken to be made available to a person at a relevant time include any case in which any of the communication is diverted or recorded at a relevant time so as to make the content of the communication available to a person after that time.

(6) In paragraph (3), references to modifying a telecommunication system include references to attaching any apparatus to, or otherwise modifying or interfering with—

(a) any part of the system; or

(b) any wireless telegraphy apparatus used for making transmissions to or from apparatus that is part of the system.

(7) For the purposes of this regulation, the following definitions also apply—

“apparatus” includes any equipment, machinery or device (whether physical or logical) and any wire or cable;

“communication”, for the purpose of a telecommunication system, includes—

- (a) anything comprising speech, music, sounds, visual images or data of any description; and
- (b) signals serving for the impartation of anything between persons, between a person and a thing or between things, for the actuation or control of any apparatus;

“content”, in relation to a communication and a telecommunication system, means any element of the communication, or any data attached to or logically associated with the communication, which reveals anything of what might reasonably be considered to be the meaning (if any) of the communication, but—

- (a) any meaning arising from the fact of the communication or from any data relating to the transmission of the communication is to be disregarded; and
- (b) anything which is systems data is not content;

“systems data” means any data that enables or facilitates, or identifies or describes anything connected with enabling or facilitating, the functioning of a telecommunication system (including any apparatus forming part of the system);

“a telecommunication system” means a system (including the apparatus comprised in it) that exists for the purpose of facilitating the transmission of communications by any means involving the use of electrical or electromagnetic energy;

“wireless telegraphy” and “wireless telegraphy apparatus” have the same meaning as in sections 116 and 117 of the Wireless Telegraphy Act 2006(a).”.

### **Maritime goods and maritime technology**

5.—(1) In regulation 22—

(a) after paragraph (1) insert—

“(1A) The export of maritime goods and maritime technology for the placing on board of a Russian-flagged vessel is prohibited.”;

(b) in paragraph (2), for “Paragraph (1) is” substitute “Paragraphs (1) and (1A) are”.

(2) In regulation 24—

(a) after paragraph (1)(b) insert—

“(c) directly or indirectly supply or deliver maritime goods or maritime technology from a third country for the placing on board of a Russian-flagged vessel.”;

(b) after paragraph (3)(b) insert—

“(c) it is a defence for a person charged with the offence of contravening paragraph (1)(c) to show that the person did not know and had no reasonable cause to suspect that the supply or delivery was for the placing on board of a Russian-flagged vessel, whether directly or indirectly.”.

(3) In regulation 25—

(a) after paragraph (1)(e) insert—

“(f) directly or indirectly make maritime goods or maritime technology available for the placing on board of a Russian-flagged vessel.”;

(b) after paragraph (3)(d) insert—

“(e) it is a defence for a person charged with the offence of contravening paragraph (1)(f) to show that the person did not know and had no reasonable cause to suspect

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(a) 2006 c. 36.

that the goods or technology were to be made available for the placing on board of a Russian-flagged vessel.”.

(4) In regulation 26—

(a) after paragraph (1)(c) insert—

“(d) transfer maritime technology to a Russian-flagged vessel.”;

(b) after paragraph (3)(c) insert—

“(d) it is a defence for a person charged with the offence of contravening paragraph (1)(d) to show that the person did not know and had no reasonable cause to suspect that the transfer was to a Russian-flagged vessel.”.

## **Goods and technology relating to non-government controlled Ukrainian territory**

6. In Part 5, after Chapter 2 insert—

### **“CHAPTER 2A**

**Goods and technology relating to non-government controlled Ukrainian territory**

#### **Interpretation**

**30A.** In this Chapter—

“relevant restricted goods” means only those restricted goods which are not infrastructure-related goods but which are military goods;

“relevant restricted technology” means only that restricted technology which is military technology.

#### **Export of relevant restricted goods and relevant restricted technology**

**30B.**—(1) The export of relevant restricted goods and of relevant restricted technology to, or for use in, non-government controlled Ukrainian territory is prohibited.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

#### **Supply and delivery of relevant restricted goods and relevant restricted technology**

**30C.**—(1) A person must not directly or indirectly supply or deliver relevant restricted goods and relevant restricted technology from a third country to a place in non-government controlled Ukrainian territory.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with the offence of contravening paragraph (1) to show that the person did not know and had no reasonable cause to suspect that the goods or technology were destined (or ultimately destined) for non-government controlled Ukrainian territory.

(4) In this regulation, “third country” means a country that is not the United Kingdom or the Isle of Man.

#### **Making available relevant restricted goods and relevant restricted technology**

**30D.**—(1) A person must not—

(a) directly or indirectly make relevant restricted goods or relevant restricted technology available to a person connected with non-government controlled Ukrainian territory; or

(b) directly or indirectly make relevant restricted goods or relevant restricted technology available for use in non-government controlled Ukrainian territory.

- (2) Paragraph (1) is subject to Part 7 (Exceptions and licences).
- (3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—
  - (a) it is a defence for a person charged with an offence of contravening paragraph (1)(a) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with non-government controlled Ukrainian territory;
  - (b) it is a defence for a person charged with the offence of contravening paragraph (1)(b) to show that the person did not know and had no reasonable cause to suspect that the goods or technology were for use in non-government controlled Ukrainian territory.

#### **Transfer of relevant restricted technology**

- 30E.**—(1) A person must not—
- (a) transfer relevant restricted technology to a place in non-government controlled Ukrainian territory; or
  - (b) transfer relevant restricted technology to a person connected with non-government controlled Ukrainian territory.
- (2) Paragraph (1) is subject to Part 7 (Exceptions and licences).
- (3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—
- (a) it is a defence for a person charged with the offence of contravening paragraph (1)(a) to show that the person did not know and had no reasonable cause to suspect that the transfer was to a place in non-government controlled Ukrainian territory;
  - (b) it is a defence for a person charged with the offence of contravening paragraph (1)(b) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with non-government controlled Ukrainian territory.

#### **Technical assistance relating to relevant restricted goods and relevant restricted technology**

- 30F.**—(1) A person must not directly or indirectly provide technical assistance relating to relevant restricted goods or relevant restricted technology—
- (a) to a person connected with non-government controlled Ukrainian territory; or
  - (b) for use in non-government controlled Ukrainian territory.
- (2) Paragraph (1) is subject to Part 7 (Exceptions and licences).
- (3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—
- (a) it is a defence for a person charged with an offence of contravening paragraph (1)(a) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with non-government controlled Ukrainian territory;
  - (b) it is a defence for a person charged with an offence of contravening paragraph (1)(b) to show that the person did not know and had no reasonable cause to suspect that the goods or technology were for use in non-government controlled Ukrainian territory.

#### **Financial services and funds relating to relevant restricted goods and relevant restricted technology**

- 30G.**—(1) A person must not directly or indirectly provide, to a person connected with non-government controlled Ukrainian territory, financial services in pursuance of or in connection with an arrangement whose object or effect is—
- (a) the export of relevant restricted goods;
  - (b) the direct or indirect supply or delivery of relevant restricted goods;

- (c) directly or indirectly making relevant restricted goods or relevant restricted technology available to a person;
- (d) the transfer of relevant restricted technology; or
- (e) the direct or indirect provision of technical assistance relating to relevant restricted goods or relevant restricted technology.

(2) A person must not directly or indirectly provide funds to a person connected with non-government controlled Ukrainian territory in pursuance of or in connection with an arrangement mentioned in paragraph (1).

(3) A person must not directly or indirectly provide financial services or funds in pursuance of or in connection with an arrangement whose object or effect is—

- (a) the export of relevant restricted goods to, or for use in, non-government controlled Ukrainian territory;
- (b) the direct or indirect supply or delivery of relevant restricted goods to a place in non-government controlled Ukrainian territory;
- (c) directly or indirectly making relevant restricted goods or relevant restricted technology available—
  - (i) to a person connected with non-government controlled Ukrainian territory, or
  - (ii) for use in non-government controlled Ukrainian territory;
- (d) the transfer of relevant restricted technology—
  - (i) to a person connected with non-government controlled Ukrainian territory, or
  - (ii) to a place in non-government controlled Ukrainian territory; or
- (e) the direct or indirect provision of technical assistance relating to relevant restricted goods or relevant restricted technology—
  - (i) to a person connected with non-government controlled Ukrainian territory, or
  - (ii) for use in non-government controlled Ukrainian territory.

(4) Paragraphs (1) to (3) are subject to Part 7 (Exceptions and licences).

(5) A person who contravenes a prohibition in any of paragraphs (1) to (3) commits an offence, but—

- (a) it is a defence for a person charged with an offence of contravening paragraph (1) or (2) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with non-government controlled Ukrainian territory;
- (b) it is a defence for a person charged with the offence of contravening paragraph (3) to show that the person did not know and had no reasonable cause to suspect that the financial services or funds (as the case may be) were provided in pursuance of or in connection with an arrangement mentioned in that paragraph.

**Brokering services relating to relevant restricted goods and relevant restricted technology**

**30H.**—(1) A person must not directly or indirectly provide brokering services to a person connected with non-government controlled Ukrainian territory in relation to an arrangement whose object or effect is—

- (a) the export of relevant restricted goods;
- (b) the direct or indirect supply or delivery of relevant restricted goods;
- (c) directly or indirectly making relevant restricted goods or relevant restricted technology available to a person;
- (d) the transfer of relevant restricted technology; or
- (e) the direct or indirect provision of technical assistance relating to relevant restricted goods or relevant restricted technology.



(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the brokering services were provided in relation to an arrangement mentioned in that paragraph.”.

### **Iron and steel products**

7.—(1) Chapter 4C of Part 5 is amended as follows.

(2) For regulation 46C substitute—

#### **“Interpretation**

**46C.** In this Chapter—

“iron and steel products” means any thing specified in Schedule 3B;

“third country” means a country that is not the United Kingdom, the Isle of Man or Russia.”.

(3) After regulation 46F insert—

#### **“Technical assistance relating to iron and steel products**

**46G.**—(1) A person must not directly or indirectly provide technical assistance relating to—

(a) the import of iron and steel products which—

(i) originate in Russia; or

(ii) are consigned from Russia;

(b) the direct or indirect acquisition of iron and steel products which—

(i) originate in Russia; or

(ii) are located in Russia; or

(c) the direct or indirect supply or delivery of iron and steel products from a place in Russia to a third country.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—

(a) it is a defence for a person charged with an offence of contravening paragraph (1)(a), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to an import described in that paragraph;

(b) it is a defence for a person charged with an offence of contravening paragraph (1)(b), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to an acquisition described in that paragraph;

(c) it is a defence for a person charged with an offence of contravening paragraph (1)(c), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to a supply or delivery described in that paragraph.

### **Financial services and funds relating to iron and steel products**

**46H.**—(1) A person must not directly or indirectly provide financial services or funds in pursuance of or in connection with an arrangement whose object or effect is—

(a) the import of iron and steel products which—

- (i) originate in Russia; or
- (ii) are consigned from Russia;
- (b) the direct or indirect acquisition of iron and steel products which—
  - (i) originate in Russia; or
  - (ii) are located in Russia; or
- (c) the direct or indirect supply or delivery of iron and steel products from a place in Russia to a third country.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes the prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the financial services or funds (as the case may be) were provided in pursuance of or in connection with an arrangement mentioned in that paragraph.

### **Brokering services relating to iron and steel products**

**46I.**—(1) A person must not directly or indirectly provide brokering services in relation to any arrangements described in regulation 46H(1)(a) to (c).

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the brokering services were provided in relation to an arrangement mentioned in that paragraph.”.

### **Further prohibitions relating to certain goods and services**

8. After regulation 46I (inserted by regulation 7), insert—

#### **“CHAPTER 4D**

#### **Interception and monitoring services**

#### **Interpretation**

**46J.** In this Chapter, “Government of Russia” has the meaning given in regulation 6(7);

#### **Interception and monitoring services**

**46K.**—(1) A person must not directly or indirectly provide interception and monitoring services to, or for the benefit of, the Government of Russia.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes the prohibition in paragraph (1) commits an offence, but it is a defence for a person (“P”) charged with that offence to show that P did not know and had no reasonable cause to suspect that the services were provided to, or for the benefit of, the Government of Russia.

