

# **EXPORT-RELATED RESTRICTIONS FOR DUAL-USE GOODS AND ADVANCED TECHNOLOGIES**

*RELATED PROVISIONS: ARTICLE 2; ARTICLE 2a; ARTICLE 2b OF COUNCIL  
REGULATION 833/2014*

**FREQUENTLY ASKED QUESTIONS – AS OF 31 MARCH 2023**

## **1. What is the purpose of this Guidance and how do the new export restrictions in the Sanctions Regulation relate to existing sanctions against Russia?**

*Last update: 10 October 2022*

Council Regulation (EU) 2022/328 of 25 February 2022<sup>1</sup>, Council Regulation (EU) 2022/345 of 1 March 2022, Council Regulation (EU) 2022/394 of 9 March 2022, Council Regulation (EU) 2022/428 of 15 March 2022, Council Regulation (EU) 2022/576 of 8 April 2022, Council Regulation (EU) 2022/879 of 3 June 2022, Council Regulation (EU) 2022/1269 of 21 July 2022 and Council Regulation (EU) 2022/1904 of 6 October 2022 build on, and expand, the EU restrictive measures (sanctions) in form of export restrictions under the Sanctions Regulation<sup>2</sup>.

This Guidance aims at supporting competent authorities and stakeholders, including exporters, in the implementation of the export restrictions introduced in Articles 2, 2a and 2b and the related provisions in Articles 1, 2c and 2d of the Sanctions Regulation, without prejudice to that regulation or of other regulations.

## **2. What does the Sanctions Regulation do in the area of export restrictions, including export controls for dual-use and advanced technologies?**

*Last update: 10 October 2022*

Firstly, the Sanctions Regulation has expanded the scope of export restrictions concerning dual-use goods and technologies as identified in Annex I of the EU Dual-Use Regulation<sup>3</sup>. The export of these items has been prohibited since 2014 for the military sector. Now the prohibition applies even when these items are intended for civilian end-users or uses, with very limited exemptions and derogations.

Secondly, the Sanctions Regulation also prohibits the export of additional ‘Advanced Technology’ items to limit the enhancement of Russia’s military and technological capacity in sectors such as

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<sup>1</sup> Council Regulation (EU) 2022/328 of 25 February 2022 amending Regulation (EU) No 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine.

<sup>2</sup> Council Regulation (EU) No 833/2014 of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine.

<sup>3</sup> Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items.

electronics, computers, telecommunications and information security, sensors and lasers marine, chemicals that could be used in the process of manufacture of chemical weapons, special materials and related equipment, manufacturing equipment and other sensitive items, such as those used by law enforcement bodies.

Thirdly, the Sanctions Regulation identifies entities connected to Russia's defence and industrial base, on whom even tighter export restrictions are imposed.

As in other EU sanctions regimes, the export restrictions apply to the sale, supply, transfer and export of covered items, as well as the provision of brokering services and of technical and financial assistance.

The new provisions foresee very limited exemptions and derogations in certain defined situations further explained in this document. Similarly, the Sanctions Regulation allows for some possibility of continuing exporting under pre-existing, or "grandfathered" contracts, subject to an authorisation by the competent authority.

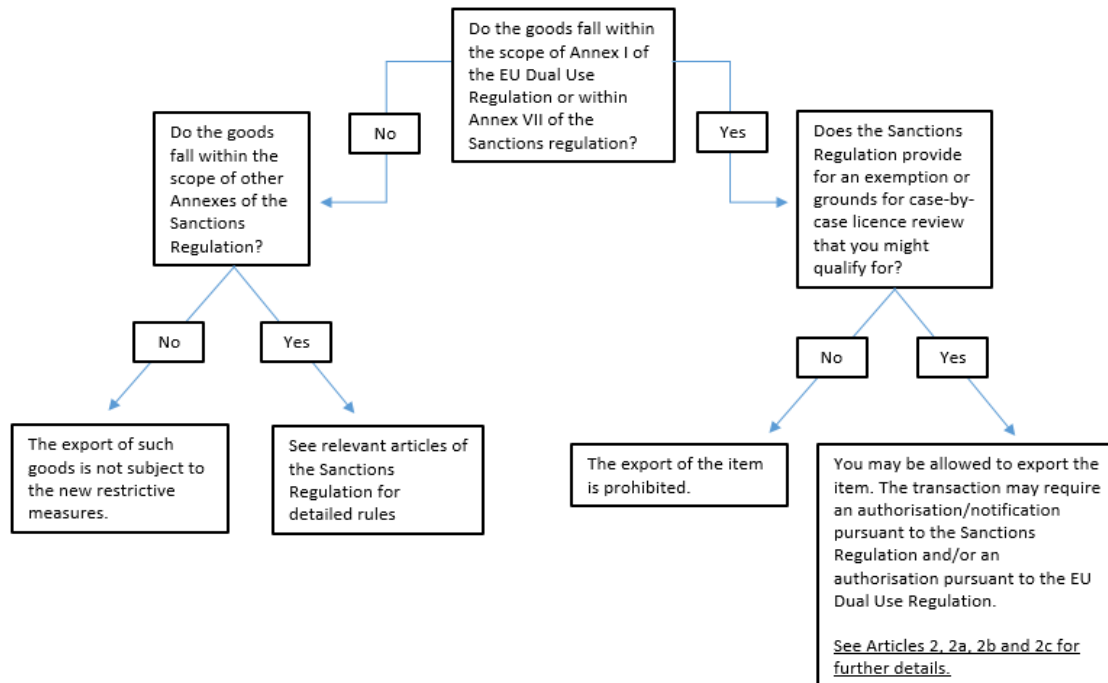
Lastly, the Sanctions Regulation contains other export restrictions e.g. an export ban for goods and technology suited for use in aviation or the space industry as well as in the energy sector, for luxury goods, on maritime navigation goods and technology and on goods which could contribute in particular to the enhancement of Russian industrial capacities. These measures are not covered by this FAQ.

**3. I am an exporter selling products to Russia. How can I verify that I am allowed to export the product and whether it requires any prior authorisation?**

*Last update: 10 October 2022*

In simplified terms, the process for verifying if you are concerned by an export restriction is the

following:



This is a simplified diagram. For further clarification, please check with the relevant competent authorities of your Member State whether the Sanctions Regulation (or other restrictions) apply to the product you are selling to Russia.

Certain Annexes to the Sanctions Regulation, for example Annexes II, X, XI, XVIII and XXIII, include codes of the Combined Nomenclature (CN), while dual-use items and advanced technology items listed in Annex VII are identified with technical descriptions. As part of its compliance obligations, the economic operator must verify, based on the CN code or the technical description, whether an item to be exported is covered or not. The fact that the CN code corresponding to an item is not listed in the Sanctions Regulation does not exclude that certain items classified under that CN code are affected because they may be dual-use items or those of Annex VII to the Sanctions Regulation, in accordance with Articles 2, 2a and 2b. As regards dual-use items and those of Annex VII of the Sanctions Regulation, there is no correlation in the Sanctions Regulation between the CN codes and such items subject to the restrictive measures.

#### **4. The new measures take the form of “prohibitions”: is there now a total ban of exports to Russia for dual-use and ‘Advanced Technology’ items?**

*Last update: 10 October 2022*

The export restrictions applicable to items covered by Annex I to the EU Dual-Use Regulation and to ‘Advanced technology’ items take the form of prohibitions but there are limited exemptions and derogations. Exemptions according to Article 2(3) and Article 2a(3) cover, among others,

humanitarian needs, health emergencies, natural disasters, medical and pharmaceutical uses, temporary exports of equipment for use by news media and items for personal use. Derogations according to Article 2(4) and Article 2a(4) cover, among others, exports intended for government-to-government cooperation, exports intended for civilian non-publicly available electronic communications networks which are not the property of an entity that is publicly controlled or with over 50% public ownership, exports for the operation, maintenance and safety of civil nuclear capabilities, or exports intended for companies owned, or solely or jointly controlled by an EU entity or the entity of a partner country, exports covered by prior contracts and items ensuring cyber-security and information security.

These exemptions and derogations are not available for export to individuals or entities connected to Russia's defence and industrial base, as listed in Annex IV. For these entities, export is only permitted under the conditions specified in Article 2b(1)(a) and (b).

In parallel, it should be noted that the exemptions and derogations mentioned above are also not available for exports for the energy sector and for aviation or space industry except if they are intended for intergovernmental cooperation in space programmes.

**5. What happened to EU exports to Russia on the day when the measures entered into force, if they were caught under the Sanctions Regulation?**

*Last update: 16 March 2022*

The export restrictions entered into force and became fully applicable on 26 February 2022.

From that date, exports of goods and technology subject to the export restrictions introduced by the Sanctions Regulation are only allowed if permitted under (i) relevant exemptions, or (ii) derogations subject to authorisation. If an authorisation is required, until such an authorisation is granted, trade may not proceed.

**6. What happened to EU exports to Russia on the day when the measures entered into force, if they were not caught under the Sanctions Regulation?**

*Last update: 16 March 2022*

If the items are not covered by the Sanctions Regulation, they may be sold, supplied, transferred or exported to Russia without restrictions and the related provision of technical and financial assistance may continue. This is without prejudice to any other trade restrictions that might be in place under other provisions of the Regulation or under other regulations.

**7. How does the Sanctions Regulation relate to the existing Dual-Use Regulation? Does it supersede it? Do both continue to apply?**

*Last update: 10 October 2022*

The Sanctions Regulation applies “without prejudice” – i.e. in parallel – to the EU Dual-Use Regulation (EU) 2021/821. Exporters must ensure they comply with both regulations.

Consequently, the export of dual-use items might require an authorisation under the EU Dual-Use Regulation and, where a derogation applies under the Sanctions Regulation, also under that regulation. In case of doubt, exporters should contact the competent authority of the Member State where the exporter is resident or established.

In case the export of a dual-use item or an ‘Advanced technology’ item in Annex VII falls under the scope of an exemption according to Articles 2(3) and 2a(3), no prior authorisation is required under the Sanctions Regulation. For dual-use items, however, an authorisation might still be required under the EU Dual-Use Regulation.

For authorisations for goods and technology listed in Annex VII of the Sanctions Regulation, the rules and procedures laid down in the EU Dual-Use Regulation apply, *mutatis mutandis*. This means, for example, that when the export of an item not listed under Annex I of the Dual-Use Regulation is subject to an authorisation requirement under the EU Dual-Use Regulation, for example under Article 4 (so-called ‘catch-all’ clauses), such authorisation requirements remain in place, notwithstanding the fact that the same item may be listed in Annex VII to the Sanctions Regulation.

**8. How does the ‘catch-all’ rule in the EU Dual-Use Regulation apply for entities listed in Annex IV of the Sanctions Regulation?**

*Last update: 16 March 2022*

The export of dual-use items for military use and end-users is prohibited under the Sanctions Regulation. The export of items not listed in Annex I to the EU Dual-Use Regulation may still be subject to control under the “catch-all clause” of the EU Dual-Use Regulation, i.e. to ensure that they are not for military uses or end-users (including where the export concerns individuals or entities listed on Annex IV to the Sanctions Regulation).

**9. What restrictions apply to the provision of technical assistance and brokering services?**

*Last update: 16 March 2022*

The definition of ‘technical assistance’ and ‘brokering services’ can be found in Articles 1(c) and 1(d) of the Sanctions Regulation. The provision of such assistance or services falls under the prohibitions in Articles 2(2) and 2a(2) and it may be subject to the exemptions and derogations

pursuant to Articles 2(3) and 2a(3), Articles 2(4) and 2a(4) and Articles 2(5) and 2a(5).

**10. What information should be provided for notification and request for authorisation purposes for exports of dual-use or advanced technology items and the related technical assistance subject to exemptions or derogations under the Sanctions Regulation?**

*Last update: 10 October 2022*

The notification to the competent authority and the request for authorisation shall – whenever possible - be submitted by electronic means. Annex IX to the Sanctions Regulation provides forms containing the mandatory elements for these notifications or applications and whenever possible, exporters should use these forms. However, when the use of the form is not possible, exporters shall provide at least all the elements described in the form and in the order provided set out in the forms.

If the item is covered by the EU Dual-Use Regulation, exporters must also submit the form(s) pursuant to that Regulation to the competent authority.

The notification/application/authorisation form in Annex IX to the Sanctions Regulation only refers to the provisions of Articles 2, 2a and 2b. It does not affect the use of forms related to other provisions of the Sanctions Regulation.

**11. The item I am planning to export is not a dual-use item, nor is it included in Annex VII to the Sanctions Regulation. However, it includes a component listed in Annex I of the EU Dual-Use Regulation or in Annex VII to the Sanctions Regulation. Am I concerned by the export restrictions?**

*Last update: 10 October 2022*

Non-controlled items containing one or more components listed in Annex VII are not subject to the export restrictions applicable to the export of these components, provided that the transaction is not intended to circumvent rules on dual-use export control or the restrictions on dual-use and ‘Advanced technology’ items pursuant to the Sanctions Regulation.

However, non-controlled items containing one or more components listed in Annex I of the EU Dual-Use Regulation may still be subject to export controls under the so-called ‘principal elements rule’ (point 2 of the General Notes to Annex I of the EU Dual-Use Regulation). This means that the object of the controls contained in Annex I may not be defeated by the export of any non-controlled goods containing one or more controlled components when the controlled component or components are the principal element of the goods and can feasibly be removed or used for other purposes. In judging whether the controlled component or components are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the controlled

component or components as the principal element of the goods being procured.

## **12. What situations are covered by the exemptions under the Sanctions Regulation?**

*Last update: 10 October 2022*

Articles 2(3) and 2a(3) of the Sanctions Regulation provide for six limited exemptions from the export restrictions provided that certain conditions and requirements are fulfilled, i.e. the use of the exemption is declared to the customs authorities and a notification is made the first time it is used. These exemptions apply to:

- (a) humanitarian purposes, health emergencies, the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or the environment or as a response to natural disasters;
- (b) medical or pharmaceutical purposes;
- (c) temporary export of items for use by news media;
- (d) software updates;
- (e) use as consumer communication devices; or
- (f) personal use of natural persons travelling to Russia or members of their immediate families travelling with them, and limited to personal effects, household effects, vehicles or tools of trade owned by those individuals and not intended for sale.

## **13. What situations are covered by the derogations with requirement of authorisation under the Sanctions Regulation?**

*Last update: 10 October 2022*

Articles 2(4) and 2a(4) of the Sanctions Regulation provide for eight derogations where an authorisation must be requested from the competent authority. Until the authorisation is granted, the export of the item is prohibited. The derogations cover situations where the item is intended for:

- (a) cooperation between the Union, the governments of Member States and the government of Russia in purely civilian matters;
- (b) intergovernmental cooperation in space programmes;
- (c) the operation, maintenance, fuel retreatment and safety of civil nuclear capabilities, as well as civil nuclear cooperation, in particular, in the field of research and development;
- (d) maritime safety;
- (e) civilian non-publicly available electronic communications networks which are not the property of an entity that is publicly controlled or with over 50% public ownership;
- (f) the exclusive use of entities owned, or solely or jointly controlled by a legal person, entity or body which is incorporated or constituted under the law of a Member State or of a partner country;

- (g) diplomatic representations of the Union, Member States and partner countries, including delegations, embassies and missions; and
- (h) ensuring cyber-security and information security for natural and legal persons, entities and bodies in Russia except for its government and undertakings directly or indirectly controlled by that government.

For contracts concluded before 26 February 2022, please check questions 30 to 33. For situations with individuals or entities listed in Annex IV, please check question 20.

**14. How can the exporter demonstrate conclusively that one of the exemptions or derogations applies to its situation?**

*Last update: 16 March 2022*

It is for the competent authority to determine the necessary documentation that might be useful to assess and verify that the conditions for exemptions or derogations are met. This documentation may include contracts, intergovernmental agreements, and declarations from the exporter (self-declaration).

**15. The exemption under Article 2(3)(b) and Article 2a(3)(b) can apply under the condition that the goods and technology are intended for non-military use and for a non-military end-user. What does that mean?**

*Last update: 10 October 2022*

The exemptions in Articles 2(3) and 2a(3) allow exports of dual-use and advanced technologies intended for humanitarian purposes, health emergencies and medical purposes from the relevant restrictions, as long as such exports are destined for non-military use and for a non-military end-user. Therefore, where the items are destined for a civilian facility as the end-user, the exemption could apply unless there are reasonable grounds to believe that the items could be diverted to a military use or end-user.

**16. Can you explain in more detail how exemptions and derogations operate concerning the exports of Dual-use items and ‘Advanced Technology’ items?**

*Last update: 10 October 2022*

The Sanctions Regulation prohibits the sale, supply, transfer or export, or the related provision of technical and financial assistance, of goods or technology to military end users in Russia, for military end uses and users listed in Annex IV to the Sanctions Regulation.

This covers both Dual-use items (listed in Annex I of the EU Dual-Use Regulation) and ‘Advanced Technology’ items (listed in Annex VII to the Sanctions Regulation).

In relation to potential exports to non-military end-users not listed in Annex IV to the Sanctions



Regulation or for non-military end uses of those goods and technology, the following applies:

- For Dual-use items listed in Annex I to the EU Dual-Use Regulation or under authorisation requirement due to the application of a catch-all clause:
  - if the intended end-use falls under the scope of the exemptions listed in Article 2(3) (see under question 12), it is not necessary to seek an authorisation pursuant to the Sanctions Regulation, but the exporter shall comply with the requirements pursuant to the EU Dual-Use Regulation. In addition, the Sanctions Regulation requires the exporter to declare in the customs declaration that the items are being exported under the relevant exemption and notify the competent authority of the Member State where the exporter is resident or established when they export for the first time using the relevant exemption within 30 days from the date when the first export took place. The national competent authorities will monitor the use of exemptions with a view to preventing any risk of circumvention of the measures.
  - if the intended end-use falls under the scope of any of the eight activities listed in Article 2(4) (see under question 13), the exporter shall apply for an authorisation and a case-by-case assessment is made by the competent authority of the Member State where the exporter is resident or established. In addition, the exporter shall comply with the requirements pursuant to the EU Dual-Use Regulation.
  - if the export falls under contracts concluded before 26 February 2022, please check questions 30-33.
- For ‘Advanced Technology’ items as listed in Annex VII to the Sanctions Regulation:
  - if the intended end-use falls under the scope of the eight exemptions listed in Article 2a(3) (see under question 12), it is not necessary to seek an authorisation pursuant to the Sanctions Regulation. The Sanctions Regulation requires the exporter to declare in the customs declaration that the items are being exported under the relevant exemption and notify the competent authority of the Member State where the exporter is resident or established when they export for the first time using the relevant exemption within 30 days from the date when the first export took place.  
The national competent authorities will monitor the use of exemptions with a view to preventing any risk of circumvention of the measures.
  - if the intended end-use falls under the scope of activities listed in Article 2a(4) (see under question 13), the exporter shall apply for an authorisation by the competent authority of the Member State where the exporter is resident or established.
  - if the export falls under contracts concluded before 26 February 2022, please check questions 30-33.

In addition, as regards aviation and space industry items, please see question 4, which confirms

that the derogation and exemptions above are not available for those sectors except if they are intended for intergovernmental cooperation in space programmes.

**17. What rules and procedures apply to the authorisations pursuant to the Sanctions Regulation?**

*Last update: 16 March 2022*

Authorisations pursuant to Articles 2, 2a and 2b are processed by the competent authorities listed in Annex I to the Sanctions Regulation and follow the rules and procedures laid down in the EU Dual-Use Regulation, which applies *mutatis mutandis*.

**18. I am an exporter of cyber-security and information security items, such as software, do I need to apply for a licence under the Sanctions Regulation each time I make a software available to my Russian customers and provide updates to them?**

*Last update: 10 October 2022*

The Sanctions Regulation applies “without prejudice” – i.e. in parallel – to the EU Dual-Use Regulation (EU) 2021/821. Exporters must ensure they comply with both regulations. Consequently, the export of dual-use items might require an authorisation under the EU Dual-Use Regulation and, where a derogation applies under the Sanctions Regulation, also under that regulation. In case of doubt, exporters should contact the competent authority of the Member State where the exporter is resident or established.

For authorisations for goods and technology listed in Annex VII of the Sanctions Regulation, the rules and procedures laid down in the EU Dual-Use Regulation apply, *mutatis mutandis*. This means, for example, that the competent authority of the Member State where the exporter is resident or established may decide to grant a global export authorisation, as defined in the EU Dual-Use Regulation<sup>7</sup>, for the export of cyber-security and information security items in Annex VII. Such authorisation could cover, for instance, the export of a specified item and subsequent *updates* (for example bug-fixes, malware fingerprint data) and/or *upgrades* (unlocking additional functionalities) to multiple end-users in Russia, recognising that some exporters of cybersecurity items may have large numbers of customers.

**19. Can my company perform remote software configuration updates, software monitoring and software log analysis telecommunication and Information Security equipment installed in Russian sites of customers?**

*Last update: 10 October 2022*

Sale, supply, transfer or exports of dual-use and advanced technology items (as well as related provision of technical assistance) intended for software updates are allowed under the exemption of Article 2(3)(d) and 2a(3)(d) of the Sanctions Regulation. EU companies can provide remote

software interventions, including software configuration updates, software monitoring and software log analysis, related to dual-use goods and technology and to certain goods and technology listed in annex VII of the Sanctions Regulation for non-military use and for a non-military end-user. As indicated in the relevant provisions, the exporter shall notify the competent authority of the Member State where the exporter is resident or established of the first use of the relevant exception within 30 days from the date when the remote software intervention is provided.

**20. Is it still possible to export to the individuals or entities listed in Annex IV? What rules apply to the subsidiaries of these entities or entities controlled by them?**

*Last update: 10 October 2022*

Stricter conditions apply for exports to certain end-users connected to Russia's defence and industrial base. With respect to these individuals and entities listed in Annex IV to the Sanctions Regulation, exemptions do not apply and only some very limited possibilities of authorisation by the competent authorities apply for the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or the environment. With regard to these individuals and entities, contracts concluded before 26 February 2022 may be executed, subject to an authorisation by the competent authority, but trade must stop until such authorisation is granted. Such authorisations should have been requested before 1 May 2022.

Export restrictions to these entities do not apply if the items concerned are not listed in Annex VII to the Sanctions Regulation ('Advanced technology' items) nor listed in Annex I to the EU Dual-Use Regulation or subject to catch-all clauses under the EU Dual-Use Regulation. This is without prejudice to any other export restrictions that might be in place under the Sanctions Regulation, other rules or regulations.

EU exporters must also ensure that the covered items do not reach the listed entities indirectly (via those entities' non-listed subsidiaries or other entities they control, or via an intermediary). The sale, supply, transfer or export of covered items to a third-party intermediary is also prohibited, if the items would reach the listed entity. In all situations, EU exporters should perform adequate due diligence on their business partners and the final destination of the goods.

EU exporters are furthermore prohibited from participating, knowingly and intentionally, in activities the object or effect of which is to circumvent these export restrictions.

**21. What if the exports of Dual-use or 'Advanced Technology' items do not appear to fall within the exemptions or the derogations, can I still apply for an authorisation?**

*Last update: 16 March 2022*

As a general rule, if you fall outside these situations there is no point in applying for an authorisation.

For the conditions applicable to the fulfilment of existing contracts, please check questions 30-33.

**22. How did you select the items included in your list of ‘Advanced Technology’ products?**

*Last update: 16 March 2022*

The items included in the list of products in Annex VII were selected on the basis that they may contribute, directly or indirectly, to enhancing Russia’s military and technological capacity. They were also selected in cooperation with our partner countries.

**23. How did you select the individuals and entities listed in Annex IV of the Sanctions Regulation?**

*Last update: 16 March 2022*

The individuals and entities on the extended list are certain end-users connected to Russia’s defence and industrial base. They were also selected in cooperation with our partner countries.

**24. How should the term ‘other services’ be interpreted?**

*Last update: 9 June 2022*

The term “other services” is comprehensive. It covers all services that are "related to the goods and technology [...] and to the provision, manufacture, maintenance and use of these goods and technology, directly or indirectly to any natural or legal person, entity or body in Russia, or for use in Russia”. It is for the EU Company to ensure that the provision of services in question is not related to the sanctioned good or to the provision, manufacture, maintenance and use of this sanctioned good.

**PRACTICAL OPERATION OF THE EXPORT RESTRICTION OF DUAL-USE AND 'ADVANCED TECHNOLOGY' ITEMS FOR BUSINESSES**

**25. How can I verify/demonstrate that the technical specifications of the items I want to export do or do not fall under the Annex with ‘Advanced technology’ items?**

*Last update: 16 March 2022*

Items in Annex VII are listed on the basis of their description and their technical parameters. When exporting to Russia and your items are subject to controls, you might be asked to provide any document needed to identify your item, and useful to its identification and classification, including, for example, technical datasheet where characteristics and technical parameters of your item are listed.

**26. What is the “indicative temporary correlation table” linking customs codes to items in Annex VII?**

*Last update: 10 October 2022*

Annex VII to the Sanctions Regulation listing ‘Advanced Technology’ items does not contain commodity (customs) codes.

[The Annex of this FAQ](#) includes, for purely informative purposes, a Correlation Table with references correlating the goods in Annex VII to the Sanctions Regulation with the corresponding commodity codes as defined under the rules of the Common Customs Tariff and Combined Nomenclature (CN). This is provided as courtesy to economic operators to help them in the identification and classification of goods in Annex VII that are subject to the measures set out in Article 2a(1) and 2b(1) of the Sanctions Regulation. The corresponding 8-digit CN codes provide a non-binding guide for economic operators to detect and identify the goods that they are declaring. It is not binding and is provided without prejudice to all the obligations of the economic operator from the point of view of export control and sanctions to be checked at the moment of the lodging of the customs declaration.

It should be noted that, while the commodity codes support economic operators in their compliance efforts, an additional technical assessment is necessary for drawing conclusions as to whether a good is subject to the export restrictions. This additional technical assessment is often required as, in most cases, there is not a perfect match between the description of the goods in Annex VII and the description of corresponding commodity codes.

The commodity codes are taken from the Combined Nomenclature. This is defined in Article 1(2) of Council Regulation (EEC) No 2658/87<sup>4</sup> and as set out in Annex I thereto, which are valid at the time of publication of the Sanctions Regulation.

**27. Please clarify the term “tractor” in X.A.VII.001. Is it tractor for use in agriculture or does it refer to heavy trucks?**

*Last update: 16 March 2022*

The term ‘tractor’ (Item X.A.VII.001.b in Annex VII) concerns off highway wheel tractors, which include agriculture tractors as long as they meet the technical parameters required in this control.

Heavy trucks understood as road trucks for semi-trailers are covered by item X.A.VII.001.c in the same annex.

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<sup>4</sup> Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff.

## **28. How do I apply for a derogation concerning dual-use items?**

*Last update: 16 March 2022*

To facilitate the notification and authorisation of sale, supply, transfer or export of items falling under the scope of Articles 2, 2a and 2b of the Sanctions Regulation, Annex IX of the Regulation provides a template with the mandatory elements of information to be provided by the exporter to the competent authority of the Member State where the exporter is resident or established.

If the item also falls under the scope of the EU Dual-Use Regulation, the exporter must also comply with the requirements pursuant to that regulation, using the template made available in that regulation.

The list of Member States' competent authorities for the Sanctions Regulation is available in Annex I to the Sanctions Regulation.

The list of Member States' competent authorities under the EU Dual-Use Regulation is published in the Official Journal of the European Union<sup>5</sup>. A [copy of that list](#) is available on the dedicated website of the Commission.

## **29. I have a contract with a Russian company involving the exports of an item covered by the Sanctions Regulation. Can I continue exporting the item to the Russian company?**

*Last update: 10 October 2022*

In order to allow the fulfilment of contracts concluded before 26 February 2022, Member States may authorise the export of dual-use and 'Advanced technology' items for non-military uses and non-military end-users provided the exporter requested such an authorisation before 1 May 2022. These authorisations shall be assessed by the competent authority according to the applicable rules. Until the authorisation is received, exports of such items covered by the new sanctions are prohibited. Beyond 1 May 2022, it is not allowed to seek authorisation for the fulfilment of existing contracts.

The competent authority of the Member State where the exporter is resident or established shall not grant an authorisation if there are reasonable grounds to believe that the end-user might be a military end-user or an individual or entity listed in Annex IV or that the goods might have a military use, unless the export is intended for humanitarian purposes, health emergencies, the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or the environment, or as a response to natural disasters. Furthermore,

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<sup>5</sup> [Information note](#) - Regulation (EU) 2021/821 of the European Parliament and of the Council setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (OJ L 206, 11.6.2021, p. 1.): Information on measures adopted by Member States in conformity with Articles 4, 6, 7, 9, 11, 12, 22 and 23.

national competent authorities shall not grant an authorisation if there are reasonable grounds to believe that the export is intended for aviation or the space industry (unless it is intended for intergovernmental cooperation in space programmes) or for the energy sector.

