Forskrift om endring i forskrift 15. august 2014 nr. 1076 om restriktive tiltak vedrørende handlinger som undergraver eller truer Ukrainas territorielle integritet, suverenitet, uavhengighet og stabilitet

Fastsatt av Utenriksdepartementet 19. mars 2024 med hjemmel i lov 16. april 2021 nr. 18 om gjennomføring av internasjonale sanksjoner § 2 og forskrift 15. august 2014 nr. 1076 om restriktive tiltak vedrørende handlinger som undergraver eller truer Ukrainas territorielle integritet, suverenitet, uavhengighet og stabilitet § 23.

I

I forskrift 15. august 2014 nr. 1076 om restriktive tiltak vedrørende handlinger som undergraver eller truer Ukrainas territorielle integritet, suverenitet, uavhengighet og stabilitet gjøres følgende endringer:

I § 2 bokstav bb skal innledningen lyde:

bb. «energisektor»: en sektor som omfatter følgende virksomhet, med unntak av sivil atomrelatert virksomhet, *for eksempel Paks II-prosjektet*:

I § 3 gjøres følgende endringer:

I tredje ledd skal bokstav j lyde:

> j. enheter etablert i Russland, som tidligere var eid eller kontrollert av enheter som er etablert i Norge eller en EU-medlemsstat, hvis eierskap eller kontroll er tvangsoverført av Russland ved lover, forskrifter, andre lovgivningsinstrumenter eller ved annen handling fra en offentlig russisk myndighet, eller fysiske eller juridiske personer, som har dratt nytte av slik overføring, og fysiske personer som er utnevnt til de styrende organene i disse enhetene i Russland, uten samtykke fra enhetene i Norge eller EU som tidligere eide eller kontrollerte dem, eller

I tredje ledd skal ny bokstav k lyde:

> k. fysiske eller juridiske personer som er tilknyttet fysiske eller juridiske personer nevnt i bokstav a–j.

Nytt fjerde ledd skal lyde:

Dersom fysiske personer som er oppført i vedlegg I, dør i løpet av anvendelsesperioden for de restriktive tiltakene, kan navnene på de døde personene beholdes på denne listen, dersom det å fjerne dem fra listen vil medføre risiko for at formålet med de restriktive tiltakene

undergraves på grunn av sannsynligheten for at de aktuelle aktivaene ellers ville bli brukt til å finansiere Russlands angrepskrig mot Ukraina eller andre handlinger som undergraver eller truer Ukrainas territoriale integritet, suverenitet og uavhengighet.

Ny § 5a skal lyde:

§ 5a. Unntak fra § 3 knyttet til en domstols eller forvaltningsmyndighets beslutning om å frata penger eller formuesgoder

Som unntak fra § 3 kan Utenriksdepartementet gi tillatelse til at visse frosne penger eller formuesgoder frigis eller stilles til rådighet, etter å ha slått fast at:

a. en domstol eller forvaltningsmyndighet i Norge eller en EU-medlemsstat har truffet en beslutning i henhold til vilkår fastsatt i lov, om å frata en fysisk eller juridisk person oppført i vedlegg I penger eller formuesgoder som tilhører, eies av eller kontrolleres av denne personen eller enheten, og

b. kompensasjon som betales for slik fratagelse av penger eller formuesgoder, fryses.

Ny § 5b skal lyde:

§ 5b. Unntak fra § 3 knyttet til enheter hvis eierskap eller kontroll er tvangsoverført av Russland

Som unntak fra § 3 kan Utenriksdepartementet, på de vilkårene Utenriksdepartementet finner hensiktsmessige, gi tillatelse til å frigi visse frosne penger eller formuesgoder som tilhører fysiske eller juridiske personer oppført på listen i vedlegg I i henhold til § 3 tredje ledd bokstav j, eller at visse frosne penger eller formuesgoder stilles til rådighet for disse fysiske eller juridiske personene. Slik tillatelse kan kun gis hvis pengene eller formuesgodene er nødvendige for salg eller bruk av aksjer i eller aktiva hos juridiske personer etablert i Russland og oppført i vedlegg I i henhold til § 3 tredje ledd bokstav j, for å kunne betale vederlag avtalt mellom partene eller kompensasjon fastsatt av en domstol eller forvaltningsmyndighet eller ved lov i forbindelse med Russlands tvangsoverføring av eierskap eller kontroll i en enhet som tidligere var eid eller kontrollert av enheter etablert i Norge eller en EU-medlemsstat.

Unntaket i første ledd gjelder ikke frosne penger eller formuesgoder som holdes av verdipapirsentraler i henhold til europaparlaments- og rådsforordning (EU) nr. 909/2014.

I § 6b gjøres følgende endringer:

Sjette ledd skal lyde:

Som unntak fra § 3 kan Utenriksdepartementet gi tillatelse til å frigi visse frosne penger eller formuesgoder som tilhører Alfa-Bank JCS, Rosbank og Tinkoff Bank JCS, eller til å stille visse frosne penger eller formuesgoder til rådighet for disse enhetene, på de vilkårene som Utenriksdepartementet finner hensiktsmessige og etter å ha slått fast at disse pengene eller

formuesgodene er nødvendige for, senest den 3. oktober 2023, å kunne avslutte transaksjoner, kontrakter eller andre avtaler, herunder korrespondentbankforbindelser, inngått med disse enhetene før 25. februar 2023, eller, med hensyn til Alfa-Bank JCS, for transaksjoner for betaling av beløp fra Jewish Claims Conference til mottakere i Russland innen *2. april 2025*, uavhengig av når *transaksjonene*, kontraktene eller andre avtaler ble inngått.