#### **Supply and delivery of interception and monitoring services**

**46L.**—(1) A person must not directly or indirectly supply or deliver interception and monitoring services to, or for the benefit of, the Government of Russia from a third country.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes the prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with the offence of contravening paragraph (1) to show

that the person did not know and had no reasonable cause to suspect that the supply or delivery was to the Government of Russia, whether directly or indirectly.

(4) In this regulation, “third country” means a country which is not the United Kingdom, the Isle of Man or Russia.

## CHAPTER 4E

### Banknotes

#### **Banknotes**

**46M.**—(1) The export of banknotes to, or for use in, Russia is prohibited.

(2) A person must not directly or indirectly—

- (a) supply or deliver banknotes to a person connected with Russia;
- (b) make banknotes available to a person connected with Russia; or
- (c) make banknotes available for use in Russia.

(3) Paragraphs (1) and (2) are subject to Part 7 (Exceptions and licences).

(4) A person who contravenes a prohibition in paragraph (2) commits an offence.

(5) In this regulation, “banknotes” means—

- (a) sterling denominated banknotes issued by the Bank of England and banks in Scotland and Northern Ireland; and
- (b) banknotes denominated in any official currency of the European Union.

## CHAPTER 4F

### Jet fuel and fuel additives

#### **Interpretation**

**46N.** In this Chapter, “jet fuel and fuel additives” means the goods listed under that heading in Part 8 of Schedule 2A(a).

#### **Jet fuel and fuel additives**

**46O.**—(1) The export of jet fuel and fuel additives to, or for use in, Russia is prohibited.

(2) A person must not directly or indirectly—

- (a) supply or deliver jet fuel and fuel additives from a third country to a place in Russia;
- (b) make jet fuel and fuel additives available to a person connected with Russia;
- (c) make jet fuel and fuel additives available for use in Russia.

(3) Paragraphs (1) and (2) are subject to Part 7 (Exceptions and licences).

(4) A person who contravenes a prohibition in paragraph (2) commits an offence, but—

- (a) it is a defence for a person charged with the offence of contravening paragraph (2)(a) to show that the person did not know and had no reasonable cause to suspect that the jet fuel and fuel additives were destined (or ultimately destined) for Russia;

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(a) Those goods are inserted into Part 8 by regulation 11(5) and Schedule 2.

- (b) it is a defence for a person charged with the offence of contravening paragraph (2)(b) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with Russia;
- (c) it is a defence for a person charged with the offence of contravening paragraph (2)(c) to show that the person did not know and had no reasonable cause to suspect that the jet fuel and fuel additives were for use in Russia.

(5) In this regulation, “third country” means a country that is not the United Kingdom, the Isle of Man or Russia.

#### **Technical assistance relating to jet fuel and fuel additives**

**46P.**—(1) A person must not directly or indirectly provide technical assistance relating to jet fuel and fuel additives—

- (a) to a person connected with Russia; or
- (b) for use in Russia.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—

- (a) it is a defence for a person charged with an offence of contravening paragraph (1)(a), to show that the person did not know and had no reasonable cause to suspect that the technical assistance was to be provided to a person connected with Russia;
- (b) it is a defence for a person charged with an offence of contravening paragraph (1)(b), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to jet fuel and fuel additives for use in Russia.

#### **Financial services and funds relating to jet fuel and fuel additives**

**46Q.**—(1) A person must not directly or indirectly provide, to a person connected with Russia, financial services in pursuance of or in connection with an arrangement whose object or effect is—

- (a) the export of jet fuel and fuel additives;
- (b) the direct or indirect supply or delivery of jet fuel and fuel additives;
- (c) directly or indirectly making jet fuel and fuel additives available to a person connected with Russia; or
- (d) the direct or indirect provision of technical assistance relating to jet fuel and fuel additives.

(2) A person must not directly or indirectly make funds available to a person connected with Russia in pursuance of or in connection with an arrangement mentioned in paragraph (1).

(3) A person must not directly or indirectly provide financial services or funds in pursuance of or in connection with an arrangement whose object or effect is—

- (a) the export of jet fuel and fuel additives to, or for use in, Russia;
- (b) the direct or indirect supply or delivery of jet fuel and fuel additives to a place in Russia;
- (c) directly or indirectly making jet fuel and fuel additives available—
  - (i) to a person connected with Russia, or
  - (ii) for use in Russia; or
- (d) the direct or indirect provision of technical assistance relating to jet fuel and fuel additives—

- (i) to a person connected with Russia, or
- (ii) for use in Russia.

(4) Paragraphs (1) to (3) are subject to Part 7 (Exceptions and licences).

(5) A person who contravenes a prohibition in any of paragraphs (1) to (3) commits an offence, but—

- (a) it is a defence for a person charged with an offence of contravening paragraph (1) or (2) (“P”) to show that P did not know and had no reasonable cause to suspect that the person was connected with Russia;
- (b) it is a defence for a person charged with the offence of contravening paragraph (3) to show that the person did not know and had no reasonable cause to suspect that the financial services or funds (as the case may be) were provided in pursuance of or in connection with an arrangement mentioned in that paragraph.

### **Brokering services relating to jet fuel and fuel additives**

**46R.**—(1) A person must not directly or indirectly provide brokering services to a person connected with Russia in relation to an arrangement whose object or effect is—

- (a) the export of jet fuel and fuel additives;
- (b) the direct or indirect supply or delivery of jet fuel and fuel additives;
- (c) directly or indirectly making jet fuel and fuel additives available to a person connected with Russia; or
- (d) the direct or indirect provision of technical assistance relating to jet fuel and fuel additives.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the brokering services were provided in relation to an arrangement mentioned in that paragraph.

## **CHAPTER 4G**

### **Revenue generating goods**

#### **Interpretation**

**46S.** In this Chapter—

“revenue generating goods” means any thing specified in Schedule 3D(a);

“third country” means a country that is not the United Kingdom, the Isle of Man or Russia.

#### **Import of revenue generating goods**

**46T.**—(1) The import of revenue generating goods which are consigned from Russia is prohibited.

(2) The import of revenue generating goods which originate in Russia is prohibited.

(3) Paragraphs (1) and (2) are subject to Part 7 (Exceptions and licences).

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(a) Schedule 3D is inserted by regulation 11(8) and Schedule 3.

### **Acquisition of revenue generating goods**

**46U.**—(1) A person must not directly or indirectly acquire revenue generating goods which—

- (a) originate in Russia; or
- (b) are located in Russia,

with the intention of those goods entering the United Kingdom.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—

- (a) it is a defence for a person charged with the offence of contravening paragraph (1)(a) to show that the person did not know and had no reasonable cause to suspect that the goods originated in Russia;
- (b) it is a defence for a person charged with the offence of contravening paragraph (1)(b) to show that the person did not know and had no reasonable cause to suspect that the goods were located in Russia.

### **Supply and delivery of revenue generating goods**

**46V.**—(1) A person must not directly or indirectly supply or deliver revenue generating goods from a place in Russia into the United Kingdom.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes the prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with the offence of contravening paragraph (1) to show that the person did not know and had no reasonable cause to suspect that the supply or delivery was from a place in Russia, whether directly or indirectly.

### **Technical assistance relating to revenue generating goods**

**46W.**—(1) A person must not directly or indirectly provide technical assistance relating to—

- (a) the import of revenue generating goods which—
  - (i) originate in Russia, or
  - (ii) are consigned from Russia;
- (b) the direct or indirect acquisition of revenue generating goods which—
  - (i) originate in Russia, or
  - (ii) are located in Russia,

with the intention of those goods entering the United Kingdom;

- (c) the direct or indirect supply or delivery of revenue generating goods from a place in Russia into the United Kingdom.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but—

- (a) it is a defence for a person charged with an offence of contravening paragraph (1)(a), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to an import described in that paragraph;
- (b) it is a defence for a person charged with an offence of contravening paragraph (1)(b), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to an acquisition described in that paragraph;

- (c) it is a defence for a person charged with an offence of contravening paragraph (1)(c), to show that the person did not know and had no reasonable cause to suspect that the technical assistance related to a supply or delivery described in that paragraph.

#### **Financial services and funds relating to revenue generating goods**

**46X.**—(1) A person must not directly or indirectly provide financial services or funds in pursuance of or in connection with an arrangement whose object or effect is—

- (a) the import of revenue generating goods which—
  - (i) originate in Russia, or
  - (ii) are consigned from Russia; or
- (b) the direct or indirect acquisition of revenue generating goods which—
  - (i) originate in Russia, or
  - (ii) are located in Russia,with the intention of those goods entering the United Kingdom;
- (c) the direct or indirect supply or delivery of revenue generating goods from a place in Russia into the United Kingdom.

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes the prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the financial services or funds (as the case may be) were provided in pursuance of or in connection with an arrangement mentioned in that paragraph.

#### **Brokering services relating to revenue generating goods**

**46Y.**—(1) A person must not directly or indirectly provide brokering services in relation to any arrangements described in regulation 46X(1)(a) to (c).

(2) Paragraph (1) is subject to Part 7 (Exceptions and licences).

(3) A person who contravenes a prohibition in paragraph (1) commits an offence, but it is a defence for a person charged with that offence to show that the person did not know and had no reasonable cause to suspect that the brokering services were provided in relation to an arrangement mentioned in that paragraph.”.

#### **Application of prohibitions in Chapter 2 of Part 5**

9. In Chapter 5 of Part 5, after regulation 53 insert—

##### **“Application of prohibitions and requirements in Chapter 2 of Part 5 to non-government controlled Ukrainian territory**

**53A.** Where it is specified in Schedule 2A, 3 or 3C or in any table in those Schedules that this regulation applies in relation to an item, any prohibition or requirement in Chapter 2 of this Part which applies to Russia in relation to that item also applies to non-government controlled Ukrainian territory.”.

#### **Exceptions**

**10.**—(1) Part 7 is amended as follows.

(2) In each of regulation 60ZA(3) to (5), after “A prohibition in” insert “Chapter 2A of Part 5 (goods and technology relating to non-government controlled Ukrainian territory),”.

(3) After regulation 60D insert—

**“Trade: exceptions in relation to maritime goods and maritime technology**

**60E.**—(1) The prohibitions in Chapters 2 and 2A of Part 5—

- (a) in so far as they relate to maritime goods, do not apply to the sale, supply, making available or export of such goods, or to the related provision of technical and financial services, funds and brokering necessary for a purpose specified in paragraph (2);
- (b) in so far as they relate to maritime technology, do not apply to the sale, supply, making available, transfer or export of such technology, or to the related provision of technical and financial assistance, necessary for a purpose specified in paragraph (2).

(2) The purposes are—

- (a) non-military use for a non-military end-user;
- (b) humanitarian assistance activity;
- (c) addressing a health emergency;
- (d) the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or on the environment; or
- (e) providing a response to a natural disaster.

(3) For the purposes of this regulation—

“humanitarian assistance activity” is to be construed in accordance with paragraph A1 of Schedule 5;

“maritime goods” and “maritime technology” respectively have the meanings given in regulation 21 (interpretation of Part 5).

**Trade: exceptions in relation to banknotes**

**60F.**—(1) Subject to paragraph (2), the prohibitions in Chapter 4E of Part 5 do not apply to the making available, supply, export or delivery of banknotes where the making available, supply, export or delivery is necessary for the personal use of natural persons travelling to Russia or members of their immediate families travelling with them.

(2) The exception in paragraph (1) applies only to banknotes up to the value of £10,000 or its equivalent in any official currency of the European Union.

(3) The prohibitions in Chapter 4E of Part 5 do not apply to the making available, supply, export or delivery of banknotes where the making available, supply, export or delivery is necessary for the official purposes of diplomatic missions, consular posts or international organisations in Russia enjoying immunities in accordance with international law.

(4) The prohibitions in Chapter 4E of Part 5 do not apply to anything done by a person who did not know and had no reasonable cause to suspect that the banknotes were ultimately—

- (a) to be exported, supplied, delivered or made available to a person connected with Russia; or
- (b) for use in Russia.