If the contract has been concluded directly with an individual or entity listed in Annex IV, national competent authorities can authorise its continued execution only if the items are necessary for the urgent prevention or mitigation of an event likely to have a serious and significant impact on human health and safety or the environment.

All authorisations by the competent authorities of the Member States must be granted in accordance with the rules and procedures laid down in the EU Dual-Use Regulation, which applies mutatis mutandis. This includes the period of validity of such authorisations.

In case the contract provides for the exports of a dual-use controlled item, the exporter needs to hold the necessary authorisation pursuant to the EU Dual-Use Regulation before the actual exports.

### **30. To whom and how do I apply to in order to get my contract authorised to continue?**

*Last update: 16 March 2022*

To facilitate the authorisation of existing contracts, Annex IX to the Sanctions Regulation provides a template with the mandatory elements of information to be provided by the exporter to the competent authority of the Member State where the exporter is resident or established. If the item falls under the scope of the EU Dual-Use Regulation, the exporter must comply with the requirements pursuant to that Regulation as well.

The list of Member States' competent authorities is available in Annex I to the Sanctions Regulation.

The list of Member States' competent authorities under the EU Dual-Use Regulation is published in the Official Journal of the European Union<sup>6</sup>. A [copy of that list](#) is available on the [Dual-use export control webpage](#) of the Commission.

### **31. Is it possible to authorise the grandfathering of a contract if there are reasonable grounds to believe that the end-user is a military end-user or if the goods might have a military end-use?**

*Last update: 10 October 2022*

No. The derogations in Articles 2(5) and 2a(5) are intended for non-military uses and for non-

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<sup>6</sup> [Information note](#) - Regulation (EU) 2021/821 of the European Parliament and of the Council setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (OJ L 206, 11.6.2021, p. 1.): Information on measures adopted by Member States in conformity with Articles 4, 6, 7, 9, 11, 12, 22 and 23.

military end-users. Article 2(7) and Article 2a(7) provide that when deciding on requests for authorisations, the national competent authorities cannot grant an authorisation if they have reasonable grounds to believe that the end-user might be a military end-user or the goods might have a military end-use.

According to Article 2b(1) point (b), the grandfathering of a contract can be authorised in the case where the end-user is an entity or natural person listed in Annex IV.

In all cases, an authorisation for the execution of a contract concluded before 26 February 2022 can only be granted if the request for authorisation was made before 1 May 2022.

**32. Is it possible to execute contracts where the item was delivered before the entry into force of the Sanctions Regulation, but some activities are still required for the completion of the contract? For example, can an EU-based company provide technical assistance in Russia in relation to an item which is covered by the Sanctions Regulation, if it was sold to a Russian end-user before the entry into force of the sanctions and fully paid by the end-user?**

*Last update: 16 March 2022*

The execution of contracts where the items were delivered and some activities need to be undertaken by the seller (for example technical interviews with the customer; formal acceptance of the product/items; testing; contract closeout and milestones payment) requires an authorisation for the completion of those parts of the contract concerning after-sale services.

**33. How should the word “contracts” be interpreted? Has a contract been concluded if, for instance, an order has been placed in an electronic system of a European economic operator? Is it any contract with an existing customer in Russia, regardless of whether a specification of quantity and specific code numbers (e.g. CN-codes) have been agreed upon?**

*Last update: 16 March 2022*

Articles 2(5), 2a(5), and 2b(1)(b) do not define the term ‘contracts’. Given that the object and purpose of those provisions is to enable, subject to authorisation, exporters to honour their contractual obligations under relevant domestic law, it is for the competent authorities to assess under their domestic laws whether a contract has been concluded.

In general, in the context of EU sanctions, a contract is considered concluded where it contains all the necessary elements for the execution of a transaction (such as product, price, quantities, deliver dates, modalities of execution, etc.). If one of these essential elements is missing and would therefore require the signature of a subsequent agreement, the initial agreement should not be considered as a contract.



**34. Is an EU exporter allowed to fulfil a contract with a Russian entity requiring the export of an item covered by the Sanctions Regulation through a subsidiary of the Russian entity based in the EU or in a third country?**

*Last update: 16 March 2022*

The Sanctions Regulation prohibits "to sell, supply, transfer or export, directly or indirectly, [covered items], whether or not originating in the Union, to any natural or legal person, entity or body in Russia or for use in Russia". It also prohibits "to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent prohibitions" in the Regulation.

The EU exporter would therefore need to seek the authorisation of the competent authorities under Articles 2(5), 2a(5), and 2b(1)(b) in order to be allowed to fulfil any contract requiring export of a covered item to Russia or for use in Russia.

If the subsidiary of the Russian entity is based in the EU, that subsidiary is itself bound to comply with the Sanctions Regulation.

EU exporters must also ensure that the covered items do not reach the listed entities indirectly (via those entities' non-listed subsidiaries or other entities they control, or via an intermediary). The sale, supply, transfer or export of covered items to a third-party intermediary is also prohibited, if the items would reach the listed entity. In all situations, EU exporters should perform adequate due diligence on their business partners and the final destination of the goods.

EU exporters are furthermore prohibited from participating, knowingly and intentionally, in activities the object or effect of which is to circumvent these restrictions.

**35. To what extent are the sanctions measures binding on (i) subsidiaries of EU companies outside of the EU and (ii) EU nationals residing or working outside of the EU? How should Russian entities, which are owned or controlled by an EU company, act in light of the Sanctions Regulation? Can a Russia-based subsidiary of an EU company sell products covered by the Sanctions Regulation to other Russian entities if these products are in stock on the premises of the Russian subsidiary? Would this be seen as a circumvention?**

*Last update: 16 March 2022*

The scope of application of the Sanctions Regulation is set out in Article 13; EU sanctions do not apply extraterritorially. The Sanctions Regulation applies, inter alia, to any person inside or outside the territory of the Union who is a national of a Member State, and to any legal person, entity or body, inside or outside the territory of the Union, which is incorporated or constituted under the law of a Member State.

Subsidiaries of EU companies are incorporated under the laws of the host country, thus bound by

the host country laws. Nevertheless, EU nationals working for that subsidiary are personally bound by EU sanctions and can be held personally liable for participating in transactions which breach EU sanctions. For example, even if the subsidiary itself entered the transaction, EU nationals facilitating the transaction could still be covered by the anti-circumvention clause if they "participate in activities" the object or effect of which was to circumvent the main prohibition. In addition, decisions taken by the foreign subsidiary that need to be cleared/green-lighted by the EU parent company would be relevant, in that the latter is bound in respect of its own actions.

**36. My company has equity in a joint venture in Russia. Can I continue supplying the joint venture with Dual-use or ‘Advanced Technology’ items subject to the sanctions?**

*Last update: 16 March 2022*

If your EU-based company solely or jointly controls a joint venture company established in and under the laws of Russia and the item is intended for the exclusive use of the joint venture, it is possible to seek authorisation for the exports of the item. For the derogations applicable to exports intended to fulfil contracts concluded before 26 February 2022, please check questions 30-33.

**37. What are the grounds for annulling, suspending, modifying or revoking an authorisation?**

*Last update: 16 March 2022*

Member States’ competent authorities under the EU Dual-Use Regulation issue export authorisations for dual-use items based on specific and case-by-case assessment. Where the competent authorities have grounds for a review of their previous assessment, Article 16(1) of the EU Dual-Use Regulation allows them to annul, suspend, modify or revoke an export authorisation which was already granted.

This may be due to, among others, the changed assessment of risks associated to a specific end-use, end-user or destination of concern, or further restrictions to trade in goods that may have been adopted once the export authorisation was granted. There might, however, be also other reasons for a competent authority to annul, suspend, modify or revoke export authorisations.

The Sanctions Regulation allows the competent authorities to annul, suspend, modify or revoke an authorisation, which they have granted if they deem that such annulment, suspension, modification or revocation is necessary for the effective implementation of the Sanctions Regulation.

**38. Do export licences issued before 26 February 2022 remain valid?**

*Last update: 16 March 2022*

Export of dual-use items to Russia is prohibited under the Sanctions Regulation, even for civilian uses, as of 26 February 2022. Some exemptions and derogations, as listed in the Sanctions Regulation still allow for the export of dual-use items licensed before 26 February 2022 in very

specific cases and under very strict conditions, including the need for additional export authorisations under the Sanctions Regulation.

That being said, the Sanctions Regulation does not oblige the competent authorities to suspend or revoke licences granted under the EU Dual-Use Regulation. It rather requires that the same exports comply with the new prohibitions on dual-use exports as set out in the Sanctions Regulation and can only continue under an exemption or a derogation.

**39. What about goods that are *en route*? Do you have a “shipping” clause?**

*Last update: 10 October 2022*

No. The Sanctions Regulation does not provide specific flexibilities for items that were under way inside the European Union on the date when the item concerned became subject to Articles 2, 2a or 2b of the Regulation.

**40. I have been trading under conditions and requirements for using a General Export Authorisation No EU003 (Export after repair/replacement), EU004 (Temporary export for exhibition or fair) or EU005 (Telecommunications). Can I export to Russia?**

*Last update: 10 October 2022*

Pursuant to Article 12(1)(d) of the EU Dual-Use Regulation, Union general export authorisations apply to exports of certain items to certain destinations under specific conditions and requirements for use.

The three following Union general export authorisations were – in the past - usable for exports to Russia of dual-use items, under specific conditions and requirements for each of them:

- EU003: Union general export authorisations for items that are re-exported after being repaired or replaced in the Union.
- EU004: Union general export authorisations for items that are temporarily exported for the purpose of an exhibition or fair.
- EU005: Union general export authorisations for items of the telecommunications category.

In order to align the EU Dual-Use Regulation with the restrictive measures against Russia and to ensure legal clarity, Russia was removed from the list of destinations covered by those Union

general export authorisations, by means of a delegated regulation amending the relevant Annexes to the EU Dual-Use Regulation<sup>7</sup>. The delegated regulation entered into force on 5 May 2022.

**41. What is the effect of these sanctions on goods originating from a non-EU jurisdiction that are transiting through a Member State with Russia as final destination? Do the measures apply for transshipments via an EU country?**

*Last update: 16 March 2022*

Goods located in the EU having Russia as a final destination, and which are included in the sanctions list, fall under the scope of Articles 2, 2a and 2b of the Sanctions Regulation. The prohibition to sell, supply, transfer or export these goods, directly or indirectly, includes the prohibition to transit via the EU territory. Transit of prohibited goods between third countries across an EU country is thus prohibited.

External transit, transshipment, reshipment, re-exported from a free zone, temporary stored and directly re-exported from a temporary storage facility, introduced into the customs territory of the Union on the same vessel or aircraft that will take them out of that territory without unloading, and any other movement of goods entering in the EU and are destined to Russia, will be subject to the risk assessment by the customs authorities, which can decide whether the consignment is in the scope of the sanctions and therefore needing a control. These goods would be under customs supervision until they exit the customs territory of the Union (see Article 267(1) of Regulation (EU) No 952/2013 of the European Parliament and of the Council, of 9 October 2013, laying down the Union Customs Code).

**42. Is it required for EU companies to seek authorisation for the export of an item on Annex I of the EU Dual-Use Regulation or an ‘Advanced technology’ item to a Russian end-user if the item is already in Russia?**

*Last update: 16 March 2022*

The controls in the Sanctions Regulation apply also to the "sale, supply or transfer" of dual-use and "Advanced technology" items in addition to their export, including therefore, to the sale, supply or transfer of items already in Russia, for example where the items are held in inventory of an EU company in Russia (for example a branch of the EU company in Russia).

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<sup>7</sup> Commission Delegated Regulation (EU) 2022/699 of 3 May 2022 amending Regulation (EU) 2021/821 of the European Parliament and of the Council by removing Russia as a destination from the scope of Union general export authorisations

**43. Does the Sanctions Regulation affect the export of controlled goods shipped in transit through Russia by land to third countries?**

*Last update: 31 March 2023*

Yes. Article 2 of the Sanctions Regulation prohibits the transit via the territory of Russia of dual-use goods and technology exported from the Union.

**44. To what extent do the sanctions measures affect my business transactions with companies incorporated in the EU, but which are directly or indirectly owned or controlled by Russian persons or entities?**

*Last update: 16 March 2022*

The export restrictions pursuant to the Sanctions Regulation do not apply to transactions strictly within the EU between companies established in the EU. For details on contracts with EU-incorporated entities linked to listed persons or entities, see also question 35.

Separately from the Sanctions Regulation, certain Russian persons and entities are targeted by individual financial restrictions, e.g. in Council Regulation (EU) No 269/2014. These restrictions include an asset freeze and a prohibition to make funds or economic resources available, directly or indirectly, to those listed persons and entities.

Making funds or economic resources available to non-listed entities which are owned or controlled by a listed person or entity (including payments in exchange for goods) will in principle be considered as making them indirectly available to the latter, unless it can be reasonably determined, on a case-by-case basis using a risk-based approach, taking into account all of the relevant circumstances, that the funds will not reach the listed person or entity. Making funds or economic resources available to a third-party intermediary is also prohibited, if those assets would be for the benefit of the listed person or entity. In all situations, EU exporters should perform adequate due diligence on their business partners and the final destination of funds or economic resources.

EU exporters are furthermore prohibited from participating, knowingly and intentionally, in activities the object or effect of which is to circumvent these restrictions.

**45. To what extent EU exporters should ensure that no sanctioned entity or person is involved in any way in their business operations? Should they go beyond first tier suppliers and customers?**

*Last update: 10 October 2022*

See Section 2. ‘Circumvention and Due Diligence’ of the Commission FAQs on the implementation of Council Regulation No 833/2014 and Council Regulation No 269/2014, in particular: questions No 1-2; 4; 6. EU exporters can also seek the advice and support of National

Competent Authorities to ensure compliance with EU restrictive measures as well as to obtain information on specific business situations.

**46. Do I need to take specific measures towards my employees who are Russian nationals and are working in the EU? Should the EU entities block the transfer of and access to knowledge related to the products and technology covered by the new sanctions to Russia?**

*Last update: 16 March 2022*

Release of controlled technology (including knowledge or intangible items) to foreign persons is a kind of Intangible Technology Transfer also known as a “deemed export”.

Articles 2 and 2a of the Sanctions Regulation prohibit to sell supply, transfer or export, direct or indirectly, goods and technology subject to the measures to any natural or legal person, entity or body in Russia or for use in Russia. The requirements for the control of technical assistance also extends the control to foreign nationals in the EU. Therefore, companies should restrict the access of Russian staff to such knowledge or technology if such knowledge and technology would be used in Russia.

**47. How does the EU ensure and verify that EU exports of items covered by the Sanctions Regulation to third countries are not re-exported to Russia?**

*Last update: 16 March 2022*

EU operators should have in place adequate due diligence procedures to ensure that their exports of covered items are not diverted to Russia. This could include, for instance, contractual clauses with their third-country business partner giving rise to liability in case the latter re-exports the items to Russia, as well as ex post verifications.

It is for Member States to implement and enforce sanctions. The Commission monitors sanctions’ implementation and enforcement by Member States. If a covered item exported from the EU to a third country is re-exported to Russia, the competent authorities may consider the EU exporter’s failure to conduct adequate due diligence as a breach of the Sanctions Regulation. If the EU exporter knowingly and intentionally fails to conduct such due diligence, this can be considered as participation in a circumvention scheme.

**48. Is Turkey obliged to implement equivalent controls and/or anti-circumvention measures due to its Customs Union with the EU?**

*Last update: 16 March 2022*

The territorial scope of the Sanctions Regulation is limited to the EU. The existence of a customs union between Turkey and the Union does not imply an automatic extension of the territorial scope of the sanctions – this has not been provided in the EU-Turkey Customs Union Agreement. The

latter provides that Turkey has an obligation to align with measures with the Common Commercial Policy of the Customs Union. Conversely, as the sanctions have a legal basis related to the EU's Common Foreign and Security Policy, they do not fall under Turkey's commitment to align its measures with Common Commercial Policy in the Customs Union. In that respect, Turkey is treated like any other third country that does not apply the same sanctions as the EU.

**49. I am based in Northern Ireland, can I continue to export to Russia items covered by the Sanctions Regulation?**

*Last update: 16 March 2022*

Under the Northern Ireland Protocol, and specifically section 47 of Annex 2 thereto, sanctions based on Article 215 TFEU apply automatically also to Northern Ireland in so far as they concern trade in goods. This means that the restrictions under the Sanctions Regulation relating to trade in goods apply also to trade between Northern Ireland and Russia.

In addition, the general rules on the scope of application of the Sanctions Regulation under Article 13 apply.

**50. Will there be compensation for companies exporting covered items to Russia as a result of these measures?**

*Last update: 16 March 2022*

The Sanctions Regulation does not provide for compensation for companies exporting covered items to Russia.

**51. What documentation needs to accompany a shipment of goods to ensure that it is not stopped on the way by the customs?**

*Last update: 10 October 2022*

The export and re-export of goods from the EU to a non-EU country are subject to customs formalities, i.e. they have to be accompanied by certain customs documents. Thus, Union goods to be exported to Russia, or non-Union goods to be re-exported to Russia have to be covered by an export or a re-export declaration, respectively.

Where the goods fall within the scope of the sanctions against Russia and their movement is subject to an export authorisation in accordance with the Sanctions Regulation, the exporter has to possess an authorisation also in that respect, accompanied by the customs declaration.

Where certain goods or shipments are exempted from the sanctions in place and the Sanctions Regulation does not provide for specific supporting documentation as proof of the exemption, the form or type of such supporting documentation may be determined by national competent authorities. Therefore, the economic operators concerned are strongly recommended to consult

with their competent authorities, in order to identify the documents which need to accompany the shipments of goods affected by the Sanctions Regulation.

## **WORK WITH PARTNER COUNTRIES**

### **52. Your approach has been closely aligned with the United States, do you expect other countries to become “partner countries”?**

*Last update: 16 March 2022*

The scope of export restrictions has been closely coordinated with those countries that are expected to apply substantially equivalent trade measures. This is the case in particular for the U.S., where our cooperation builds on our engagement in the framework of the EU-U.S. Trade and Technology Council. Our cooperation has been stepped up following the adoption of the measures in order to ensure adequate coordination and a level playing field for EU and U.S. companies.

The Sanctions Regulation contains a list of partner countries that may be amended to add other countries that have substantially equivalent trade measures.

### **53. Who are the partner countries and what benefits do they enjoy pursuant to the Regulation?**

*Last update: 10 October 2022*

For the purpose of these measures, ‘partner countries’ are countries that are applying a set of export restriction measures substantially equivalent to those set out in the Sanctions Regulation. The list of partner countries is annexed to the Regulation and as of 21 July 2022, it includes the U.S., Japan, the United Kingdom and South Korea. The Commission will keep reviewing the measures adopted by third countries and maintaining close contacts with them with a view to ensuring effective sanctions.

The concept of “partner country” has several dimensions related to Articles 2 and 2a of the Sanctions Regulation:

Firstly, entities owned or controlled by an undertaking of a partner country are eligible for the same exception as those owned or controlled by an undertaking of a Member State. As a result, Member States may authorise the sale, supply, transfer or export of covered goods and technology or the provision of related technical or financial assistance to these undertakings, provided that it is not intended for military use or for a military end user.

Secondly, Member States may authorise the sale, supply, transfer or export of covered goods and technology, or the provision of related technical or financial assistance intended for the diplomatic representations of partner countries located in Russia.



Thirdly, the EU will exchange information with partner countries, where appropriate, and on the basis of reciprocity, with a view to supporting the effectiveness of export restrictions under the Sanctions Regulation and the consistent application of export restriction measures applied by partner countries.

**54. Is the US exempting the EU from its extraterritorial export controls?**

*Last update: 16 March 2022*

The U.S. has waived its so-called Foreign Direct Product Rule (section 734.9 of the EAR) and *de-minimis* rule (section 734.4(a) of the EAR) for the Advanced Technology items listed in Annex VII. The U.S. also waived the FDPR in the case of Dual-use items.

Furthermore, the US will not apply extraterritorial controls to items, where the controlled item included in Annex VII is the principal element of the exported item but the exported item itself is not covered by the Sanctions Regulation, provided that the national competent authority exercises due diligence set out in Article 2(7) and Article 2a(7) of the Sanctions Regulation.

**OTHER MISCELLANEOUS QUESTION**

**55. Is Belarus covered by the Sanctions Regulation?**

*Last update: 16 March 2022*

No. The additional sanctions imposed on Belarus including further restrictions on trade are set out [in Council Regulation \(EU\) 2022/355](#) of 2 March 2022 amending Regulation (EC) No 765/2006 concerning restrictive measures in view of the situation in Belarus. These, however, largely mirror the approach set out above.

## **Annex – Indicative temporary correlation table for items listed in Annex VII of the Sanctions Regulation**

**ANNEX VII TO REGULATION (EU) 2022/1904**

### **TARIC MEASURES**

Integrated tariff of the Community (TARIC), held in a Commission database, contains import and export measures applicable to specific goods, such as tariff suspensions, tariff quotas, tariff preferences, anti-dumping duties, quantitative restrictions, embargoes but also export controls.

By integrating and coding these measures, the TARIC secures their uniform application by all Member States and gives all economic operators a clear view of all measures to be undertaken when importing into the EU or exporting goods from the EU.

Regarding the items included in Annex VII of the Regulation (EU) 833/2014 and its amendments, TARIC measures at 8-digit level have been made available on 4 March to the concerned authorities and the stakeholders.

### **CORRELATION TABLE**

The Correlation Table links the goods in Annex VII with the corresponding commodity codes as defined under the rules of the Common Customs Tariff and Combined Nomenclature (CN). The corresponding 8-digit CN codes define the customs classification of the goods and the codes to be entered in the customs declaration.

**This correlation table is not binding and is provided without prejudice to the obligations of the economic operator under export controls and restrictive measures, which will be checked, in particular, when lodging of the customs declaration.**

It should be noted that, in many cases, the list of CN codes in the Correlation Table is not sufficient. Additional technical assessment is necessary for drawing conclusions as to whether a good is subject to the measures. This additional assessment is necessary because, in many cases, the description of the CN code is not specific enough to correspond exactly to the control text of the items in Annex VII. It should be noted that this correlation table does not include the correlations to software, for the following reasons:

- the CN classification is not based on the content of the software but on its support (flash drive, DVD, etc.);
- software is often exported as part of related equipment or products, and therefore the CN code to be declared by the exporter is the one that relates to the equipment or products;
- most of the times software is not sent to the recipient through Customs but through the

cloud, or by means any computing server.

It should also be noted that this correlation table does not include the correlations to technology, since the export of intangible items is not declared at Customs.

The CN codes are taken from the Combined Nomenclature as defined in Article 1(2) of Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the 2023 Common Customs Tariff and as set out in Annex I thereto, which are valid at the time of publication of the Sanctions Regulation. The Correlation Table will be revised, when appropriate, in light of revisions to the list of goods in Annex VII and/or of the corresponding commodity codes.

For greater clarity, major components include any assembled elements, which form a portion of an end item without which the end item is inoperable.

## **CORRELATION TABLE (ANNEX VII)**

*Last update: 31 March 2023*

# Annex VII of Regulation (EU) 833/2014 - Advanced Technology Items –

## Full list

EU code	EU Item Description	2023 CN Code	CN text	Date
<b>I. Electronics</b>				
X.A.1.001.a	"Microprocessor microcircuits", "microcomputer microcircuits", and microcontroller microcircuits having any of the following: 1. A performance speed of 5 GigaFLOPS or more and an arithmetic logic unit with an access width of 32 bit or more; 2. A clock frequency rate exceeding 25 MHz; or 3. More than one data or instruction bus or serial communication port that provides a direct external interconnection between parallel "microprocessor microcircuits" with a transfer rate of 2,5 Mbyte/s;	8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	25-Feb-22
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
		8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)	25-Feb-22
		8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85	25-Feb-22
		8542.39.90	Other electronic integrated circuits	25-Feb-22
X.A.1.001.b	Storage integrated circuits, as follows: 1. Electrically erasable programmable read-only memories (EEPROMs) with a storage capacity; a. Exceeding 16 Mbits per package for flash memory types; or b. Exceeding either of the following limits for all other EEPROM types: 1. Exceeding 1 Mbit per package; or 2. Exceeding 256 kbit per package and a maximum access time of less than 80 ns; 2. Static random access memories (SRAMs) with a storage capacity: a. Exceeding 1 Mbit per package; or b. Exceeding 256 kbit per package and a maximum access time of less than 25 ns;	8542.32.45	Electronic integrated circuits as static random access memories "static RAMs", incl. cache random-access memories "cache-RAMs" (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.32.69	Electronic integrated circuits as electrically erasable, programmable read-only memories "flash E <sup>2</sup> PROMs", with a storage capacity of > 512 Mbit (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.32.75	Electronic integrated circuits as electrically erasable, programmable read-only memories "E <sup>2</sup> PROMs" (excl. flash E <sup>2</sup> PROMs and in the form of multichip or multi-component integrated circuits)	25-Feb-22
X.A.1.001.c	Analog-to-digital converters having any of the following: 1. A resolution of 8 bit or more, but less than 12 bit, with an output rate greater than 200 Mega Samples Per Second (MSPS); 2. A resolution of 12 bit with an output rate greater than 105 Mega Samples per Second (MSPS); 3. A resolution of more than 12 bit but equal to or less than 14 bit with an output rate greater than 10 Mega Samples per Second (MSPS); or 4. A resolution of more than 14 bit with an output rate greater than 2,5 Mega Samples Per Second (MSPS);	8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	25-Feb-22
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
		8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)	25-Feb-22
		8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85	25-Feb-22
		8542.39.90	Other electronic integrated circuits	25-Feb-22

X.A.1.001.d	Field programmable logic devices having a maximum number of single-ended digital input/outputs between 200 and 700;	8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	25-Feb-22
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
		8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)	25-Feb-22
		8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85	25-Feb-22
		8542.39.90	Other electronic integrated circuits	25-Feb-22
		X.A.1.001.e	Fast Fourier Transform (FFT) processors having a rated execution time for a 1 024 point complex FFT of less than 1 ms;	8542.31.11
8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85			25-Feb-22
8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)			25-Feb-22
8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)			25-Feb-22
8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85			25-Feb-22
8542.39.90	Other electronic integrated circuits			25-Feb-22
X.A.1.001.f	Custom integrated circuits for which the function is unknown, or the control status of the equipment in which the integrated circuits will be used is unknown to the manufacturer, having any of the following: 1. More than 144 terminals; or 2. A typical 'basic propagation delay time' of less than 0,4 ns;			8542.31.11
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
		8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)	25-Feb-22
		8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85	25-Feb-22
		8542.39.90	Other electronic integrated circuits	25-Feb-22
		X.A.1.001.g	Traveling-wave 'vacuum electronic devices', pulsed or continuous wave, as follows: 1. Coupled cavity devices, or derivatives thereof; 2. Devices based on helix, folded waveguide, or serpentine waveguide circuits, or derivatives thereof, having any of the following: a. An 'instantaneous bandwidth' of half an octave or more and	8540.79.00
8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits			25-Feb-22

	average power (expressed in kW) times frequency (expressed in GHz) of more than 0,2; or b. An 'instantaneous bandwidth' of less than half an octave; and average power (expressed in kW) times frequency (expressed in GHz) of more than 0,4;	8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
		8542.31.90	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (excl. in the form of multichip or multi-component integrated circuits)	25-Feb-22
		8542.39.11	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85; multi-component integrated circuits (MCOs)	25-Feb-22
		8542.39.19	Other electronic integrated circuits; goods specified in note 12(b)(3 and 4) to the chapter 85	25-Feb-22
		8542.39.90	Other electronic integrated circuits	25-Feb-22
X.A.1.001.h	Flexible waveguides designed for use at frequencies exceeding 40 GHz;	8543.30.70	Machines and apparatus for electroplating, electrolysis or electrophoresis (excl. electroplating and electrolysis machines of a kind used solely or principally for the manufacture of printed circuits)	25-Feb-22
X.A.1.001.i	Surface acoustic wave and surface skimming (shallow bulk) acoustic wave devices, having either of the following: 1. A carrier frequency exceeding 1 GHz; or 2. A carrier frequency of 1 GHz or less; and a. A 'frequency side-lobe rejection' exceeding 55 dB; b. A product of the maximum delay time and bandwidth (time in microseconds and bandwidth in MHz) of more than 100; or c. A dispersive delay of more than 10 microseconds;	8541.60.00	Mounted piezo-electric crystals	25-Feb-22
		8543.70.06	Digital signal processing apparatus capable of connecting to a wired or wireless network for the mixing of sound	25-Feb-22
X.A.1.001.j	'Cells' as follows: 1. 'Primary cells' having an 'energy density' of 550 Wh/kg or less at 293 K (20°C); 2. 'Secondary cells' having an 'energy density' of 350 Wh/kg or less at 293 K (20°C);	8506.50.10	Lithium cells and batteries, in the form of cylindrical cells (excl. spent)	25-Feb-22
		8506.50.90	Lithium cells and batteries (excl. spent, and in the form of cylindrical or button cells)	25-Feb-22
		8507.60.00	Lithium-ion accumulators (excl. spent)	25-Feb-22
X.A.1.001.k	'Superconductive' electromagnets or solenoids specially designed to be fully charged or discharged in less than one minute, having all of the following: 1. Maximum energy delivered during the discharge divided by the duration of the discharge of more than 500 kJ per minute; 2. Inner diameter of the current carrying windings of more than 250 mm; and 3. Rated for a magnetic induction of more than 8T or 'overall current density' in the winding of more than 300 A/mm <sup>2</sup> ;	8505.90.29	Electromagnets; electromagnetic or permanent magnet chucks, clamps and similar holding devices (excl. electromagnets used for magnetic resonance imaging apparatus)	25-Feb-22
X.A.1.001.l	Circuits or systems for electromagnetic energy storage, containing components manufactured from 'superconductive' materials specially designed for operation at temperatures below the 'critical temperature' of at least one of their 'superconductive' constituents, having all of the following: 1. Resonant operating frequencies exceeding 1 MHz; 2. A stored energy density of 1 MJ/m <sup>3</sup> or more; and 3. A discharge time of less than 1 ms;	8504.40.95	Other static converters	25-Feb-22
		8504.50.00	Inductors (excl. inductors for discharge lamps or tubes)	25-Feb-22
X.A.1.001.m	Hydrogen/hydrogen-isotope thyatron of ceramic-metal construction and rate for a peak current of 500 A or more;	8540.89.00	Electronic valves and tubes (excl. receiver or amplifier valves and tubes, microwave tubes, photo-cathode tubes, cathode ray tubes, black and white or other monochrome data-graphic display tubes and colour data-graphic display tubes with a phosphor dot screen pitch of < 0,4 mm)	25-Feb-22
X.A.1.001.o	Solar cells, cell-interconnect-coverglass (CIC) assemblies, solar panels, and solar arrays, which are 'space qualified' and not controlled by 3A001.e.4	8541.42.00	Photovoltaic cells not assembled in modules or made up into panels	25-Feb-22
		8541.43.00	Photovoltaic cells assembled in modules or made up into panels	25-Feb-22
X.A.1.002.a	Electronic test equipment, other than those specified in the CML or in Regulation (EU) 2021/821;	9030.10.00	Instruments and apparatus for measuring or detecting ionising radiations	25-Feb-22
		9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
		9030.31.00	Multimeters for voltage, current, resistance or electrical power, without recording device	25-Feb-22
		9030.32.00	Multimeters with recording device	25-Feb-22
		9030.33.20	Resistance measuring instruments without recording device	25-Feb-22
		9030.33.70	Instruments and apparatus for measuring or checking voltage, current or electrical power, without recording device (excl. multimeters, oscilloscopes and oscillographs)	25-Feb-22