Nytt femtende, sekstende og syttende ledd skal lyde:

Som unntak fra § 3 kan Utenriksdepartementet gi tillatelse til å frigi visse frosne penger eller formuesgoder som tilhører AlfaStrakhovanie Group, på de vilkårene Utenriksdepartementet finner hensiktsmessig, og etter å ha slått fast at

a. dette er nødvendig for å gjøre det mulig for AlfaStrakhovanie Group, å betale en enhet som er etablert i Norge, et land som er medlem av Det europeiske økonomiske samarbeidsområde eller Sveits, eller en borger eller en person bosatt i Norge, i et land som er medlem av Det europeiske økonomiske samarbeidsområde eller i Sveits, og
b. en slik betaling utgjør den godtgjøringen eller fordelen som skal ytes etter en inntruffet forsikringssak, og ikke er i strid med § 3 annet ledd.

Som unntak fra § 3 kan Utenriksdepartementet på de vilkårene Utenriksdepartementet finner hensiktsmessige, tillate at visse frosne penger eller formuesgoder frigis, eller at visse frosne penger eller formuesgoder stilles til rådighet for Arkady ROTENBERG, Petr Olegovich AVEN, Mikhail Maratovich FRIDMAN, Gennady TIMCHENKO, German Borisovich KHAN, Alexey KUZMICHEV, Igor Albertovich KESAEV og Boris ROTENBERG, og for OAO 'VO Technopromexport og VO Technopromexport, etter å ha slått fast at

a. pengene eller formuesgodene er nødvendige for salg og overføring innen 30. september 2024 av eiendomsrettigheter som direkte eller indirekte eies av en av disse personene eller enhetene i juridiske personer, som er etablert i Norge eller en EU-medlemsstat, og
b. inntektene av dette salget og denne overføringen fryses.

Som unntak fra § 3 kan Utenriksdepartementet på de vilkårene Utenriksdepartementet finner hensiktsmessige, tillate frigivelse av visse frosne penger eller formuesgoder som tilhører JSC 'Alabuga' Special Economic Zone of Industrial and Production Type, eller at visse penger eller formuesgoder stilles til rådighet for denne enheten, etter å ha slått fast at slike penger eller formuesgoder er nødvendige for innen 20. september 2024 å kunne heve kontrakter som er inngått med denne enheten før 19. desember 2023.

I § 6f skal første ledd lyde:

Som unntak fra § 3 kan Utenriksdepartementet tillate frigivelse av visse frosne penger eller formuesgoder som tilhører Bank Rossiya, Promsvyazbank, VEB.RF, Otkritie FC Bank, Novikombank, Sovcombank, VTB Bank, Sberbank, Credit Bank of Moscow, JC Dalnevostochniy Bank, Alfa-Bank JSC, Rosbank, Tinkoff Bank JSC, MRB Bank, CMRBank og *AlfaStrakhovanie Group*, eller til å stille visse penger eller formuesgoder til rådighet for disse enhetene, på de vilkårene Utenriksdepartementet finner hensiktsmessige, og etter å ha

slått fast at disse pengene eller formuesgodene er nødvendige for kjøp, import eller transport av landbruksprodukter og matvarer herunder hvete og gjødsel.

§ 6g skal lyde:

§ ***6g. Unntak fra § 3 for lostjenester til fartøy***

§ 3 får ikke anvendelse for penger eller formuesgoder som kreves for yting av lostjenester som er nødvendige av hensyn til sikkerheten til sjøs.

I § 8b skal sjette og syvende ledd lyde:

Det er forbudt direkte eller indirekte å opprette eller delta i ordninger med sikte på å

i. yte nye lån eller kreditter med en løpetid på over 30 dager til juridiske personer nevnt i første eller tredje ledd, etter 29. september 2014 til 19. mars 2022, eller
ii. yte nye lån eller kreditter til juridiske personer nevnt i første, annet, tredje eller fjerde ledd etter 19. mars 2022.

a. Forbudet gjelder ikke lån eller kreditter som har som konkret og dokumentert formål å finansiere import eller eksport av varer som ikke omfattes av forbud, og ikke-finansielle tjenester mellom *Norge eller EU og* et tredjeland, herunder utgifter til varer og tjenester fra et annet tredjeland som er nødvendige for å oppfylle kontraktene om eksport eller import, *forutsatt at Utenriksdepartementet er underrettet innen tre måneder etter låne- eller kredittdatoen,* eller
b. *lån som* har som konkret og dokumentert formål å yte nødfinansiering med sikte på å oppfylle solvens- og likviditetskriterier for juridiske personer etablert i Norge eller EU der mer enn 50% av eiendomsrettighetene innehas av en enhet oppført i vedlegg V*, forutsatt at Utenriksdepartementet er underrettet innen tre måneder etter låne- eller kredittdatoen*.

Forbudet i sjette ledd gjelder ikke utnyttelse av kredittmuligheter eller utbetalinger som er foretatt i henhold til kontrakt inngått før 19. mars 2022, forutsatt at følgende vilkår er oppfylt:

a. alle vilkår for slik utnyttelse av kredittmuligheter eller slike utbetalinger
   i. var avtalt før 19. mars 2022, og
   ii. er ikke blitt endret på eller etter denne datoen, og

b. det før 19. mars 2022 er fastsatt en kontraktfestet forfallsdag for full tilbakebetaling av penger som er stilt til rådighet, og for oppheving av alle tilsagn, rettigheter og forpliktelser i henhold til kontrakten,

c. det ikke forelå brudd på noen av forbudene i denne forskriften på tidspunktet kontraktinngåelse*, og*

d. Utenriksdepartementet er underrettet innen tre måneder etter datoen for utnyttelse kredittmuligheten eller utbetalingen.

Vilkårene som gjelder ved utnyttelse av kredittmulighet og utbetaling som nevnt i bokstav a skal omfatte bestemmelser om lengden på tilbakebetalingstiden for hver kredittutnyttelse eller utbetaling, gjeldende rentesats eller renteberegningsmetoden samt maksimumsbeløpet.

Åttende ledd utgår.