(5) For the purposes of this regulation, “diplomatic mission” and “consular post” are to be construed in accordance with paragraph A1 of Schedule 5.

**Trade: exception in relation to certain revenue generating goods consigned from Russia**

**60G.**—(1) The prohibitions in Chapter 4G of Part 5 do not apply to, or in relation to, revenue generating goods which are—

- (a) consigned from Russia before 23rd June 2022; and



(b) imported into the United Kingdom before 10th July 2022.

(2) For the purposes of paragraph (1)(a), goods are deemed to have been consigned from Russia at the time when—

- (a) they have completed the applicable export formalities, and
- (b) where the goods were transported by—
  - (i) land, they have left Russia;
  - (ii) sea, the ship on which they were transported has departed a port in Russia for a destination outside Russia;
  - (iii) air, the aircraft on which they were transported has departed an airport in Russia for a destination outside Russia.”.

(4) In regulation 62(1), after “A prohibition in” insert “Chapter 2A of Part 5 (goods and technology relating to non-government controlled Ukrainian territory).”.

### **Trade offences in CEMA: modification of penalty**

**11.**—(1) Regulation 86 is amended as follows.

(2) In paragraph (1), after “46D” insert “, 46T”.

(3) In paragraph (3), for “40(1), 46B(1)” substitute “30B, 40(1), 46B(1), 46O(1).”.

(4) In paragraph (5), for “40(1), 46B(1), 46D” substitute “30B, 40(1), 46B(1), 46D, 46O(1), 46T”.

### **Amendment and insertion of Schedules**

**12.**—(1) Schedule 2A (critical-industry goods and critical-industry technology) is amended in accordance with paragraphs (2) to (5).

(2) In Part 1, before the definition of “dynamic adaptive routing” in paragraph 2(1) insert—

““controlled materials” means controlled energetic materials specified in 1C011, 1C111, 1C239 of Annex I of the Dual-Use Regulation and ML8 in Schedule 2 to the Export Control Order 2008;”.

(3) After Part 1 insert the Parts 1A and 1B in Schedule 1 to these Regulations.

(4) At the end of Part 7 insert—

“maritime goods and maritime technology within the meaning in regulation 21 (interpretation of Part 5).”.

(5) At the end of Part 8 insert the table in Schedule 2 to these Regulations.

(6) In Schedule 2D (oil refining goods and technology), insert the following entries in the appropriate places in the table in paragraph 2—

<i>“Commodity code</i>	<i>Description</i>
ex 8419 50 20, 8419 50 80	Cold boxes in the LNG-process
ex 8419 50 20 or 8419 50 80	Cryogenic exchangers in the LNG-process
ex 8414 10 81	Cryogenic pumps in the LNG-process
ex 8418 69 00	Process units for gas cooling in the LNG-process
ex 8419 60 00	Process units for the liquefaction of the natural gas
ex 8419 40 00	Process units for the separation and fractionation of the hydrocarbons in the LNG-process”

(7) In Part 2 of Schedule 3 (energy-related goods), after paragraph 3 insert—

“**3A.** Any thing falling within the first column of the following table.

<i>Item</i>	<i>Regulation applies?</i>	<i>53A</i>
a. Oil and gas exploration data, e.g., seismic analysis data.		
b. Hydraulic fracturing items, as follows:		
b.1. Hydraulic fracturing design and analysis software and data.		
b.2. Hydraulic fracturing proppant, fracking fluid, and chemical additives therefor.	Yes	
b.3. High pressure pumps.	Yes	

(8) After Schedule 3B, insert Schedules 3C and 3D, which are set out in Schedule 3 to these Regulations.

20th June 2022

Amanda Milling  
Minister of State  
Foreign, Commonwealth and Development Office

## SCHEDULE 1

Regulation 12(3)

### Insertion of Parts 1A and 1B into Schedule 2A

#### “PART 1A

#### Special materials and related equipment

##### Microorganisms and Toxins

<i>Item</i>	<i>Regulation 53A applies?</i>
1B999 Specific processing equipment as follows:	
a. Electrolytic cells for fluorine “production”;	
b. Particle accelerators;	
c. Industrial process control hardware/systems designed for power industries;	
d. Freon and chilled water-cooling systems capable of continuous cooling duties of 100,000 BTU/hr (29.3 kW) or greater;	
e. Equipment for the “production” of structural composites, fibres, prepregs and preforms.	
1C990 Fibrous and filamentary materials for “use” in “composite” structures and with a specific modulus of $3.18 \times 10^6$ m or greater and a specific tensile strength of $7.62 \times 10^4$ m or greater.	Yes
1C992 Commercial charges and devices containing energetic materials, and nitrogen trifluoride in a gaseous state.	Yes
<i>Note: For the purposes of this entry the mass of the non-controlled substance in any ‘mixture’ is omitted when determining the total mass of the controlled material.</i>	
These items are as follows:	Yes
a. Shaped charges specially designed for oil well operations, utilising one charge functioning along a single axis, that upon detonation produce a hole, and	
a.1. Contain any formulation of controlled materials;	

a.2. Have only a uniform shaped conical liner with an included angle of 90 degrees or less; a.3. Contain more than 0.010 kg but less than or equal to 0.090 kg of “controlled materials”; and a.4. Have a diameter not exceeding 4.5 inches;	
b. Shaped charges specially designed for oil well operations containing less than or equal to 0.010 kg of controlled materials;	Yes
c. Detonation cord or shock tubes containing less than or equal to 0.064 kg per meter (300 grains per foot) of controlled materials;	Yes
d. Cartridge power devices, that contain less than or equal to 0.70 kg of controlled materials in the deflagration material;	Yes
e. Oil well cartridges, that contain less than or equal to 0.015 kg of “controlled materials”;	Yes
f. Commercial prefabricated slurries and emulsions containing less than or equal to 10.0 kg and less than or equal to thirty-five percent by weight of materials controlled by ML8 in Schedule 2 of the Export Control Order 2008;	Yes
g. Cutters and severing tools containing less than or equal to 3.5 kg of controlled materials;	Yes
h. Pyrotechnic devices when designed exclusively for commercial purposes (e.g., theatrical stages, motion picture special effects, and fireworks displays) and containing less than or equal to 3.0 kg of controlled materials;	Yes
i. Other commercial explosive devices and charges not controlled by 1C992.a to.h. containing less than or equal to 1.0 kg of controlled materials. <i>Note: 1C992.i includes automotive safety devices; extinguishing systems; cartridges for riveting guns; explosive charges for agricultural, oil and gas operations, sporting goods, commercial mining, or public works purposes; and delay tubes used in the assembly of commercial explosive devices.</i>	Yes
j. Nitrogen trifluoride (NF <sub>3</sub> ) in a gaseous state - Nitrogen trifluoride (CAS RN 7783-54-2)	
1C996 Hydraulic fluids containing synthetic hydrocarbon oils, having all the following characteristics:	Yes
a. A flash point exceeding 477 K (204 degrees C); b. A pour point at 239 K (-34 degrees C) or less; c. A viscosity index of 75 or more; and d. A thermal stability at 616 K (343 degrees C).	
1C997 Ammonium nitrate, including fertilisers and fertiliser blends containing more than 15% by weight ammonium nitrate, except liquid fertilisers (containing any amount of ammonium nitrate) or dry fertilisers containing less than 15% by weight ammonium nitrate	
1C998 Non fluorinated polymeric substances as follows: a. Polyarylene ether ketones, as follows: a.1 Polyether ether ketone (PEEK); a.2. Polyether ketone ketone (PEKK); a.3. Polyether ketone (PEK); a.4. Polyether ketone ether ketone ketone (PEKEKK);	Yes
1C999 Specific materials, as follows:	
a. Hardened steel and tungsten carbide precision ball bearings (3mm or greater diameter);	Yes
b. 304 and 316 stainless steel plate;	
c. Monel plate;	
d. Tributyl phosphate;	
e. Nitric acid in concentrations of 20 weight percent or greater;	
f. Fluorine;	
g. Alpha emitting radionuclides,	

1D999 Specific software as follows:	
a. "Software" specially designed for industrial process control hardware/systems controlled by 1B999;	
b. "Software" specially designed for equipment for the "production" of structural composites, fibres, prepregs and preforms controlled by 1B999.	
1E994 "Technology" for the "development", "production", or "use" of fibrous and filamentary materials controlled by 1C990.	Yes

**PART 1B**  
**MATERIALS PROCESSING**

<i>Item</i>	<i>Regulation 53A applies?</i>
2A983 Explosives or detonator detection equipment, both bulk and trace based, consisting of an automated device, or combination of devices for automated decision making to detect the presence of different types of explosives, explosive residue, or detonators as follows and specifically designed components thereof: <i>Note: For the purpose of this entry, automated decision making is the ability of the equipment to detect explosives or detonators at the design or operator-selected level of sensitivity and provide an automated alarm when explosives or detonators at or above the sensitivity level are detected. This entry does not control equipment that depends on operator interpretation of indicators such as inorganic/organic colour mapping of the items(s) being scanned.</i> <i>Note: Explosives or detonation detection equipment in 2A983 includes equipment for screening people, documents, baggage, other personal effects, cargo and/or mail.</i>	
a. Explosives detection equipment for automated decision making to detect and identify bulk explosives utilising, but not limited to, x-ray (e.g., computed tomography, dual energy, or coherent scattering), nuclear (e.g. thermal neutron analysis, pulse fast neutron analysis, pulse fast neutron transmission spectroscopy, and gamma resonance absorption), or electromagnetic techniques (e.g. quadropole resonance and dielectrometry).	Yes
b. Detonator detection equipment for automated decision making to detect and identify initiation devices (e.g. detonators, blasting caps) utilising, but not limited to, x-ray (e.g. dual energy or computed tomography) or electromagnetic techniques.	Yes
2A984 Concealed object detection equipment operating in the frequency range from 30 GHz to 3000 GHz and having a spatial resolution of 0.1 milliradian up to and including 1 milliradian at a standoff distance of 100 metres; and specially designed components thereof. <i>Note: Concealed object detection equipment includes but is not limited to equipment for screening people, documents, baggage, other personal effects, cargo and mail.</i> <i>Technical Note: The range of frequencies span what is generally considered as the millimetre-wave, submillimetre-wave and terahertz frequency regions.</i>	Yes
2A991 Bearings and bearing systems as follows:	
<i>This entry does not control balls with tolerance specified by the manufacturer in accordance with ISO 3290 as grade 5 or worse.</i> <i>Note (1) (a) DN is the product of the bearing bore diameter in mm and the bearing rotational velocity in rpm.</i> <i>(b) Operating temperatures include those temperatures obtained when a gas turbine engine has stopped after operation.</i>	