		9030.39.00	Instruments and apparatus for measuring or checking voltage, current, resistance or electrical power, with recording device (excl. multimeters, and oscilloscopes and oscillographs)	25-Feb-22
		9030.40.00	Instruments and apparatus for measuring or checking electrical quantities, specifically for telecommunications, e.g. cross-talk meters, gain measuring instruments, distortion factor meters, psophometers	25-Feb-22
		9030.82.00	Instruments and apparatus for measuring or checking semiconductor wafers or devices	25-Feb-22
		9030.84.00	Instruments and apparatus for measuring or checking electrical quantities, with recording device (excl. appliances specially designed for telecommunications, multimeters, oscilloscopes and oscillographs, and apparatus for measuring or checking semiconductor wafers or devices)	25-Feb-22
		9030.89.00	Instruments and apparatus for measuring or checking electrical quantities, without recording device, n.e.s.	25-Feb-22
		9030.90.00	Parts and accessories for instruments and apparatus for measuring or checking electrical quantities or for detecting ionising radiations, n.e.s.	25-Feb-22
X.A.1.002.b	Digital instrumentation magnetic tape data recorders having any of the following characteristics; 1. A maximum digital interface transfer rate exceeding 60 Mbit/s and employing helical scan techniques; 2. A maximum digital interface transfer rate exceeding 120 Mbit/s and employing fixed head techniques; or 3. 'Space qualified';	8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	25-Feb-22
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
X.A.1.002.c	Equipment, with a maximum digital interface transfer rate exceeding 60 Mbit/s, designed to convert digital video magnetic tape recorders for use as digital instrumentation data recorders;	8542.31.11	Electronic multi-component integrated circuits "MCOs" as processors and controllers as specified in note 9 (b) (4) to chapter 85, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	25-Feb-22
		8542.31.19	Electronic integrated circuits as processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits in the form of multichip integrated circuits consisting of two or more interconnected monolithic integrated circuits as specified in note 9 (b) (3) to chapter 85	25-Feb-22
X.A.1.002.d	Non-modular analog oscilloscopes having a bandwidth of 1 GHz or greater;	9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
X.A.1.002.e	Modular analog oscilloscope systems having either of the following characteristics: 1. A mainframe with a bandwidth of 1 GHz or greater; or 2. Plug-in modules with an individual bandwidth of 4 GHz or greater;	9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
X.A.1.002.f	Analog sampling oscilloscopes for the analysis of recurring phenomena with an effective bandwidth greater than 4 GHz;	9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
X.A.1.002.g	Digital oscilloscopes and transient recorders, using analog-to-digital conversion techniques, capable of storing transients by sequentially sampling single-shot inputs at successive intervals of less than 1 ns (greater than 1 Giga Samples per Second (GSPS)), digitizing to 8 bits or greater resolution and storing 256 or more samples.	9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
X.A.1.003.a	Frequency changers and their specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821;	8504.40.85	Inverters having power handling capacity $\leq 7,5$ kVA	25-Feb-22
		8504.40.86	Inverters having power handling capacity $> 7,5$ kVA	25-Feb-22
		8504.40.95	Other Static converters	25-Feb-22
X.A.1.003.b	Mass spectrometers, other than those specified in the CML or in Regulation (EU) 2021/821;	9027.81.00	Mass spectrometers	25-Feb-22
X.A.1.003.c	All flash x-ray machines, or components of pulsed power systems designed thereof, including Marx generators, high power pulse shaping networks, high voltage capacitors, and triggers;	9022.19.00	Apparatus based on the use of X-rays (other than for medical, surgical, dental or veterinary uses)	25-Feb-22
		9022.29.00	Apparatus based on the use of alpha, beta or gamma radiations (other than for medical, surgical, dental or veterinary uses)	25-Feb-22
		9022.30.00	X-ray tubes	25-Feb-22
		9022.90.20	Parts and accessories of apparatus based on the use of X-rays	25-Feb-22
X.A.1.003.d	Pulse amplifiers, other than those specified in the CML or in Regulation (EU) 2021/821;	8543.70.02	Microwave amplifiers	25-Feb-22
		8543.70.30	Aerial amplifiers	25-Feb-22

		8543.70.90	Electrical machines and apparatus, having individual functions, n.e.s. in chap. 85	25-Feb-22
X.A.1.003.e	Electronic equipment for time delay generation or time interval measurement, as follows: 1. Digital time delay generators with a resolution of 50 ns or less over time intervals of 1 $\mu$ s or greater; or 2. Multi-channel (three or more) or modular time interval meter and chronometry equipment with resolution of 50 ns or less over time intervals of 1 $\mu$ s or greater;	9027.89.90	Instruments and apparatus for physical or chemical analysis or for determining surface tension or the like, or for measuring heat or sound, n.e.s.	25-Feb-22
X.A.1.003.f	Chromatography and spectrometry analytical instruments.	9027.20.00	Chromatographs and electrophoresis instruments	25-Feb-22
		9027.30.00	Spectrometers, spectrophotometers and spectrographs using optical radiations, such as UV, visible, IR	25-Feb-22
X.B.1.001.a	Equipment specially designed for the manufacture of electron tubes, optical elements and specially designed components therefor controlled by 3A001 or X.A.1.001;	8464.20.11	Grinding or polishing machines, for cold-working optical glass	25-Feb-22
		8475.10.00	Machines for assembling electric or electronic lamps, tubes or valves or flashbulbs, in glass envelopes	25-Feb-22
X.B.1.001.b.1.a	Equipment for producing polycrystalline silicon and materials controlled by 3C001	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.b	Equipment "specially designed" for purifying or processing III/V and II/VI semiconductor materials	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.c	Crystal pullers and furnaces, as follows: 1. Annealing or recrystallizing equipment other than constant temperature furnaces employing high rates of energy transfer capable of processing wafers at a rate exceeding 0,005 m <sup>2</sup> per minute; 2. 'Stored program controlled' crystal pullers having any of the following characteristics: a. Rechargeable without replacing the crucible container; b. Capable of operation at pressures above 2,5 x 10 <sup>5</sup> Pa; or c. Capable of pulling crystals of a diameter exceeding 100 mm;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.d	'Stored program controlled' equipment for epitaxial growth having any of the following characteristics: 1. Capable of producing silicon layer with a thickness uniform to less than $\pm$ 2,5 % across a distance of 200 mm or more; 2. Capable of producing a layer of any material other than silicon with a thickness uniformity across the wafer of equal to or better than $\pm$ 3,5 %; or 3. Rotation of individual wafers during processing;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.e	Molecular beam epitaxial growth equipment;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.f	Magnetically enhanced 'sputtering' equipment with specially designed integral load locks capable of transferring wafers in an isolated vacuum environment;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.g	Equipment specially designed for ion implantation, ion-enhanced or photo-enhanced diffusion, having any of the following characteristics: 1. Patterning capability; 2. Beam energy (accelerating voltage) exceeding 200 keV; 3. Optimised to operate at a beam energy (accelerating voltage) of less than 10 keV; or 4. Capable of high energy oxygen implant into a heated 'substrate';	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.h	'Stored program controlled' equipment for the selective removal (etching) by means of anisotropic dry methods (e.g., plasma), as follows: 1. 'Batch types' having either of the following: a. End-point detection, other than optical emission spectroscopy types; or b. Reactor operational (etching) pressure of 26,66 Pa or less; 2. 'Single wafer types' having any of the following: a. End-point detection, other than optical emission spectroscopy types; b. Reactor operational (etching) pressure of 26,66 Pa or less; or c. Cassette-to-cassette and load locks wafer handling;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.1.001.b.1.i	'Chemical vapor deposition' (CVD) equipment, e.g., plasma-enhanced CVD (PECVD) or photo-enhanced CVD, for semiconductor device manufacturing, having either of the following capabilities, for deposition of oxides, nitrides, metals or polysilicon: 1. 'Chemical vapor deposition' equipment operating below 10 <sup>5</sup> Pa; or 2. PECVD equipment operating either below 60 Pa or having automatic cassette-to-cassette and load lock wafer handling;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22



X.B.I.001.b.1.j	Electron beam systems specially designed or modified for mask making or semiconductor device processing having any of the following characteristics: 1. Electrostatic beam deflection; 2. Shaped, non-Gaussian beam profile; 3. Digital-to-analogue conversion rate exceeding 3 MHz; 4. Digital-to-analogue conversion accuracy exceeding 12 bit; or 5. Target-to-beam position feedback control precision of 1 µm or finer;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.1.k	Surface finishing equipment for the processing of semiconductor wafers as follows: 1. Specially designed equipment for backside processing of wafers thinner than 100 micrometer and the subsequent separation thereof; or 2. Specially designed equipment for achieving a surface roughness of the active surface of a processed wafer with a two-sigma value of 2 micrometer or less, total indicator reading (TIR);	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.1.l	Interconnection equipment which includes common single or multiple vacuum chambers specially designed to permit the integration of any equipment controlled by X.B.I.001 into a complete system;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.1.m	'Stored program controlled' equipment using 'lasers' for the repair or trimming of 'monolithic integrated circuits' with either of the following characteristics: 1. Positioning accuracy less than ± 1 micrometer; or 2. Spot size (kerf width) less than 3 micrometer.	9011.20.10	Photomicrographic optical microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles (excl. stereoscopic microscopes)	25-Feb-22
		9031.41.00	Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting photomasks or reticles used in manufacturing semiconductor devices	25-Feb-22
X.B.I.001.b.2.a	Finished masks, reticles and designs therefor, except: 1. Finished masks or reticles for the production of integrated circuits not controlled by 3A001 ; or 2. Masks or reticles, having both of the following characteristics: a. Their design is based on geometries of 2,5 micrometer or more; and b. The design does not include special features to alter the intended use by means of production equipment or 'software';	3705.00.90	Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs	25-Feb-22
X.B.I.001.b.2.b	Mask substrates as follows: 1. Hard surface (e.g., chromium, silicon, molybdenum) coated 'substrates' (e.g., glass, quartz, sapphire) for the preparation of masks having dimensions exceeding 125 mm x 125 mm; or 2. Substrates specially designed for X-ray masks;	3701.99.00	Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs	25-Feb-22
X.B.I.001.b.2.c	Equipment, other than general purpose computers, specially designed for computer aided design (CAD) of semiconductor devices or integrated circuits;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.2.d	Equipment or machines, as follows, for mask or reticle fabrication: 1. Photo-optical step and repeat cameras capable of producing arrays larger than 100 mm x 100 mm, or capable of producing a single exposure larger than 6 mm x 6 mm in the image (i.e., focal) plane, or capable of producing line widths of less than 2,5 micrometer in the photoresist on the 'substrate'; 2. Mask or reticle fabrication equipment using ion or 'laser' beam lithography capable of producing line widths of less than 2,5 micrometer; or 3. Equipment or holders for altering masks or reticles or adding pellicles to remove defects;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.2.e	Stored program controlled' equipment for the inspection of masks, reticles or pellicles with: 1. A resolution of 0,25 micrometer or finer; and 2. A precision of 0,75 micrometer or finer over a distance in one or two coordinates of 63,5 mm or more;	9011.20.10	Photomicrographic optical microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles (excl. stereoscopic microscopes)	25-Feb-22
		9031.41.00	Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting photomasks or reticles used in manufacturing semiconductor devices	25-Feb-22
X.B.I.001.b.2.f	Align and expose equipment for wafer production using photo-optical or X-ray methods, e.g., lithography equipment, including both projection image transfer equipment and step and repeat (direct step on wafer) or step and scan (scanner) equipment, capable of performing any of the following functions: 1. Production of a pattern size of less than 2,5 micrometer; 2. Alignment with a precision finer than ± 0,25 micrometer (3 sigma); 3. Machine-to-machine overlay no better than ± 0,3 micrometer; or 4. A light source wavelength shorter than 400 nm;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22

X.B.I.001.b.2.g	Electron beam, ion beam or X-ray equipment for projection image transfer capable of producing patterns less than 2,5 micrometer;	8486.10.00	Machines and apparatus for the manufacture of boules or wafers	25-Feb-22
X.B.I.001.b.2.h	Equipment using 'lasers' for direct write on wafers capable of producing patterns less than 2,5 micrometer.	8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	25-Feb-22
X.B.I.001.b.3.a	"Stored program controlled" die bonders	8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	25-Feb-22
X.B.I.001.b.3.b	'Stored program controlled' equipment for producing multiple bonds in a single operation (e.g., beam lead bonders, chip carrier bonders, tape bonders);	8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	25-Feb-22
X.B.I.001.b.3.c	Semi-automatic or automatic hot cap sealers, in which the cap is heated locally to a higher temperature than the body of the package, specially designed for ceramic microcircuit packages controlled by 3A001 and that have a throughput equal to or more than one package per minute.	8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	25-Feb-22
X.B.I.001.b.4	Filters for clean rooms capable of providing an air environment of 10 or less particles of 0,3 micrometer or smaller per 0,02832 m <sup>3</sup> and filter materials therefor.	8421.99.90	Parts of machinery and apparatus for filtering or purifying liquids or gases, n.e.s.	25-Feb-22
X.B.I.002.a	Equipment specially designed for the inspection or testing of electron tubes, optical elements and specially designed components therefor controlled by 3A001 or X.A.I.001;	9031.80.80	Non-optical instruments, appliances and machines for measuring or checking, n.e.s. in Chapter 90	25-Feb-22
X.B.I.002.b	Equipment specially designed for the inspection or testing of semiconductor devices, integrated circuits and 'electronic assemblies', as follows, and systems incorporating or having the characteristics of such equipment: .....	9030.82.00	Instruments and apparatus for measuring or checking semiconductor wafers or devices	25-Feb-22
		9031.41.00	Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting photomasks or reticles used in manufacturing semiconductor devices	25-Feb-22
X.C.I.001	Positive resists designed for semiconductor lithography specially adjusted (optimised) for use at wavelengths between 370 and 193 nm.	3920.10.23	Polyethylene film, of a thickness of 20 micrometres or more but not exceeding 40 micrometres, for the production of photoresist film used in the manufacture of semiconductors or printed circuits	25-Feb-22
		8486.90.00	Parts and accessories for machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays, and for machines and apparatus specified in note 9 C to chapter 84, n.e.s.	25-Feb-22
X.D.I.001	'Software' specially designed for the 'development', 'production', or 'use' of electronic devices or components controlled by X.A.I.001, general purpose electronic equipment controlled by X.A.I.002, or manufacturing and test equipment controlled by X.B.I.001 and X.B.I.002; or 'software' specially designed for the 'use' of equipment controlled by 3B001.g and 3B001.h.	N/A	Software	25-Feb-22
X.E.I.001	'Technology' for the 'development', 'production' or 'use' of electronic devices or components controlled by X.A.I.001, general purpose electronic equipment controlled by X.A.I.002, or manufacturing and test equipment controlled by X.B.I.001 or X.B.I.002, or materials controlled by X.C.I.001.	N/A	Technology	25-Feb-22

## II. Computers

X.A.II.001.a	Electronic computers and related equipment, and "electronic assemblies" and "specially designed" "parts" and "components" therefor, rated for operation at an ambient temperature above 343 K (70°C)	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22

X.A.II.001.b	"Digital computers", including equipment of "signal processing" or "image enhancement", having an "Adjusted Peak Performance" ("APP") equal to or greater than 0,0128 Weighted TeraFLOPS (WT)	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.A.II.001.c	"Electronic assemblies" that are "specially designed" or modified to enhance performance by aggregation of processors	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.A.II.001.f	Equipment for "signal processing" or "image enhancement" having an "Adjusted Peak Performance" ("APP") equal to or greater than 0,0128 Weighted TeraFLOPS WT	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.A.II.001.i	Equipment containing 'terminal interface equipment' exceeding the limits in X.A.III.101;	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.A.II.001.j	Equipment specially designed to provide external interconnection of 'digital computers' or associated equipment that allows communications at data rates exceeding 80 Mbyte/s.	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22

		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.A.II.001.k	Hybrid computers' and 'electronic assemblies' and specially designed components therefor containing analog-to-digital converters having all of the following characteristics: 1. 32 channels or more; and 2. A resolution of 14 bit (plus sign bit) or more with a conversion rate of 200 000 Hz or more.	8471.41.00	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit, whether or not combined (excl. portable weighing <= 10 kg and excl. those presented in the form of systems and peripheral units)	25-Feb-22
		8471.49.00	Data-processing machines, automatic, presented in the form of systems "comprising at least a central processing unit, one input unit and one output unit" (excl. portable weighing <= 10 kg and excl. peripheral units)	25-Feb-22
		8471.50.00	Processing units for automatic data-processing machines, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units (excl. those of heading 8471.41 or 8471.49 and excl. peripheral units)	25-Feb-22
		8471.80.00	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)	25-Feb-22
X.D.II.001	'Program' proof and validation 'software', 'software' allowing the automatic generation of 'source codes', and operating system 'software' that are specially designed for 'real-time processing' equipment. a. 'Program' proof and validation 'software' using mathematical and analytical techniques and designed or modified for 'programs' having more than 500 000 'source code' instructions; b. 'Software' allowing the automatic generation of 'source codes' from data acquired on line from external sensors described in the Regulation (EU) 2021/821; or c. Operating system 'software' specially designed for 'real-time processing' equipment that guarantees a 'global interrupt latency time' of less than 20 microseconds.	N/A	Software	25-Feb-22
X.D.II.002	'Software' other than that controlled in 4D001 specially designed or modified for the 'development', 'production' or 'use' of equipment controlled by 4A101, X.A.II.001.	N/A	Software	25-Feb-22
X.E.II.001	'Technology' for the 'development', 'production' or 'use' of equipment controlled by X.A.II.001, or 'software' controlled by X.D.II.001 or X.D.II.002.	N/A	Technology	25-Feb-22
X.E.II.002	'Technology' for the 'development' or 'production' of equipment designed for 'multi-data-stream processing'.	N/A	Technology	25-Feb-22

### III. Telecommunications and Information Security

X.A.III.101.a	Any type of telecommunications equipment, not controlled by 5A001.a, "specially designed" to operate outside the temperature range from 219 K (-54 °C) to 397 K (124 °C)	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-telegraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-telegraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
		8517.79.00	Part of telecommunications equipment	25-Feb-22
X.A.III.101.b.1	Telecommunication transmission equipment and systems, and specially designed components and accessories employing digital techniques, including digital processing of analog signals, and designed to operate at a 'digital transfer rate' at the highest multiplex level exceeding 45 Mbit/s or a 'total digital transfer rate' exceeding 90 Mbit/s;	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22

		8517.69.30	Reception apparatus for radio-telephony or radio-teleggraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-teleggraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.2	Telecommunication transmission equipment and systems, and specially designed components and accessories; Modems using the 'bandwidth of one voice channel' with a "data signaling rate" exceeding 9,600 bits per second	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-teleggraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-teleggraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.3	Telecommunication transmission equipment and systems, and specially designed components and accessories; being "stored program controlled" digital cross connect equipment with "digital transfer rate" exceeding 8,5 Mbit/s per port.	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-teleggraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-teleggraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.4	Telecommunication transmission equipment and systems, and specially designed components and accessories; being equipment containing any of the following: a. "Network access controllers" and their related common medium having a 'digital transfer rate' exceeding 33 Mbit/s; or b. 'Communication channel controllers' with a digital output having a 'data signalling rate' exceeding 64 000 bit/s per channel;	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-teleggraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-teleggraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.5	Employing a 'laser' and having any of the following characteristics: a. A transmission wavelength exceeding 1 000 nm; or b. Employing analog techniques and having a bandwidth exceeding 45 MHz; c. Employing coherent optical transmission or coherent optical detection techniques (also called optical heterodyne or homodyne techniques); d. Employing wavelength division multiplexing techniques; or e. Performing 'optical amplification';	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-teleggraphy	25-Feb-22

		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-telegraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.6	Radio equipment operating at input or output frequencies exceeding: a. 31 GHz for satellite-earth station applications; or b. 26,5 GHz for other applications;	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-telegraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-telegraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.b.7	7. Being radio equipment employing any of the following: a. Quadrature-amplitude-modulation (QAM) techniques above level 4 if the 'total digital transfer rate' exceeds 8,5 Mbit/s; b. QAM techniques above level 16 if the 'total digital transfer rate' is equal to or less than 8,5 Mbit/s; c. Other digital modulation techniques and having a 'spectral efficiency' exceeding 3 bit/s/Hz; or d. Operating in the 1,5 MHz to 87,5 MHz band and incorporating adaptive techniques providing more than 15 dB suppression of an interfering signal.	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
		8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
		8517.69.30	Reception apparatus for radio-telephony or radio-telegraphy	25-Feb-22
		8517.69.90	Apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-telegraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	25-Feb-22
X.A.III.101.c.1	for 'packet-mode operation', electronic assemblies and components therefor, other than those specified in the CML or in Regulation (EU) 2021/821.	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.3	Routing or switching of 'datagram' packets	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.5	Multi-level priority and pre-emption for circuit switching	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.6	Designed for automatic hand-off of cellular radio calls to other cellular switches or automatic connection to a centralized subscriber data base common to more than one switch	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.7	Containing "stored program controlled" digital cross connect equipment with "digital transfer rate" exceeding 8.5 Mbit/s per port	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.8	"Common channel signaling" operating in either non-associated or quasi-associated mode of operation	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.9	'Dynamic adaptive routing'	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22

X.A.III.101.c.10	Being packet switches, circuit switches and routers with ports or lines exceeding any of the following: a. A 'data signalling rate' of 64 000 bit/s per channel for a 'communications channel controller'; or b. A 'digital transfer rate' of 33 Mbit/s for a 'network access controller' and related common media;	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.11	"Optical switching"	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.c.12	Employing 'Asynchronous Transfer Mode' ('ATM') techniques	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.A.III.101.d	Optical fibers and optical fiber cables of more than 50 m in length designed for single mode operation	8536.70.00	Connectors for optical fibres, optical fibre bundles or cables	25-Feb-22
X.A.III.101.e	Centralised network control having all of the following characteristics: 1. Receives data from the nodes; and 2. Process these data in order to provide control of traffic not requiring operator decisions, and thereby performing 'dynamic adaptive routing';	8517.61.00	Base stations of apparatus for the transmission or reception of voice, images or other data	25-Feb-22
X.A.III.101.f	Phased array antennas, operating above 10,5 GHz, containing active elements and distributed components, and designed to permit electronic control of beam shaping and pointing, except for landing systems with instruments meeting International Civil Aviation Organization (ICAO) standards (microwave landing systems (MLS)).	8517.71.00	Aerials and aerial reflectors of all kinds; parts suitable for use therewith	25-Feb-22
		8529.10.69	Aerials (excl. inside and outside aerials for radio or television broadcast receivers and telescopic and whip-type aerials for portable apparatus or for apparatus for fitting in motor vehicles)	25-Feb-22
X.A.III.101.g	Mobile communications equipment other than those specified in the CML or in Regulation (EU) 2021/821, electronic assemblies and components therefor	8517.13.00	Smartphones	25-Feb-22
		8517.14.00	Other telephones for cellular networks or for other wireless networks	25-Feb-22
		8517.79.00	Parts of telephone sets, including smartphones and other telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network	25-Feb-22
X.A.III.101.h	Radio relay communications equipment designed for use at frequencies equal to or exceeding 19,7 GHz and components therefor, other than those specified in the CML or in Regulation (EU) 2021/821.	8517.62.00	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)	25-Feb-22
X.B.III.101	Telecommunications test equipment, other than those specified in the CML or in Regulation (EU) 2021/821.	9030.10.00	Instruments and apparatus for measuring or detecting ionising radiations	25-Feb-22
		9030.20.00	Oscilloscopes and oscillographs	25-Feb-22
		9030.31.00	Multimeters for voltage, current, resistance or electrical power, without recording device	25-Feb-22
		9030.32.00	Multimeters with recording device	25-Feb-22
		9030.33.20	Resistance measuring instruments without recording device	25-Feb-22
		9030.33.70	Instruments and apparatus for measuring or checking voltage, current or electrical power, without recording device (excl. multimeters, oscilloscopes and oscillographs)	25-Feb-22
		9030.39.00	Instruments and apparatus for measuring or checking voltage, current, resistance or electrical power, with recording device (excl. multimeters, and oscilloscopes and oscillographs)	25-Feb-22
		9030.40.00	Instruments and apparatus for measuring or checking electrical quantities, specifically for telecommunications, e.g. cross-talk meters, gain measuring instruments, distortion factor meters, psophometers	25-Feb-22
		9030.82.00	Instruments and apparatus for measuring or checking semiconductor wafers or devices	25-Feb-22
		9030.84.00	Instruments and apparatus for measuring or checking electrical quantities, with recording device (excl. appliances specially designed for telecommunications, multimeters, oscilloscopes and oscillographs, and apparatus for measuring or checking semiconductor wafers or devices)	25-Feb-22
9030.89.00	Instruments and apparatus for measuring or checking electrical quantities, without recording device, n.e.s.	25-Feb-22		
9030.90.00	Parts and accessories for instruments and apparatus for measuring or checking electrical quantities or for detecting ionising radiations, n.e.s.	25-Feb-22		
X.C.III.101	Preforms of glass or of any other material optimised for the manufacture of optical fibres controlled by X.A.III.101.	7002.20.10	Rods of optical glass, unworked	25-Feb-22

X.D.III.101	'Software' specially designed or modified for the 'development', 'production' or 'use' of equipment controlled by X.A.III.101 and X.B.III.101, and dynamic adaptive routing software as described as follows: a. 'Software', other than in machine-executable form, specially designed for 'dynamic adaptive routing'.	N/A	Software	25-Feb-22
X.A.III.101.h	'Technology' for the 'development', 'production' or 'use' of equipment controlled by X.A.III.101 or X.B.III.101, or 'software' controlled by X.D.III.101, and other 'technologies' as follows: a. Specific 'technologies' as follows: 1. 'Technology' for the processing and application of coatings to optical fibre specially designed to make it suitable for underwater use; 2. 'Technology' for the 'development' of equipment employing 'Synchronous Digital Hierarchy' ('SDH') or 'Synchronous Optical Network' ('SONET') techniques.	N/A	Technology	25-Feb-22
X.A.III.201	Equipment as follows: a. Not used; b. Not used; c. Goods classified as mass market encryption in accordance with Cryptography Note – Note 3 to Category 5, Part 2	N/A	Many items with different HS codes	25-Feb-22
X.D.III.201	'Information Security' 'software' as follows: a. Not used; b. Not used; c. 'Software' classified as mass market encryption software in accordance with Cryptography Note – Note 3 to Category 5, Part 2.	N/A	Software	25-Feb-22
X.E.III.201	'Information Security' 'technology' according to the General Technology Note, as follows: a. Not used; b. 'Technology', other than specified in the CML or in Regulation (EU) 2021/821, for the 'use' of mass market goods controlled by X.A.III.201.c or mass market 'software' controlled by X.D.III.201.c.	N/A	Technology	25-Feb-22