I § 8c skal tredje og fjerde ledd lyde:

Forbudet *i* andre ledd gjelder ikke lån eller kreditter som har som konkret og dokumentert formål å finansiere import eller eksport av varer som ikke omfattes av forbud, og ikke-finansielle tjenester mellom Norge og et tredjeland, herunder utgifter til varer og tjenester fra et annet tredjeland som er nødvendige for å oppfylle kontraktene om eksport- eller import, *forutsatt at Utenriksdepartementet er underrettet innen tre måneder etter låne- eller kredittdatoen.*

Forbudet *i* andre ledd gjelder ikke utnyttelse av kredittmuligheter eller utbetalinger som er foretatt i henhold til en kontrakt inngått før 18. mars 2022, forutsatt at følgende vilkår er oppfylt:

a. alle vilkår for slik utnyttelse av kredittmuligheter eller slike utbetalinger
   i. var avtalt før 18. mars 2022, og
   ii. er ikke blitt endret på eller etter denne datoen, og

b. det før 18. mars 2022 er fastsatt en kontraktfestet forfallsdag for full tilbakebetaling av alle penger som er stilt til rådighet, og for oppheving av alle tilsagn, rettigheter og forpliktelser i henhold til kontrakten*, og*

c. *Utenriksdepartementet er underrettet innen tre måneder etter datoen for utnyttelse av kredittmuligheten eller utbetalingen.*

Vilkårene som gjelder ved utnyttelse av kredittmulighet og utbetaling nevnt i bokstav a skal omfatte bestemmelser om lengden på tilbakebetalingstiden for hver kredittutnyttelse eller utbetaling, gjeldende rentesats eller renteberegningsmetode samt maksimumsbeløpet.

Femte ledd utgår.

I § 8ca gjøres følgende endringer:

Syvende, niende og ellevte ledd utgår.

I trettende ledd skal innledningen lyde:

Med mindre det ellers er forbudt, gjelder forbudet i første ledd ikke:

I trettende ledd skal bokstav d lyde:

d. transaksjoner, herunder salg, som er strengt nødvendige for avvikling innen *2. april 2025* av et fellesforetak eller *et* lignende juridisk arrangement som er inngått før 25. mars 2022, og som involverer en juridisk person omhandlet i første ledd,

I trettende ledd utgår bokstav h.

Fjortende ledd skal lyde:

Som unntak fra første ledd kan Utenriksdepartementet gi tillatelse på de vilkårene Utenriksdepartementet finner hensiktsmessige, til transaksjoner som er strengt nødvendige for avhending og tilbaketrekking av enhetene nevnt i første ledd eller deres datterselskaper i Norge eller EU innen *2. april 2025* fra juridiske personer som er etablert i Norge eller EU.

I § 8d gjøres følgende endringer:

Overskriften skal lyde:

§ 8d. Forbud mot å motta visse innskudd og ytelse av tjenester for kryptoeiendeler, og forbud mot å inneha stillinger i visse styrende organer

Tredje ledd skal lyde:

Fra og med 19. april 2024 er det forbudt å tillate russiske borgere eller fysiske personer som bor i Russland, direkte eller indirekte å eie eller kontrollere eller å inneha stillinger i styrende organer i juridiske personer, som er etablert eller stiftet i henhold til Norges eller en EU-medlemsstats lovgivning, og som yter tjenestene nevnt i andre ledd.

Nytt fjerde ledd skal lyde:

Første, annet og *tredje ledd* gjelder ikke statsborgere i Norge, i et land som er medlem av Det europeiske økonomiske samarbeidsområde, eller i Sveits, eller fysiske personer med midlertidig eller fast oppholdstillatelse i Norge, i et land som er medlem av Det europeiske økonomiske samarbeidsområdet, eller i Sveits.

I § 8i skal overskriften lyde:

§ 8i. Rapporteringsplikt for kredittinstitusjoner om innskudd

Ny § 8ii skal lyde:

§ 8ii. Rapporteringsplikt for visse juridiske personer og kredittinstitusjoner om pengeoverføringer

Juridiske personer etablert i Norge hvis eiendomsrettigheter direkte eller indirekte er mer enn 40 % eid av

a. en juridisk person etablert i Russland,
b. en russisk borger, eller
c. en fysisk person bosatt i Russland,

skal fra og med 1. august 2024 innen to uker etter utgangen av hvert kvartal innberette til Utenriksdepartementet, enhver pengeoverføring ut av Norge på over 100 000 euro som de i løpet av det aktuelle kvartalet direkte eller indirekte har foretatt i en eller flere transaksjoner.

Uavhengig av gjeldende regler om rapportering, konfidensialitet og taushetsplikt, skal kreditt- og finansinstitusjoner fra og med 1. oktober 2024 innen to uker etter utgangen av hvert halvår innberette til Utenriksdepartementet, opplysninger om alle pengeoverføringer ut av Norge av et samlet beløp i løpet av det aktuelle halvåret på over 100 000 euro som de direkte eller indirekte har foretatt for de juridiske personene som er nevnt i første ledd.

I § 8n andre ledd skal bokstav a lyde:

a. drift, vedlikehold, stenging og håndtering av radioaktivt avfall, *forsyning og etterbehandling* av brensel *og* sikkerhet knyttet til sivile kjernefysiske kapasiteter, samt fortsatt utforming, konstruksjon og idriftsettelse som kreves for å ferdigstille sivile kjernekraftanlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder, kritisk teknologi til overvåking av miljøstråling, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling,

I § 8o andre ledd skal bokstav d lyde:

d. drift, vedlikehold, stenging og håndtering av radioaktivt avfall, forsyning og etterbehandling av brensel og sikkerhet knyttet til sivile kjernefysiske kapasiteter, samt fortsatt utforming, konstruksjon, og idriftsettelse som kreves for å ferdigstille sivile kjernekraftanlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder, kritisk teknologi til overvåking av miljøstråling, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling,

I § 16 femte ledd skal bokstav c lyde:

c. beregnet på *drift,* vedlikehold, etterbehandling av brensel og sikkerhet knyttet til sivile kjernefysiske kapasiteter, *for eksempel Paks II-prosjektet*, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling,

I § 16a sjette ledd skal bokstav c lyde:

c. beregnet på drift, vedlikehold, etterbehandling av brensel og sikkerhet knyttet til sivile kjernefysiske kapasiteter, *for eksempel Paks II-prosjektet*, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling,

I § 17 skal fjerde og femte ledd lyde:

Forbudene i andre ledd gjelder ikke før 20. september 2024 for levering av forsikrings- eller gjenforsikringstjenester til alle juridiske personer som er etablert eller stiftet i henhold til Norges eller en EU-medlemsstats lovgivning, i forbindelse med deres virksomhet utenfor energisektoren i Russland.