(2) <i>Annular Bearing Engineers Committee (ABEC); American National Standards Institute (ANSI); Anti-Friction Bearing Manufacturers Association (AFBMA).</i>	
a. Ball bearings or solid ball bearings, having tolerances specified by the manufacturer in accordance with ABEC 7, ABEC 7P, or ABEC 7T or ISO Standard Class 4 or better (or equivalents) and having any of the following characteristics.	Yes
a.1. Manufactured for “use” at operating temperatures above 573 K (300 degrees C) either by using special materials or by special heat treatment; or	
a.2. With lubricating elements or component modifications that, according to the manufacturer’s specifications, are specially designed to enable the bearings to operate at speeds exceeding 2.3 million DN.	
b. Solid tapered roller bearings, having tolerances specified by the manufacturer in accordance with ANSI/AFBMA Class 00 (inch) or Class A (metric) or better (or equivalents) and having any of the following characteristics.	
b.1. With lubricating elements or component modifications that, according to the manufacturer’s specifications, are specially designed to enable the bearings to operate at speeds exceeding 2.3 million DN; or	
b.2. Manufactured for “use” at operating temperatures below 219 K (54 degrees C) or above 423 K (150 degrees C).	
c. Gas-lubricated foil bearing manufactured for “use” at operating temperatures of 561 K (288 °C) or higher and a unit load capacity exceeding 1 MPa.	
d. Active magnetic bearing systems.	Yes
e. Fabric-lined self-aligning or fabric-lined journal sliding bearings manufactured for “use” at operating temperatures below 219 K(-54 degrees C) or above 423 K (150 degrees C).	
2A992 Piping, fittings and valves made of, or lined with stainless, copper-nickel alloy or other alloy steel containing 10% or more nickel and/or chromium as follows:	
a. Pressure tube, pipe, and fittings of 200 mm (8 in.) or more inside diameter, and suitable for operation at pressures of 3.4 MPa (500 psi) or greater;	
b. Pipe valves having all of the following characteristics that are not controlled by 2B350.g of Annex I of the Dual-Use Regulation;	
b.1. A pipe size connection of 200 mm (8 in.) or more inside diameter; and	
b.2. Rated at 10.3 MPa (1,500 psi) or more.	
2A993 Pumps designed to move molten metals by electromagnetic forces.	
2A994 Portable electric generators, weighing 2300 kg or less on wheels or transportable in a 2½ ton truck without a special set up requirement and specially designed components thereof.	
2A999 Specific processing equipment as follows:	
a. Bellows sealed valves;	
<i>TECHNICAL NOTES FOR 2B991 TO 2B999:</i>	
<i>1. Secondary parallel contouring axes, (e.g., the w-axis on horizontal boring mills or a secondary rotary axis the centre line of which is parallel to the primary rotary axis) are not counted in the total number of contouring axes. Rotary axes need not rotate over 360°. A rotary axis can be driven by a linear device (e.g., a screw or a rack-and-pinion).</i>	
<i>2. The number of axes which can be coordinated simultaneously for “contouring control” is the number of axes along or around which, during processing of the workpiece, simultaneous and interrelated motions are performed between the workpiece and a tool. This does not include any additional axes along or around which other relative motions within the machine are performed, such as:</i>	
<i>2.a. Wheel-dressing systems in grinding machines;</i>	Yes
<i>2.b. Parallel rotary axes designed for mounting of separate workpieces;</i>	
<i>2.c. Co-linear rotary axes designed for manipulating the same workpiece by</i>	

<i>holding it in a chuck from different ends.</i>	
<i>3. Axis nomenclature shall be in accordance with International Standard ISO 841:2001, Industrial automation systems and integration - Numerical control of machines - Coordinate system and motion nomenclature.</i>	Yes
<i>4. A “tilting spindle” is counted as a rotary axis.</i>	Yes
<i>5. ‘Stated “unidirectional positioning repeatability”’ may be used for each specific machine model as an alternative to individual machine tests, and is determined as follows:</i>	Yes
<i>5.a. Select five machines of a model to be evaluated;</i>	Yes
<i>5.b. Measure the linear axis repeatability (<math>R_{\uparrow}, R_{\downarrow}</math>) according to ISO 230-2:2014 and evaluate “unidirectional positioning repeatability” for each axis of each of the five machines;</i>	Yes
<i>5.c. Determine the arithmetic mean value of the “unidirectional positioning repeatability”-values for each axis of all five machines together. These arithmetic mean values “unidirectional positioning repeatability” ( ) become the stated value of each axis for the model...( x, y, ...);</i>	Yes
<i>5.d. Since the Category 2 list refers to each linear axis there will be as many ‘stated “unidirectional positioning repeatability”’ values as there are linear axes;</i>	Yes
<i>5.e. If any axis of a machine model not controlled by 2B001.a. to 2B001.c. has a ‘stated “unidirectional positioning repeatability”’ equal to or less than the specified “unidirectional positioning repeatability” of each machine tool model plus 0.7 <math>\mu\text{m}</math>, the builder should be required to reaffirm the accuracy level once every eighteen months.</i>	Yes
<i>6. For the purpose of 2B, measurement uncertainty for the “unidirectional positioning repeatability” of machine tools, as defined in the International Standard ISO 230-2:2014, shall not be considered.</i>	Yes
<i>7. For the purpose of 2B, the measurement of axes shall be made according to test procedures in 5.3.2. of ISO 230-2:2014. Tests for axes longer than 2 meters shall be made over 2 m segments. Axes longer than 4 m require multiple tests (e.g., two tests for axes longer than 4 m and up to 8 m, three tests for axes longer than 8 m and up to 12 m), each over 2 m segments and distributed in equal intervals over the axis length. Test segments are equally spaced along the full axis length, with any excess length equally divided at the beginning, in between, and at the end of the test segments. The smallest “unidirectional positioning repeatability”-value of all test segments is to be reported.</i>	Yes
2B991 Numerical control units for machine tools and “numerically controlled” machine tools as follows:	
a. Numerical control units for machine tools:	
a.1. Having four interpolating axes that can be coordinated simultaneously for “contouring control”; or	
a.2. Having two or more axes that can be coordinated simultaneously for contouring control and a minimum programmable increment better (less) than 0.001 mm;	
a.3. “Numerical control” units for machine tools having two, three or four interpolating axes that can be coordinated simultaneously for contouring control and capable of receiving directly (online) and processing computer aided design (CAD) data for internal preparation of machine instructions; or	
b. Motion control boards specially designed for machine tools and having any of the following characteristics:	
b.1. Interpolation in more than four axes;	
b.2. Capable of “real-time processing” of data to modify tool path, feed rate and spindle data, during the machining operation, by any of the following:	
b.2.a. Automatic calculation and modification of part programme data for machining in two or more axes by means of measuring cycles and access to source data; or	

b.2.b. “Adaptive control” with more than one physical variable measured and processed by means of a computing model (strategy) to change one or more machining instructions to optimise the process.	
b.3. Capable of receiving and processing CAD data for internal preparation of machine instructions; or	
c. “Numerically controlled” machine tools that, according to the manufacturer’s technical specifications, can be equipped with electronic devices for simultaneous “contouring control” in two or more axes and that have both of the following characteristics:	
c.1. Two or more axes that can be coordinated simultaneously for contouring control; and	
c.2. Positioning accuracies according to ISO 230/2 (2006), with all compensations available:	
c.2.a. Better than 15 mm along any linear axis (overall positioning) for grinding machines;	
c.2.b. Better than 15 mm along any linear axis (overall positioning) for milling machines; or	
c.2.c. Better than 15 mm along any linear axis (overall positioning) for turning machines; or	
d. Machine tools, as follows, for removing or cutting metals, ceramics or composites, that, according to the manufacturer’s technical specifications, can be equipped with electronic devices for simultaneous “contouring control” in two or more axes:	
d.1. Machine tools for turning, grinding, milling or any combination thereof, having two or more axes that can be coordinated simultaneously for “contouring control” and having any of the following characteristics:	
d.1.a. One or more contouring tilting spindles; <i>Note: 2B991.d.1.a. applies to machine tools for grinding or milling only.</i>	
d.1.b. Camming (axial displacement) in one revolution of the spindle less (better) than 0.0006 mm total indicator reading (TIR); <i>Note: 2B991.d.1.b. applies to machine tools for turning only.</i>	
d.1.c. Run out (out of true running) in one revolution of the spindle less (better) than 0.0006 mm total indicator reading (TIR);	
d.1.d. The positioning accuracies with all compensations available, are less (better) than: 0.001° on any rotary axis;	
d.2. Electrical discharge machines (EDM) of the wire feed type that have five or more axes that can be coordinated simultaneously for “contouring control”.	Yes
2B992 Non “numerically controlled” machine tools for generating optical quality surfaces as follows and specially designed components therefor.	
a. Turning machines using a single point cutting tool and having all of the following characteristics:	
a.1. Slide positioning accuracy less (better) than 0.0005 mm per 300 mm of travel;	
a.2. Bidirectional slide positioning repeatability less (better) than 0.00025 mm per 300 mm of travel;	
a.3. Spindle “run out” and “camming” less (better) than 0.0004 mm total indicator reading (TIR);	
a.4. Angular deviation of the slide movement (yaw, pitch and roll) less (better) than 2 seconds of arc, TIR, over full travel; and	
a.5. Slide perpendicularity less (better) than 0.001 mm per 300 mm of travel; <i>Technical Note: The bidirectional slide positioning repeatability (R) of an axis is the maximum value of the repeatability of positioning at any position along or around the axis determined using the procedure and under the conditions specified in Part 2.11 of ISO 230/2: 1988.</i>	

b. Fly cutting machines having all of the following characteristics:	
b.1. Spindle “run out” and “camming” less (better) than 0.0004 mm TIR; and	
b.2. Angular deviation of slide movement (yaw, pitch and roll) less (better) than 2 seconds of arc, TIR, over full travel.	
2B993 Gearmaking and/or finishing machinery capable of producing gears to a quality level of better than AGMA 11.	Yes
2B996 Dimensional inspection or measuring systems or equipment as follows. a. Manual dimensional inspection machines, having both of the following characteristics: a.1. Two or more axes; and a.2. A measurement uncertainty equal to or less (better) than $(3 + L/300)$ micrometre in any axes (L measured length in mm).	
2B997 “Robots” that are capable of employing feedback information in real-time processing from one or more sensors to generate or modify “programs” or to generate or modify numerical program data.	
2B998 Assemblies, circuit boards or inserts as follows specially designed for machine tools controlled by 2B991, or for equipment controlled by 2B993, 2B996 or 2B997.	Yes
a. Spindle assemblies, consisting of spindles and bearings as a minimal assembly, with radial (“run out”) or axial (“camming”) axis motion in one revolution of the spindle less (better) than 0.0006 mm total indicator reading (TIR);	
b. Single point diamond cutting tool inserts, having all of the following characteristics: b.1. Flawless and chip free cutting edge when magnified 400 times in any direction; b.2. Cutting radius from 0.1 to 5 mm inclusive; and b.3. Cutting radius out of roundness less (better) than 0.002 mm TIR.	
c. Specially designed printed circuit boards with mounted parts or components capable of upgrading, according to the manufacturer’s specifications, “numerical control” units, machine tools or feed-back devices to or above the levels specified in 2B991, 2B993, 2B996, 2B997, or 2B998.	Yes
2B999 Specific processing equipment, as follows:	
a. Isostatic presses;	
b. Bellows manufacturing equipment, including hydraulic forming equipment and bellows forming dies;	
c. Laser welding machines;	
d. MIG welders;	
e. E-beam welders;	
f. Monel equipment, including valves, piping, tanks and vessels;	
g. 304 and 316 stainless steel valves, piping, tanks and vessels; <i>Note: Fittings are considered part of “piping” for purposes of 2B999.g.</i>	
h. Mining and drilling equipment, as follows:	
h.1. Large boring equipment capable of drilling holes greater than 60cm in diameter;	
h.2. Large earth-moving equipment used in the mining industry;	
i. Electroplating equipment designed for coating parts with nickel or aluminium;	
j. Pumps designed for industrial service and for “use” with an electrical motor of 5 HP or greater;	
k. Vacuum valves, piping, flanges, gaskets and related equipment specially designed for use in high-vacuum service;	
l. Spin forming and flow forming machines;	
m. Centrifugal multiplane balancing machines;	
n. Austenitic stainless-steel plate, valves, piping, tanks and vessels.	