#### IV. Sensors and Lasers

X.A.IV.001	Marine or terrestrial acoustic equipment, capable of detecting or locating underwater objects or features or positioning surface vessels or underwater vehicles; and specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821.	9014.80.00	Navigational instruments and apparatus (excl. for aeronautical or space navigation, compasses and radio navigational equipment)	25-Feb-22
X.A.IV.002.a	Image intensifier tubes and specially designed components therefor, as follows: 1. Image intensifier tubes having all the following: a. A peak response in wavelength range exceeding 400 nm, but not exceeding 1 050 nm; b. A microchannel plate for electron image amplification with a hole pitch (center-to-center spacing) of less than 25 micrometers; and c. Having any of the following: 1. An S-20, S-25 or multialkali photocathode; or 2. A GaAs or GaInAs photocathode; 2. Specially designed microchannel plates having both of the following characteristics: a. 15 000 or more hollow tubes per plate; and b. Hole pitch (center-to-center spacing) of less than 25 micrometers.	9022.90.80	X-ray generators other than X-ray tubes, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like, and general parts and accessories for apparatus of heading 9022, n.e.s.	25-Feb-22
X.A.IV.002.b	Direct view imaging equipment operating in the visible or infrared spectrum, incorporating image intensifier tubes having the characteristics listed in X.A.IV.002.a.1.	8525.83.00	Other, night vision goods as specified in subheading note 3 to this chapter	25-Feb-22
X.A.IV.003	Cameras that meet the criteria of Note 3 to 6A003.b.4.	8525.83.00	Other, night vision goods as specified in subheading note 3 to this chapter	25-Feb-22



X.A.IV.004.a	Optical filters: 1. For wavelengths longer than 250 nm, comprised of multi-layer optical coatings and having either of the following: a. Bandwidths equal to or less than 1 nm Full Width Half Intensity (FWHI) and peak transmission of 90 % or more; or b. Bandwidths equal to or less than 0,1 nm FWHI and peak transmission of 50 % or more; 2. For wavelengths longer than 250 nm, and having all of the following: a. Tunable over a spectral range of 500 nm or more; b. Instantaneous optical bandpass of 1,25 nm or less; c. Wavelength resettable within 0,1 ms to an accuracy of 1 nm or better within the tunable spectral range; and d. A single peak transmission of 91 % or more; 3. Optical opacity switches (filters) with a field of view of 30° or wider and a response time equal to or less than 1 ns;	9002.20.00	Filters, optical, being parts of or fittings for instruments, apparatus and appliances, framed or mounted	25-Feb-22
X.A.IV.004.b	'Fluoride fibre' cable, or optical fibres therefor, having an attenuation of less than 4 dB/km in the wavelength range exceeding 1 000 nm but not exceeding 3 000 nm.	8536.70.00	Connectors for optical fibres, optical fibre bundles or cables	25-Feb-22
X.A.IV.005.a	a. Carbon dioxide (CO <sub>2</sub> ) 'lasers' having any of the following: 1. A CW output power exceeding 10 kW; 2. A pulsed output with a 'pulse duration' exceeding 10 µs; and a. An average output power exceeding 10 kW; or b. A pulsed 'peak power' exceeding 100 kW; or 3. A pulsed output with a 'pulse duration' equal to or less than 10 µs; and a. A pulse energy exceeding 5 J per pulse and 'peak power' exceeding 2,5 kW; or b. An average output power exceeding 2,5 kW;	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.005.b	Semiconductor lasers, as follows: 1. Individual, single-transverse mode semiconductor 'lasers' having: a. An average output power exceeding 100 mW; or b. A wavelength exceeding 1 050 nm; 2. Individual, multiple-transverse mode semiconductor 'lasers', or arrays of individual semiconductor 'lasers', having a wavelength exceeding 1 050 nm;	9013.20.00	Lasers, other than laser diodes	25-Feb-22
		9013.80.00	other optical appliances and instruments, not specified or included elsewhere in this chapter	25-Feb-22
X.A.IV.005.c	Ruby 'lasers' having an output energy exceeding 20 J per pulse;	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.005.d	d. Non-'tunable' 'pulsed lasers' having an output wavelength exceeding 975 nm but not exceeding 1 150 nm and having any of the following: ...	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.005.e	Non-'tunable' continuous wave '(CW) lasers', having an output wavelength exceeding 975 nm but not exceeding 1 150 nm and having any of the following: ...	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.005.f	Non-'tunable' 'lasers', having a wavelength exceeding 1 400 nm, but not exceeding 1 555 nm and having any of the following: 1. An output energy exceeding 100 mJ per pulse and a pulsed 'peak power' exceeding 1 W; or 2. An average or CW output power exceeding 1 W;	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.005.g	Free electron "lasers"	9013.20.00	Lasers (excl. laser diodes)	25-Feb-22
X.A.IV.006	Magnetometers', 'Superconductive' electromagnetic sensors, and specially designed components therefor, as follows: ...	9015.80.20	Meteorological, hydrological and geophysical instruments and apparatus (excl. compasses, rangefinders, theodolites, tachymeters "tacheometers", levels and photogrammetrical surveying instruments and appliances)	25-Feb-22
X.A.IV.007	Gravity meters (gravimeters) for ground use, other than those specified in the CML or in Regulation (EU) 2021/821, as follows: a. Having a static accuracy of less (better) than 100 µGal; or b. Being of the quartz element (Worden) type.	9015.80.20	Meteorological, hydrological and geophysical instruments and apparatus (excl. compasses, rangefinders, theodolites, tachymeters "tacheometers", levels and photogrammetrical surveying instruments and appliances)	25-Feb-22

X.A.IV.008	Radar systems, equipment and major components, other than those specified in the CML or in Regulation (EU) 2021/821, and specially designed components therefor, as follows: a. Airborne radar equipment, other than those specified in the CML or in Regulation (EU) 2021/821, and specially designed components therefor. b. 'Space-qualified' 'laser' radar or Light Detection and Ranging (LIDAR) equipment specially designed for surveying or for meteorological observation. c. Millimeter wave enhanced vision radar imaging systems specially designed for rotary wing aircraft and having all of the following: ... ...	8526.10.00	Radar apparatus	25-Feb-22
X.A.IV.009.a	Seismic detection equipment not controlled by X.A.IV.009.c.	9015.80.20	Meteorological, hydrological and geophysical instruments and apparatus (excl. compasses, rangefinders, theodolites, tachymeters "tacheometers", levels and photogrammetrical surveying instruments and appliances)	25-Feb-22
X.A.IV.009.b	Radiation hardened TV cameras, other than those specified in the CML or in Regulation (EU) 2021/821.	8525.82.00	Other, radiation-hardened or radiation-tolerant goods as specified in subheading note 2 to this chapter	25-Feb-22
X.A.IV.009.c	Seismic intrusion detection systems that detect, classify and determine the bearing on the source of a detected signal.	9031.80.80	Non-optical instruments, appliances and machines for measuring or checking, n.e.s. in Chapter 90	25-Feb-22
X.B.IV.001.a	Equipment, including tools, dies, fixtures or gauges, and other specially designed components and accessories therefor, specially designed or modified for any of the following: a. For the manufacture or inspection of: 1. Free electron 'laser' magnet wigglers; 2. Free electron 'laser' photo injectors;	9031.49.90	Optical instruments, appliances and machines for measuring or checking, not elsewhere specified or included in chapter 90	25-Feb-22
X.B.IV.001.b	Equipment, including tools, dies, fixtures or gauges, and other specially designed components and accessories therefor, specially designed or modified for any of the following: For the adjustment, to required tolerances, of the longitudinal magnetic field of free electron 'lasers'.	9031.49.90	Optical instruments, appliances and machines for measuring or checking, not elsewhere specified or included in chapter 90	25-Feb-22
X.C.IV.001	Optical sensing fibres that are modified structurally to have a 'beat length' of less than 500 mm (high birefringence) or optical sensor materials not described in 6C002.b and having a zinc content of equal to or more than 6 % by 'mole fraction.'	8536.70.00	Connectors for optical fibres, optical fibre bundles or cables	25-Feb-22
X.C.IV.002.a	Low optical absorption materials, as follows: 1. Bulk fluoride compounds containing ingredients with a purity of 99,999 % or better; or Note: X.C.IV.002.a.1 controls fluorides of zirconium or aluminum and variants. 2. Bulk fluoride glass made from compounds controlled by 6C004.e.1 ;	2826.12.00	Fluoride of aluminium	25-Feb-22
		2826.19.90	Fluorides (excl. of ammonium, sodium, aluminium and mercury)	25-Feb-22
X.C.IV.002.b	'Optical fibre preforms' made from bulk fluoride compounds containing ingredients with a purity of 99,999 % or better, 'specially designed' for the manufacture of 'fluoride fibres' controlled by X.A.IV.004.b.	7002.20.10	Rods of optical glass, unworked	25-Feb-22
X.D.IV.001	'Software', other than those specified in the CML or in Regulation (EU) 2021/821, specially designed for the 'development', 'production', or 'use' of goods controlled by 6A002, 6A003, X.A.IV.001, X.A.IV.006, X.A.IV.007, or X.A.IV.008.	N/A	Software	25-Feb-22
X.D.IV.002	'Software' specially designed for the 'development' or 'production' of equipment controlled by X.A.IV.002, X.A.IV.004, or X.A.IV.005.	N/A	Software	25-Feb-22
X.D.IV.003	Other 'software', as follows: a. Air Traffic Control (ATC) 'software' application 'programs' hosted on general purpose computers located at Air Traffic Control centers, and capable of automatically handing over primary radar target data (if not correlated with secondary surveillance radar (SSR) data) from the host ATC center to another ATC center. b. 'Software' specially designed for seismic intrusion detection systems in X.A.IV.009.c. c. 'Source Code' specially designed for seismic intrusion detection systems in X.A.IV.009.c.	N/A	Software	25-Feb-22
X.E.IV.001	'Technology' for the 'development', 'production' or 'use' of equipment controlled by X.A.IV.001, X.A.IV.006, X.A.IV.007, X.A.IV.008 or X.A.IV.009.c.	N/A	Technology	25-Feb-22
X.E.IV.002	'Technology' for the 'development' or 'production' of equipment, materials or 'software' controlled by X.A.IV.002, X.A.IV.004, or X.A.IV.005, X.B.IV.001, X.C.IV.001, X.C.IV.002, or X.D.IV.003.	N/A	Technology	25-Feb-22

X.E.IV.003	Other 'technology' as follows: a. Optical fabrication technologies for serially producing optical components at a rate exceeding 10 m <sup>2</sup> of surface area per year on any single spindle and having all of the following: 1. Area exceeding 1 m <sup>2</sup> ; and 2. Surface figure exceeding $\lambda/10$ (rms) at the designed wavelength; b. 'Technology' for optical filters with a bandwidth equal to or less than 10 nm, a field of view (FOV) exceeding 40° and a resolution exceeding 0,75 line pairs per milliradian; c. 'Technology' for the 'development' or 'production' of cameras controlled by X.A.IV.003; d. 'Technology' required for the 'development' or 'production' of non-triaxial fluxgate 'magnetometers' or non-triaxial fluxgate 'magnetometer' systems, having any of the following:.....	N/A	Technology	25-Feb-22
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## V. Navigation and Avionics

X.A.V.001	Airborne communication equipment, all "aircraft" inertial navigation systems, and other avionic equipment, including components, other than those specified in the CML or in Regulation (EU) 2021/821.	8517.69.30	Reception apparatus for radio-telephony or radio-telegraphy	25-Feb-22
		8526.91.20	Radio navigational receivers (excl. radar apparatus)	25-Feb-22
		9014.10.00	Direction finding compasses	25-Feb-22
		9014.20.20	Inertial navigation systems for aeronautical or space navigation (excl. compasses and radio navigational equipment)	25-Feb-22
		9014.20.80	Instruments and appliances for aeronautical or space navigation (excl. inertial navigation systems, compasses and radio navigational equipment)	25-Feb-22
		9014.90.00	Parts and accessories for compasses and other navigational instruments and appliances, n.e.s.	25-Feb-22
X.B.V.001	Other equipment specially designed for the test, inspection, or 'production' of navigation and avionics equipment.	9030.82.00	Instruments and apparatus for measuring or checking semiconductor wafers or devices	25-Feb-22
X.D.V.001	'Software', other than specified in the CML or in Regulation (EU) 2021/821, for the 'development', 'production', or 'use' of navigation, airborne communication and other avionics.	N/A	Software	25-Feb-22
X.E.V.001	'Technology', other than specified in the CML or in Regulation (EU) 2021/821, for the 'development', 'production' or 'use' of navigation, airborne communication, and other avionics equipment.	N/A	Technology	25-Feb-22

## VI. Marine

X.A.VI.001.a	Underwater vision systems, as follows: 1. Television systems (comprising camera, lights, monitoring and signal transmission equipment) having a limiting resolution when measured in air of more than 500 lines and specially designed or modified for remote operation with a submersible vehicle; or 2. Underwater television cameras having a limiting resolution when measured in air of more than 700 lines;	9006.30.00	Cameras specially designed for underwater use, for aerial survey or for medical or surgical examination of internal organs; comparison cameras for forensic or criminological laboratories	25-Feb-22
X.A.VI.001.b	Photographic still cameras specially designed or modified for underwater use, having a film format of 35 mm or larger, and having autofocus or remote focusing 'specially designed' for underwater use;	9006.30.00	Cameras specially designed for underwater use, for aerial survey or for medical or surgical examination of internal organs; comparison cameras for forensic or criminological laboratories	25-Feb-22
X.A.VI.001.c	Stroboscopic light systems, specially designed or modified for underwater use, capable of a light output energy of more than 300 J per flash;	9029.20.90	Stroboscopes	25-Feb-22
X.A.VI.001.d	Other underwater camera equipment, other than those specified in the CML or in Regulation (EU) 2021/821;	9006.30.00	Cameras specially designed for underwater use, for aerial survey or for medical or surgical examination of internal organs; comparison cameras for forensic or criminological laboratories	25-Feb-22
X.A.VI.001.f	Vessels (surface or underwater), including inflatable boats, and specially designed components therefor, other than those specified in the CML or in Regulation (EU) 2021/821;	8901.10.10	Sea-going cruise ships, excursion boats and similar vessels principally designed for the transport of persons, and seagoing ferry-boats of all kinds	25-Feb-22
		8901.10.90	Cruise ships, excursion boats and similar vessels principally designed for the transport of persons and ferry-boats of all kinds (excl. seagoing vessels)	25-Feb-22
		8901.20.10	Sea-going tankers	25-Feb-22
		8901.20.90	Tankers (excl. seagoing tankers)	25-Feb-22
		8901.30.10	Sea-going refrigerated vessels (excl. tankers)	25-Feb-22
		8901.30.90	Refrigerated vessels (excl. seagoing vessels and tankers)	25-Feb-22

8901.90.10	Sea-going vessels for the transport of goods and seagoing vessels for the transport of both persons and goods (excl. refrigerated vessels, tankers, ferry-boats and vessels principally designed for the transport of persons)	25-Feb-22
8901.90.90	Vessels for the transport of goods and vessels for the transport of both persons and goods, whether or not mechanically propelled (excl. seagoing vessels, refrigerated vessels, tankers, ferry-boats and vessels principally designed for the transport of persons)	25-Feb-22
8902.00.10	Fishing vessels, factory ships and other vessels for processing or preserving fishery products, seagoing	25-Feb-22
8902.00.90	Fishing vessels; factory ships and other vessels for processing or preserving fishery products (excl. seagoing vessels and fishing boats for sport)	25-Feb-22
8903.21.00	Sailboats, other than inflatable, with or without auxiliary motor: of a length not exceeding 7,5 m	25-Feb-22
8903.22.10	Sailboats, other than inflatable, of a length exceeding 7,5 m but not exceeding 24 m; seagoing	25-Feb-22
8903.22.90	Sailboats, other than inflatable, of a length exceeding 7,5 m but not exceeding 24 m; other	25-Feb-22
8903.23.10	Sailboats, other than inflatable, of a length exceeding 24 m; seagoing	25-Feb-22
8903.23.90	Sailboats, other than inflatable, of a length exceeding 24 m; other	25-Feb-22
8903.31.00	Motorboats, other than inflatable, not including outboard motorboats; of a length not exceeding 7,5 m	25-Feb-22
8903.32.10	Motorboats, other than inflatable, not including outboard motorboats; of a length exceeding 7,5 m but not exceeding 24 m; seagoing	25-Feb-22
8903.32.90	Motorboats, other than inflatable, not including outboard motorboats; of a length exceeding 7,5 m but not exceeding 24 m; other	25-Feb-22
8903.33.10	Motorboats, other than inflatable, not including outboard motorboats; of a length exceeding 24 m; seagoing	25-Feb-22
8903.33.90	Motorboats, other than inflatable, not including outboard motorboats; of a length exceeding 24 m; other	25-Feb-22
8903.93.10	Other yachts and other vessels for pleasure or sports; rowing boats and canoes; of a length not exceeding 7,5 m; of a weight not exceeding 100 kg each	25-Feb-22
8903.93.90	Other yachts and other vessels for pleasure or sports; rowing boats and canoes; of a length not exceeding 7,5 m; other	25-Feb-22
8903.99.10	Other yachts and other vessels for pleasure or sports; rowing boats and canoes; of other length; of a weight not exceeding 100 kg each	25-Feb-22
8903.99.90	Other yachts and other vessels for pleasure or sports; rowing boats and canoes; of other length; other	25-Feb-22
8904.00.10	Tugs, seagoing and for inland waterways	25-Feb-22
8904.00.91	Sea-going pusher craft	25-Feb-22
8904.00.99	Pusher craft (excl. seagoing)	25-Feb-22
8905.10.10	Sea-going dredgers	25-Feb-22
8905.10.90	Dredgers (excl. seagoing)	25-Feb-22
8905.90.10	Sea-going light vessels, fire-floats, floating cranes and other vessels, the navigability of which is subsidiary to their main function (excl. dredgers, floating or submersible drilling or production platforms; fishing vessels and warships)	25-Feb-22
8905.90.90	Light vessels, fire-floats, floating cranes and other vessels, the navigability of which is subsidiary to their main function (excl. seagoing vessels, dredgers, floating or submersible drilling or production platforms; fishing vessels and warships)	25-Feb-22
8906.10.00	Warships of all kinds	25-Feb-22
8906.90.10	Other vessels, including warships and lifeboats other than rowing boats	25-Feb-22
8906.90.91	Vessels, incl. lifeboats, of a weight ≤ 100 kg each (excl. rowing boats and other vessels of heading 8901 to 8905 and vessels for breaking up)	25-Feb-22
8906.90.99	Vessels, incl. lifeboats, of a weight > 100 kg each (excl. seagoing vessels, warships, rowing boats and other vessels of heading 8901 to 8905 and floating structures for breaking up)	25-Feb-22
8908.00.00	Vessels and other floating structures for breaking up	25-Feb-22

X.A.VI.001.g	Marine engines (both inboard and outboard) and submarine engines and specially designed components therefor, other than those specified in the CML or in Regulation (EU) 2021/821;	8406.10.00	Steam and other vapour turbines for marine propulsion	25-Feb-22
		8407.21.10	Spark-ignition outboard motors for marine propulsion, of a cylinder capacity <= 325 cm <sup>3</sup>	25-Feb-22
		8407.21.91	Spark-ignition outboard motors for marine propulsion, of a cylinder capacity > 325 cm <sup>3</sup> and a power <= 30 kW	25-Feb-22
		8407.21.99	Spark-ignition outboard motors for marine propulsion, of a cylinder capacity > 325 cm <sup>3</sup> and a power > 30 kW	25-Feb-22
		8407.29.00	Spark-ignition reciprocating or rotary engines, for marine propulsion (excl. outboard motors)	25-Feb-22
		8408.10.11	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", used, for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00	25-Feb-22
		8408.10.19	Compression-ignition combustion piston engine, used, for vessels (other than for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.23	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power <= 50 kW	25-Feb-22
		8408.10.27	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for vessels, new, of a power <= 50 kW (excl. for seagoing vessels of heading 8901 to 8906, for tugs of subheading 8904.00.10 and for warships of subheading 8906.10.00)	25-Feb-22
		8408.10.31	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 50 kW but <= 100 kW	25-Feb-22
		8408.10.39	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vessels, new, of a power > 50 kW but <= 100 kW (excl. for vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.41	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 100 kW but <= 200 kW	25-Feb-22
		8408.10.49	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vessels, new, of a power > 100 kW but <= 200 kW (excl. for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.51	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 200 kW but <= 300 kW	25-Feb-22
		8408.10.59	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", of vessels, new, of a power > 200 kW but <= 300 kW (excl. for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.61	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 300 kW but <= 500 kW	25-Feb-22
		8408.10.69	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for vessels, new, of a power > 300 kW but <= 500 kW (excl. for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.71	Compression-engine internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 500 kW but <= 1.000 kW	25-Feb-22
		8408.10.79	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vessels, new, of a power > 500 kW but <= 1.000 kW (excl. for seagoing vessels of	25-Feb-22

			heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	
		8408.10.81	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine", for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 1.000 kW but <= 5.000 kW	25-Feb-22
		8408.10.89	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vessels, new, of a power > 1.000 kW but <= 5.000 kW (excl. for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
		8408.10.91	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00, new, of a power > 5.000 kW	25-Feb-22
		8408.10.99	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vessels, new, of a power > 5.000 kW (excl. for seagoing vessels of heading 8901 to 8906, tugs of subheading 8904.00.10 and warships of subheading 8906.10.00)	25-Feb-22
X.A.VI.001.h	Self-contained underwater breathing apparatus (scuba gear) and accessories therefor, other than those specified in the CML or in Regulation (EU) 2021/821;	9506.29.00	Water-skis, surfboards and other water-sport equipment (other than sailboards)	25-Feb-22
X.A.VI.001.i	Life jackets, inflation cartridges, dive compasses and dive computers;	8471.30.00	Portable automatic data-processing machines, weighing not more than 10 kg, consisting of at least a central processing unit, a keyboard and a display	25-Feb-22
		9506.29.00	Water-skis, surfboards and other water-sport equipment (other than sailboards)	25-Feb-22
X.A.VI.001.j	Underwater lights and propulsion equipment;	9405.42.10	Other electric luminaires and lighting fittings; Searchlights and spotlights	25-Feb-22
		8906.90.10	Other vessels, including warships and lifeboats other than rowing boats	25-Feb-22
X.A.VI.001.k	Air compressors and filtration system specially designed for filling air cylinders;	8414.40.10	Air compressors mounted on a wheeled chassis for towing giving a flow per minute not exceeding 2 m <sup>3</sup>	25-Feb-22
X.D.VI.001	'Software' specially designed or modified for the 'development', 'production' or 'use' of equipment controlled by X.A.VI.001.	N/A	Software	25-Feb-22
X.D.VI.002	'Software' specially designed for the operation of unmanned submersible vehicles used in the oil and gas industry.	N/A	Software	25-Feb-22
X.E.VI.001	'Technology' for the 'development', 'production' or 'use' of equipment controlled by X.A.VI.001.	N/A	Technology	25-Feb-22

## VII. Aerospace and Propulsion

X.A.VII.001.a	Diesel engines, other than those specified in the CML or in Regulation (EU) 2021/821, for trucks, tractors, and automotive applications, having an overall power output of 298kW or more.	8408.20.37	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for wheeled agricultural or forestry tractors, of a power > 100 kW	25-Feb-22
		8408.20.99	Compression-ignition internal combustion piston engine "diesel or semi-diesel engine" for vehicles of chapter 87, of a power > 200 kW (excl. engines of subheading 8408.20.10 and engines for wheeled agricultural or forestry tractors)	25-Feb-22
X.A.VII.001.b	Off highway wheel tractors of carriage capacity 9 t or more; and major components and accessories, other than those specified in the CML or in Regulation (EU) 2021/821.	8701.95.10	Agricultural tractors and forestry tractors, wheeled, of an engine power > 130 kW (excl. pedestrian-controlled tractors)	25-Feb-22
X.A.VII.001.c	Road tractors for semi-trailers, with single or tandem rear axles rated for 9 t per axel or more and specially designed major components.	8701.95.90	Tractors, of an engine power > 130 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers, track-laying tractors and wheeled agricultural/forestry tractors)	25-Feb-22
X.A.VII.002.c	Aero gas turbine engines and components specially designed therefor.	8411.11.00	Turbojets of a thrust <= 25 kN	25-Feb-22
		8411.12.10	Turbojets of a thrust > 25 kN but <= 44 kN	25-Feb-22
		8411.12.30	Turbojets of a thrust > 44 kN but <= 132 kN	25-Feb-22
		8411.12.80	Turbojets of a thrust > 132 kN	25-Feb-22
		8411.21.00	Turbopropellers of a power <= 1.100 kW	25-Feb-22
		8411.22.20	Turbopropellers of a power > 1.100 kW but <= 3.730 kW	25-Feb-22
		8411.22.80	Turbopropellers of a power > 3.730 kW	25-Feb-22
8411.91.00	Parts of turbojets or turbopropellers, n.e.s.	25-Feb-22		
X.A.VII.003	Aircraft engines, other than those specified in X.A.VII.002, the CML or in	8407.10.00	Spark-ignition reciprocating or rotary internal combustion piston engines;	16-Dec-22

	Regulation (EU) 2021/821, as follows: a. Reciprocating or rotary internal combustion piston engines; or b. Electric engines. Technical Note: For the purpose of X.A.VII.003 aircrafts includes: aeroplanes, UAVs, helicopters, autogyros, hybrid aircrafts or radio-controlled models	8408.90.27	Uded compression-ignition internal combustion engines	16-Dec-22
		8408.90.41	Compression-ignition internal combustion engines; not exceeding 15 kW	16-Dec-22
		8408.90.43	Compression-ignition internal combustion engines; exceeding 15 kW but not exceeding 30 kW	16-Dec-22
		8408.90.45	Compression-ignition internal combustion engines; exceeding 30 kW but not exceeding 50 kW	16-Dec-22
		8408.90.47	Compression-ignition internal combustion engines; exceeding 50 kW but not exceeding 100 kW	16-Dec-22
		8408.90.61	Compression-ignition internal combustion engines; exceeding 100 kW but not exceeding 200 kW	16-Dec-22
		8408.90.65	Compression-ignition internal combustion engines; exceeding 200 kW but not exceeding 300 kW	16-Dec-22
		8408.90.67	Compression-ignition internal combustion engines; exceeding 300 kW but not exceeding 500 kW	16-Dec-22
		8408.90.81	Compression-ignition internal combustion engines; exceeding 500 kW but not exceeding 1 000 kW	16-Dec-22
		8408.90.85	Compression-ignition internal combustion engines; exceeding 1 000 kW but not exceeding 5 000 kW	16-Dec-22
		8408.90.89	Compression-ignition internal combustion engines; exceeding 5 000 kW	16-Dec-22
			Heading 8501	Electric motors and generators (excluding generating sets):
X.A.VII.002.e	Pressurised aircraft breathing equipment components specially designed therefor, other than those specified in the CML or in Regulation (EU) 2021/821.	9020.00.10	Gas masks	25-Feb-22
		9020.00.90	Other breathing appliances and gas masks, including accessories	25-Feb-22
X.B.VII.001	Vibration test equipment and specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821.	9031.20.00	Test benches for motors, generators, pumps, etc.	25-Feb-22
		9031.80.20	Instruments, appliances and machines for measuring or checking geometrical quantities, n.e.s. in Chapter 90	25-Feb-22
X.B.VII.002.a	Automated equipment using non-mechanical methods for measuring airfoil wall thickness;	9031.80.20	Instruments, appliances and machines for measuring or checking geometrical quantities, n.e.s. in Ch 90	25-Feb-22
X.B.VII.002.b	Tooling, fixtures or measuring equipment for the 'laser', water jet or ECM/EDM hole drilling processes controlled by 9E003.c	8466.10.20	Arbors, collets and sleeves for use as tool holders in machine tools, incl. tool holders for any type of tool for working in the hand	25-Feb-22
		8466.10.38	Tool holders for machine tools, incl. tool holders for any type of tool for working in the hand (excl. tool holders for lathes, arbors, collets and sleeves)	25-Feb-22
		8466.20.20	Work holders for machine tools in the form of jigs and fixtures for specific applications, incl. sets of standard jig and fixture components	25-Feb-22
		8466.20.98	Work holders for machine tools (excl. work holders for lathes and in the form of jigs and fixtures for specific applications, incl. sets of standard jig and fixture components)	25-Feb-22
		8466.93.50	Parts and accessories for water-jet cutting machines, n.e.s.	25-Feb-22
		8466.93.60	Parts and accessories for machine tools for working material by removing material of headings 8456 to 8461, n.e.s.	25-Feb-22
X.B.VII.002.c	Ceramic core leaching equipment	8474.39.00	Other machinery for the treatment of solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry moulds of sand	25-Feb-22
X.B.VII.002.d	Ceramic core manufacturing equipment or tools	8474.80.10	Machinery for agglomerating, shaping or moulding ceramic paste	25-Feb-22
		8514.11.00	Resistance heated furnaces and ovens; Hot isostatic presses	25-Feb-22
		8514.19.80	Resistance heated furnaces and ovens; Other	25-Feb-22
X.B.VII.002.e	Ceramic shell wax pattern preparation equipment;	8479.89.97	Other machines and mechanical appliances having individual functions, not specified or included elsewhere in chapter 84	25-Feb-22
X.B.VII.002.f	Ceramic shell burn out or firing equipment	8514.11.00	Resistance heated furnaces and ovens; Hot isostatic presses	25-Feb-22
		8514.19.80	Resistance heated furnaces and ovens; Other	25-Feb-22
X.D.VII.001	'Software', other than those specified in the CML or in Regulation (EU) 2021/821, for the 'development' or 'production' of equipment controlled by X.A.VII.001 or X.B.VII.001.	N/A	Software	25-Feb-22
X.D.VII.002	'Software', for the 'development' or 'production' of equipment controlled by X.A.VII.002 or X.B.VII.002.	N/A	Software	25-Feb-22
X.E.VII.001	'Technology', other than those specified in the CML or in Regulation (EU) 2021/821, for the 'development' or 'production' or 'use' of equipment controlled by X.A.VII.001 or X.B.VII.001.	N/A	Technology	25-Feb-22
X.E.VII.002	'Technology', for the 'development', 'production' or 'use' of equipment controlled by X.A.VII.002 or X.B.VII.002.	N/A	Technology	25-Feb-22