Som unntak fra andre ledd kan Utenriksdepartementet på de vilkår Utenriksdepartementet finner hensiktsmessige, etter 20. september 2024 tillate levering av forsikrings- eller gjenforsikringstjenester til juridiske personer som er etablert eller stiftet i henhold til Norges eller en EU-medlemsstats lovgivning, i forbindelse med deres virksomhet utenfor energisektoren i Russland.

I § 17a skal fjerde ledd lyde:

Som unntak fra første ledd bokstav b kan Utenriksdepartementet på de vilkår Utenriksdepartementet finner hensiktsmessige tillate enhver virksomhet nevnt i første ledd bokstav b, etter å ha slått fast at virksomheten i overensstemmelse med § 8ca trettende ledd bokstav b, er nødvendig for å sikre drift av et offshore dypvannsgassprosjekt i Middelhavet, der en juridisk person som er oppført i vedlegg XIX, var en mindretallsaksjeeier før 31. oktober 2017 og fortsatt er det. Slik tillatelse kan kun gis hvis prosjektet alene eller sammen med andre kontrolleres eller drives av en juridisk person som er etablert eller stiftet i henhold til Norges eller en EU-medlemsstats lovgivning.

Nåværende fjerde ledd blir nytt femte ledd.

I § 17c utgår sjette, syvende, åttende og niende ledd.

I § 17e gjøres følgende endringer:

I første ledd skal bokstav d lyde:

d. direkte eller indirekte å importere eller kjøpe, fra og med 30. september 2023, jern- og stålprodukter som oppført i vedlegg XVII, når de er bearbeidet i et tredjeland og inneholder jern- og stålprodukter med opprinnelse i Russland som oppført i vedlegg XVII. Med hensyn til produkter oppført i vedlegg XVII som er bearbeidet i et tredjeland og inneholder stålprodukter med opprinnelse i Russland og hører inn under KN-kode 7207 11, 7207 12 10 eller 7224 90, gjelder dette forbudet fra og med 1. april 2024 for KN-kode 7207 11, og fra og med *1. oktober 2028* for KN-kode 7207 12 10 og 7224 90. Importører skal, på

importtidspunktet, framlegge dokumentasjon på opprinnelsesland for jern- og stålinnsatsfaktorer brukt til bearbeiding av produktet i et tredjeland.

I tredje ledd skal nye bokstaver c, d, e og f lyde:

c. 3 185 719 tonn mellom 1. oktober 2024 og 30. september 2025,

d. 2 998 324 tonn mellom 1. oktober 2025 og 30. september 2026,

e. 2 623 534 tonn mellom 1. oktober 2026 og 30. september 2027,

f. 2 061 348 tonn mellom 1. oktober 2027 og 30. september 2028.

I femte ledd skal nye bokstaver c, d, e og f lyde:

c. 124 956 tonn mellom 1. oktober 2024 og 30. september 2025,

d. 117 606 tonn mellom 1. oktober 2025 og 30. september 2026,

e. 102 905 tonn mellom 1. oktober 2026 og 30. september 2027,

f. 80 854 tonn mellom 1. oktober 2027 og 30. september 2028.

Sjette ledd skal lyde:

Som unntak fra første ledd kan Utenriksdepartementet tillate kjøp, import eller overføring av varene oppført i vedlegg XVII på de vilkårene Utenriksdepartementet finner hensiktsmessige, etter å ha slått fast at det er nødvendig for opprettelse, drift, vedlikehold, forsyning og etterbehandling av brensel samt sikkerhet knyttet til sivile kjernefysiske kapasiteter, og fortsatt utforming, bygging og idriftsettelse som kreves for å ferdigstille sivile kjernekraftanlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder, eller kritisk teknologi til overvåking av miljøstråling, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling.

I § 17f skal første ledd lyde:

Det er forbudt direkte eller indirekte å selge, levere, overføre eller eksportere luksusvarer, *uavhengig av om de har opprinnelse i Norge eller ikke*, som er oppført i vedlegg XVIII, til fysiske eller juridiske personer i Russland eller til bruk i Russland.

I § 17g gjøres følgende endringer:

Tredje ledd skal lyde:

Utenriksdepartementet kan tillate import av varer som utelukkende er beregnet på personlig bruk av fysiske personer på reise til Norge, eller av deres nære familiemedlemmer, begrenset til personlige eiendeler som eies av disse personene og som åpenbart ikke er beregnet på salg.

Femte ledd skal lyde:

Som unntak fra første og annet ledd kan Utenriksdepartementet tillate kjøp, import eller overføring av varene oppført i vedlegg XXI, eller yting av tilknyttet faglig eller finansiell bistand, på de vilkårene Utenriksdepartementet finner hensiktsmessige, etter å ha slått fast at dette er nødvendig for opprettelse, drift, vedlikehold, forsyning og etterbehandling av brensel samt sikkerhet knyttet til sivile kjernefysiske kapasiteter, og for fortsatt utforming, konstruksjon og idriftsettelse som kreves for ferdigstilling av sivile kjernekraftanlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder, eller kritisk teknologi til overvåking av miljøstråling, samt for sivilt atomsamarbeid, særlig innenfor forskning og utvikling.