2D983 “Software” specially designed or modified for the “development”, “production” or “use” of equipment controlled by 2A983.	
2D984 “Software” required for the “development”, “production” or “use” of concealed object detection equipment controlled by 2A984.	Yes
2D991 “Software” specially designed for the “development”, “production” or “use” of equipment controlled by 2B991, 2B993, or 2B996, 2B997, and 2B998.	Yes
2D992 Specific “software”, as follows (see List of Items Controlled).	
a.1. For flexible manufacturing units (FMUs) which consist at least of	
(1) A machine tool described in 2B001.c. of Annex I of the Dual-Use Regulation; and	
(2) A dimensional inspection machine described in Category 2 of Annex I of the Dual-Use Regulation, or another digitally controlled measuring machine controlled by an entry in Category 2 of Annex I of the Dual-Use Regulation; and	Yes
a.2. Capable of generating or modifying, in “real-time processing”, programs or data by using the signals obtained simultaneously by means of at least two detection techniques, such as:	Yes
a.2.a. Machine vision (optical ranging);	Yes
a.2.b. Infrared imaging;	Yes
a.2.c. Acoustical imaging (acoustical ranging);	Yes
a.2.d. Tactile measurement;	Yes
a.2.e. Inertial positioning;	Yes
a.2.f. Force measurement; and	Yes
a.2.g. Torque measurement.	Yes
<i>Note: 2D992.a. does not control “software” which only provides rescheduling of functionally identical equipment within “flexible manufacturing units” using prestored part programs and a prestored strategy for the distribution of the part programs.</i>	
2D993 “Software” specially designed or modified for the “development”, “production” or “use” of items controlled by 2A992 or 2A993.	
2D994 “Software” specially designed for the “development” or “production” of portable electric generators controlled by 2A994.	
2E984 “Technology” required for the “development”, “production” or “use” of equipment controlled by 2A984 or required for the “development” of “software” controlled by 2D984.	Yes
2E991 “Technology” for the use of equipment controlled by 2B991, 2B993, 2B996, or 2B997.	
2E993 “Technology” according to the General Technology Note of Annex I of the Dual-Use Regulation for the “use” of equipment controlled by 2A992 or 2A993.	
2E994 “Technology” for the “use” of portable electric generators controlled by 2A994.”	

SCHEDULE 2

Regulation 12(5)

Insertion into Part 8 of Schedule 2A

**“Jet fuel and fuel additives**

Any thing falling within a commodity code mentioned in column 1 of the following table.

<i>Commodity code (1)</i>	<i>Item (2)</i>
	Jet fuel (other than kerosene):
2710 12 70	—spirit type jet fuel (light oils)
2710 19 29	—other than kerosene (medium oils)
2710 19 21	—kerosene type jet fuel (medium oils)
2710 20 90	—kerosene type jet fuel blended with biodiesel
	Oxidation inhibitors Oxidation inhibitors used in additives for lubricating oils:
3811 21 00	— oxidation inhibitors containing petroleum oils
3811 29 00	— other oxidation inhibitors
3811 90 00	Oxidation inhibitors used for other liquids used for the same purpose as mineral oils
	Static dissipater additives Static dissipater additives for lubricating oils:
3811 21 00	— containing petroleum oils
3811 29 00	— other
3811 90 00	Static dissipater additives for other liquids used for the same purpose as mineral oils
	Corrosion inhibitors Corrosion inhibitors for lubricating oils:
3811 21 00	— containing petroleum oils
3811 29 00	— other
3811 90 00	Corrosion inhibitors for other liquids used for the same purpose as mineral oils
	Fuel system icing inhibitors (anti-icing additives) Fuel system icing inhibitors for lubricating oils:
3811 21 00	— containing petroleum oils
3811 29 00	— other
3811 90 00	Fuel system icing inhibitors for other liquids used for the same purpose as mineral oils
	Metal de-activators Metal de-activators for lubricating oils:
3811 21 00	—containing petroleum oils
3811 29 00	— other
3811 90 00	Metal de-activator for other liquids used for the same purpose as mineral oils
	Biocide additives Biocide additives for lubricating oils:

3811 21 00	— containing petroleum oils
3811 29 00	— other
3811 90 00	Biocide additives for other liquids used for the same purpose as mineral oils
	Thermal stability improver additives Thermal stability improver for lubricating oils:
3811 21 00	— containing petroleum oils
3811 29 00	— other
3811 90 00	Thermal stability improver for other liquids used for the same purposes as mineral oils”

## SCHEDULE 3

Regulation 12(8)

### Insertion of Schedules 3C and 3D

## “SCHEDULE 3C

Regulation 21

### DEFENCE AND SECURITY GOODS AND DEFENCE AND SECURITY TECHNOLOGY

#### PART 1

#### PRELIMINARY

##### **Application to non-government controlled Ukrainian territory**

1. Regulation 53A applies, subject to paragraph 2, in relation to all the goods and technology specified in Parts 2, 3 and 4.

##### **CAS numbers**

2.—(1) For the purposes of this Schedule “CAS Number” when followed by a numerical sequence is a reference to the CAS Registry Numbers assigned to chemicals by the Chemical Abstracts Service(a).

(2) But regulation 53A applies to chemicals of the same structural formula (including hydrates) regardless of name or CAS Number.

#### PART 2

##### Interception and monitoring goods and interception and monitoring technology

##### **Interception and monitoring equipment**

1. This Part applies to any goods which can perform any of the following functions (whether individually or as part of a system)—

- (a) deep packet inspection;

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(a) <https://www.cas.org/cas-data/cas-registry>.

- (b) network interception, including associated systems management and data retention functions;
- (c) radio frequency monitoring, including associated processing or examination;
- (d) network and satellite jamming;
- (e) remote infection;
- (f) speaker recognition, including associated processing functions;
- (g) IMSI, MSISDN, IMEI and TMSI interception and monitoring;
- (h) tactical SMS, GSM, GPS, GPRS, UMTS, CDMA, and PSTN interception and monitoring;
- (i) DHCP, SMTP and GTP information interception and monitoring;
- (j) pattern recognition and pattern profiling;
- (k) remote forensics;
- (l) semantic processing;
- (m) WEP and WPA code breaking;
- (n) interception of VoIP (including proprietary and standard protocols).

2. Any software which can perform any of the functions described in paragraph 1(a) to (n) (whether individually or as part of a system).

**Other software and other technology**

3. Any software or other technology which is specially designed for the development, production or use of any goods or software described in paragraph 1 or 2.

**Interpretation**

4. For the purposes of this Part, the following terms have the meaning given to them in the Dual-Use Regulation—

- “development”;
- “production”;
- “software”;
- “technology”;
- “use”.

**PART 3**

**Internal repression goods and internal repression technology**

**Firearms and related goods**

- 1. Firearms, ammunition and related accessories, as follows—
  - (a) firearms;
  - (b) ammunition specially designed for firearms;
  - (c) weapon-sights.
- 2. Simulators for training persons to use firearms.
- 3. Bombs and grenades.

## **Vehicles**

**4.**—(1) Subject to sub-paragraph (3), the following types of vehicles—

- (a) vehicles equipped with a water cannon, specially designed or modified for the purpose of riot control;
- (b) vehicles specially designed or modified to be electrified to repel boarders;
- (c) vehicles specially designed or modified to remove barricades, including construction equipment with ballistic protection;
- (d) vehicles specially designed for the transport or transfer of prisoners or detainees;
- (e) vehicles specially designed to deploy mobile barriers.

(2) Components for the vehicles specified in sub-paragraphs (1)(a) to (e) that have been designed for the purposes of riot control.

(3) Vehicles that might otherwise fall within sub-paragraph (1)(a) to (e) are not internal repression goods if they are specially designed for the purposes of fire-fighting.

(4) For the purposes of this paragraph, “vehicle” includes a trailer.

## **Explosive substances and related goods**

**5.**—(1) Equipment and devices specially designed to initiate explosions by electrical or non-electrical means, including—

- (a) firing sets;
- (b) detonators; (codes for electric detonators and detonating caps);
- (c) igniters;
- (d) boosters;
- (e) detonating cord.

(2) Components that have been specially designed for any thing mentioned in sub-paragraph (1).

(3) Sub-paragraphs (1) and (2) do not apply to any thing that has been specially designed for a specific commercial use.

(4) For the purpose of sub-paragraph (3), a “specific commercial use” means the actuation or operation by explosive means of other equipment or devices the function of which is not the creation of explosions, including—

- (a) car air-bag inflaters;
- (b) electric-surge arresters;
- (c) fire sprinkler actuators.

(5) Linear cutting explosive charges.

(6) The following explosives and related substances—

- (a) amatol;
- (b) nitrocellulose (containing more than 12.5 % nitrogen);
- (c) nitroglycol;
- (d) pentaerythritol tetranitrate (PETN);
- (e) picryl chloride;
- (f) 2,4,6-trinitrotoluene (TNT).

## **Other goods**

**6.**—(1) Subject to sub-paragraph (2), the following equipment designed for the protection of a person—

- (a) body armour providing ballistic or stabbing protection or both;
  - (b) helmets providing ballistic or fragmentation protection, or both, including anti-riot helmets;
  - (c) anti-riot shields and ballistic shields.
- (2) Sub-paragraph (1) does not apply to—
- (a) any thing specially designed to protect persons for the following purposes—
    - (i) participation in competitive sport;
    - (ii) ensuring safety at work;
  - (b) any thing mentioned in sub-paragraph (1)(a) or (b) when accompanying a person for that person's own protection.

**7.** Night vision equipment.

**8.** Thermal imaging equipment.

**9.** Image intensifier tubes.

**10.** Razor barbed wire.

**11.** The following types of knives—

- (a) knives that are designed for use by military personnel (military knives);
- (b) knives that are designed for use as a weapon for inflicting injury (combat knives);
- (c) bayonets with blade lengths in excess of 10 cm.

**12.** Law enforcement striking weapons, including saps, police batons, side handle batons, tonfas, sjamboks, and whips.

**13.—(1)** Handcuffs, straitjackets and specially designed components and accessories.

(2) Sub-paragraph (1) does not apply to—

- (a) medical devices that are equipped to restrain patient movement during medical procedures;
- (b) devices which confine memory impaired patients to appropriate medical facilities.

**14.** Technology exclusively for the development or production of equipment controlled by paragraph 15.

**15.** Chemical agents, including tear gas formulation containing 1 per cent. or less of orthochlorobenzalmalononitrile (CS), or 1 per cent. or less of chloroacetophenone (CN), except in individual containers with a net weight of 20 grams or less; liquid pepper except when packaged in individual containers with a net weight of 3 ounces (85.05 grams) or less; smoke bombs; non-irritant smoke flares, canisters, grenades and charges; and other pyrotechnic articles having dual military and commercial use, and specially designed components thereof.

**16.** Fingerprinting powders, dyes, and inks.

### **Production equipment**

**17.** Any equipment which is specially designed or modified for the development or for one or more of the production phases of any item mentioned in paragraphs 1 to 13 of this Part.

### **Software and technology**

**18.** Any software which is specially designed for the simulators mentioned in paragraph 2.

19. Any technology which is specially designed for the development, production or use of any item mentioned in paragraphs 1 to 11.

### Interpretation

20.—(1) In this Part, “firearm” means any portable barrelled weapon that expels, is designed to expel or may be converted to expel, a shot, bullet or projectile by the action of a combustible propellant.

(2) For the purposes of this Schedule, the following terms have the meaning given to them in Annex I of the Dual-Use Regulation—

“development”;

“production”;

“software”;

“technology”;

“use”.