X.E.VII.003	Other 'technology', not described by 9E003, as follows: a. Rotor blade tip clearance control systems employing active compensating casing 'technology' limited to a design and development data base; or b. Gas bearing for turbine engine rotor assemblies.	N/A	Technology	25-Feb-22
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## VIII. Miscellaneous items

X.A.VIII.001.a	Drill head integrated measurement equipment, including internal navigation systems for measurement while drilling (MWD);	9014.80.00	Other navigational instruments and appliances:	08-Apr-22
X.A.VIII.001.b	Gas monitoring systems and detectors therefor, designed for continuous operation and detection of hydrogen sulphide	9027.10.10	Gas or smoke analysis apparatus	08-Apr-22
X.A.VIII.001.c	Equipment for seismological measurements, including reflection seismics and seismic vibrators	9031.80.20	Instruments, appliances and machines for measuring or checking geometrical quantities, n.e.s. in Chapter 90	08-Apr-22
X.A.VIII.001.d	Sediment echo sounders	9015.80.20	Meteorological, hydrological and geophysical instruments and apparatus	08-Apr-22
X.A.VIII.002	Equipment, "electronic assemblies" and components, specially designed for quantum computers, quantum electronics, quantum sensors, quantum processing units, qubit circuits, qubit devices or quantum radar systems, including pockels cells.	8471.49.00	Other, portable automatic data-processing machines, weighing not more than 10 kg, consisting of at least a central processing unit, a keyboard and a display presented in the form of systems	08-Apr-22
		8473.30.20	Parts and accessories of the machines of heading 8471; Electronic assemblies	08-Apr-22
		8535.40.00	Lightning arresters, voltage limiters and surge suppressors	08-Apr-22
		8535.90.00	Other electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits	08-Apr-22
		8542.31	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	08-Apr-22
X.A.VIII.003	Microscopes, related equipment and detectors as follows	9012.10.00	Microscopes other than optical microscopes; diffraction apparatus	08-Apr-22
		9012.90.00	Microscopes other than optical microscopes; diffraction apparatus; Parts and accessories	08-Apr-22
X.A.VIII.004	Collector equipment for metal ores in deep seabed	8905.20.00	Floating or submersible drilling or production platforms	08-Apr-22
X.A.VIII.005.a	Additive manufacturing equipment for the "production" of metal parts;	8485.10.00	Machines for additive manufacturing; By metal deposit	08-Apr-22
X.A.VIII.005.b	Additive manufacturing equipment for "energetic materials", including equipment using ultrasonic extrusion	8485.20.00	Machines for additive manufacturing; By plastics or rubber deposit	08-Apr-22
		8485.80.90	Other machines for additive manufacturing	08-Apr-22
X.A.VIII.005.c	Vat photopolymerization (VVP) additive manufacturing equipment using stereo lithography (SLA) or direct light processing (DLP)	8485.20.00	Machines for additive manufacturing; By plastics or rubber deposit	08-Apr-22
X.A.VIII.006	Equipment for the "production" of printed electronics for organic light emitting diodes (OLED), organic field-effect transistors (OFET) or organic photovoltaic cells (OPVC).	8486.30.00	Machines and apparatus for the manufacture of flat panel displays	08-Apr-22
		8486.40.00	Machines and apparatus specified in note 11(C) to this chapter	08-Apr-22
		8486.90.00	Parts and accessories of machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in note 11(C) to this chapter	08-Apr-22
X.A.VIII.007	Equipment for the "production" of microelectromechanical systems (MEMS) using the mechanical properties of silicon, including sensors in chip format like pressure membranes, bending beams or micro adjustment devices.	8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	08-Apr-22
		8486.40.00	Machines and apparatus specified in note 11(C) to this chapter	08-Apr-22
X.A.VIII.008	Equipment, specially designed for the production of E-Fuels (electrofuels and synthetic fuels) or ultra efficient solar cells (efficiency > 30 %).	8419.60.00	Machinery for liquefying air or other gases	08-Apr-22
		8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature	08-Apr-22
		8486.10.00	Machines and apparatus for the manufacture of boules or wafers	08-Apr-22
		8486.20.00	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	08-Apr-22
X.A.VIII.009.a	UHV pumps (sublimation, turbomolecular, diffusion, cryogenic, ion getter);	8414.10.15	Vacuum pumps of a kind used for the manufacture of semiconductors or solely or principally used for the manufacture of flat panel displays	08-Apr-22
		8414.10.25	Vacuum pumps: rotary piston pumps, sliding vane rotary pumps, molecular drag pumps and Roots pumps	08-Apr-22



		8414.10.81	Vacuum pumps: Diffusion pumps, cryopumps and adsorption pumps	08-Apr-22
X.A.VIII.009.b	UHV pressure gauges.	9026.20.20	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases; for measuring or checking pressure; electronic.	08-Apr-22
		9026.20.40	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases; for measuring or checking pressure; Spiral or metal diaphragm type pressure gauges	08-Apr-22
		9026.20.80	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases; for measuring or checking pressure; Other	08-Apr-22
X.A.VIII.010.a	Pulse Tubes for 'Cryogenic refrigeration systems'	8418.99.10	Evaporators and condensers, excluding those for refrigerators of the household type	08-Apr-22
X.A.VIII.010.b	Cryostats for 'Cryogenic refrigeration systems'	8418.69.00	Other refrigerating or freezing equipment	08-Apr-22
X.A.VIII.010.c	Dewars for 'Cryogenic refrigeration systems'	8541.59.00	Other semiconductor devices	08-Apr-22
X.A.VIII.010.d	Gas Handling System (GHS) for 'Cryogenic refrigeration systems'	8419.50.80	Other Heat-exchange units	08-Apr-22
X.A.VIII.010.e	Compressors for 'Cryogenic refrigeration systems'	8414.30.81	Compressors of a kind used in refrigerating equipment; Of a power exceeding 0,4 kW; Hermetic or semi-hermetic	08-Apr-22
X.A.VIII.010.f	Control units for 'Cryogenic refrigeration systems'	8418.99.10	Evaporators and condensers, excluding those for refrigerators of the household type	08-Apr-22
X.A.VIII.011	'Decapsulation' equipment for semiconductor devices.	8486.40.00	Machines and apparatus specified in note 11(C) to this chapter	08-Apr-22
X.A.VIII.012	High Quantum Efficiency (QE) photodetectors with a QE greater than 80 % in the wavelength range exceeding 400 nm but not exceeding 1600 nm	9031.80.20	Instruments, appliances and machines for measuring or checking geometrical quantities, n.e.s. in Chapter 90	08-Apr-22
		9031.80.80	Other Measuring or checking instruments, appliances and machines, not specified or included elsewhere in chapter 90	08-Apr-22
X.A.VIII.013	Machine tools, having one or more linear axis with a travel length greater than 8000 mm.	Heading 8456	Machine tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electrodischarge, electrochemical, electron beam, ionic-beam or plasma arc processes; water-jet cutting machines	08-Apr-22
		Heading 8457	Machining centres, unit construction machines (single station) and multi-station transfer machines, for working metal	08-Apr-22
		Heading 8458	Lathes (including turning centres) for removing metal	08-Apr-22
		Heading 8459	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes (including turning centres) of heading 8458	08-Apr-22
		Heading 8460	Machine tools for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal or cermet by means of grinding stones, abrasives or polishing products, other than gear cutting, gear grinding or gear finishing machines of heading 8461	08-Apr-22
X.A.VIII.014	Water cannon systems for riot or crowd control, and components	8424.89.70	Other Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sandblasting machines and similar jet projecting machines	21-Jul-22
		8424.89.90	Parts of Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sandblasting machines and similar jet projecting machines	21-Jul-22
X.A.VIII.015	Law enforcement striking weapons, including saps, police batons, side handle batons, tonfas, sjamboks, and whips	9304.00.00	Other arms (for example, spring, air or gas guns and pistols, truncheons)	21-Jul-22
X.A.VIII.016	Police helmets and shields; and components	6506.10.80	Safety headgear of other materials different from plastic	21-Jul-22
		3926.90.97	Other articles of plastics	21-Jul-22
X.A.VIII.017	Law enforcement restraint devices, including leg irons, shackles, and handcuffs; straight jackets; stun cuffs; shock belts; shock sleeves; multipoint restraint devices such as restraint chairs	4203.30.00	Belts and bandoliers	21-Jul-22
		7326.90.98	Other articles of iron or steel	21-Jul-22
		7616.99.90	Other articles of aluminium	21-Jul-22

		8301.50.00	Clasps and frames with clasps, incorporating locks	21-Jul-22
X.A.VIII.018.b	Oil and gas exploration data; Hydraulic fracturing 'proppant,' 'fracking fluid,' and chemical additives therefor	3824.99.96	Chemical products or preparations, predominantly not composed of organic compounds, not elsewhere specified or included	21-Jul-22
X.A.VIII.019	Specific processing equipment; ring magnets	8505.11.10	Permanent magnets and articles intended to become permanent magnets after magnetisation, of metal, containing neodymium, praseodymium, dysprosium or samarium	21-Jul-22
		8505.11.90	Permanent magnets and articles intended to become permanent magnets after magnetisation, of metal, others	21-Jul-22
		8505.19.10	Permanent magnets and articles intended to become permanent magnets after magnetisation, permanent magnets of agglomerated ferrite	21-Jul-22
		8505.19.90	Permanent magnets and articles intended to become permanent magnets after magnetisation, other	21-Jul-22
X.A.VIII.020.a	Portable electric discharge weapons that can target only one individual each time an electric shock is administered, including but not limited to electric shock batons, electric shock shields, stun guns and electric shock dart guns;	8543.70.90	Other machines and apparatus	06-Oct-22
		9304.00.00	Other arms (for example, spring, air or gas guns and pistols, truncheons), excluding those of heading 9307	06-Oct-22
X.A.VIII.020.b	Kits containing all essential components for assembly of portable electric discharge weapons controlled by item X.A.VIII.020.a	8543.90.00	Parts of other machines and apparatus:	06-Oct-22
		9305.99.00	Parts and accessories of articles of headings 9301 to 9304	06-Oct-22
X.A.VIII.020.c	Fixed or mountable electric discharge weapons that cover a wide area and can target multiple individuals with electrical shocks	8543.70.90	Other machines and apparatus	06-Oct-22
		9304.00.00	Other arms (for example, spring, air or gas guns and pistols, truncheons), excluding those of heading 9307	06-Oct-22
X.A.VIII.021.a	Portable weapons and equipment which either administer a dose of an incapacitating or irritating chemical substance that targets one individual or disseminate a dose of such substance affecting a small area, e.g. in the form of a spray fog or cloud, when the chemical substance is administered or disseminated;	8424.20.00	Spray guns and similar appliances	06-Oct-22
		8424.89.00	Other appliances	06-Oct-22
		9304.00.00	Other arms (for example, spring, air or gas guns and pistols, truncheons), excluding those of heading 9307	06-Oct-22
X.A.VIII.021.b	Pelargonic acid vanillylamide (PAVA) (CAS 2444-46-4)	2939.79.90	Other alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives of vegetal origin	06-Oct-22
X.A.VIII.021.c	Oleoresin capsicum (OC) (CAS 8023-77-6)	3301.90.30	Other extracted oleoresin	06-Oct-22
X.A.VIII.021.d	Mixtures containing at least 0,3 % by weight of PAVA or OC and a solvent (such as ethanol, 1-propanol or hexane), which could be administered as such as incapacitating or irritating agents, in particular in aerosols and in liquid form, or used for manufacturing of incapacitating or irritating agents;	2939.79.90	Other alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives of vegetal origin	06-Oct-22
		3301.90.30	Other extracted oleoresin	06-Oct-22
		3302.10.90	Mixtures of a kind used in the food industries	06-Oct-22
		3302.90.10	Alcoholic solutions	06-Oct-22
		3302.90.90	Other mixtures of odoriferous substances and mixtures (including alcoholic solutions) with a basis of one or more of these substances, of a kind used as raw materials in industry	06-Oct-22
X.A.VIII.021.e	Fixed equipment for the dissemination of incapacitating or irritating chemical substances, which can be attached to a wall or to a ceiling inside a building, comprises a canister of irritating or incapacitating chemical agents and is activated using a remote control system	8424.20.00	Spray guns and similar appliances	06-Oct-22
		8424.89.00	Other appliances	06-Oct-22
X.A.VIII.021.f	Fixed or mountable equipment for the dissemination of incapacitating or irritating chemical agents that covers a wide area and is not designed to be attached to a wall or to a ceiling inside a building.	8424.20.00	Spray guns and similar appliances	06-Oct-22
		8424.89.00	Other appliances	06-Oct-22
		9304.00.00	Other arms (for example, spring, air or gas guns and pistols, truncheons), excluding those of heading 9307	06-Oct-22
X.A.VIII.021.g.1	Dibenzo[b,f][1,4]oxazepine (CR) (CAS 257-07-8);	2934.99.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.2	8-Methyl-N-vanillyl-trans-6-nonenamide (capsaicin) (CAS 404-86-4);	2939.79.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.3	8-Methyl-N-vanillylnonamide (dihydrocapsaicin) (CAS 19408-84-5);	2939.79.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.4	N-Vanillyl-9-methyldec-7-(E)-enamide (homocapsaicin) (CAS 58493-48-4);	2939.79.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.5	N-Vanillyl-9-methyldecanamide (homodihydrocapsaicin) (CAS 20279-06-5);	2939.79.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.6	N-Vanillyl-7-methyloctanamide (nordihydrocapsaicin) (CAS 28789-35-7);	2939.79.90	Other heterocyclic compounds	16-Dec-22
X.A.VIII.021.g.7	4-Nonanolylmorpholine (MPA) (CAS 5299-64-9);	2934.99.90	Other heterocyclic compounds	16-Dec-22

X.A.VIII.021.g.8	Cis-4-acetylamino-dicyclohexylmethane;	2924.29.70	Other carboxamide-function compounds; amide-function compounds of carbonic acid:	16-Dec-22
X.A.VIII.021.g.9	N,N'-Bis(isopropyl)ethylenediimine (CAS 4013-94-9)	2921.29.00	Other acyclic polyamines and their derivatives; salts thereof:	16-Dec-22
X.A.VIII.021.g.10	N,N'-Bis(tert-butyl)ethylenediimine (CAS 4062-60-6).	2921.29.00	Other acyclic polyamines and their derivatives; salts thereof:	16-Dec-22
X.A.VIII.022.a.1	Amobarbital (CAS 57-43-2);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.2	Amobarbital sodium salt (CAS 64-43-7);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.3	Pentobarbital (CAS 76-74-4);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.4	Pentobarbital sodium salt (CAS 57-33-0);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.5	Secobarbital (CAS 76-73-3);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.6	Secobarbital sodium salt (CAS 309-43-3);	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.7	Thiopental (CAS 76-75-5); or	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.a.8	Thiopental sodium salt (CAS 71-73-8), also known as thiopentone sodium;	2933.53.90	Other compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure	06-Oct-22
X.A.VIII.022.b	Products containing one of the anaesthetic agents listed under X.A.VIII.022.a, or intermediate acting barbiturate anaesthetic agents.	3003.90.00	Other medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of two or more constituents which have been mixed together for therapeutic or prophylactic uses, not put up in measured doses or in forms or packings for retail sale	06-Oct-22
		3004.90.00	Other medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems) or in forms or packings for retail sale:	06-Oct-22
		3824.99.64	Other products and preparations for pharmaceutical or surgical uses	06-Oct-22
X.A.VIII.023	Nettings, canopies, tents, blankets and apparel, specially designed for camouflage	N/A	Various CN codes depending on the material and shape	16-Dec-22
X.B.VIII.001.a	Specific processing equipment; Hot cells	8428.70.00	Other lifting, handling, loading or unloading machinery (for example, lifts, escalators, conveyors, teleferics); Industrial robots	21-Jul-22
		8479.50.00	Machines and mechanical appliances having individual functions, not specified or included elsewhere in chapter 84; Industrial robots, not elsewhere specified or included	21-Jul-22
X.B.VIII.001.b	Specific processing equipment; Glove boxes suitable for use with radioactive materials	8414.80.80	Other air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters; gas-tight biological safety cabinets, whether or not fitted with filters:	21-Jul-22
X.C.VIII.001	Metal powders and metal alloy powders, usable for any of the systems listed in X.A.VIII.005.a.	7205.21.00	Of alloy steel	08-Apr-22
		7406.10.00	Powders of non-lamellar structure	08-Apr-22
		7406.20.00	Powders of lamellar structure; flakes	08-Apr-22
		7504.00.00	Nickel powders and flakes	08-Apr-22
		7603.10.00	Powders of non-lamellar structure	08-Apr-22
		7603.20.00	Powders of lamellar structure; flakes	08-Apr-22
		7903.10.00	Zinc dust	08-Apr-22
		8101.10.00	Powders	08-Apr-22
		8102.10.00	Powders	08-Apr-22
		8103.20.00	Unwrought tantalum, including bars and rods obtained simply by sintering; powders	08-Apr-22
		8105.20.00	Cobalt mattes and other intermediate products of cobalt metallurgy; unwrought cobalt; powders	08-Apr-22
		8106.10.10	Unwrought bismuth; waste and scrap; powders	08-Apr-22
8106.90.10	Unwrought bismuth; waste and scrap; powders	08-Apr-22		

		8108.20.00	Unwrought titanium; powders	08-Apr-22
		8109.21.00	Containing less than 1 part hafnium to 500 parts zirconium by weight	08-Apr-22
		8109.29.00	Unwrought zirconium; powders	08-Apr-22
		8110.10.00	Unwrought antimony; powders	08-Apr-22
		8111.00.11	Unwrought manganese; powders	08-Apr-22
		8112.12.00	Unwrought Beryllium; powders	08-Apr-22
		8112.21.10	Alloys containing more than 10 % by weight of nickel	08-Apr-22
		8112.21.90	Other Chromium Unwrought; powders	08-Apr-22
		8112.31.00	Unwrought Hafnium; waste and scrap; powders	08-Apr-22
		8112.41.10	Rhenium Waste and scrap	08-Apr-22
		8112.41.90	Rhenium other	08-Apr-22
		8112.49.00	Other: Thallium	08-Apr-22
		8112.51.00	Unwrought Thallium; powders	08-Apr-22
		8112.69.10	Unwrought cadmium; powders	08-Apr-22
		8112.92	Unwrought; waste and scrap; powders: Niobium (columbium); gallium; indium; vanadium; germanium	08-Apr-22
X.C.VIII.002.a	Materials for cloaking or adaptive camouflage	N/A	It can be made of various materials	08-Apr-22
X.C.VIII.002.b	Metamaterials, e.g. with a negative refractive index;	N/A	It can be made of various materials	08-Apr-22
X.C.VIII.002.c	Advanced fibres for the reinforcement of composite materials, including carbon fibers;	5503.11.00	Synthetic staple fibres, not carded, combed or otherwise processed for spinning of aramids	08-Apr-22
		5503.19.00	Synthetic staple fibres, not carded, combed or otherwise processed for spinning; of nylon or other polyamides	08-Apr-22
		5503.90.00	Other synthetic staple fibres, not carded, combed or otherwise processed for spinning of aramids	08-Apr-22
		5506.10.00	Synthetic staple fibres, carded, combed or otherwise processed for spinning of nylon or other polyamides	08-Apr-22
		5506.20.00	Synthetic staple fibres, carded, combed or otherwise processed for spinning of polyesters	08-Apr-22
		5506.90.00	Other	08-Apr-22
		6815.11.00	Carbon fibres	08-Apr-22
		7019.11.00	Glass fibre chopped strands, of a length of not more than 50 mm	08-Apr-22
		7019.12.00	Glass fibre rovings	08-Apr-22
		7019.13.00	Other yarn, slivers of glass fibre	08-Apr-22
X.C.VIII.002.d	High entropy alloys (HEA);	Various possible HS chapters: 73, 76, 78, 79, etc.	Alloys can be classified in chapter 72, 73, 74, 75, etc. Without knowing the composition of the alloys is not possible to assign a CN code	08-Apr-22
X.C.VIII.002.e	Heusler compounds;	Various possible HS chapters: 73, 76, 78, 79, etc.	Heusler are intermetallic compounds which can be classified in chapter 72, 73, 74, 75, 81, etc. Without knowing the composition of the alloys is not possible to assign a CN code	08-Apr-22
X.C.VIII.002.f	Kitaev materials, including kitaev spin liquids.	Various possible HS chapters: 73, 76, 78, 79, etc.	Kitaev materials can be classified in various chapters of the Harmonized System	08-Apr-22
X.C.VIII.003	Conjugated polymers (conductive, semiconductive, electroluminescent) for printed or organic electronics.	3902.90.90	Other polymers of propylene or of other olefins, in primary forms	08-Apr-22
		3911.90.13	Poly(thio-1,4-phenylene)	08-Apr-22
		3911.90.19	Other condensation or rearrangement polymerisation products whether or not chemically modified	08-Apr-22
		3911.90.99	Other condensation or rearrangement polymerisation products whether or not chemically modified	08-Apr-22
X.C.VIII.004	Mixtures and propellant preparations	3601.00.00	Propellant powders	08-Apr-22

		3602.00.00	Prepared explosives, other than propellant powders	08-Apr-22
X.C.VIII.004 .a	Ammonium picrate (CAS 131-74-8);	2908.99.00	Other halogenated, sulphonated, nitrated or nitrosated derivatives of phenols or phenol-alcohols	08-Apr-22
X.C.VIII.004 .b	Black powder;	2803.00.00	Carbon (carbon blacks and other forms of carbon not elsewhere specified or included)	08-Apr-22
X.C.VIII.004 .c	Hexanitrodiphenylamine (CAS 131-73-7);	2921.44.00	Diphenylamine and its derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .d	Diffluoroamine(CAS 10405-27-3);	2812.90.00	Other halides and halide oxides of non-metals	08-Apr-22
X.C.VIII.004 .e	Nitrostarch (CAS 9056-38-6);	3505.10.50	Starches, esterified or etherified	08-Apr-22
X.C.VIII.004 .h	Tetranitronaphthalene;	2902.90.00	Other cyclic hydrocarbons	08-Apr-22
X.C.VIII.004 .i	Trinitroanisol;	2909.30.90	Other aromatic ethers and their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.C.VIII.004 .j	Trinitronaphthalene;	2902.90.00	Other cyclic hydrocarbons	08-Apr-22
X.C.VIII.004 .k	Trinitroxylene;	2902.41.00	o-Xylene	08-Apr-22
		2902.42.00	m-Xylene	08-Apr-22
		2902.43.00	p-Xylene	08-Apr-22
		2902.44.00	Mixed xylene isomers	08-Apr-22
X.C.VIII.004 .l	N-pyrrolidinone; 1-methyl-2-pyrrolidinone (CAS 872-50-4);	2939.79.90	Other alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives	08-Apr-22
X.C.VIII.004 .m	Diocetylmalate (CAS 142-16-5);	2917.19.80	Other polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.C.VIII.004 .n	Ethylhexylacrylate (CAS 103-11-7);	2916.12.00	Esters of acrylic acid	08-Apr-22
X.C.VIII.004 .o	Triethylaluminium (TEA) (CAS 97-93-8), trimethylaluminium (TMA) (CAS 75-24-1), and other pyrophoric metal alkyls and aryls of lithium, sodium, magnesium, zinc or boron;	2931.90.00	Other organo-inorganic compounds	08-Apr-22
X.C.VIII.004 .p	Nitrocellulose (CAS 9004-70-0);	3912.20.19	Other cellulose nitrates	08-Apr-22
X.C.VIII.004 .q	Nitroglycerin (or glyceroltrinitrate, trinitroglycerine) (NG) (CAS 55-63-0);	2920.90.70	Other esters of other inorganic acids of non-metals (excluding esters of hydrogen halides) and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.C.VIII.004 .r	2,4,6-trinitrotoluene (TNT) (CAS 118-96-7);	2904.20.00	Derivatives containing only nitro or only nitroso groups	08-Apr-22
X.C.VIII.004 .s	Ethylenediaminedinitrate (EDDN) (CAS 20829-66-7);	2920.90.70	Other esters of other inorganic acids of non-metals (excluding esters of hydrogen halides) and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.C.VIII.004 .t	Pentaerythritol tetranitrate (PETN) (CAS 78-11-5);	2920.90.70	Other esters of other inorganic acids of non-metals (excluding esters of hydrogen halides) and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.C.VIII.004 .u	Lead azide (CAS 13424-46-9), normal lead styphnate(CAS 15245-44-0) and basic lead styphnate (CAS 12403-82-6), and primary explosives or priming compositions containing azides or azide complexes;	2850.00.60	Azides; silicides	08-Apr-22
		2908.99.00	Other halogenated, sulphonated, nitrated or nitrosated derivatives of phenols or phenol-alcohols	08-Apr-22
X.C.VIII.004 .x	Diethyldiphenylurea (CAS 85-98-3); dimethyldiphenylurea(CAS 611-92-7); methylethyldiphenyl urea.	2924.21.00	Ureines and their derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .y	N,N-diphenylurea (unsymmetrical diphenylurea) (CAS 603-54-3);	2924.21.00	Ureines and their derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .z	Methyl-N,N-diphenylurea (methyl unsymmetrical diphenylurea)(CAS 13114-72-2);	2924.21.00	Ureines and their derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .bb	Ethyl-N,N-diphenylurea (ethyl unsymmetrical diphenylurea) (CAS 64544-71-4);	2924.21.00	Ureines and their derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .cc	4-Nitrodiphenylamine (4-NDPA)(CAS 836-30-6);	2921.44.00	Diphenylamine and its derivatives; salts thereof	08-Apr-22
X.C.VIII.004 .dd	2,2-dinitropropanol (CAS 918-52-5);	2905.59.98	Other acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives	08-Apr-22
X.D.VIII.001	Software, specially designed for the 'development', 'production' or 'use' of equipment specified in X.A.VIII.005 to X.A.VIII.0013.	N/A	Software	08-Apr-22
X.D.VIII.002	Software, specially designed for the 'development', 'production' or 'use' of equipment, 'electronic assemblies' or components specified in X.A.VIII.002.	N/A	Software	08-Apr-22
X.D.VIII.003	Software for digital twins of additive manufacturing products or for the determination of the reliability of additive manufacturing products.	N/A	Software	08-Apr-22
X.E.VIII.001	Technology for the 'development', 'production' or 'use' of equipment specified in X.A.VIII.001 to X.A.VIII.0013.	N/A	Technology	08-Apr-22
X.E.VIII.002	Technology for the 'development', 'production' or 'use' of materials specified in X.C.VIII.002 or X.C.VIII.003	N/A	Technology	08-Apr-22

X.E.VIII.003	Technology for digital twins of additive manufacturing products, for the determination of the reliability of additive manufacturing products or for software specified in X.D.VIII.003.	N/A	Technology	08-Apr-22
X.E.VIII.004	Technology for the 'development', 'production' or 'use' of software specified in X.D.VIII.001 to X.D.VIII.002.	N/A	Technology	08-Apr-22