Sjette, syvende, åttende og niende ledd skal lyde:

Med hensyn til varer som hører inn under KN-kode 7205, 7408, 7604, 7605, 7607 og 7608, gjelder forbudene i første og annet ledd ikke oppfyllelse innen 20. juni 2024 av kontrakter inngått før 20. mars 2024 eller tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Med hensyn til varer som hører inn under KN-kode 2711 12, 2711 13, 2711 14, 2711 19 og 7202, gjelder forbudene i første og annet ledd ikke oppfyllelse innen 22. mars 2025 av kontrakter inngått før 20. mars 2024 eller tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Forbudene i første og annet ledd gjelder ikke import, kjøp eller transport, eller tilknyttet faglig eller finansiell bistand, av følgende mengder av varer som hører inn under KN-kode 7201:

a. 1 140 000 tonn mellom 20. mars 2024 og 31. desember 2024.

b. 700 000 tonn mellom 1. januar 2025 og 31. desember 2025.

Forbudene i første og annet ledd gjelder ikke import, kjøp eller transport, eller tilknyttet faglig eller finansiell bistand, av følgende mengder av varer som hører inn under KN-kode 7203:

a. 1 140 836 tonn mellom 20. mars 2024 og 31. desember 2024.

b. 651 906 tonn mellom 1. januar 2025 og 31. desember 2025.

Nåværende niende til tolvte ledd blir tiende til trettende ledd.

Fjortende ledd skal lyde:

Forbudet i første ledd gjelder ikke innførsel av kjøretøy som hører inn under KN-kode 8703 (biler med opptil 9 seter ment for persontransport), dersom ett av følgende alternativer er oppfylt:

a. Kjøretøyet eies eller benyttes av en stats diplomatiske eller konsulære stasjon, av diplomatisk eller konsulært personell, av en diplomatisk stasjons administrative eller tekniske personell, eller av familiemedlem som tilhører husstanden til noen av disse, og som nyter privilegier og immunitet i henhold til Wien-konvensjonen av 1961 om diplomatisk samkvem, eller Wien-konvensjonen av 1963 om konsulært samkvem. Tilsvarende gjelder for kjøretøy som eies eller benyttes av mellomstatlige organisasjoner eller konvensjonsorganer og deres ansatte og oppdragstakere, eller av en stats kurertjeneste.

b. Kjøretøyet eies av statsborger av Norge eller et annet EØS-land~~,~~ eller av dennes nære familiemedlem*, som er bosatt i Russland, dersom kjøretøyet ikke er beregnet på salg, men innføres utelukkende til personlig bruk*. Med nære familiemedlem menes her ektefelle, registrert partner, samboer, mindreårige eller voksne barn, og foreldre.

c. Innførsel er nødvendig av humanitære grunner, som akutt sykdom, dødsfall eller begravelse i familie i Norge eller EØS-land. Med familie menes her ektefelle, registrert partner, samboer, mindreårige eller voksne barn eller stebarn, foreldre eller steforeldre, mindreårige eller voksne barnebarn eller stebarnebarn, besteforeldre eller stebesteforeldre, og søsken eller stesøsken.

d. Utenriksdepartementet har gitt tillatelse. Utenriksdepartementet kan gi slik tillatelse, på de vilkår departementet finner hensiktsmessige, i særlige tilfeller der utenrikspolitiske hensyn tilsier det.

Femtende ledd skal lyde:

Forbudet i første ledd skal ikke hindre kjøretøyer som allerede befinner seg på Norges territorium 19. desember 2023, i å bli registrert i Norge.

Nåværende fjortende ledd blir nytt sekstende ledd.

I § 17i gjøres følgende endringer:

Første ledd skal lyde:

Det er forbudt direkte eller indirekte å selge, levere, overføre eller eksportere varer som i særlig grad kan bidra til å forbedre Russlands industrielle kapasitet, *uavhengig av om de har opprinnelse i Norge eller ikke*, som oppført i vedlegg XXIII, til fysiske eller juridiske personer i Russland eller til bruk i Russland.

Andre ledd skal lyde:

Transitt via Russlands territorium av varer og teknologi oppført i vedlegg XXXVII, eksportert fra Norge, er forbudt.

Nåværende andre ledd blir tredje ledd.

Fjerde til sjette ledd skal lyde:

Med hensyn til varer som hører inn under KN-kodene som er oppført i vedlegg XXIIIA, gjelder forbudene i første og andre ledd ikke oppfyllelse innen 20. juni 2024 av kontrakter inngått før 20. mars 2024 eller tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Med hensyn til varer som hører inn under KN-kodene som er oppført i vedlegg XXIIIB, gjelder forbudene i første og andre ledd ikke oppfyllelse innen 20. september 2024 av kontrakter inngått før 20. mars 2024 eller tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Med hensyn til varer som hører inn under KN-kode 8504 10, 8504 21, 8504 22, 8504 23, 8504 31, 8504 40, 8504 50 eller 8504 90, gjelder forbudene i første og andre ledd ikke oppfyllelse innen 25. mai 2024 av kontrakter inngått før 24. februar 2024 eller tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Nåværende sjette til tiende ledd blir syvende til ellevte ledd.

I niende ledd skal bokstav c lyde:

c. for opprettelse, drift, vedlikehold, forsyning og etterbehandling av brensel samt sikkerhet knyttet til sivile kjernefysiske kapasiteter, og for fortsatt utforming, konstruksjon, og idriftsettelse som kreves for å ferdigstille sivile kjernekraftanlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder, eller kritisk teknologi til overvåking av miljøstråling, samt sivilt atomsamarbeid, særlig innenfor forskning og utvikling.

Tolvte ledd skal lyde:

Som unntak fra andre ledd kan Utenriksdepartementet tillate transitt via Russlands territorium av varer og teknologi som særlig kan bidra til å styrke Russlands industrielle kapasitet, som oppført i vedlegg XXXVII, etter å ha slått fast at slike varer eller teknologi er beregnet på formålene angitt i åttende og tiende ledd.

Nåværende ellevte ledd blir trettende ledd.