## PART 4

### Chemicals and equipment

#### Chemicals

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Regulation 53A applies?</i>
Aluminium chloride	(7446-70-0)	
Dichloromethane	(75-09-2)	
N,N-Dimethylaniline	(121-69-7)	
Isopropyl bromide	(75-26-3)	
Isopropyl ether	(108-20-3)	
Monoisopropylamine	(75-31-0)	
Potassium Bromide	(7758-02-3)	
Pyridine	(110-86-1)	
Sodium bromide	(7647-15-6)	
Sodium metal	(7440-23-5)	
Tributylamine	(102-82-9)	
Triethylamine	(121-44-8)	
Trimethylamine	(75-50-3)	
Diethylenetriamine	(111-40-0)	
Butyrylcholinesterase (BCHE)	Not Applicable	Yes
Pyridostigmine bromide	(101-26-8)	
Obidoxime chloride	(114-90-9)	
Acetylene	(CAS 74-86-2)	
Acetone	(CAS 67-64-1)	
Antimony	(CAS 7440-36-0)	
Arsenic	(CAS 7440-38-2)	
Arsenic trioxide	(CAS 1327-53-3)	
Bis(2-chloroethyl)ethylamine hydrochloride	(CAS 3590-07-6)	
Bis(2-chloroethyl)methylamine hydrochloride	(CAS 55-86-7)	
Benzil	(CAS 134-81-6)	
Benzaldehyde	(CAS 100-52-7)	

Benzoin	(CAS 119-53-9)	
2-bromochloroethane	(CAS 107-04-0)	
Chlorine	(CAS 7782-50-5)	
Diethyl ether	(CAS 60-29-7)	
Dimethyl ether	(CAS 115-10-6)	
Dimethylaminoethanol	(CAS 108-01-0)	
Dicyclohexylamine (DCA)	(CAS 101-83-7)	
Ethylene	(CAS 74-85-1)	
Ethylene dichloride	(CAS 107-06-2)	
2-methoxyethanol	(CAS 109-86-4)	
Ethyl bromide	(CAS 74-96-4)	
Ethyl chloride	(CAS 75-00-3)	
Ethylamine	(CAS 75-04-7)	
Ethylene oxide	(CAS 75-21-8)	
Fluorapatite	(CAS 1306-05-4)	
Hexamine	(CAS 100-97-0)	Yes
Hydrogen sulfide	(CAS 7783-06-4)	
Isocyanatomethane	(CAS 624-83-9)	
Isopropanol, 95% concentration or greater	(CAS 67-63-0)	
Mandelic acid	(CAS 90-64-2)	
Methylamine	(CAS 74-89-5)	
Methyl bromide	(CAS 74-83-9)	
Methyl chloride	(CAS 74-87-3)	
Methyl iodide	(CAS 74-88-4)	
Methylmercaptan	(CAS 74-93-1)	
Monoethylene Glycol (MEG)	(CAS 107-21-1)	
Nitromethane	(CAS 75-52-5)	
Oxalyl chloride	(CAS 79-37-8)	
Picric acid	(CAS 88-89-1)	
Potassium sulfide	(CAS 1312-73-8)	
Potassium thiocyanate	(CAS 333-20-0)	
Quinaldine	(CAS 91-63-4)	
Thiophosphoryl chloride	(CAS 3982-91-0)	
Tributylphosphite	(CAS 102-85-2)	
Triisobutylphosphite	(CAS 1606-96-8)	
Tris(2-chloroethyl)amine hydrochloride	(CAS 817-09-4)	
Sodium hypochlorite	(CAS 7681-52-9)	
Sulfur trioxide	(CAS 7446-11-9)	
White/yellow phosphorus	(CAS 12185-10-3, 7723-14-0)	
Mercury	(7439-97-6)	
Barium chloride	(10361-37-2)	
Sulphuric acid, with a concentration by weight of 90% or greater	(7664-93-9)	
3,3-dimethyl-1-butene	(558-37-2)	
2,2-dimethylpropanal	(630-19-3)	
2,2-dimethylpropylchloride	(753-89-9)	
2-methylbutene	(26760-64-5)	



2-chloro-3-methylbutane	(631-65-2)	
2,3-dimethyl-2,3-butanediol	(76-09-5)	
2-methyl-2-butene	(513-35-9)	
Butyl lithium	(109-72-8)	
Bromo(methyl)magnesium	(75-16-1)	
Formaldehyde	(50-00-0)	
Diethanolamine	(111-42-2)	
Dimethylcarbonate	(616-38-6)	
Methyldiethanolamine hydrochloride	(54060-15-0)	
Methanol	(67-56-1)	
Ethanol	(64-17-5)	Yes
1-butanol	(71-36-3)	
2-butanol	(78-92-2)	
Iso-butanol	(78-83-1)	
Tert-butanol	(75-65-0)	
Cyclohexanol	(108-93-0)	
Diethylamine hydrochloride	(660-68-4)	
Diisopropylamine hydrochloride	(819-79-4)	
3-Quinuclidinone hydrochloride	(1193-65-3)	
3-Quinuclidinol hydrochloride	(6238-13-7)	
(R)-3- Quinuclidinol hydrochloride	(42437-96-7)	
N,N-Diethylaminoethanol hydrochloride	(14426-20-1)	
Acetyl-alpha-methylfentanyl	101860-00-8	
Alfentanil	71195-58-9	
Alpha-methylfentanyl	79704-88-4	
Alpha-methylthiofentanyl	103963-66-2	
Beta-hydroxyfentanyl	78995-10-5	
Beta-hydroxy-3-methylfentanyl	78995-14-9	
Fentanyl	437-38-7	
3-methylfentanyl	42045-86-3	
3-methylthiofentanyl	86052-04-2	
Para-fluorofentanyl	90736-23-5	
Remifentanil	132875-61-7	
Sufentanil	56030-54-7	
Thiofentanyl	60771-38-2	
Acryloylfentanyl (Acrylfentanyl)	82003-75-6	
Carfentanil	59708-52-0	
4-Fluoroisobutyrfentanyl (4-FIBF, pFIBF)	244195-32-2	
Furanyl fentanyl	101345-66-8	
Ocfentanil	101343-69-5	
Tetrahydrofuranfentanyl (THF-F)	2142571-01-3	
Cyclopropylfentanyl	1169-68-2	
Methoxyacetylfentanyl	101345-67-9	

Orthofluorofentanyl	910616-29-4	
Parafluorobutyrylfentanyl	244195-31-1	
Crotonylfentanyl	760930-59-4	
Valeryl fentanyl	122882-90-0	
4-Anilino- <i>N</i> -phenethylpiperidine (ANPP)	21409-26-7	
<i>N</i> -Phenethyl-4-piperidone (NPP)	39742-60-4	
Dialkyl( $\leq$ C10) chlorophosphates	N/A	
Dialkyl( $\leq$ C10) fluorophosphates	N/A	
<i>N,N</i> -Methylisopropylacetamide	1339185-57-7	
<i>N,N</i> -Methylethylacetamide	1339632-40-4	
<i>N,N</i> -Ethylisopropylacetamide	1339156-10-3	
<i>N,N</i> -Methylpropylacetamide	1344238-28-3	
<i>N,N</i> -Ethylpropylacetamide	1339737-43-7	
<i>N,N</i> -Isopropylpropylacetamide	1341389-98-7	
<i>N,N</i> -Methylethylpropanamide	1339424-26-8	
<i>N,N</i> -Ethylisopropylpropanamide	1344354-09-1	
<i>N,N</i> -Methylpropylpropanamide	1340216-25-2	
<i>N,N</i> -Ethylpropylpropanamide	1341493-60-4	
<i>N,N</i> -Isopropylpropylpropanamide	1343225-93-3	
<i>N,N</i> -Methylisopropylpropanamide	1339042-55-5	
<i>N,N</i> -Methylethylbutanamide	1341049-51-1	
<i>N,N</i> -Methylpropylbutanamide	1343721-02-7	
<i>N,N</i> -Ethylpropylbutanamide	1343806-12-1	
<i>N,N</i> -Isopropylpropylbutanamide	1343316-02-8	
<i>N,N</i> -Methylisopropylbutanamide	1340219-94-4	
<i>N,N</i> -Ethylisopropylbutanamide	1342204-10-7	
<i>N,N</i> -Methylethylisobutanamide	1342365-47-2	
<i>N,N</i> -Ethylpropylisobutanamide	1342566-58-8	
<i>N,N</i> -Methylpropylisobutanamide	1342270-21-6	
<i>N,N</i> -	1342156-11-9	

Isopropylpropylisobutanamide		
N,N-Methylisopropylisobutanamide	1341992-96-8	
N,N-Ethylisopropylisobutanamide	1339048-76-8	
N,N-Dimethylacetamide hydrobromide	1801188-12-4	
N,N-Dimethylacetamide hydrochloride	2909-15-1	
N,N-Diethylacetamide hydrochloride	91400-32-7	
N,N-Diethylacetamide hydrobromide	78053-54-0	
N,N-Dimethylpropanamide dihydrochloride	79972-73-9	
N,N-Dimethylpropanamide hydrochloride	56776-15-9	

### Equipment

<i>Item</i>	<i>Regulation 53A applies?</i>
Floor-mounted fume hoods (walk-in style) with a minimum nominal width of 2.5 metres.	
Full face-mask air-purifying and air-supplying respirators.	Yes
Class II biosafety cabinets and glove boxes.	
Batch centrifuges with a rotor capacity of 4 L or greater, usable with biological materials.	
Fermenters with an internal volume of 10 L – 20 L, usable with biological materials.	Yes
Reaction vessels, reactors, agitators, heat exchangers, condensers, pumps (including single seal pumps), valves, storage tanks, containers, receivers, and distillation or absorption columns that meet AG performance parameters, regardless of their materials of construction.	Yes
Conventional or turbulent air-flow clean-air rooms and self-contained fan-HEPA filter units that may be used for P3 or P4 (BSL 3, BSL 4, L3, L4) containment facilities.	

Vacuum pumps with a manufacturer's specified maximum flow-rate greater than 1 m <sup>3</sup> /h (under standard temperature and pressure conditions), casings (pump bodies), 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 controlled materials.	
Laboratory equipment, including parts and accessories for such equipment, for the analysis or detection, destructive or non-destructive, of chemical substances.	
Whole chlor-alkali electrolysis cells – mercury, diaphragm, and membrane.	
Titanium electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Bipolar titanium nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Asbestos diaphragms specially designed for use in chlor-alkali cells.	
Fluoropolymer based diaphragms specially designed for use in chlor-alkali cells.	
Fluoropolymer based ion exchange membranes specially designed for use in chlor-alkali cells.	
Compressors specially designed to compress wet or dry chlorine, regardless of material of construction.	

Microwave reactors— Machinery, plant or laboratory equipment, whether or not electrically heated, for the treatment of materials by a process involving a change of temperature such as heating 84 19 89 98 00.	Yes
Microreactors— Instruments and apparatus for physical or chemical analysis: 90 27 89 90 00 BE (classified similar item to 90 27 80 17 90, now invalid due to code changes), for similar microreactors.	
Solid & Liquid Aerosol generating equipment— Mechanical appliances (whether or not hand-operated), for projecting, dispersing or spraying liquids or powders: 84 24 89 70 00.	

### Laboratory equipment

<i>Item</i>	<i>Regulation 53A applies?</i>
Next-generation (second generation) and third generation DNA and RNA sequencers	
PCR Machines and qPCR (real-time) PCR machines	Yes
Solid phase DNA and RNA synthesisers	
Peptide synthesizers	
Automated nucleic acid extraction systems	
Ultracentrifuges	
Probe sonicators	
Fast protein liquid chromatography (FPLC) systems (medium pressure chromatography systems)	
Cell disruptors and tissue homogenisers, with a volume of 1 L or greater	

### Associated Parts and Consumables

<i>Item</i>	<i>Regulation 53A applies?</i>
Next generation (second generation) and third generation DNA and RNA sequencers	DNA and RNA sequencing reagent kits Yes
	Library and template preparation kits Cluster generation kits Flow cells Yes Yes
PCR Machines and qPCR (real-time) PCR machines	Yes
Solid phase DNA and RNA synthesisers	Nucleoside phosphoramidites Columns

	Solid support resin	Yes
	Reagent kits	Yes
	Synthesis reagents	Yes
Peptide synthesizers	Fmoc and T-Boc protected amino acids	
	Resins	Yes
	Synthesis reagents	Yes
Automated nucleic acid extraction systems	Reagents	Yes
Ultracentrifuges	Rotor adapters Ultracentrifuge rotors with total capacity 1 L or greater	
Probe sonicators	Sonicator probes over 25mm diameter High volume (1 L or greater) sonicator continuous flow cell	
Fast protein liquid chromatography (FPLC) systems (medium pressure chromatography systems)	FPLC columns	
	Reagents	Yes
Cell disruptors and tissue homogenisers		