## IX. Special Materials and Related Equipment

X.A.IX.001	Chemical agents, including tear gas (CS, CN, liquid pepper, smoke bombs; non-irritant smoke flares, canisters, grenades and charges; and other pyrotechnic articles having dual military and commercial use, and components)	2914.79.00	Halogenated, sulphonated, nitrated or nitrosated derivatives	21-Jul-22
		2926.90.70	Other Nitrile-function compounds	21-Jul-22
		2934.99.90	Other compounds containing in the structure a phenothiazine ring-system (whether or not hydrogenated), not further fused	21-Jul-22
		2939.79.90	Other alkaloids of vegetal origin	21-Jul-22
		3301.90.30	Extracted oleoresins	21-Jul-22
		3604.10.00	Fireworks	21-Jul-22
		3604.90.00	Signalling flares, rain rockets, fog signals and other pyrotechnic articles	21-Jul-22
X.A.IX.002	Fingerprinting powders, dyes, and inks	3824.99.96	Chemical products or preparations, predominantly not composed of organic compounds, not elsewhere specified or included	21-Jul-22
X.A.IX.003.a	Protective and detection equipment not "specially designed" for military use and not controlled by 1A004 or 2B351; Personal radiation monitoring dosimeters	6210.10.98	Other garments made up of fabrics	21-Jul-22
		9020.00.10	Gas masks	21-Jul-22
		9027.10.10	Electronic gas or smoke analysis apparatus	21-Jul-22
X.A.IX.003.b	Technology" exclusively for the "development" or "production" of law enforcement restraint devices; 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	N/A		21-Jul-22
X.A.IX.004.a	Radiation detection, monitoring and measurement equipment, other than those specified in the CML or in Regulation (EU) 2021/821	9030.10.00	Instruments and apparatus for measuring or detecting ionising radiation	21-Jul-22
X.A.IX.004.b	Radiographic detection equipment such as X-ray converters, and storage phosphor image plates	3701.10.00	Photographic plates for X-ray	21-Jul-22
		3702.10.00	Photographic film in rolls for X-ray	21-Jul-22
		9022.29.00	Apparatus based on the use of alpha, beta, gamma or other ionising radiation	21-Jul-22
		9022.90.20	Parts and accessories of apparatus based on the use of X-rays	21-Jul-22
X.B.IX.001.a	Specific processing equipment; Electrolytic cells for fluorine production	8543.30.70	Other Machines and apparatus for electroplating, electrolysis or electrophoresis	21-Jul-22
X.B.IX.001.b	Specific processing equipment; Particle accelerators	8543.10.00	Particle accelerators	21-Jul-22
X.B.IX.001.c	Specific processing equipment; Industrial process control hardware/systems designed for power industries	8537.10.10	Boards, panels, consoles, desks, cabinets and other bases, For a voltage not exceeding 1 000 V, Numerical control panels with built-in automatic data-processing machine.....	21-Jul-22
		8537.10.91	Boards, panels, consoles, desks, cabinets and other bases, For a voltage not exceeding 1 000 V, Programmable memory controllers	21-Jul-22
		8537.10.95	Boards, panels, consoles, desks, cabinets and other bases, For a voltage not exceeding 1 000 V, Numerical control panels with built-in automatic data-processing machine, Touch-Sensitive Data Input Device	21-Jul-22
		8537.10.98	Boards, panels, consoles, desks, cabinets and other bases, For a voltage not exceeding 1 000 V, Numerical control panels with built-in automatic data-processing machine, Other	21-Jul-22
		8537.20.91	Boards, panels, consoles, desks, cabinets and other bases, For a voltage exceeding 1 000 V, For a voltage exceeding 1 000 V but not exceeding 72,5 kV	21-Jul-22
		8537.20.99	Boards, panels, consoles, desks, cabinets and other bases, For a voltage exceeding 1 000 V, For a voltage exceeding 72,5 kV	21-Jul-22
X.B.IX.001.d	Freon and chilled water cooling systems capable of continuous cooling duties of 29,3 kW/hr or greater	8418.69.00	Other refrigerating or freezing equipment;	16-Dec-22
X.B.IX.001.e	Specific processing equipment; Equipment for the production of structural composites, fibers, prepregs and preforms	8545.90.00	Other machines for preparing textile fibres	21-Jul-22
		8451.80.30	Machines for dressing or finishing	21-Jul-22
		8477.80.11	Machines for processing reactive resins	21-Jul-22
X.C.IX.001.a.1	Ethylene dichloride (CAS 107-06-2);	2903.15.00	Ethylene dichloride (ISO) (1,2-dichloroethane)	04-Jun-22

X.C.IX.001.a.2	Nitromethane (CAS 75-52-5);	2904.20.00	Other sulphonated, nitrated or nitrosated derivatives of hydrocarbons, whether or not halogenated	04-Jun-22
X.C.IX.001.a.3	Picric acid, (CAS 88-89-1);	2908.99.00	Other halogenated, sulphonated, nitrated or nitrosated derivatives of phenols or phenol-alcohols	04-Jun-22
X.C.IX.001.a.4	Aluminum chloride (CAS 7446-70-0);	2827.32.00	Other chlorides of aluminium	04-Jun-22
X.C.IX.001.a.5	Arsenic (CAS 7440-38-2);	2804.80.00	Arsenic	04-Jun-22
X.C.IX.001.a.6	Arsenic trioxide (CAS 1327-53-3);	2811.29.10	Sulphur trioxide (sulphuric anhydride); diarsenic trioxide	04-Jun-22
X.C.IX.001.a.7	Bis(2-chloroethyl)ethylamine hydrochloride (CAS 3590-07-6);	2921.19.99	Amine-function compounds	04-Jun-22
X.C.IX.001.a.8	Bis(2-chloroethyl)methylamine hydrochloride (CAS 55-86-7);	2921.19.99	Amine-function compounds	04-Jun-22
X.C.IX.001.a.9	Tris(2-chloroethyl)amine hydrochloride (CAS 817-09-4);	2921.19.99	Amine-function compounds	04-Jun-22
X.C.IX.001.a.10	Tributylphosphite (CAS 102-85-2);	2920.29.00	Other phosphite esters and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives	04-Jun-22
X.C.IX.001.a.11	Isocyanatomethane (CAS 624-83-9);	2929.10.00	Isocyanates	04-Jun-22
X.C.IX.001.a.12	Quinaldine (CAS 91-63-4);	2933.49.90	Other compounds containing in the structure a quinoline or isoquinoline ring- system (whether or not hydrogenated), not further fused	04-Jun-22
X.C.IX.001.a.13	2-bromochloroethane (CAS 107-04-0);	2903.79.30	Halogenated derivatives of hydrocarbons only with bromine and chlorine, fluorine and chlorine or with fluorine and bromine	04-Jun-22
X.C.IX.001.a.14	Benzil (CAS 134-81-6);	2914.39.00	Other aromatic ketones without other oxygen function	04-Jun-22
X.C.IX.001.a.15	Diethyl ether (CAS 60-29-7);	2909.11.00	Diethyl ether	04-Jun-22
X.C.IX.001.a.16	Dimethyl ether (CAS 115-10-6);	2909.19.90	Other 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	04-Jun-22
X.C.IX.001.a.17	Dimethylaminoethanol (CAS 108-01-0)	2922.19.00	Other amino-alcohols, other than those containing more than one kind of oxygen function, their ethers and esters; salts thereof	04-Jun-22
X.C.IX.001.a.18	2-methoxyethanol (CAS 109-86-4)	2909.44.00	Other monoalkylethers of ethylene glycol or of diethylene glycol	04-Jun-22
X.C.IX.001.a.19	Butyrylcholinesterase (BChE);	N/A		04-Jun-22
X.C.IX.001.a.20	Diethylenetriamine (CAS 111-40-0);	2921.29.00	Other acyclic polyamines and their derivatives; salts thereof	04-Jun-22
X.C.IX.001.a.21	Dichloromethane (CAS 75-09-2);	2903.12.00	Dichloromethane (methylene chloride)	04-Jun-22
X.C.IX.001.a.22	Dimethylaniline (CAS 121-69-7);	2921.42.00	Aniline derivatives and their salts	04-Jun-22
X.C.IX.001.a.23	Ethyl bromide (CAS 74-96-4);	2903.69.19	Halogenated derivatives of hydrocarbons; other bromides	04-Jun-22
X.C.IX.001.a.24	Ethyl chloride (CAS 75-00-3);	2903.11.00	Chloromethane (methyl chloride) and chloroethane (ethyl chloride)	04-Jun-22
X.C.IX.001.a.25	Ethylamine (CAS 75-04-7);	2921.19.99	Other acyclic monoamines and their derivatives; salts thereof;	04-Jun-22
X.C.IX.001.a.26	Hexamine (CAS 100-97-0);	2933.69.40	Methenamine (INN) (hexamethylenetetramine); 2,6-di-tert-butyl-4-[4,6-bis (octylthio)-1,3,5-triazin-2-ylamino]phenol	04-Jun-22
X.C.IX.001.a.27	Isopropanol (CAS 67- 63-0)	2905.12.00	Propan-1-ol (propyl alcohol) and propan-2-ol (isopropyl alcohol)	04-Jun-22
X.C.IX.001.a.28	Isopropyl bromide (CAS 75-26-3);	2903.69.19	Halogenated derivatives of hydrocarbons; other bromides	04-Jun-22
X.C.IX.001.a.29	Isopropyl ether (CAS 108-20-3);	2909.19.90	Other acyclic monoamines and their derivatives; salts thereof;	04-Jun-22
X.C.IX.001.a.30	Methylamine (CAS 74-89-5);	2921.11.00	Methylamine, di- or trimethylamine and their salts	04-Jun-22
X.C.IX.001.a.31	Methyl bromide (CAS 74-83-9);	2903.61.00	Methyl bromide (bromomethane)	04-Jun-22
X.C.IX.001.a.32	Monoisopropylamine (CAS 75-31-0);	2921.19.99	Other acyclic monoamines and their derivatives; salts thereof;	04-Jun-22
X.C.IX.001.a.33	Obidoxime chloride (CAS 114-90-9)	2933.39.99	Other compounds containing an unfused pyridine ring (whether or not hydrogenated) in the structure	04-Jun-22
X.C.IX.001.a.34	Potassium bromide (CAS 7758-02-3);	2827.51.00	Bromides of sodium or of potassium	04-Jun-22
X.C.IX.001.a.35	Pyridine (CAS 110-86-1);	2933.31.00	Pyridine and its salts	04-Jun-22
X.C.IX.001.a.36	Pyridostigmine bromide (CAS 101-26-8);	2933.39.10	Iproniazid (INN); ketobemidone hydrochloride (INN); pyridostigmine bromide (INN)	04-Jun-22
X.C.IX.001.a.37	Sodium bromide (CAS 7647-15-6);	2827.51.00	Bromides of sodium or of potassium	04-Jun-22
X.C.IX.001.a.38	Sodium metal (CAS 7440-23-5);	2805.11.00	Sodium metal	04-Jun-22

X.C.IX.001.a.39	Tributylamine (CAS 102-82-9);	2921.19.99	Other acyclic monoamines and their derivatives; salts thereof;	04-Jun-22
X.C.IX.001.a.40	Triethylamine (CAS 121-44-8); or	2921.19.99	Other acyclic monoamines and their derivatives; salts thereof;	04-Jun-22
X.C.IX.001.a.41	Trimethylamine (CAS 75-50-3).	2921.11.00	Methylamine, di- or trimethylamine and their salts	04-Jun-22
X.C.IX.001.b.1	Acetone (CAS 67-64-1);	2914.11.00	Acetone	04-Jun-22
X.C.IX.001.b.2	Acetylene (CAS 74-86-2);	2901.29.00	Other acyclic hydrocarbons	04-Jun-22
X.C.IX.001.b.3	Ammonia (CAS 7664-41-7);	2814.10.00	Anhydrous ammonia	04-Jun-22
X.C.IX.001.b.4	Antimony (CAS 7440-36-0);	Heading 8110	Antimony and articles thereof, including waste and scrap	04-Jun-22
X.C.IX.001.b.5	Benzaldehyde (CAS 100-52-7);	2912.21.00	Benzaldehyde	04-Jun-22
X.C.IX.001.b.6	Benzoin (CAS 119-53-9);	2914.40.90	Other ketone-alcohols and ketone-aldehydes	04-Jun-22
X.C.IX.001.b.7	1-Butanol (CAS 71-36-3);	2905.13.00	Butan-1-ol (n-butyl alcohol)	04-Jun-22
X.C.IX.001.b.8	2-Butanol (CAS 78-92-2);	2905.14.90	Other butanols	04-Jun-22
X.C.IX.001.b.9	Iso-Butanol (CAS 78-83-1);	2905.14.90	Other butanols	04-Jun-22
X.C.IX.001.b.10	Tert-Butanol (CAS 75-65-0);	2905.14.10	2-Methylpropan-2-ol (tert-butyl alcohol)	04-Jun-22
X.C.IX.001.b.11	Calcium carbide (CAS 75-20-7);	2849.10.00	Carbides, whether or not chemically defined of calcium	04-Jun-22
X.C.IX.001.b.12	Carbon monoxide (CAS 630-08-0);	2811.29.90	Other inorganic acids and other inorganic oxygen compounds of non- metals	04-Jun-22
X.C.IX.001.b.13	Chlorine (CAS 7782-50-5);	2801.10.00	Chlorine	04-Jun-22
X.C.IX.001.b.14	Cyclohexanol (CAS 108-93-0);	2906.12.00	Cyclohexanol, methylcyclohexanols and dimethylcyclohexanols	04-Jun-22
X.C.IX.001.b.15	Dicyclohexylamine (CAS 101-83-7);	2921.30.99	Other cyclanic, cyclenic or cycloterpenic mono- or polyamines, and their derivatives; salts thereof	04-Jun-22
X.C.IX.001.b.16	Ethanol (CAS 64-17-5);	2207.10.00	Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher	04-Jun-22
X.C.IX.001.b.17	Ethylene (CAS 74-85-1);	2901.21.00	Ethylene	04-Jun-22
X.C.IX.001.b.18	Ethylene oxide (CAS 75-21-8);	2910.10.00	Oxirane (ethylene oxide)	04-Jun-22
X.C.IX.001.b.19	Fluoroapatite (CAS 1306-05-4);	2835.39.00	Other polyphosphates	04-Jun-22
X.C.IX.001.b.20	Hydrogen chloride (CAS 7647-01-0);	2806.10.00	Hydrogen chloride (hydrochloric acid)	04-Jun-22
X.C.IX.001.b.21	Hydrogen sulfide (CAS 7783-06-4);	2811.19.80	Other inorganic acids	04-Jun-22
X.C.IX.001.b.22	Mandelic acid (CAS 90-64-2);	2918.19.98	Other carboxylic acids with alcohol function but without other oxygen function, their anhydrides, halides, peroxides, peroxyacids and their derivatives	04-Jun-22
X.C.IX.001.b.23	Methanol (CAS 67-56-1);	2905.11.00	Methanol (methyl alcohol)	04-Jun-22
X.C.IX.001.b.24	Methyl chloride (CAS 74-87-3);	2903.11.00	Chloromethane (methyl chloride) and chloroethane (ethyl chloride)	04-Jun-22
X.C.IX.001.b.25	Methyl iodide (CAS 74-88-4);	2903.69.80	Brominated or iodinated derivatives of acyclic hydrocarbons	04-Jun-22
X.C.IX.001.b.26	Methyl mercaptan (CAS 74-93-1);	2930.90.98	Other organo-sulphur compounds;	04-Jun-22
X.C.IX.001.b.27	Monoethyleneglycol (CAS 107-21-1);	2905.31.00	Ethylene glycol (ethanediol)	04-Jun-22
X.C.IX.001.b.28	Oxalyl chloride (CAS 79-37-8);	2917.19.80	Other acyclic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids and their derivatives	04-Jun-22
X.C.IX.001.b.29	Potassium sulphide (CAS 1312-73-8);	2830.90.85	Halogenated derivatives of cyclanic, cyclenic or cycloterpenic hydrocarbons; iodides	04-Jun-22
X.C.IX.001.b.30	Potassium thiocyanate (CAS 333-20-0);	2842.90.80	Other salts of inorganic acids or peroxyacids (including aluminosilicates whether or not chemically defined), other than azides	04-Jun-22
X.C.IX.001.b.31	Sodium hypochlorite (CAS 7681-52-9);	2828.90.00	Other hypochlorites; commercial calcium hypochlorite; chlorites; hypobromites	04-Jun-22
X.C.IX.001.b.32	Sulphur (CAS 7704-34-9);	2802.00.00	Sulphur, sublimed or precipitated; colloidal sulphur	04-Jun-22
X.C.IX.001.b.33	Sulphur dioxide (CAS 7446-09-5);	2811.29.05	Sulphur dioxide	04-Jun-22
X.C.IX.001.b.34	Sulphur trioxide (CAS 7446-11-9);	2811.29.10	Sulphur trioxide (sulphuric anhydride); diarsenic trioxide	04-Jun-22
X.C.IX.001.b.35	Thiophosphoryl chloride (CAS 3982-91-0);	2853.90.90	Other inorganic compounds	04-Jun-22
X.C.IX.001.b.36	Tri-isobutyl phosphite (CAS 1606-96-8);	2920.29.00	Other phosphite esters and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives	04-Jun-22



X.C.IX.001.b.37	White phosphorus (CAS 12185-10-3); or	2804.70.90	Other phosphorus	04-Jun-22
X.C.IX.001.b.38	Yellow phosphorus (CAS 7723-14-0).	2804.70.90	Other phosphorus	04-Jun-22
X.C.IX.001.b.39	Mercury (CAS 7439-97-6);	2805.40.00	Mercury	06-Oct-22
X.C.IX.001.b.40	Barium chloride (CAS 10361-37-2);	2827.39.85	Other chlorides	06-Oct-22
X.C.IX.001.b.41	Sulphuric acid (CAS 7664-93-9);	2807.00.00	Sulphuric acid; oleum	06-Oct-22
X.C.IX.001.b.42	3,3-dimethyl-1-butene (CAS 558-37-2);	2901.29.00	Other saturated acyclic hydrocarbons	06-Oct-22
X.C.IX.001.b.43	2,2-dimethylpropanal (CAS 630-19-3);	2912.19.00	Other aldehydes, whether or not with other oxygen function	06-Oct-22
X.C.IX.001.b.44	2,2-dimethylpropylchloride (CAS 753-89-9);	2903.19.00	Other saturated chlorinated derivatives of acyclic hydrocarbons	06-Oct-22
X.C.IX.001.b.45	2-methylbutene (CAS 26760-64-5);	2901.29.00	Other saturated acyclic hydrocarbons	06-Oct-22
X.C.IX.001.b.46	2-chloro-3-methylbutane (CAS 631-65-2);	2903.19.00	Other saturated chlorinated derivatives of acyclic hydrocarbons	06-Oct-22
X.C.IX.001.b.47	2,3-dimethyl-2,3-butanediol (CAS 76-09-5);	2905.39.95	Other diols	06-Oct-22
X.C.IX.001.b.48	2-methyl-2-butene (CAS 513-35-9);	2901.29.00	Other saturated acyclic hydrocarbons	06-Oct-22
X.C.IX.001.b.49	Butyl lithium (CAS 109-72-8);	2931.90.00	Other organo-inorganic compounds	06-Oct-22
X.C.IX.001.b.50	Bromo(methyl)magnesium (CAS 75-16-1);	2931.90.00	Other organo-inorganic compounds	06-Oct-22
X.C.IX.001.b.51	Formaldehyde (CAS 50-00-0);	2912.11.00	Methanal (formaldehyde)	06-Oct-22
X.C.IX.001.b.52	Diethanolamine (CAS 111-42-2);	2922.12.00	Diethanolamine and its salts	06-Oct-22
X.C.IX.001.b.53	Dimethylcarbonate (CAS 616-38-6);	2920.90.10	Sulphuric esters and carbonic esters and their salts, and their halogenated, sulphonated, nitrated or nitrosated derivatives	06-Oct-22
X.C.IX.001.b.54	Methyldiethanolamine hydrochloride (CAS 54060-15-0);	2922.19.00	Other amino-alcohols, other than those containing more than one kind of oxygen function, their ethers and esters; salts thereof	06-Oct-22
X.C.IX.001.b.55	Diethylamine hydrochloride (CAS 660-68-4);	2921.19.50	Diethylamine and its salts	06-Oct-22
X.C.IX.001.b.56	Diisopropylamine hydrochloride (CAS 819-79-4);	2921.19.99	Other acyclic monoamines and their derivatives; salts thereof	06-Oct-22
X.C.IX.001.b.57	3-Quinuclidinone hydrochloride (CAS 1193-65-3);	2933.39.99	Other compounds containing an unfused pyridine ring (whether or not hydrogenated) in the structure	06-Oct-22
X.C.IX.001.b.58	3-Quinuclidinol hydrochloride (CAS 6238-13-7);	2933.39.99	Other compounds containing an unfused pyridine ring (whether or not hydrogenated) in the structure	06-Oct-22
X.C.IX.001.b.59	(R)-3- Quinuclidinol hydrochloride (CAS 42437-96-7);	2933.39.99	Other compounds containing an unfused pyridine ring (whether or not hydrogenated) in the structure	06-Oct-22
X.C.IX.001.b.60	N,N-Diethylaminoethanol hydrochloride (CAS 14426-20-1).	2922.19.00	Other amino-alcohols, other than those containing more than one kind of oxygen function, their ethers and esters; salts thereof	06-Oct-22
X.C.IX.002	Fentanyl and its derivatives	2933.33.00	Alfentanil (INN), anileridine (INN), bezitramide (INN), bromazepam (INN), carfentanil (INN), difenoxin (INN), diphenoxylate (INN), dipipanone (INN), fentanyl (INN), ketobemidone (INN), methylphenidate (INN), pentazocine (INN), pethidine (INN), pethidine (INN) intermediate A, phencyclidine (INN) (PCP), phenoperidine (INN), pipradrol (INN), piritramide (INN), propiram (INN), remifentanyl (INN) and trimeperidine (INN); salts thereof	04-Jun-22
		2934.91.00	Aminorex (INN), brotizolam (INN), clotiazepam (INN), cloxazolam (INN), dextromoramide (INN), haloxazolam (INN), ketazolam (INN), mesocarb (INN), oxazolam (INN), pemoline (INN), phendimetrazine (INN), phenmetrazine (INN) and sufentanil (INN); salts thereof	04-Jun-22
X.C.IX.003	Chemical precursors to Central Nervous System Acting Chemicals, '4-anilino-N-phenethylpiperidine (CAS 21409-26-7) and 'N-phenethyl-4-piperidone (CAS 39742-60-4).	2933.36.00	4-Anilino-N-phenethylpiperidine (ANPP)	04-Jun-22
		2933.37.00	N-Phenethyl-4-piperidone (NPP)	04-Jun-22
X.C.IX.004	Fibrous and filamentary materials, not controlled by 1C010 or 1C210, 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.	5402.11.00	High tenacity yarn of aramid whether or not textured	21-Jul-22
		5501.11.00	Synthetic filament tow of aramid	21-Jul-22
		5503.11.00	Synthetic staple fibres, not carded, combed or otherwise processed for spinning of aramid	21-Jul-22
		6815.11.00	Carbon fibres	21-Jul-22
		6815.12.00	Fabrics of carbon fibres	21-Jul-22
		6815.19.00	Other articles of carbon fibres	21-Jul-22

		7019.12.00	Glass fibre rovings	21-Jul-22
		7019.19.10	Glass fibre fillments	21-Jul-22
X.C.IX.005.a	Vaccines containing, or designed for use against, items controlled by 1C351, 1C353 or 1C354	3002.41.90	Human vaccines	21-Jul-22
X.C.IX.005.b	Immunotoxins containing items controlled by 1C351.d	3002.49.00	Cultures of microorganisms, toxins, etc.	21-Jul-22
X.C.IX.005.c.1	Medical products that contain any of the following; Toxins controlled by 1C351.d (except for botulinum toxins controlled by 1C351.d.3, conotoxins controlled by 1C351.d.6, or items controlled for CW reasons under 1C351.d.11 or .d.12);	3002.49.00	Cultures of microorganisms, toxins, etc.	21-Jul-22
X.C.IX.005.c.2	Medical products that contain any of the following; Genetically modified organisms or genetic elements controlled by 1C353.a.3 (except for those that contain, or code for, botulinum toxins controlled by 1C351.d.3 or conotoxins controlled by ECCN 1C351.d.6)	3002.51.00	Cell therapy products	21-Jul-22
		3002.59.00	Other cell cultures whether or not modified	21-Jul-22
X.C.IX.005.d.1	Medical products not controlled by 1C991.c that contain Botulinum toxins controlled by ECCN 1C351.d.3	3002.49.00	Cultures of microorganisms, toxins, etc.	21-Jul-22
X.C.IX.005.d.2	Medical products not controlled by 1C991.c that contain Conotoxins controlled by 1C351.d.6	3002.49.00	Cultures of microorganisms, toxins, etc.	21-Jul-22
X.C.IX.005.d.3	Medical products not controlled by 1C991.c that contain Genetically modified organisms or genetic elements controlled by 1C353.a.3 that contain, or code for, botulinum toxins controlled by 1C351.d.3 or conotoxins controlled by 1C351.d.6	3002.59.00	Other cell cultures whether or not modified	21-Jul-22
X.C.IX.005.e	Diagnostic and food testing kits containing items controlled by 1C351.d (except for items controlled for CW reasons under 1C351.d.11 or .d.12).	3822.19.00	Other diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents whether or not on a backing, whether or not put up in the form of kits:	21-Jul-22
		3822.90.00	Other diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents whether or not on a backing, whether or not put up in the form of kits, other than those of heading 3006; certified reference materials	21-Jul-22
X.C.IX.006.a	Commercial charges and devices containing energetic materials; Shaped charges "specially designed" for oil well operations, utilizing one charge functioning along a single axis, that upon detonation produce a hole	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.b	Shaped charges "specially designed" for oil well operations containing less than or equal to 0,010 kg of controlled materials	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.c	Detonation cord or shock tubes containing less than or equal to 0,064 kg per meter (300 grains per foot) of controlled materials	3603.20.00	Detonating cord	21-Jul-22
X.C.IX.006.d	Cartridge power devices, that contain less than or equal to 0,70 kg of controlled materials in the deflagration material;	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.e	Detonators (electric or nonelectric) and assemblies thereof, that contain less than or equal to 0,01 kg of controlled materials;	3603.40.00	Detonating caps	21-Jul-22
		3603.60.00	Electric detonators	21-Jul-22
X.C.IX.006.f	Igniters, that contain less than or equal to 0,01 kg of controlled materials;	3603.50.00	Igniters	21-Jul-22
X.C.IX.006.g	Oil well cartridges, that contain less than or equal to 0,015 kg of controlled energetic materials;	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.h	Commercial cast or pressed boosters containing less than or equal to 1,0 kg of controlled materials;	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.i	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 USML controlled materials;	3601.00.00	Propellant powders	21-Jul-22
X.C.IX.006.j	Cutters and severing tools containing less than or equal to 3,5 kg of 'controlled materials'	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.006.k	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'	3604.10.00	Fireworks	21-Jul-22
X.C.IX.006.l	Other commercial explosive devices and charges not controlled by X.C.IX.006.a through .k containing less than or equal to 1,0 kg of 'controlled materials'	3602.00.00	Prepared explosives, other than propellant powders	21-Jul-22
X.C.IX.007.a	<u>AG chemical precursors</u> (These chemicals are already included in the Annex I but with a higher threshold regarding mixtures and dilutions)			
	Thiodiglycol	2930.70.00	Thiodiglycol	21-Jul-22
	Phosphorus oxychloride;	2812.12.00	Phosphorus oxychloride; POCl <sub>3</sub>	21-Jul-22
	Dimethyl methylphosphonate	2931.41.00	Dimethyl methylphosphonate	21-Jul-22
	Methylphosphonyl dichloride	2931.51.00	Methylphosphonyl dichloride	21-Jul-22