I § 17j gjøres følgende endringer:

Syvende ledd skal lyde:

Fra og med 5. februar 2023, og som unntak fra første og andre ledd, kan Kroatias kompetente myndigheter inntil 31. desember *2024* tillate kjøp, import eller overføring av vakuumgassolje som hører inn under KN-kode 2710 19 71 og har opprinnelse i Russland eller eksporteres fra Russland, forutsatt at følgende vilkår er oppfylt:

a. det finnes ingen alternativ forsyning av vakuumgassolje, og

b. Kroatia har minst to uker før tillatelsen gis, underrettet Kommisjonen om hvorfor de anser at det bør gis en særlig tillatelse, og Kommisjonen har ikke gjort innsigelse innen denne fristen.

Niende ledd fjerde avsnitt skal lyde:

Som midlertidig unntak skal forbudene omhandlet i tredje setning i dette ledd gjelde fra og med 5. desember *2024* for import og overføring til Tsjekkia og for salg til kjøpere i Tsjekkia av petroleumsprodukter framstilt av råolje som er levert via rørledning til Norge eller en EU-medlemsstat som omhandlet i tredje ledd bokstav d. Dersom alternative forsyninger av slike petroleumsprodukter stilles til rådighet for Tsjekkia før den nevnte datoen, skal dette midlertidige unntaket oppheves. I perioden fram til 5. desember *2024* skal mengdene av slike petroleumsprodukter som importeres til Tsjekkia fra Norge eller EUs medlemsstater, ikke overstige de gjennomsnittlige mengdene som er importert til Tsjekkia fra Norge eller disse EU-medlemsstatene i samme periode i de foregående fem årene.

I § 17k gjøres følgende endringer:

Syvende ledd skal lyde:

Ved anvendelse av fjerde ledd og sjette ledd bokstav a når det gjelder russisk råolje eller petroleumsprodukter som er oppført i vedlegg XXV og lastet fra og med 20. februar 2024, skal tjenesteytere uten tilgang til innkjøpsprisen per fat fastsatt i vedlegg XXVIII for slike produkter, innhente spesifisert prisinformasjon om tilleggskostnader som angitt av operatører høyere opp i forsyningskjeden for handel med russisk råolje eller petroleumsprodukter. Slik spesifisert prisinformasjon skal gis til motparter og myndigheter på deres anmodning, for å kunne verifisere overholdelse av denne bestemmelsen.

Nåværende syvende ledd blir åttende ledd.

Nåværende åttende ledd oppheves.

Ny § 17m skal lyde:

§ 17m. Forbud mot kjøp, import mv. av diamanter

Fra og med 2. april 2024 er det forbudt direkte eller indirekte å kjøpe, importere eller overføre diamanter og produkter som inneholder diamanter, som oppført i del A, B og C i vedlegg XXXVIIIA, dersom de har opprinnelse i Russland eller er eksportert fra Russland til Norge, EU eller et tredjeland.

Fra og med 2. april 2024 er det forbudt direkte eller indirekte å kjøpe, importere eller overføre diamanter og produkter som inneholder diamanter, som oppført i del A, B og C i vedlegg XXXVIIIA, av enhver opprinnelse, dersom de har vært i transitt via Russlands territorium.

Fra og med 1. juni 2024 er det forbudt direkte eller indirekte å kjøpe, importere eller overføre produkter oppført i del A i vedlegg XXXVIIIA, dersom de er bearbeidet i et tredjeland og består av diamanter med opprinnelse i Russland eller er eksportert fra Russland og har en vekt på minst 1,0 karat per diamant.

Fra og med 2. desember 2024 er det forbudt direkte eller indirekte å kjøpe, importere eller overføre produkter oppført i del A, B og C i vedlegg XXXVIIIA, dersom de er bearbeidet i et tredjeland og består av eller inneholder diamanter med opprinnelse i Russland eller er eksportert fra Russland og har en vekt på minst 0,5 karat eller 0,1 gram per diamant.

Med hensyn til tredje og fjerde ledd skal importører på importtidspunktet, framlegge dokumentasjon på opprinnelsesland til diamanter eller produkter som inneholder diamanter, som er brukt ved bearbeidingen av produktet i et tredjeland.

Første til femte ledd gjelder ikke kjøp eller import av varer fra EU til Norge, eller kjøp innad i Norge.

Det er forbudt å

a. direkte eller indirekte å yte faglig bistand, formidlingstjenester eller andre tjenester knyttet til varene nevnt i første til fjerde ledd, og til levering, framstilling, vedlikehold og bruk av de nevnte varene i forbindelse med forbudene i første til fjerde ledd,

b. direkte eller indirekte å yte finansiering eller finansiell bistand knyttet til varene nevnt i første til fjerde ledd for kjøp, import eller overføring av disse varene, eller for yting av tilknyttet faglig bistand, formidlingstjenester eller andre tjenester i forbindelse med forbudene i første til fjerde ledd.

Forbudene i første til fjerde ledd gjelder ikke varer oppført i del C i vedlegg XXXVIIIA til personlig bruk av fysiske personer på reise til Norge, eller av deres nære familiemedlemmer som reiser sammen med dem, som eies av disse personene og ikke er beregnet på salg.

Som unntak fra første til fjerde ledd kan Utenriksdepartementet tillate overføring eller import av kulturgjenstander som er til lån i forbindelse med formelt kulturelt samarbeid med Russland.

Ny § 17n skal lyde:

§ 17n. Forbud mot eksport mv. av tankskip

Det er forbudt for en norsk statsborger, en fysisk person som bor i Norge, eller en juridisk person som er etablert i Norge, direkte eller indirekte å selge, eller på annen måte overføre eierskap av, tankskip for transport av råolje eller petroleumsprodukter som er oppført i vedlegg XXV og hører inn under KN-kode ex 8901 20, uavhengig av om tankskipet har opprinnelse i Norge eller ikke, til en fysisk eller juridisk person i Russland eller til bruk i Russland.