**Other related items**

<i>Item</i>	<i>Regulation 53A applies?</i>
0B999 Specific processing equipment as follows:	
a. Ring magnets.	Yes
b. Hot cells.	
c. Glove boxes suitable for use with radioactive materials.	
0D999 Specific software, as follows:	
a. Software for neutronic calculations/modelling;	
b. Software for radiation transport calculations/modelling;	
c. Software for hydrodynamic calculations/modelling.	Yes
1A995 Protective and detection equipment as follows and specially designed components therefor.	
a. Personal radiation monitoring dosimeters;	
b. Equipment limited by design or function to protect against hazards specific to civil industries, such as mining, quarrying, agriculture, pharmaceuticals, medical, veterinary, environmental, waste management, or to the food industry.	
<i>Note: This entry does not control items for protection against chemical or biological agents that are consumer goods, packaged for retail sale or personal use, or medical products, such as latex exam gloves, latex surgical gloves, liquid disinfectant soap, disposable surgical drapes, surgical gowns, surgical foot covers, and surgical masks.</i>	

1A999 Specific processing equipment as follows: Radiation detection, monitoring and measurement equipment	
Radiographic detection equipment such as x-ray converters, and storage phosphor image plates.	Yes
1C991 Vaccines, immunotoxins, medical products, diagnostic and food testing kits, as follows. <i>Technical note:- For the purpose of this entry, 'immunotoxins' are monoclonal antibodies linked to a toxin with the intention of destroying a specific target cell while leaving adjacent cells intact. For the purpose of this entry, "medical products" are: (1) pharmaceutical formulations designed for testing and human (or veterinary) administration in the treatment of medical conditions, (2) prepackaged for distribution as clinical or medical products. For the purpose of this entry, "diagnostic and food testing kits" are specifically developed, packaged and marketed for diagnostic or public health purposes. For the purpose of this entry, "vaccine" is defined as a medicinal (or veterinary) product in a pharmaceutical formulation that is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered. Technical Note: For purposes of the controls described in this entry 'toxins' refers to those toxins, or their subunits, controlled under 1C351.d of Annex I of the Dual-Use Regulation</i>	
a. Vaccines containing, or designed for use against, items controlled by 1C351, 1C353 or 1C354 of Annex I of the Dual-Use Regulation;	Yes
b. Immunotoxins containing items controlled by 1C351.d of Annex I of the Dual-Use Regulation;	Yes
c. Medical products that contain any of the following:	Yes
c.1. Toxins controlled by 1C351.d of Annex I of the Dual-Use Regulation ( <i>except for</i> botulinum toxins controlled by 1C351.d.3 of Annex I of the Dual-Use Regulation, conotoxins controlled by 1C351.d.6, of Annex I of the Dual-Use Regulation or items controlled for CW reasons under 1C351.d.11 or .d.12 of Annex I of the Dual-Use Regulation); or	Yes
c.2. Genetically modified organisms or genetic elements controlled by 1C353.a.3 of Annex I of the Dual-Use Regulation ( <i>except for</i> those that contain, or code for, botulinum toxins controlled by 1C351.d.3 of Annex I of the Dual-Use Regulation or conotoxins controlled by 1C351.d.6 of Annex I of the Dual-Use Regulation);	Yes
d. Medical products not controlled by 1C991.c that contain any of the following:	Yes
d.1. Botulinum toxins controlled by 1C351.d.3 of Annex I of the Dual-Use Regulation;	Yes

- d.2. Conotoxins controlled by 1C351.d.6 of Annex I of the Dual-Use Regulation; or Yes
- d.3. Genetically modified organisms or genetic elements controlled by 1C353.a.3 of Annex I of the Dual-Use Regulation that contain, or code for, botulinum toxins controlled by 1C351.d.3 of Annex I of the Dual-Use Regulation or conotoxins controlled by 1C351.d.6 of Annex I of the Dual-Use Regulation; Yes
- e. Diagnostic and food testing kits containing items controlled by 1C351.d of Annex I of the Dual-Use Regulation. Yes

1C995 Mixtures that contain chemicals controlled by 1C350 or 1C450 of Annex 1 of the Dual-Use Regulation and medical, analytical, diagnostic, and food testing kits that contain chemicals controlled by 1C350, as follows:

For the purpose of this entry, “medical, analytical, diagnostic, and food testing kits” are pre-packaged materials of defined composition that are specifically developed, packaged and marketed for medical, analytical, diagnostic, or public health purposes.

a. Mixtures containing the following concentrations of precursor chemicals controlled by 1C350 of Annex I of the Dual-Use Regulation:

a.1. Mixtures containing 10 per cent. or less, by weight, of any of the following—

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Regulation 53A applies?</i>
Arsenic trichloride;	7784-34-1	
Benzilic acid;	76-93-7	
Diethyl ethylphosphonate;	78-38-6	
Diethyl methylphosphonate;	683-08-9	
Diethyl methylphosphonite	15715-41-0	
Diethyl-N,N-dimethylphosphoroamidate;	2404-03-7	
N,N-Diisopropylaminoethanethiol hydrochloride;	41480-75-5	
N,N-Diisopropyl-beta-aminoethane thiol;	5842-07-9	
N,N-Diisopropyl-beta-aminoethanol;	96-80-0	
N,N-Diisopropyl-beta-aminoethyl chloride;	96-79-7	
N,N-Diisopropyl-beta-aminoethyl chloride hydrochloride;	4261-68-1	
Dimethyl ethylphosphonate;	6163-75-3	
Dimethyl methylphosphonate;	756-79-6	
N,N-dimethylamino-phosphoryl dichloride;	677-43-0	
Ethyl phosphonous dichloride [Ethyl phosphinyl dichloride];	1498-40-4	
Ethyl phosphonous difluoride [Ethyl phosphinyl	430-78-4	



difluoride];	
Ethyl phosphonyl dichloride;	1066-50-8
Methylphosphonic acid;	993-13-5
Methylphosphonothioic dichloride.	676-98-2
Pinacolyl alcohol;	464-07-3
3-Quinuclidinol;	1619-34-7
Thiodiglycol.	111-48-8

a.2. Mixtures containing less than 30 per cent., by weight, of:

a.2.a. Any of the following—

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Regulation 53A applies?</i>
Diethyl phosphite;	762-04-9	
Dimethyl phosphite (dimethyl hydrogen phosphite);	868-85-9	
Ethyldiethanolamine;	139-87-7	
Phosphorus oxychloride;	10025-87-3	
Phosphorus pentachloride;	10026-13-8	
Phosphorus trichloride;	7719-12-2	
Sulfur dichloride;	10545-99-0	
Sulfur monochloride;	10025-67-9	
Thionyl chloride;	7719-09-7	
Triethanolamine;	102-71-6	
Triethyl phosphite;	122-52-1	
Trimethyl phosphite.	121-45-9	

or

a.2.b. Any of the following single precursor chemicals—

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Regulation 53A applies?</i>
Ammonium hydrogen fluoride;	1341-49-7	
2-Chloroethanol;	107-07-3	
Diethylamine;	109-89-7	
N,N-Diethylaminoethanol;	100-37-8	
Diethyl chlorophosphite;	589-57-1	
O,O-Diethyl phosphorodithioate;	298-06-6	
O,O-Diethyl phosphorothioate;	2465-65-8	
Di-isopropylamine;	108-18-9	
Dimethylamine;	124-40-3	
Dimethylamine hydrochloride;	506-59-2	
Ethyl chlorofluorophosphate;	762-77-6	
Ethyl dichlorophosphate;	1498-51-7	
Ethyl difluorophosphate;	460-52-6	
Hydrogen fluoride;	7664-39-3	
3-Hydroxyl-1-methylpiperidine;	3554-74-3	
Methyl benzilate;	76-89-1	
Methyl	754-01-8	

chlorofluorophosphate;	
Methyl dichlorophosphate;	677-24-7
Methyl difluorophosphate;	22382-13-4
N,N Diethylacetamide;	14277-06-6
N,N-Diethylbutanamide;	53510-30-8
N,N-Diethylformamide;	90324-67-7
N,N	1342789-47-2
Diethylisobutanamide;	
N,N-Diethylpropanamide;	84764-73-8
N,N-	1315467-17-4
Diisopropylbutanamide;	
N,N-	857522-08-8
Diisopropylformamide;	
N,N-Dimethylacetamide;	2909-14-0
N,N-Dimethylbutanamide;	1340437-35-5
N,N-Dimethylformamide;	44205-42-7
N,N-	321881-25-8
Dimethylisobutanamide;	
N,N-	56776-14-8
Dimethylpropanamide;	
N,N-Dipropylacetamide;	1339586-99-0
N,N-Dipropylbutanamide;	1342422-35-8
N,N-Dipropylformamide;	48044-20-8
N,N-	1342700-45-1
Dipropylisobutanamide;	
N,N-	1341496-89-6
Dipropylpropanamide;	
Phosphorus pentasulfide;	1314-80-3
Pinacolone;	75-97-8
Potassium bifluoride;	7789-29-9
Potassium cyanide;	151-50-8
Potassium fluoride;	7789-23-3
3-Quinuclidone;	3731-38-2
Sodium bifluoride;	1333-83-1
Sodium cyanide;	143-33-9
Sodium fluoride;	7681-49-4
Sodium hexafluorosilicate;	16893-85-9
Sodium sulfide;	1313-82-2
Triethanolamine	637-39-8
hydrochloride;	
Tri-isopropyl phosphite.	116-17-6

b. Mixtures containing the following concentrations of toxic or precursor chemicals controlled by 1C450 of Annex I of the Dual-Use Regulation—

b.1. Mixtures containing the following concentrations of CWC Schedule 2 chemicals controlled by 1C450.a.2, 1C450.b1, 1C450.b2, 1C450.b.3, 1C450.b.4, 1C450.b.5 or 1C450.b.6 of Annex I of the Dual-Use Regulation;

b.1.a. Mixtures containing 1 per cent. or less, by weight, of any single CWC Schedule 2 chemical controlled by 1C450.a.2 of Annex I of the Dual-Use Regulation (i.e., mixtures containing PFIB); or

b.1.b. Mixtures containing 10 per cent. or less, by weight, of any single CWC Schedule 2 chemical controlled by 1C450.b1, 1C450.b2, 1C450.b.3, 1C450.b.4, 1C450.b.5 or 1C450.b.6 of Annex I of the Dual-Use Regulation.

b.2. Mixtures containing less than 30 per cent., by weight, of any single CWC Schedule 3 chemical controlled by 1C450.a.4, 1C450.a.5, 1C450.a.6, 1C450.a.7, 1C450.b.8, of Annex I of the Dual-Use Regulation.

c. "Medical, analytical, diagnostic, and food testing kits" that contain precursor chemicals controlled by the following in an amount not exceeding 300 grams per chemical.

<i>Chemical Name</i>	<i>CAS Number</i>	<i>Regulation 53A applies?</i>
Ammonium hydrogen fluoride;	1341-49-7	Yes to all items in column 1 of this table
2-Chloroethanol;	107-07-3	
Diethylamine;	109-89-7	
N,N-Diethylaminoethanol;	100-37-8	
Diethyl chlorophosphite;	589-57-1	
O,O-Diethyl phosphorodithioate;	298-06-6	
O,O-Diethyl phosphorothioate;	2465-65-8	
Di-isopropylamine;	108-18-9	
Dimethylamine;	124-40-3	
Dimethylamine hydrochloride;	506-59-2	
Ethyl chlorofluorophosphate;	762-77-6	
Ethyl dichlorophosphate;	1498-51-7	
Ethyl difluorophosphate;	460-52-6	
Hydrogen fluoride;	7664-39-3	
3-Hydroxy-1-methylpiperidine;	3554-74-3	
Methyl benzilate;	76-89-1	
Methyl chlorofluorophosphate;	754-01-8	
Methyl dichlorophosphate;	677-24-7	
Methyl difluorophosphate;	22382-13-4	
N,N Diethylacetamidine;	14277-06-6	
N,N-Diethylbutanamidine;	53510-30-8	
N,N-Diethylformamidine;	90324-67-7	
N,N-Diethylisobutanamidine;	1342789-47-2	
N,N-Diethylpropanamidine;	84764-73-8	
N,N-Diisopropylbutanamidine;	1315467-17-4	
N,N-Diisopropylformamidine;	857522-08-8	
N,N-Dimethylacetamidine;	2909-14-0	
N,N-Dimethylbutanamidine;	1340437-35-5	
N,N-Dimethylformamidine;	44205-42-7	
N,N-Dimethylisobutanamidine;	321881-25-8	
N,N-Dimethylpropanamidine;	56776-14-8	
N,N-Dipropylacetamidine;	1339586-99-0	
N,N-Dipropylbutanamidine;	1342422-35-8	
N,N-Dipropylformamidine;	48044-20-8	
N,N-Dipropylisobutanamidine;	1342700-45-1	

Dipropylisobutanamidine; N,N-	1341496-89-6
Dipropylpropanamidine;	
Phosphorus pentasulfide;	1314-80-3
Pinacolone;	75-97-8
Potassium bifluoride;	7789-29-9
Potassium cyanide;	151-50-8
Potassium fluoride;	7789-23-3
3-Quinuclidone;	3731-38-2
Sodium bifluoride;	1333-83-1
Sodium cyanide;	143-33-9
Sodium fluoride;	7681-49-4
Sodium hexafluorosilicate;	16893-85-9
Sodium sulfide;	1313-82-2
Triethanolamine hydrochloride;	637-39-8
Tri-isopropyl phosphite.	116-17-6

## SCHEDULE 3D

Regulation 46S

### Revenue generating goods

1. Paragraph 1 of Schedule 3 applies for the purpose of interpreting this Schedule.
2. A revenue generating good is any thing falling within a commodity code mentioned in column 1 of the following table.