Dimethyl phosphite	2920.21.00	Dimethyl phosphite	21-Jul-22
Phosphorus trichloride;	2812.13.00	Phosphorus trichloride; PCl <sub>3</sub>	21-Jul-22
Trimethyl phosphite	2920.23.00	Trimethyl phosphite	21-Jul-22
Thionyl chloride;	2812.17.00	Thionyl chloride; SOCl <sub>2</sub>	21-Jul-22
3-Hydroxy-1-methylpiperidine	2933.39.99	Other compounds containing an unfused pyridine ring	21-Jul-22
N,N-Diisopropyl-(beta)-aminoethyl chloride	2921.19.99	Other acyclic monoamines	21-Jul-22
N,N-Diisopropyl-(beta)-aminoethane thiol	2930.90.98	Other organo-sulphur compounds	21-Jul-22
3-Quinuclidinol	2933.35.00	3-Quinuclidinol	21-Jul-22
R-(-)-3-Quinuclidinol	2933.35.00	R-(-)-3-Quinuclidinol	21-Jul-22
Potassium fluoride; KF	2826.19.90	Other fluorides	21-Jul-22
2-Chloroethanol	2905.59.98	Other halogenated, sulphonated, nitrated or nitrosated derivatives of acyclic alcohols	21-Jul-22
Dimethylamine	2921.11.00	Methylamine, di- or trimethylamine and their salts	21-Jul-22
Diethyl ethylphosphonate	2931.43.00	Diethyl ethylphosphonate	21-Jul-22
Diethyl N,N-dimethylphosphoramidate	2929.90.00	Other compounds with other nitrogen function	21-Jul-22
Diethyl phosphite	2920.22.00	Diethyl phosphite	21-Jul-22
Dimethylamine hydrochloride	2921.11.00	Dimethylamine hydrochloride	21-Jul-22
Ethylphosphinyl dichloride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
Ethylphosphonyl dichloride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
Ethylphosphonyl difluoride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
Hydrogen fluoride; HF	2811.11.00	Hydrogen fluoride; HF	21-Jul-22
Methyl benzilate	2918.19.98	Other carboxylic acids with alcohol function but without other oxygen function	21-Jul-22
Methylphosphinyl dichloride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
N,N-Diisopropyl-(beta)-amino-ethanol	2922.18.00	N,N-Diisopropyl-(beta)-amino-ethanol	21-Jul-22
Pinacolyl alcohol	2905.19.00	Other saturated monohydric alcohols	21-Jul-22
Triethyl phosphite	2920.24.00	Triethyl phosphite	21-Jul-22
Arsenic trichloride; AsCl <sub>3</sub>	2812.19.90	Other chlorides and chloride oxides	21-Jul-22
Benzilic acid	2918.17.00	Benzilic acid	21-Jul-22
Diethyl methylphosphonite	2931.49.90	Other non-halogenated organo-phosphorous derivatives	21-Jul-22
Dimethyl ethylphosphonate	2931.49.90	Other non-halogenated organo-phosphorous derivatives	21-Jul-22
Ethylphosphinyl difluoride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
Methylphosphinyl difluoride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
3-Quinuclidone	2933.39.99	Other halogenated organo-phosphorous derivatives	21-Jul-22
Phosphorus pentachloride; PCl <sub>5</sub>	2812.14.00	Phosphorus pentachloride;	21-Jul-22
Pinacolone	2914.19.90	Other acyclic ketones without other oxygen function	21-Jul-22
Potassium cyanide; KCN	2837.19.00	Potassium cyanide;	21-Jul-22
Potassium bifluoride; KHF <sub>2</sub>	2826.19.90	Other fluorides	21-Jul-22
Ammonium hydrogen fluoride; (NH <sub>4</sub> )HF <sub>2</sub>	2826.19.10	Fluorides of ammonium or sodium	21-Jul-22
Sodium fluoride; NaF	2826.19.10	Fluorides of ammonium or sodium	21-Jul-22
Sodium bifluoride; NaHF <sub>2</sub>	2826.19.10	Fluorides of ammonium or sodium	21-Jul-22
Sodium cyanide; NaCN	2837.11.00	Sodium cyanide;	21-Jul-22
Triethanolamine	2922.15.00	Triethanolamine	21-Jul-22
Phosphorus pentasulphide	2813.90.10	Phosphorus sulphides, commercial phosphorus trisulphide	21-Jul-22
Diisopropylamine	2921.19.99	Other acyclic monoamines and their derivatives	21-Jul-22

Diethylaminoethanol	2922.19.00	Diethylaminoethanol	21-Jul-22
Sodium sulphide; Na <sub>2</sub> S	2830.10.00	Sodium sulphide;	21-Jul-22
Sulphur monochloride; S <sub>2</sub> Cl <sub>2</sub>	2812.15.00	Sulphur monochloride;	21-Jul-22
Sulphur dichloride: SCl <sub>2</sub>	2812.16.00	Sulphur dichloride:	21-Jul-22
Triethanolamine hydrochloride	2922.19.00	Triethanolamine hydrochloride	21-Jul-22
N,N-Diisopropyl-2-aminoethyl chloride hydrochloride	2921.14.00	N,N-Diisopropyl-2-aminoethyl chloride hydrochloride	21-Jul-22
Methylphosphonic acid	2931.44.00	Methylphosphonic acid	21-Jul-22
Diethyl methylphosphonate	2931.49.90	Other non-halogenated organo-phosphorous derivatives	21-Jul-22
N,N-Dimethylaminophosphoryl dichloride	2929.90.00	N,N-Dimethylaminophosphoryl dichloride	21-Jul-22
Triisopropyl phosphite	2920.29.00	Triisopropyl phosphite	21-Jul-22
Ethyl-diethanolamine	2922.17.00	Ethyl-diethanolamine	21-Jul-22
O,O-Diethyl phosphorothioate	2920.19.00	O,O-Diethyl phosphorothioate	21-Jul-22
O,O-Diethyl phosphorodithioate	2920.19.00	O,O-Diethyl phosphorodithioate	21-Jul-22
Sodium hexafluorosilicate; Na <sub>2</sub> SiF <sub>6</sub>	2826.90.80	Other fluorides	21-Jul-22
Methylphosphonothioic dichloride	2931.59.90	Other halogenated organo-phosphorous derivatives	21-Jul-22
Diethylamine	2921.19.50	Diethylamine and its salts	21-Jul-22
N,N-Diisopropylaminoethanethiol hydrochloride	2930.90.98	Other organo-sulphur compounds	21-Jul-22
Methyl dichlorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
Ethyl dichlorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
Methyl difluorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
Ethyl difluorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
Diethyl chlorophosphite	2920.29.00	Other esters of inorganic acids	21-Jul-22
Methyl chlorofluorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
Ethyl chlorofluorophosphate	2920.90.70	Other esters of inorganic acids	21-Jul-22
N,N-Dimethylformamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diethylformamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dipropylformamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diisopropylformamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dimethylacetamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diethylacetamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dipropylacetamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dimethylpropanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diethylpropanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dipropylpropanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dimethylbutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diethylbutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dipropylbutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diisopropylbutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dimethylisobutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Diethylisobutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
N,N-Dipropylisobutanamidine	2925.29.00	Other Imines and their derivatives	21-Jul-22
X.C.IX.007.b	<u>CWC toxic chemicals and chemical precursors</u> (These chemicals are already included in the Annex I but with a higher threshold regarding mixtures and dilutions)		

	Phosgene	2812.11.00	Phosgene	21-Jul-22
	Cyanogen chloride	2853.10.00	Cyanogen chloride	21-Jul-22
	Hydrogen cyanide	2811.12.00	Hydrogen cyanide	21-Jul-22
	Chloropicrin	2904.91.00	Chloropicrin	21-Jul-22
	Methyldiethanolamine and ethyldiethanolamine	2922.17.00	Methyldiethanolamine and ethyldiethanolamine	21-Jul-22
	Methylphosphonic acid compound with (aminoiminomethyl)urea (1:1)	2931.45.00	Methylphosphonic acid compound with (aminoiminomethyl)urea (1:1)	21-Jul-22
	2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide	2931.46.00	2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide	21-Jul-22
	(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methylphosphonate	2931.47.00	(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate	21-Jul-22
	3,9-Dimethyl-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane 3,9-dioxide	2931.48.00	3,9-Dimethyl-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane 3,9-dioxide	21-Jul-22
	Sodium 3-(trihydroxysilyl)propyl methylphosphonate	2931.49.10	Sodium 3-(trihydroxysilyl)propyl methylphosphonate	21-Jul-22
	Bis[(5-Ethyl-2-methyl-2-oxido-1,3,2- dioxaphosphinan-5-yl)methyl] methylphosphonate	2931.49.20	Bis[(5-Ethyl-2-methyl-2-oxido-1,3,2- dioxaphosphinan-5-yl)methyl] methylphosphonate	21-Jul-22
	2-(N,N-Dimethylamino) ethanethiol	2930.10.00	2-(N,N-Dimethylamino) ethanethiol	21-Jul-22
	2-(N,N-Diethylamino)ethanethiol.	2930.60.00	2-(N,N-Diethylamino)ethanethiol.	21-Jul-22
X.C.IX.007.c	Medical, analytical, diagnostic, and food testing kits that contain precursor chemicals controlled by 1C350 amount not exceeding 300 grams per chemical.	3822.00.00	Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents whether or not on a backing, other than those of heading 3002 or 3006; certified reference materials	21-Jul-22
X.C.IX.008	Non fluorinated polymeric substances, not controlled by 1C008; 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);	3907.20.99	Other polyethers	21-Jul-22
X.C.IX.009.a	Specific materials; Hardened steel and tungsten carbide precision ball bearings (3mm or greater diameter);	8482.10.10	Ball bearings with greatest external diameter not exceeding 30 mm	21-Jul-22
		8482.10.90	Other ball bearings	21-Jul-22
X.C.IX.009.b	Specific materials; 304 and 316 stainless steel plate	7219.11.00	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.12.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.12.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.13.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.13.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.14.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.14.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.21.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22
		7219.21.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22
		7219.22.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22
		7219.22.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22
		7219.23.00	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22
7219.24.00	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, not in coils:	21-Jul-22		

		7219.31.00	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.32.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.32.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.33.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.33.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.34.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.34.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.35.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.35.90	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7219.90.20	Flat-rolled products of stainless steel, of a width of 600 mm or more, other	21-Jul-22
		7219.90.80	Flat-rolled products of stainless steel, of a width of 600 mm or more, other	21-Jul-22
		7220.11.00	Flat-rolled products of stainless steel, of a width of less than 600 mm: Of a thickness of 4,75 mm or more	21-Jul-22
		7220.12.00	Flat-rolled products of stainless steel, of a width of less than 600 mm: Of a thickness of less than 4,75 mm	21-Jul-22
		7220.20.21	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.20.29	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.20.41	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.20.49	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.20.81	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.20.89	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
		7220.90.20	Flat-rolled products of stainless steel, of a width of less than 600 mm: other	21-Jul-22
		7220.90.80	Flat-rolled products of stainless steel, of a width of less than 600 mm: other	21-Jul-22
X.C.IX.009.c	Specific materials; Monel plate	7506.20.00	Nickel plates, sheets, strip and foil; of nickel alloys	21-Jul-22
X.C.IX.009.d	Specific materials; Tributyl phosphate	2919.90.00	Phosphoric esters and their salts, including lactophosphates; their halogenated, sulphonated, nitrated or nitrosated derivatives	21-Jul-22
X.C.IX.009.e	Specific materials; Nitric acid in concentrations of 20 weight percent or greater	2808.00.00	Nitric acid; sulphonitic acids	21-Jul-22
X.C.IX.009.f	Specific materials; Fluorine	2801.30.10	Fluorine	21-Jul-22
X.C.IX.009.g	Specific materials; Alpha emitting radionuclides	2844.42.10	Artificial radioactive isotopes (Euratom); compounds of artificial radioactive isotopes (Euratom)	21-Jul-22
		2844.42.90	Artificial radioactive isotopes (Euratom); compounds of artificial radioactive isotopes (Euratom)	21-Jul-22
		2844.40.80	Other artificial radioactive isotopes (Euratom); compounds of artificial radioactive isotopes (Euratom)	21-Jul-22
X.C.IX.010	Aromatic polyamides (aramids) not controlled by 1C010, 1C210 or X.C.IX.004, presented in any of the following forms (see List of Items Controlled): a. Primary forms;	5402.11.00	Synthetic filament yarn (other than sewing thread), not put up for retail sale, including synthetic monofilament of less than 67 decitex; High tenacity yarn of nylon or other polyamides, whether or not textured; of aramids	21-Jul-22

	b. Filament yarn or monofilaments; c. Filament tows; d. Rovings; e. Staple or chopped fibres; f. Fabrics; g. Pulp or flocks.	5501.11.00	Synthetic filament tow; Of nylon or other polyamides; of aramids	21-Jul-22
		5503.11.00	Synthetic staple fibres, not carded, combed or otherwise processed for spinning; Of nylon or other polyamides; Of aramids	21-Jul-22
		5601.30.00	Textile flock and dust and mill neps	21-Jul-22
		5902.10.90	Tyre cord fabric of high-tenacity yarn of nylon or other polyamides	21-Jul-22
X.C.IX.011	Nanomaterials as follows (see List of Items Controlled): a. Semiconductor nanomaterials; b. Composite-based nanomaterials; or c. Any of the following carbon-based nanomaterials: 1. Carbon nanotubes; 2. Carbon nanofibres; 3. Fullerenes; 4. Graphenes; or 5. Carbon onions.	6815.11.00	Carbon fibres	21-Jul-22
		6815.12.00	Fabrics of carbon fibres	21-Jul-22
		6815.13.00	Other articles of carbon fibres	21-Jul-22
X.C.IX.012	"Rare-earth metals and compounds, either in organic or inorganic form, including mixtures whether or not intermixed or interalloyed.  Note 1: Rare-earth metals and compounds include Scandium, Yttrium, Lanthanum, Cerium, Praseodymium, Neodymium, Promethium, Samarium, Europium, Gadolinium, Terbium, Dysprosium, Holmium, Erbium, Thulium, Ytterbium and Lutetium;  Note 2: For the purpose of the control X.C.IX.012 minerals containing rare-earth metals are excluded; Note 3: X.C.IX.012 does not control mixtures in which no individually metal or compound specified in this entry constitutes more than 5 % by the weight of the mixture.	2805.30.10	Rare-earth metals; 'Intermixtures or interalloys	25-Feb-23
		2805.30.21	Rare earth metals, of a purity by weight of 95 % or more; Cerium and lanthanum	25-Feb-23
		2805.30.29	Rare earth metals, of a purity by weight of 95 % or more; Praseodymium, neodymium and samarium	25-Feb-23
		2805.30.31	Rare earth metals, of a purity by weight of 95 % or more; Gadolinium, terbium and dysprosium	25-Feb-23
		2805.30.39	Rare earth metals, of a purity by weight of 95 % or more; Europium, holmium, erbium, thulium, ytterbium, lutetium and yttrium	25-Feb-23
		2805.30.40	Rare earth metals, of a purity by weight of 95 % or more; Scandium	25-Feb-23
		2805.30.80	Other rare earth metals	25-Feb-23
		2846.10.00	Compounds, inorganic or organic, of rare-earth metals; Cerium compounds	25-Feb-23
		2846.90.30	Compounds, inorganic or organic, of rare-earth metals; Scandium compounds	25-Feb-23
		2846.90.40	Compounds, inorganic or organic, of rare-earth metals; Lanthanum compounds	25-Feb-23
		2846.90.50	Compounds, inorganic or organic, of rare-earth metals; Compounds of praseodymium, neodymium or samarium	25-Feb-23
		2846.90.60	Compounds, inorganic or organic, of rare-earth metals; Compounds of gadolinium, terbium or dysprosium	25-Feb-23
		2846.90.70	Compounds, inorganic or organic, of rare-earth metals; Compounds of europium, holmium, erbium, thulium, ytterbium, lutetium or yttrium	25-Feb-23
		2846.90.90	Compounds, inorganic or organic, of rare-earth metals; Compounds of mixtures of metals	25-Feb-23
X.D.IX.001	Specific software, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled): a. Software specially designed for industrial process control hardware/systems controlled by X.B.IX.001, other than those specified in the CML or in Regulation (EU) 2021/821; or b. Software specially designed for equipment for the production of structural composites, fibres, prepregs and preforms controlled by X.B.IX.001, other than those specified in the CML or in Regulation (EU) 2021/821.	N/A	Software	21-Jul-22
X.E.IX.001	"Technology" for the "development", "production", or "use" of fibrous and filamentary materials controlled by X.C.IX.004 and X.C.IX.010.	N/A	Technology	21-Jul-22
X.E.IX.002	"Technology" for the "development", "production", or "use" of nanomaterials controlled by X.C.IX.011.	N/A	Technology	21-Jul-22

## X. Materials Processing

X.A.X.001.a	Explosives detection equipment for automated decision making to detect and identify bulk explosives utilizing, 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	9022.12.00	Computed tomography apparatus	21-Jul-22
		9022.19.00	Apparatus based on the use of alpha, beta, gamma or other ionising radiation, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus:	21-Jul-22

	gamma resonance absorption), or electromagnetic techniques (e.g., quadrupole resonance and dielectrometry).	9027.30.00	Spectrometers, spectrophotometers and spectrographs using optical radiation (UV, visible, IR)	21-Jul-22
		9027.89.90	Other Instruments and apparatus for physical or chemical analysis	21-Jul-22
X.A.X.001.c	Detonator detection equipment for automated decision making to detect and identify initiation devices (e.g. detonators, blasting caps) utilizing, but not limited to, x-ray (e.g. dual energy or computed tomography) or electromagnetic techniques.	9022.12.00	Computed tomography apparatus	21-Jul-22
		9022.19.00	Apparatus based on the use of alpha, beta, gamma or other ionising radiation, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus:	21-Jul-22
		9027.30.00	Spectrometers, spectrophotometers and spectrographs using optical radiation (UV, visible, IR)	21-Jul-22
		9027.89.90	Other Instruments and apparatus for physical or chemical analysis	21-Jul-22
X.A.X.002	Concealed object detection equipment operating in the frequency range from 30 GHz to 3 000 GHz and having a spatial resolution of 0,1 mrad (milliradian) up to and including 1 mrad (milliradian) at a standoff distance of 100 m; and components, other than those specified in the CML or in Regulation (EU) 2021/821.	8526.10.00	Radar apparatus	21-Jul-22
		8526.92.00	Radio remote control apparatus	21-Jul-22
X.A.X.003.a.1	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; Manufactured for use at operating temperatures above 573 K (300°C) either by using special materials or by special heat treatment;	8482.10.10	Ball bearings with greatest external diameter not exceeding 30 mm	21-Jul-22
		8482.10.90	Other ball bearings	21-Jul-22
X.A.X.003.a.2	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 With lubricating elements or "part" 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	8482.10.10	Ball bearings with greatest external diameter not exceeding 30 mm	21-Jul-22
		8482.10.90	Other ball bearings	21-Jul-22
X.A.X.003.b.1	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 With lubricating elements or "part" 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	8482.20.00	Tapered roller bearings, including cone and tapered roller assemblies	21-Jul-22
X.A.X.003.b.2	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 Manufactured for use at operating temperatures below 219 K (-54 °C) or above 423 K (150°C).	8482.20.00	Tapered roller bearings, including cone and tapered roller assemblies	21-Jul-22
X.A.X.003.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	8482.50.00	Other cylindrical roller bearings, including cage and roller assemblies	21-Jul-22
X.A.X.003.d	Active magnetic bearing systems.	8505.20.00	Electromagnetic couplings, clutches and brakes	21-Jul-22
		8505.90.29	Other electromagnetic couplings, clutches and brakes	21-Jul-22
X.A.X.003.e	Fabric-lined self-aligning or fabric-lined journal sliding bearings manufactured for use at operating temperatures below 219 K (-54 °C) or above 423 K (150 °C).	8482.80.00	Other, including combined ball/roller bearings	21-Jul-22
X.A.X.004.a	Pressure tube, pipe, and fittings of 200 mm or more inside diameter, and suitable for operation at pressures of 3,4 MPa or greater;	7304.11.00	Tubes, pipes and hollow profiles, seamless, line pipe of a kind used for oil or gas pipelines, of stainless steel	21-Jul-22
		7304.41.00	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of stainless steel.	21-Jul-22
		7304.49.85	Tubes, pipes and hollow profiles, seamless, of circular cross-section, not cold-reduced, of stainless steel, of an external diameter exceeding 168,3 mm but not exceeding 406,4 mm	21-Jul-22
		7304.49.89	Tubes, pipes and hollow profiles, seamless, of circular cross-section, not cold-reduced, of stainless steel, of an external diameter exceeding 406,4 mm	21-Jul-22
		7304.51.10	Tubes, pipes and hollow profiles, seamless, of circular cross-section, cold-reduced, of alloy steel, straight and of uniform wall thickness, of alloy steel containing by weight not less than 0,9 % but not more than 1,15 % of carbon, not less than 0,5 % but not more than 2 % of chromium and, if present, not more than 0,5 % of molybdenum	21-Jul-22
		7304.51.81	Tubes, pipes and hollow profiles, seamless, of circular cross-section, cold-reduced, of alloy steel, precision tubes	21-Jul-22
		7304.51.89	Tubes, pipes and hollow profiles, seamless, of circular cross-section, cold-reduced, of alloy steel, other	21-Jul-22
		7304.59.83	Tubes, pipes and hollow profiles, seamless, of circular cross-section, not cold-reduced, of alloy steel, Of an external diameter exceeding 168,3 mm but not exceeding 406,4 mm	21-Jul-22



		7304.59.89	Tubes, pipes and hollow profiles, seamless, of circular cross-section, not cold-reduced, of alloy steel, Of an external diameter exceeding 406,4 mm	21-Jul-22
X.A.X.004.b	Pipe valves having all of the following characteristics that are not controlled by ECCN 2B350.g  b.1. A pipe size connection of 200 mm or more inside diameter; and  b.2. Rated at 10.3 MPa or more.	8481.10.05	Pressure-reducing valves; Combined with filters or lubricators	21-Jul-22
		8481.10.19	Other pressure-reducing valves; of cast iron or steel	21-Jul-22
		8481.20.10	Valves for the control of oleohydraulic power transmission	21-Jul-22
		8481.20.90	Valves for the control of pneumatic power transmission	21-Jul-22
		8481.30.91	Check (non-return) valves of cast iron or of steel	21-Jul-22
		8481.40.10	Safety or relief valves: of cast iron or of steel	21-Jul-22
		8481.80.51	Process control valves; temperature regulators	21-Jul-22
		8481.80.63	Gate valves of steel	21-Jul-22
		8481.80.73	Globe valves of steel	21-Jul-22
		8481.80.81	Ball and plug valves	21-Jul-22
		8481.80.85	Butterfly valves	21-Jul-22
		8481.80.87	Diaphragm valves	21-Jul-22
		8481.80.99	Other valves	21-Jul-22
		8484.10.00	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal	21-Jul-22
X.A.X.005	Pumps designed to move molten metals by electromagnetic forces	8413.70.29	Multi-stage centrifugal pump	21-Jul-22
X.A.X.006	Portable electric generators and specially designed components	8501.61.20	AC generators (alternators), Of an output not exceeding 7,5 kVA	21-Jul-22
		8501.61.80	AC generators (alternators), Of an output exceeding 7,5 kVA but not exceeding 75 kVA	21-Jul-22
		8501.62.00	AC generators (alternators), Of an output exceeding 75 kVA but not exceeding 375 kVA	21-Jul-22
		8501.63.00	AC generators (alternators), Of an output exceeding 375 kVA but not exceeding 750 kVA	21-Jul-22
		8501.64.00	AC generators (alternators), Of an output exceeding 750 kVA	21-Jul-22
		8503.00.10	Parts, non-magnetic retaining rings	21-Jul-22
		8503.00.91	Parts of cast iron or cast steel	21-Jul-22
		8503.00.99	Other parts	21-Jul-22
X.A.X.007	Specific processing equipment; Bellows sealed valves	8481.10.05	Pressure-reducing valves; Combined with filters or lubricators	21-Jul-22
		8481.10.19	Other pressure-reducing valves; of cast iron or steel	21-Jul-22
		8481.20.10	Valves for the control of oleohydraulic power transmission	21-Jul-22
		8481.20.90	Valves for the control of pneumatic power transmission	21-Jul-22
		8481.30.91	Check (non-return) valves Of cast iron or of steel	21-Jul-22
		8481.40.10	Safety or relief valves: Of cast iron or of steel	21-Jul-22
		8481.80.51	Process control valves; Temperature regulators	21-Jul-22
		8481.80.63	Gate valves of steel	21-Jul-22
		8481.80.73	Globe valves of steel	21-Jul-22
		8481.80.81	Ball and plug valves	21-Jul-22
		8481.80.85	Butterfly valves	21-Jul-22
		8481.80.87	Diaphragm valves	21-Jul-22
		8481.80.99	Other valves	21-Jul-22
		8484.10.00	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal	21-Jul-22
X.B.X.001	'Continuous flow reactors' and their 'modular components'	8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature	04-Jun-22

X.B.X.002	Nucleic acid assemblers and synthesizers	8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature	04-Jun-22
X.B.X.003	Automated peptide synthesizers	8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature	04-Jun-22
X.B.X.004.a	Numerical control" units for machine tools	8537.10.91	Programmable memory controllers	21-Jul-22
X.B.X.004.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 program 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 optimize the process. b.3. Capable of receiving and processing CAD data for internal preparation of machine instructions;	8537.10.91	Programmable memory controllers	21-Jul-22
X.B.X.004.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: 1. Two or more axes that can be coordinated simultaneously for contouring control; and 2. Positioning accuracies according to ISO 230/2 (2006), with all compensations available: a. Better than 15 µm along any linear axis (overall positioning) for grinding machines; b. Better than 15 µm along any linear axis (overall positioning) for milling machines; or c. Better than 15 µm along any linear axis (overall positioning) for turning machines; or	8457.10.10	Machining centres, horizontal	21-Jul-22
		8457.10.90	Machining centres, other.	21-Jul-22
		8457.20.00	Unit construction machines (single station)	21-Jul-22
		8457.30.10	Multi-station transfer machines, Numerically controlled	21-Jul-22
		8458.11.20	Horizontal lathes, numerically controlled, turning centres	21-Jul-22
		8458.11.41	Horizontal lathes, numerically controlled, automatic lathes, single spindle	21-Jul-22
		8458.11.49	Horizontal lathes, numerically controlled, automatic lathes, multiple spindle	21-Jul-22
		8458.11.80	Horizontal lathes, numerically controlled, other	21-Jul-22
		8458.91.20	Other lathes, numerically controlled, turning centres	21-Jul-22
		8458.91.80	Other lathes, numerically controlled	21-Jul-22
		8459.10.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Way-type unit head machines	21-Jul-22
		8459.31.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Other boring-milling machines, numerically controlled	21-Jul-22
		8459.51.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Milling machines, knee-type, numerically controlled	21-Jul-22
		8459.61.10	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other milling machines, numerically controlled	21-Jul-22
		8460.12.00	Flat-surface grinding machines, numerically controlled	21-Jul-22
8460.22.00	Other grinding machines, Centreless grinding machines, numerically controlled	21-Jul-22		
8460.23.00	Other cylindrical grinding machines, numerically controlled	21-Jul-22		
8460.24.00	Other, numerically controlled	21-Jul-22		
X.B.X.004.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: a. One or more contouring "tilting spindles"; Note: X.B.X.004.d.1.a. applies to machine tools for grinding or milling only. b. "Camming" (axial displacement) in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR); Note: X.B.X.004.d.1.b. applies to machine tools for turning only. c. "Run-out" (out-of-true running) in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR); or	8457.10.10	Machining centres, horizontal	21-Jul-22
		8457.10.90	Machining centres, other.	21-Jul-22
		8457.20.00	Unit construction machines (single station)	21-Jul-22
		8457.30.10	Multi-station transfer machines, Numerically controlled	21-Jul-22
		8458.11.20	Horizontal lathes, numerically controlled, turning centres	21-Jul-22
		8458.11.41	Horizontal lathes, numerically controlled, automatic lathes, single spindle	21-Jul-22
		8458.11.49	Horizontal lathes, numerically controlled, automatic lathes, multiple spindle	21-Jul-22