Som unntak fra første ledd kan Utenriksdepartementet på de vilkårene Utenriksdepartementet finner hensiktsmessige, tillate salg eller annen overføring av eierskap av tankskip for transport av råolje eller petroleumsprodukter som er oppført i vedlegg XXV og hører inn under KN-kode ex 8901 20.

Når Utenriksdepartementet treffer beslutning om søknader om tillatelse nevnt i andre ledd, skal departementet ikke gi tillatelse til salg eller annen overføring av eierskap til en fysisk eller juridisk person i Russland eller til bruk i Russland dersom departementet har rimelig grunn til å anta at tankskipet vil bli brukt til å frakte, eller bli reeksportert for å frakte, råolje eller petroleumsprodukter som er oppført i vedlegg XXV, og har opprinnelse i Russland eller eksporteres fra Russland for import til Norge i strid med § 17j, eller for transport til tredjeland til en innkjøpspris per fat som er høyere enn prisen fastsatt i vedlegg XXVIII.

Ethvert salg eller enhver annen ordning som medfører overføring av eierskap, fra en norsk statsborger, en fysisk person som bor i Norge, eller en juridisk person som er etablert i Norge, til et tredjeland, av tankskip for transport av råolje eller petroleumsprodukter som er oppført i vedlegg XXV og hører inn under KN-kode ex 8901 20, unntatt salg eller annen overføring av eierskap som er forbudt i henhold til første ledd, skal umiddelbart meldes til Utenriksdepartementet.

Meldingen til Utenriksdepartementet skal minst inneholde følgende opplysninger: selgers og kjøpers identitet, og der det er aktuelt selgerens og kjøperens stiftelsesdokumenter, herunder aksjeinnehav og ledelse, tankskipets identifikasjonsnummer i IMO og tankskipets kallesignal.

Ethvert salg eller annen overføring av eierskap av tankskip som nevnt i første til fjerde ledd etter 8. desember 2022 og før 19. mars 2024, skal meldes til Utenriksdepartementet innen 19. april 2024.

I § 19a sjette ledd skal bokstav c og d lyde:

c. humanitære formål, *eller*

d. transport av kjernebrensel og andre varer som er strengt nødvendige for drift av sivile kjernefysiske kapasiteter, *for eksempel Paks II-prosjektet*.

Ny § 19aa skal lyde:

§ 19aa. Forbud mot å gi adgang til havn for fartøy som gjennomfører enkelte skip-til-skip-overføringer

Det er forbudt fra 19. april 2024 å gi adgang til havn og sluse på Fastlands-Norge til fartøy som gjennomfører skip-til-skip-overføringer, på et hvilket som helst tidspunkt på reisen til havn eller sluse på Fastlands-Norge dersom Utenriksdepartementet har gitt beskjed om at det er rimelig grunn til å tro at fartøyet krenker forbudet fastsatt i § 17j første og andre ledd og § 17k første og fjerde ledd eller tilsvarende forbud i et medlemsland i Det europeiske økonomiske samarbeidsområde eller i Sveits.

Fartøy som gjennomfører skip-til-skip-overføring av råolje eller petroleumsprodukter, som har sin opprinnelse i Russland eller eksporteres fra Russland, innenfor norsk territorialfarvann eller i soner opprettet i medhold av lov 17. desember 1976 nr. 91 om Norges økonomiske sone (økonomiske soneloven), skal ikke gis adgang til havn eller sluse på Fastlands-Norge med mindre fartøyet underretter Kystverket minst 48 timer før overføringen.

Første og andre ledd får ikke anvendelse for fartøy som har behov for hjelp og søker nødhavn, for anløp i nødssituasjoner av hensyn til maritim sikkerhet eller for å redde liv til sjøs.

Utenriksdepartementet kan, når det er nødvendig for humanitære formål, gi unntak fra første og andre ledd. Departementet kan sette de vilkårene som anses hensiktsmessig.

Ny § 19ab skal lyde:

§ 19ab. Forbud mot havneanløp for fartøy som slår av det automatiske identifikasjonssystemet (AIS)

Det er forbudt fra 19. april 2024 å gi adgang til havn og sluse på Fastlands-Norge til fartøy som Kystverket har gitt beskjed om at det er rimelig grunn til å tro at ulovlig forstyrrer, slår av eller på annen måte deaktiverer fartøyets automatiske identifikasjonssystem (AIS) på et hvilket som helst tidspunkt på reisen til havn eller sluse på Fastlands-Norge, i strid med kapittel V regel 19 nr. 2.4 i SOLAS, når det transporterer råolje eller petroleumsprodukter som er underlagt forbudene fastsatt i § 17j første og andre ledd og § 17k første og fjerde ledd eller tilsvarende forbud i et medlemsland i Det europeiske økonomiske samarbeidsområde eller i Sveits.

Første ledd får ikke anvendelse for fartøy som har behov for hjelp og søker nødhavn, for anløp i nødssituasjoner av hensyn til maritim sikkerhet eller for å redde liv til sjøs.

Utenriksdepartementet kan, når det er nødvendig for humanitære formål, gi unntak fra første og andre ledd. Departementet kan sette de vilkårene som anses hensiktsmessig.

I § 19b gjøres følgende endringer

Andre ledd skal lyde:

Forbudet i første ledd gjelder ikke for veitransportforetak som frakter post som en leveringspliktig tjeneste

Tredje ledd bokstav a skal lyde:

a. med mindre det *ellers er forbudt*, kjøp, import eller transport *til Norge eller EU* av naturgass og olje, herunder raffinerte petroleumsprodukter, samt titan, aluminium, kobber, nikkel, palladium og jernmalm,

I § 19c gjøres følgende endringer:

I tredje ledd skal innledningen lyde:

Det er forbudt *direkte eller indirekte* å yte tjenester i form av markedsundersøkelser og meningsmålinger, tekniske tester og analysetjenester samt markedsføringstjenester til

Fjerde ledd skal lyde:

Det er forbudt direkte eller indirekte å selge, levere, overføre, eksportere eller stille til rådighet programvare for foretaksledelse og programvare for industridesign og produksjon som oppført i vedlegg XXXIX til

a. Russlands regjering, eller

b. juridiske personer etablert i Russland.