<i>Commodity code (1)</i>	<i>Item (2)</i>
0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked crustaceans, whether in shell or not, whether or not cooked before or during the smoking process; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine
1604 31 00	Caviar
1604 32 00	Caviar substitutes
2523	Portland cement, aluminous cement, slag cement, supersulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers
28251000	Hydrazine and hydroxylamine and their inorganic salts
28254000	Nickel oxides and hydroxides
28255000	Copper oxides and hydroxides
28256000	Germanium oxides and zirconium dioxide
28257000	Molybdenum oxides and hydroxides
28258000	Antimony oxides
28259011	Calcium hydroxide of a purity of $\geq 98\%$ calculated on the dry weight, in the form of particles of which not $> 1\%$ by weight have a particle-size $> 75$ micrometres and not $> 4\%$ by weight have a particle-size of $< 1,3$ micrometres
28259019	Calcium oxide, hydroxide and peroxide (excl. calcium hydroxide of a purity of $\geq 98\%$ calculated on the dry weight, in the form of particles of which not $> 1\%$ by weight have a particle-size $> 75$ micrometres and not $> 4\%$ by weight have a particle-size of $< 1,3$ micrometres)
28259020	Beryllium oxide and hydroxide

28259040	Tungsten oxides and hydroxides
28259060	Cadmium oxide
28259085	Inorganic bases and metal oxides, hydroxides and peroxides, n.e.s.
28351000	Phosphinates “hypophosphites” and phosphonates “phosphites”
28352200	Mono- or disodium phosphate
28352400	Phosphates of potassium
28352500	Calcium hydrogenorthophosphate “dicalcium phosphate”
28352910	Phosphate of triammonium
28352930	Phosphate of trisodium
28352990	Phosphates (excl. phosphates of triammonium, monosodium, disodium, trisodium, of potassium, of calcium and of mercury)
28353100	Sodium triphosphate “sodium tripolyphosphate”, whether or not chemically defined
28353900	Polyphosphates, whether or not chemically defined (excl. sodium triphosphate “sodium tripolyphosphate”, and inorganic or organic compounds of mercury whether or not chemically defined)
29012100	Ethylene
29012200	Propene “propylene”
29012300	Butene “butylene” and isomers thereof
29012400	Buta-1,3-diene and isoprene
29012900	Hydrocarbons, acyclic, unsaturated (excl. ethylene, propene “propylene”, butene “butylene” and isomers thereof and Buta-1,3-diene and isoprene)
2902	Cyclic hydrocarbons
29051200	Propan-1-ol “propyl alcohol” and propan-2-ol “isopropyl alcohol”
29051300	Butan-1-ol “n-butyl alcohol”
29051410	2-Methylpropan-2-ol “tert-butyl alcohol”
29051490	Butanols (excl. butan-1-ol “n-butyl alcohol” and 2-Methylpropan-2-ol “tert-butyl alcohol”)
29051620	Octan-2-ol
29051685	Octanol “octyl alcohol” and isomers thereof (excl. octan-2-ol)
29051700	Dodecan-1-ol “lauryl alcohol”, hexadecan-1-ol “cetyl alcohol” and octadecan-1-ol “stearyl alcohol”
29051900	Saturated monohydric acyclic alcohols (excl. methanol “methyl alcohol”, propan-1-ol “propyl alcohol”, propan-2-ol “isopropyl alcohol”, butanols, octanol “octyl alcohol” and isomers thereof, dodecan-1-ol “lauryl alcohol”, hexadecan-1-ol “cetyl alcohol” and octadecan-1-ol “stearyl alcohol”)
29052200	Acyclic terpene alcohols
29052910	Allyl alcohol
29052990	Unsaturated monohydric acyclic alcohols (excl. allyl alcohol and acyclic terpene alcohols)
29053100	Ethylene glycol “ethanediol”
29053200	Propylene glycol “propane-1,2-diol”
29053920	Butane-1,3-diol
29053926	Butane-1,4-diol or tetramethylene glycol [1,4-butanediol] having a bio-based carbon content of 100% by mass
29053928	Butane-1,4-diol (excl. having a bio-based carbon content of 100%)
29053930	2,4,7,9-Tetramethyldec-5-yne-4,7-diol
29053995	Acyclic diols (excl. ethylene glycol “ethanediol”, propylene

	glycol "propane-1,2-diol", butane-1,3-diol, butane-1,4-diol and 2,4,7,9-tetramethyldec-5-yne-4,7-diol)
29054100	2-Ethyl-2-"hydroxymethyl" propane-1,3-diol "trimethylolpropane"
29054200	Pentaerythritol
29054300	Mannitol
29054411	D-glucitol "sorbitol", in aqueous solution containing <= 2% by weight of d-mannitol, calculated on the d-glucitol content
29054419	D-glucitol "sorbitol" in aqueous solution (excl. containing <= 2% by weight of d-mannitol, calculated on the d-glucitol content)
29054491	D-glucitol "sorbitol", containing <= 2% by weight of d-mannitol, calculated on the d-glucitol content (excl. in aqueous solution)
29054499	D-glucitol "sorbitol" (excl. in aqueous solution and containing <= 2% by weight of d-mannitol, calculated on the d-glucitol content)
29054500	Glycerol
29054900	Tri- and other polyhydric acyclic alcohols (excl. 2-ethyl-2-"hydroxymethyl" propane-1,3-diol "trimethylolpropane", pentaerythritol, mannitol, d-glucitol "sorbitol" and glycerol)
29055100	Ethchlorvynol "INN"
29055991	2,2-Bis "bromomethyl" propanediol
29055998	Halogenated, sulphonated, nitrated or nitrosated derivatives of acyclic alcohols (excl. 2,2-bis"bromomethyl"propanediol and ethchlorvynol "INN")
2907	Phenols; phenol-alcohols
2909	Ethers, ether-alcohols, ether-phenols, ether-alcohol-phenols, alcohol peroxides, ether peroxides, acetal and hemiacetal peroxides, ketone peroxides (whether or not chemically defined), and their halogenated, sulphonated, nitrated or nitrosated derivatives
3104 20	Potassium chloride
3105 20	Mineral or chemical fertilisers containing the three fertilising elements nitrogen, phosphorus and potassium
3105 60	Mineral or chemical fertilisers containing the two fertilising elements phosphorus and potassium
3105 90 20	Other fertilisers containing potassium chloride
3105 90 80	Other fertilisers containing potassium chloride
3902	Polymers of propylene or of other olefins, in primary forms
4011	New pneumatic tyres, of rubber
44	Wood and articles of wood; wood charcoal
4705	Wood pulp obtained by a combination of mechanical and chemical pulping processes
4804	Uncoated kraft paper and paperboard, in rolls or sheets, other than that of heading 4802 or 4803
6810	Articles of cement, of concrete or of artificial stone, whether or not reinforced
7005	Float glass and surface ground or polished glass, in sheets, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7007	Safety glass, consisting of toughened (tempered) or laminated glass
7010	Carboys, bottles, flasks, jars, pots, phials, ampoules and other containers, of glass, of a kind used for the conveyance or

	packing of goods; preserving jars of glass; stoppers, lids and other closures, of glass
7019	Glass fibres (including glass wool) and articles thereof (for example, yarn, rovings, woven fabrics)
7106	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form
7606	Aluminium plates, sheets and strip, of a thickness exceeding 0.2 mm
7801	Unwrought lead
84111100	Turbojets of a thrust $\leq 25$ kN
84111210	Turbojets of a thrust $> 25$ kN but $\leq 44$ kN
84111230	Turbojets of a thrust $> 44$ kN but $\leq 132$ kN
84111280	Turbojets of a thrust $> 132$ kN
84112100	Turbopropellers of a power $\leq 1.100$ kW
84112220	Turbopropellers of a power $> 1.100$ kW but $\leq 3.730$ kW
84112280	Turbopropellers of a power $> 3.730$ kW
84118100	Gas turbines of a power $\leq 5.000$ kW (excluding turbojets and turbopropellers)
84118220	Gas turbines of a power $> 5.000$ kW but $\leq 20.000$ kW (excluding turbojets and turbopropellers)
84118260	Gas turbines of a power $> 20.000$ kW but $\leq 50.000$ kW (excluding turbojets and turbopropellers)
84118280	Gas turbines of a power $> 50.000$ kW (excluding turbojets and turbopropellers)
84119900	Parts of gas turbines, n.e.s.
8431	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430
8901	Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods
8904	Tugs and pusher craft
8905	Light-vessels, fire-floats, dredgers, floating cranes, and other vessels the navigability of which is subsidiary to their main function; floating docks; floating or submersible drilling or production platforms
9403	Other furniture and parts thereof*

#### **EXPLANATORY NOTE**

*(This note is not part of the Regulations)*

These Regulations are made under the Sanctions and Anti-Money Laundering Act 2018 (c. 13) to amend the Russia (Sanctions) (EU Exit) Regulations 2019 (S.I. 2019/855) (“the 2019 Regulations”).

Regulations 3 to 8 and 12(2) to (5) and (8) amend Part 5 of the 2019 Regulations relating to trade, and both amend existing Schedules and insert new ones. New restrictions are imposed in relation to trade in—

- maritime goods and maritime technology in certain circumstances (regulation 5);
- military goods and technology with non-government controlled Ukrainian territory (as specified in new Chapter 2A of Part 5);
- defence and security goods and technology (as specified in Parts 2 to 4 of new Schedule 3C);
- interception and monitoring services;
- banknotes;

- jet fuel and fuel additives (as specified in an addition to Part 8 of Schedule 2A); and
- goods which generate significant revenues for Russia (as specified in new Schedule 3D).

As a result of those amendments—

–regulation 3 amends the definitions of “critical-industry goods”, “critical-industry technology”, “restricted goods” and “restricted technology” for the purposes of Part 5 of the 2019 Regulations;

–regulation 7 inserts additional prohibitions in Chapter 4C of Part 5 of the 2019 Regulations relating to trade in ancillary services relating to iron and steel goods and makes consequential amendments;

–regulation 9 extends prohibitions in Part 5 of the 2019 Regulations in relation to trade in certain items with non-government controlled Ukrainian territory;

–regulation 12(6) adds further things to the list of oil and refining goods and technology in Schedule 2D and regulation 12(7) adds further things to the list of energy-related goods in Schedule 3 in respect of which trade is prohibited.

Regulation 10 amends Part 7 of the 2019 Regulations to create exceptions to some of the new prohibitions.

Regulation 11 makes consequential amendments in relation to offences.

A full impact assessment of the effect that this instrument will have on the costs of business, the voluntary sector and the public sector has been published alongside these Regulations and is available from [legislation.gov.uk](http://legislation.gov.uk) or from the Foreign, Commonwealth and Development Office, King Charles Street, London SW1A 2AH.

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