	d. The positioning accuracies, with all compensations available, are less (better) than: 0,001° on any rotary axis;	8458.11.80	Horizontal lathes, numerically controlled, other	21-Jul-22
		8458.91.20	Other lathes, numerically controlled, turning centres	21-Jul-22
		8458.91.80	Other lathes, numerically controlled	21-Jul-22
		8459.10.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Way-type unit head machines	21-Jul-22
		8459.31.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Other boring-milling machines, numerically controlled	21-Jul-22
		8459.51.00	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, Milling machines, knee-type, numerically controlled	21-Jul-22
		8459.61.10	Machine tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other milling machines, numerically controlled	21-Jul-22
		8460.12.00	Flat-surface grinding machines, numerically controlled	21-Jul-22
		8460.22.00	Other grinding machines, Centreless grinding machines, numerically controlled	21-Jul-22
		8460.23.00	Other cylindrical grinding machines, numerically controlled	21-Jul-22
		8460.24.00	Other, numerically controlled	21-Jul-22
		X.B.X.004d.2	Electrical discharge machines (EDM) of the wire feed type that have five or more axes that can be coordinated simultaneously for "contouring control	8456.30.11
X.B.X.005.a	Non-"numerically controlled" machine tools for generating optical quality surfaces, (see List of Items Controlled) and specially designed components therefor: a. Turning machines using a single point cutting tool and having all of the following characteristics: 1. Slide positioning accuracy less (better) than 0,0005 mm per 300 mm of travel; 2. Bidirectional slide positioning repeatability less (better) than 0,00025 mm per 300 mm of travel; 3. Spindle "run-out" and "camming" less (better) than 0,0004 mm total indicator reading (TIR); 4. Angular deviation of the slide movement (yaw, pitch and roll) less (better) than 2 seconds of arc, TIR, over full travel; and 5. Slide perpendicularity less (better) than 0,001 mm per 300 mm of travel;	8457.10.10	Machining centres, horizontal	21-Jul-22
		8457.10.90	Machining centres, other.	21-Jul-22
		8458.11.20	Horizontal lathes, numerically controlled, turning centres	21-Jul-22
		8457.30.90	Multi-station transfer machines	21-Jul-22
		8458.19.00	Horizontal lathes	21-Jul-22
		8458.99.00	Other lathes	21-Jul-22
X.B.X.005.b	Non "numerically controlled" 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.	8459.69.10	Other milling machines (tool milling)	21-Jul-22
		8459.69.90	Other milling machines	21-Jul-22
X.B.X.006	Gearmaking and/or finishing machinery not controlled by 2B003 capable of producing gears to a quality level of better than AGMA 11.	8461.40.11	Gear-cutting, gear-grinding or gear-finishing machines, for cutting cylindrical gears, nemerically controlled	21-Jul-22
		8461.40.19	Gear-cutting machines, for cutting cylindrical gears	21-Jul-22
		8461.40.31	Gear-cutting machines, for cutting other gears, numerically controlled	21-Jul-22
		8461.40.39	Gear-cutting machines, for cutting other gears.	21-Jul-22
		8461.40.71	Gear-cutting machines, for cutting other gears, itted with a micrometric adjusting system, in which the positioning in any one axis can be set up to an accuracy of at least 0,01 mm, numerically controlled.	21-Jul-22
		8461.40.79	Gear-cutting machines, for cutting other gears, itted with a micrometric adjusting system, in which the positioning in any one axis can be set up to an accuracy of at least 0,01 mm.	21-Jul-22
		8461.40.90	Other gear-finishing machines	21-Jul-22
X.B.X.007	Dimensional inspection or measuring systems or equipment not controlled by 2B006 or 2B206, as follows: 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) micrometer in any axes (L measured length in mm).	9031.49.90	Optical instruments, appliances and machines for measuring or checking, not elsewhere specified or included in chapter 90	21-Jul-22
		9031.80.20	Instruments, appliances and machines for measuring or checking geometrical quantities, n.e.s. in Chapter 90	21-Jul-22
X.B.X.008	"Robots" not controlled by 2B007 or 2B207 that are capable of employing feedback information in real-time processing from one	8428.70.00	Other lifting, handling, loading or unloading machinery (for example, lifts, escalators, conveyors, teleferics); Industrial robots	21-Jul-22

	or more sensors to generate or modify “programs” or to generate or modify numerical program data.	8479.50.00	Machines and mechanical appliances having individual functions, not specified or included elsewhere in chapter 84; Industrial robots, not elsewhere specified or included	21-Jul-22
X.B.X.009.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);	8466.10.20	Tool holders and self-opening dieheads, Arbors, collets and sleeves.	21-Jul-22
		8466.10.31	Tool holders for lathes	21-Jul-22
		8466.10.38	Tool holders for other machine tools	21-Jul-22
		8466.10.80	Self-opening dieheads	21-Jul-22
		8466.20.20	Work holders, Jigs and fixtures for specific applications; sets of standard jig and fixture components	21-Jul-22
		8466.20.91	Work holders for lathes	21-Jul-22
		8466.20.98	Work holders for other machine tools	21-Jul-22
		8466.30.00	Dividing heads and other special attachments for machines	21-Jul-22
		8466.93.40	For machines of headings 8456 to 8461, Parts and accessories of machines of subheadings 8456 11 10, 8456 12 10, 8456 20, 8456 30, 8457 10, 8458 91, 8459 21 00, 8459 61 or 8461 50 of a kind used solely or principally for the manufacture of printed circuits, printed circuit assemblies, parts of heading 8517, or parts of automatic data processing machines	21-Jul-22
		8466.93.60	For other machines of headings 8456 to 8461	21-Jul-22
X.B.X.009.b	Single point diamond cutting tool inserts, having all of the following characteristics: 1. Flawless and chip-free cutting edge when magnified 400 times in any direction; 2. Cutting radius from 0,1 to 5 mm inclusive; and 3. Cutting radius out-of-roundness less (better) than 0,002 mm TIR.	8207.19.10	Rock-drilling or earth-boring tools, with working part of diamond or agglomerated diamond	21-Jul-22
		8207.20.10	Dies for drawing or extruding metal, with working part of diamond or agglomerated diamond	21-Jul-22
		8207.50.10	Tools for drilling, other than for rock-drilling, with working part of diamond or agglomerated diamond	21-Jul-22
		8207.60.10	Tools for boring or broaching, with working part of diamond or agglomerated diamond	21-Jul-22
		8207.90.10	Interchangeable tools, with working part of diamond or agglomerated diamond	21-Jul-22
X.B.X.009.c	Specially designed printed circuit boards with mounted 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 X.B.X.004, X.B.X.006, X.B.X.007, X.B.X.008, or X.B.X.009.	8466.93.60	Other parts for machines of heading 8456 to 8461	21-Jul-22
X.B.X.010.a	Isostatic presses, other than those specified in the CML or in Regulation (EU) 2021/821;	8479.83.00	Cold isostatic presses	21-Jul-22
		8514.11.00	Hot isostatic presses	21-Jul-22
X.B.X.010.b	Bellows manufacturing equipment, including hydraulic forming equipment and bellows forming dies;	8463.20.00	Machine tools for working metal or cermets, without removing material; Thread-rolling machines	21-Jul-22
		8463.10.90	Machine tools for working metal or cermets, without removing material; Drawbenches for bars, tubes or profiles	21-Jul-22
		8463.90.00	Other machine tools for working metal or cermets, without removing material	21-Jul-22
X.B.X.010.c	Laser welding machines;	8515.80.10	Other welding machines and apparatus for treating metals	21-Jul-22
X.B.X.010.d	MIG welders;	8515.31.00	Welding machines and apparatus; for arc (including plasma arc) welding of metals;	21-Jul-22
		8515.39.13	Welding machines and apparatus; for arc (including plasma arc) welding of metals; For manual welding with coated electrodes, complete with welding or cutting devices, and consigned with Transformers	21-Jul-22
		8515.39.18	Welding machines and apparatus; for arc (including plasma arc) welding of metals; For manual welding with coated electrodes, complete with welding or cutting devices, and consigned with Generators or rotary converters or static converters, rectifiers or rectifying apparatus	21-Jul-22
		8515.39.90	Welding machines and apparatus; for arc (including plasma arc) welding of metals; Other	21-Jul-22
X.B.X.010.e	E-beam welders;	8515.80.10	Other welding machines and apparatus for treating metals	21-Jul-22
X.B.X.010.f	Monel equipment, including valves, piping, tanks and vessels	7507.12.00	Tubes and pipes of nickel alloys	21-Jul-22
		7507.20.00	Tube or pipe fittings of nickel or nickel alloy	21-Jul-22

		7508.90.00	Other articles of nickel or nickel alloy	21-Jul-22
X.B.X.010.g	304 and 316 stainless steel valves, piping, tanks and vessels. Note: Fittings are considered part of piping for purposes of X.B.X.010.g.	7307.21.00	Stainless steel flanges	21-Jul-22
		7307.22.10	Stainless steel sleeves (Threaded)	21-Jul-22
		7307.22.90	Stainless elbows and bends (Threaded)	21-Jul-22
		7307.23.10	Stainless steel elbows and bends (butt)	21-Jul-22
		7307.23.90	Stainless steel other welding fittings (butt)	21-Jul-22
		7307.29.10	Stainless steel other fittings (threaded)	21-Jul-22
		7307.29.80	Stainless steel other fittings	21-Jul-22
		7310.10.00	Tanks, casks, drums, cans, boxes and similar containers, for any material (other than compressed or liquefied gas), of iron or steel, of a capacity between 50 and 300 l	21-Jul-22
		7311.00.19	Containers for compressed or liquefied gas, of iron or steel; Seamless; For a pressure of 165 bar or more, of a capacity of more than 50 l	21-Jul-22
		7311.00.30	Containers for compressed or liquefied gas, of iron or steel; Seamless; For a pressure of less than 165 bar, of a capacity of more than 50 l	21-Jul-22
		7311.00.91	Containers for compressed or liquefied gas, of iron or steel; not seamless; For a pressure of less than 165 bar, of a capacity of less than 1000 l	21-Jul-22
		7311.00.99	Containers for compressed or liquefied gas, of iron or steel; not seamless; For a pressure of less than 165 bar, of a capacity of more than 1000 l	21-Jul-22
		8481.10.05	Pressure-reducing valves; Combined with filters or lubricators	21-Jul-22
		8481.10.19	Other pressure-reducing valves; of cast iron or steel	21-Jul-22
		8481.20.10	Valves for the control of oleohydraulic power transmission	21-Jul-22
		8481.20.90	Valves for the control of pneumatic power transmission	21-Jul-22
		8481.30.91	Check (non-return) valves Of cast iron or of steel	21-Jul-22
		8481.40.10	Safety or relief valves: Of cast iron or of steel	21-Jul-22
		8481.80.51	Process control valves; Temperature regulators	21-Jul-22
		8481.80.63	Gate valves of steel	21-Jul-22
		8481.80.73	Globe valves of steel	21-Jul-22
		8481.80.81	Ball and plug valves	21-Jul-22
		8481.80.85	Butterfly valves	21-Jul-22
		8481.80.87	Diaphragm valves	21-Jul-22
		8481.80.99	Other valves	21-Jul-22
		8484.10.00	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal	21-Jul-22
		X.B.X.010.h	Mining and drilling equipment, as follows: 1. Large boring equipment capable of drilling holes greater than 61 cm in diameter; 2. Large earth-moving equipment used in the mining industry	8430.10.00
8430.31.00	Coal or rock cutters and tunnelling machinery; Self-propelled			21-Jul-22
8430.39.00	Coal or rock cutters and tunnelling machinery; not self-propelled			21-Jul-22
8430.41.00	Other boring or sinking machinery, self-propelled			21-Jul-22
8430.49.00	Other boring or sinking machinery, other			21-Jul-22
8429.11.00	Bulldozers and angledozers: Track laying			21-Jul-22
8429.19.00	Bulldozers and angledozers: Other			21-Jul-22
X.B.X.010.i	Electroplating equipment designed for coating parts with nickel or aluminum;	8543.30.70	Machines and apparatus for electroplating, electrolysis or electrophoresis	21-Jul-22
X.B.X.010.j	Pumps designed for industrial service and for use with an electrical motor of 5 HP or greater;	8413.60.20	Rotary positive displacement pumps: hydraulic units	21-Jul-22
		8413.60.31	Rotary positive displacement pumps: Hydraulic fluid power	21-Jul-22
		8413.60.39	Rotary positive displacement pumps: gear pumps	21-Jul-22
		8413.60.61	Rotary positive displacement pumps: vane pumps, hydraulic fluid power	21-Jul-22

		8413.60.69	Rotary positive displacement pumps: vane pumps, other	21-Jul-22
		8413.60.70	Rotary positive displacement pumps: screw pumps	21-Jul-22
		8413.60.80	Other Rotary positive displacement pumps	21-Jul-22
		8413.70.29	Submersible multi-stage centrifugal pump	21-Jul-22
		8413.70.30	Glandless impeller pumps for heating systems and warm water supply	21-Jul-22
		8413.70.45	Centrifugal pump with a discharge diameter exceeding 15 mm, Channel impeller pumps and side channel pumps	21-Jul-22
		8413.70.51	Centrifugal pump with a discharge diameter exceeding 15 mm, Channel impeller pumps and side channel pumps, single impellers, monobloc	21-Jul-22
		8413.70.59	Centrifugal pump with a discharge diameter exceeding 15 mm, Channel impeller pumps and side channel pumps, single impeller	21-Jul-22
		8413.70.65	Centrifugal pump with a discharge diameter exceeding 15 mm, Channel impeller pumps and side channel pumps, multiple impeller	21-Jul-22
		8413.70.75	Centrifugal pump with a discharge diameter exceeding 15 mm, Channel impeller pumps and side channel pumps, multi-stage	21-Jul-22
		8413.70.81	Centrifugal pump with a discharge diameter exceeding 15 mm, other single-stage	21-Jul-22
		8413.70.89	Centrifugal pump with a discharge diameter exceeding 15 mm, other multi-stage	21-Jul-22
X.B.X.010.k	Vacuum valves, piping, flanges, gaskets and related equipment specially designed for use in high-vacuum service, other than those specified in the CML or in Regulation (EU) 2021/821;	7307.21.00	Stainless steel flanges	21-Jul-22
		7307.22.10	Stainless steel sleeves (Threaded)	21-Jul-22
		7307.22.90	Stainless elbows and bends (Threaded)	21-Jul-22
		7307.23.10	Stainless steel elbows and bends (butt)	21-Jul-22
		7307.23.90	Stainless steel other welding fittings (butt)	21-Jul-22
		7307.29.10	Stainless steel other fittings (threaded)	21-Jul-22
		7307.29.80	Stainless steel other fittings	21-Jul-22
		8481.10.05	Pressure-reducing valves; Combined with filters or lubricators	21-Jul-22
		8481.10.19	Other pressure-reducing valves; of cast iron or steel	21-Jul-22
		8481.20.10	Valves for the control of oleohydraulic power transmission	21-Jul-22
		8481.20.90	Valves for the control of pneumatic power transmission	21-Jul-22
		8481.30.91	Check (non-return) valves Of cast iron or of steel	21-Jul-22
		8481.40.10	Safety or relief valves: Of cast iron or of steel	21-Jul-22
		8481.80.51	Process control valves; Temperature regulators	21-Jul-22
		8481.80.63	Gate valves of steel	21-Jul-22
		8481.80.73	Globe valves of steel	21-Jul-22
		8481.80.81	Ball and plug valves	21-Jul-22
		8481.80.85	Butterfly valves	21-Jul-22
		8481.80.87	Diaphragm valves	21-Jul-22
		8481.80.99	Other valves	21-Jul-22
		8484.10.00	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal	21-Jul-22
X.B.X.010.l	Spin forming and flow forming machines, other than those specified in the CML or in Regulation (EU) 2021/821;	8463.90.00	Other machine tools for working metal or cermets, without removing material:	21-Jul-22
X.B.X.010.m	Centrifugal multiplane balancing machines, other than those specified in the CML or in Regulation (EU) 2021/821;	9031.10.00	Machines for balancing mechanical parts	21-Jul-22
X.B.X.010.n	Austenitic stainless steel plate, valves, piping, tanks and vessels	7219.11.00	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22
		7219.12.10	Flat-rolled products of stainless steel, of a width of 600 mm or more, Not further worked than hot-rolled, in coils:	21-Jul-22



7220.20.81	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
7220.20.89	Flat-rolled products of stainless steel, of a width of less than 600 mm: Not further worked than cold-rolled (cold-reduced):	21-Jul-22
7220.90.20	Flat-rolled products of stainless steel, of a width of less than 600 mm: other	21-Jul-22
7220.90.80	Flat-rolled products of stainless steel, of a width of less than 600 mm: other	21-Jul-22
7304.11.00	Line pipe of a kind used for oil or gas pipelines pf stainless steel	21-Jul-22
7304.22.00	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas; Drill pipe of stainless steel	21-Jul-22
7304.24.00	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas; other of stainless steel	21-Jul-22
7304.41.00	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas, other of of circular cross-section, of stainless steel, Cold-drawn or cold-rolled (cold-reduced	21-Jul-22
7304.49.83	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas, other of of circular cross-section, of stainless steel, other Of an external diameter not exceeding 168,3 mm	21-Jul-22
7304.49.85	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas, other of of circular cross-section, of stainless steel, other Of an external diameter exceeding 168,3 mm but not exceeding 406,4 mm	21-Jul-22
7304.49.89	Casing, tubing and drill pipe, of a kind used in drilling for oil or gas, other of of circular cross-section, of stainless steel, other Of an external diameter exceeding 406,4 mm	21-Jul-22
7305.11.00	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406,4 mm, of iron or steel, Line pipe of a kind used for oil or gas pipelines: Longitudinally submerged arc welded	21-Jul-22
7305.12.00	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406,4 mm, of iron or steel, Line pipe of a kind used for oil or gas pipelines: Other, longitudinally welded	21-Jul-22
7305.19.00	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406,4 mm, of iron or steel, Line pipe of a kind used for oil or gas pipelines: Other	21-Jul-22
7306.11.00	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel: Line pipe of a kind used for oil or gas pipelines: Welded, of stainless steel	21-Jul-22
7306.40.20	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel: Other, welded, of circular cross-section, of stainless steel: Cold-drawn or cold-rolled (cold-reduced)	21-Jul-22
7306.40.80	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel: Other, welded, of circular cross-section, of stainless steel: other	21-Jul-22
7306.61.10	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel: Other, welded, of non-circular cross-section, Of square or rectangular cross-section: Of stainless steel	21-Jul-22
7306.69.10	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel: Other, welded, of non-circular cross-section, Of other non-circular cross-section, Of stainless steel	21-Jul-22
7309.00.10	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: For gases (other than compressed or liquefied gas)	21-Jul-22
7309 00.30	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: Lined or heat-insulated	21-Jul-22



		7309.00.51	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: Exceeding 100 000 L	21-Jul-22
		7309.00.59	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: Not exceeding 100 000 L	21-Jul-22
		7309.00.90	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: For solids	21-Jul-22
		7310.10.00	Tanks, casks, drums, cans, boxes and similar containers, for any material (other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment: Of a capacity of 50 l or more	21-Jul-22
		7311.00.11	Containers for compressed or liquefied gas, of iron or steel: seamless, For a pressure of 165 bar or more, of a capacity of: Less than 20 l	21-Jul-22
		7311.00.13	Containers for compressed or liquefied gas, of iron or steel: seamless, For a pressure of 165 bar or more, of a capacity of: 20 l or more but not more than 50 l	21-Jul-22
		7311.00.19	Containers for compressed or liquefied gas, of iron or steel: seamless, For a pressure of 165 bar or more, of a capacity of: More than 50 l	21-Jul-22
		7311.00.30	Containers for compressed or liquefied gas, of iron or steel: seamless, For a pressure of 165 bar or more, of other capacity	21-Jul-22
		7311.00.91	Containers for compressed or liquefied gas, of iron or steel: seamless, For other pressure, Less than 1 000 l.	21-Jul-22
		7311.00.99	Containers for compressed or liquefied gas, of iron or steel: seamless, For other pressure, 1 000 l or more	21-Jul-22
		8481.10.05	Pressure-reducing valves, Combined with filters or lubricators	21-Jul-22
		8481.10.19	Pressure-reducing valves, other, Of cast iron or of steel	21-Jul-22
		8481.20.10	Valves for oleohydraulic or pneumatic transmissions, Valves for the control of oleohydraulic power transmission	21-Jul-22
		8481.20.90	Valves for oleohydraulic or pneumatic transmissions, Valves for the control of pneumatic power transmission	21-Jul-22
		8481.30.91	Check (non-return) valves, of cast iron or of steel	21-Jul-22
		8481.40.10	Safety or relief valves: Of cast iron or of steel	21-Jul-22
		8481.80.11	Mixing valves	21-Jul-22
		8481.80.51	Process control valves: temperature regulators	21-Jul-22
		8481.80.59	Other process control valves	21-Jul-22
		8481.80.63	Gate valves of steel	21-Jul-22
		8481.80.73	Globe valves of steel	21-Jul-22
		8481.80.81	Ball and plug valves	21-Jul-22
		8481.80.85	Butterfly valves	21-Jul-22
		8481.80.87	Diaphragm valves	21-Jul-22
		8481.80.99	Other valves	21-Jul-22
X.B.X.011	Floor-mounted fume hoods (walk-in style) with a minimum nominal width of 2,5 metres.	8414.80.80	Other turbocompressors	16-Dec-22
X.B.X.012	Class II biosafety cabinets and glove boxes.	8414.70.00	Gas-tight biological safety cabinets	16-Dec-22
X.B.X.013	Batch centrifuges with a rotor capacity of 4 litres or greater, usable with biological materials.	8421.19.20	Centrifuges of a kind used in laboratories	16-Dec-22
X.B.X.014	Fermenters with an internal volume of 10–20 litres, usable with biological materials	8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated	16-Dec-22
X.B.X.015	Reaction vessels, reactors, agitators, heat exchangers, condensers, pumps (including single seal pumps), valves, storage tanks, containers, receivers, and distillation or absorption columns that	8419.89.10	Cooling towers and similar plant for direct cooling (without a separating wall) by means of recirculated water	16-Dec-22
		8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated	16-Dec-22

	meet performance parameters of the control 2B3501, regardless of their materials of construction.	8419.90.85	Parts of machinery, plant or laboratory equipment, whether or not electrically heated	16-Dec-22
X.B.X.016	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.	8421.39.25	Machinery and apparatus for filtering or purifying air	16-Dec-22
		8421.39.35	Machinery and apparatus for filtering or purifying other gases by a catalytic process	16-Dec-22
		8421.39.85	Machinery and apparatus for filtering or purifying other gases; other	16-Dec-22
X.B.X.017	Vacuum pumps with a manufacturer's specified maximum flow-rate greater than 1 m3/h (under standard temperature and pressure conditions), casings (pump bodies), pumps, in which all surfaces that come into direct contact with the chemicals being processed are made from controlled materials.	8414.10.25	Rotary piston pumps, sliding vane rotary pumps, molecular drag pumps and Roots pumps	16-Dec-22
		8414.10.81	Diffusion pumps, cryopumps and adsorption pumps	16-Dec-22
		8414.10.89	Other vacuum pumps	16-Dec-22
X.B.X.018	Laboratory equipment, including parts and accessories for such equipment, for the analysis or detection, destructive or non-destructive, of chemical substances.	9027.10.10	Gas or smoke analysis apparatus; electronic	16-Dec-22
		9027.10.90	Gas or smoke analysis apparatus; other	16-Dec-22
		9027.20.00	Chromatographs and electrophoresis instruments	16-Dec-22
		9027.30.00	Spectrometers, spectrophotometers and spectrographs using optical radiation (UV, visible, IR)	16-Dec-22
		9027.50.00	Other instruments and apparatus using optical radiation (UV, visible, IR)	16-Dec-22
		9027.81.00	Mass spectrometers	16-Dec-22
		9027.89.90	Other instruments and apparatus for physical or chemical analysis	16-Dec-22
		9027.90.00	Microtomes; parts and accessories	16-Dec-22
X.B.X.019	Whole chlor-alkali electrolysis cells – mercury, diaphragm and membrane.	8543.30.70	Other machines and apparatus for electroplating, electrolysis or electrophoresis:	16-Dec-22
X.B.X.020	Titanium electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	8108.90.30	Bars, rods, profiles and wire of titanium	16-Dec-22
		8108.90.90	Other articles of titanium	16-Dec-22
X.B.X.021	Nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	7505.11.00	Bars, rods and profiles of nickel, not alloyed	16-Dec-22
		7505.12.00	Bars, rods and profiles of nickel alloys	16-Dec-22
		7505.21.00	Wire of nickel, not alloyed	16-Dec-22
		7505.22.00	Wire of nickel alloys	16-Dec-22
		7508.90.00	Other articles of nickel or nickel alloy	16-Dec-22
X.B.X.022	Bipolar titanium nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	7505.12.00	Bars, rods and profiles of nickel alloys	16-Dec-22
		7508.90.00	Other articles of nickel or nickel alloy	16-Dec-22
X.B.X.023	Asbestos diaphragms specially designed for use in chlor-alkali cells.	8543.90.00	Parts of electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter	16-Dec-22
X.B.X.024	Fluoropolymer based diaphragms specially designed for use in chlor-alkali cells.	8543.90.00	Parts of electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter	16-Dec-22
X.B.X.025	Fluoropolymer based ion exchange membranes specially designed for use in chloralkali cells.	8543.90.00	Parts of electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter	16-Dec-22
X.B.X.026	Compressors specially designed to compress wet or dry chlorine, regardless of material of construction.	8413.60.80	Other rotary positive displacement pumps	16-Dec-22
		8414.10.25	Rotary piston pumps, sliding vane rotary pumps, molecular drag pumps and Roots pumps	16-Dec-22
		8414.10.89	Other vacuum pumps	16-Dec-22
		8414.80.73	Rotary displacement compressors, single-shaft	16-Dec-22
		8414.80.75	Rotary displacement compressors, multi-shaft, screw compressors	16-Dec-22
		8414.80.78	Other air or vacuum pumps, air or other gas compressors and fans	16-Dec-22
X.B.X.027	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.	8419.89.98	Other machinery, plant or laboratory equipment, whether or not electrically heated	16-Dec-22
X.D.X.001	“Software” specially designed or modified for the “development”, “production” or “use” of equipment controlled by X.A.X.001.	N/A	Software	21-Jul-22
X.D.X.002	“Software” “required” for the “development”, “production” or “use” of concealed object detection equipment controlled by X.A.X.002.	N/A	Software	21-Jul-22
X.D.X.003	“Software” specially designed for the “development”, “production”, or “use” of equipment controlled by X.B.X.004, X.B.X.006, or X.B.X.007, X.B.X.008, and X.B.X.009.	N/A	Software	21-Jul-22

X.D.X.004	Specific "software", as follows (see List of Items Controlled): a. "Software" to provide adaptive control and having both of the following characteristics: 1. For flexible manufacturing units (FMUs); and 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: a. Machine vision (optical ranging); b. Infrared imaging; c. Acoustical imaging (acoustical ranging); d. Tactile measurement; e. Inertial positioning; f. Force measurement; and g. Torque measurement.	N/A	Software	21-Jul-22
X.D.X.005	"Software" specially designed or modified for the "development," "production," or "use" of items controlled by X.A.X.004 or X.A.X.005.	N/A	Software	21-Jul-22
X.D.X.006	"Software" specially designed for the "development" or "production" of portable electric generators controlled by X.A.X.006.	N/A	Software	21-Jul-22
X.E.X.001	"Technology" "required" for the "development," "production" or "use" of equipment controlled by X.A.X.002 or required for the "development" of "software" controlled by X.D.X.002.	N/A	Technology	21-Jul-22
X.E.X.002	"Technology" for the "use" of equipment controlled by X.B.X.004, X.B.X.006, X.B.X.007, or X.B.X.008.	N/A	Technology	21-Jul-22
X.E.X.003	"Technology" according to the General Technology Note for the "use" of equipment controlled by X.A.X.004 or X.A.X.005.	N/A	Technology	21-Jul-22
X.E.X.004	"Technology" for the "use" of portable electric generators controlled by X.A.X.006.	N/A	Technology	21-Jul-22

## PART B

### Semiconductor devices

8541.10	Diodes, other than photosensitive or light-emitting diodes (LED)	06-Oct-22
8541.21	Transistors, other than photosensitive transistors with a dissipation rate of less than 1 W	06-Oct-22
8541.29	Other transistors, other than photosensitive transistors	06-Oct-22
8541.49	Photosensitive semiconductor devices (excl. Photovoltaic generators and cells)	06-Oct-22
8541.51	Other semiconductor devices: Semiconductor-based transducers	06-Oct-22
8541.59	Other semiconductor devices	06-Oct-22
8541.60	Mounted piezo-electric crystals	16-Dec-22
8541.90	Semiconductor devices: Parts	06-Oct-22

### Electronic integrated circuits

8537.10	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 8535 or 8536, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 8517, for a voltage not exceeding 1 000 V	25-Feb-23
8542.31	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	06-Oct-22
8542.32	Memories	06-Oct-22
8542.33	Amplifiers	06-Oct-22
8542.39	Other Electronic Integrated Circuits	06-Oct-22
8542.90	Electronic integrated circuits: Parts	06-Oct-22

### Photographic cameras

8525.89	Other television cameras, digital cameras and video camera recorders	25-Feb-23
9006.30	Cameras specially designed for underwater use, for aerial survey or for medical or surgical examination of internal organs; comparison cameras for forensic or criminological purposes	06-Oct-22
9013.80	Other optical devices, appliances and instruments	25-Feb-23

9025.19	Other thermometers and pyrometers, not combined with other instruments	25-Feb-23
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**Other electrical/magnetic components**

8505.11	Permanent magnets and articles intended to become permanent magnets after magnetisation; of metal	16-Dec-22
8529.10	Aerials and aerial reflectors of all kinds; parts suitable for use therewith	25-Feb-23
8532.21	Other fixed capacitors of tantalum	25-Feb-23
8532.24	Ceramic dielectric multilayer capacitors	16-Dec-22
8536.50	Other switches	16-Dec-22
8536.69	Plugs and sockets	16-Dec-22
8536.90	Other apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp holders and other connectors, junction boxes), for a voltage not exceeding 1 000 V; connectors for optical fibres, optical fibre bundles or cables	16-Dec-22
8548.00	Electrical parts of machinery or apparatus, not specified or included elsewhere in Chapter 85	16-Dec-22

**Machines for additive manufacturing**

8485.20	Machines for additive manufacturing by plastics or rubber deposit	16-Dec-22
8485.30	Machines for additive manufacturing by plaster, cement, ceramics or glass deposit	16-Dec-22
8485.90	Parts of machines for additive manufacturing	16-Dec-22