Femte ledd skal lyde:

Det er forbudt å

a. yte faglig bistand, formidlingstjenester eller andre tjenester knyttet til varene og tjenestene nevnt i første, andre, tredje og fjerde ledd med sikte på direkte eller indirekte levering av dem til Russlands regjering eller juridiske personer, som er etablert i Russland,

b. yte finansiering eller finansiell bistand knyttet til varene og tjenestene nevnt i første, andre, tredje eller fjerde ledd med sikte på levering av dem, eller med sikte på yting av tilknyttet faglig bistand eller tilknyttede formidlingstjenester eller andre tjenester, direkte eller indirekte til Russlands regjering eller juridiske personer, som er etablert i Russland.

Sjette ledd skal lyde:

Fjerde ledd gjelder ikke salg, levering, overføring, eksport eller tilgjengeliggjøring av programvare som er strengt nødvendig for innen 20. juni 2024 å kunne heve kontrakter som ikke er i samsvar med denne bestemmelsen og er inngått før 20. mars 2024, eller på tilknyttede kontrakter som er nødvendige for å oppfylle slike kontrakter.

Niende ledd skal lyde:

Første, andre*, tredje og fjerde* ledd gjelder *ikke før 20. september 2024 på salg, levering, overføring, eksport eller* yting av tjenester som utelukkende er beregnet på bruk for juridiske personer som er etablert i Russland, og som eies av eller, alene eller i fellesskap, kontrolleres av *en juridisk person* som er etablert eller stiftet i henhold til lovgivningen i Norge, et land som er medlem av Det europeiske økonomiske samarbeidsområdet eller Sveits.

Tiende ledd skal lyde:

Andre*, tredje og fjerde* ledd gjelder *ikke salg, levering, overføring, eksport eller* yting av tjenester som er nødvendige for kriser som truer folkehelsen, omgående hindring eller begrensning av en hendelse som kan få alvorlige eller betydelige følger for menneskers helse og sikkerhet eller miljøet, eller som respons ved naturkatastrofer.

Nåværende tolvte ledd blir ellevte ledd.

Tolvte ledd skal lyde:

Som unntak fra fjerde ledd kan Utenriksdepartementet tillate yting av tjenester som er nevnt i fjerde ledd, på de vilkårene Utenriksdepartementet finner hensiktsmessige, etter å ha slått fast at disse tjenestene er nødvendige for at russiske borgere skal kunne bidra til internasjonale prosjekter som bruker åpen kildekode.

I trettende ledd gjøres følgende endringer:

Innledningen skal lyde:

Som unntak fra første, andre, *tredje, fjerde og femte* ledd kan Utenriksdepartementet tillate *salg, levering, overføring, eksport eller yting av tjenester som omhandles i nevnte ledd*, på de vilkårene Utenriksdepartementet finner hensiktsmessige, etter å ha slått fast at dette er nødvendig for

Bokstav f og g skal lyde:

f. opprettelse, drift, vedlikehold, forsyning og etterbehandling av brensel *og* sikkerhet for sivile kjernefysiske kapasiteter, og fortsatt utforming, konstruksjon, og idriftsettelse som kreves for å ferdigstille sivile kjernekraft anlegg, *for eksempel Paks II-prosjektet*, samt levering av prekursormateriale til framstilling av medisinske radioisotoper og lignende medisinske bruksområder eller kritisk teknologi til overvåking av miljøstråling, samt for sivilt atomsamarbeid, særlig innenfor forskning og utvikling,

g. yting av elektroniske kommunikasjonstjenester fra norske eller EU-medlemsstaters teleoperatører som er nødvendige for elektroniske kommunikasjonstjenesters drift, vedlikehold og sikkerhet, herunder cybersikkerhet, i Russland, i Ukraina, i Norge, i EU, mellom Russland og Norge eller EU og mellom Ukraina og Norge eller EU, og for datasentertjenester i Norge og EU, *eller*

Ny bokstav skal lyde:

h. bruk utelukkende av juridiske personer som er etablert i Russland, og som eies av eller, alene eller i fellesskap, kontrolleres av en juridisk person som er etablert eller stiftet i henhold til lovgivningen i Norge, i et land som er medlem av Det europeiske økonomiske samarbeidsområdet eller Sveits.

I § 19d gjøres følgende endringer:

I første ledd skal innledningen lyde:

Som unntak fra § 16, § 16a, § 17, § 17b, § 17c, § 17d, § 17f og 17i kan Utenriksdepartementet fram til *30. september 2024* tillate salg, levering eller overføring av varer og teknologier oppført i vedlegg IX, IV, XI, XII, XX, XVI, XVIII og XXIII og i "Liste II - flerbruksvarer" i vedlegg II til forskrift 19. juni 2013 nr. 718 om eksport av forsvarsmateriell, flerbruksvarer, teknologi og *tjenester, samt* salg, lisensiering eller overføring på annen måte av immaterialrettigheter eller forretningshemmeligheter samt rett til adgang til eller gjenbruk av materiale eller opplysninger som er beskyttet av immaterialrettigheter eller består av forretningshemmeligheter, i tilknytning til varene og teknologien nevnt over, dersom salget, overføringen, lisensieringen eller innvilgningen av rett til adgang eller gjenbruk er strengt nødvendig for avhendelser fra Russland eller avvikling av forretningsvirksomhet i Russland, forutsatt at følgende vilkår er oppfylt:

Andre ledd skal lyde:

Som unntak fra §17 kan Utenriksdepartementet tillate salg, levering eller overføring av varer og teknologier oppført i vedlegg IV til *31. desember 2024*, dersom nevnte salg, levering eller overføring er strengt nødvendig for avhending fra et fellesforetak som er stiftet eller opprettet i henhold til Norges eller en EU-medlemsstats lovgivning før 24. februar 2022, som omfatter en russisk juridisk person, og som driver en gassrørledningsinfrastruktur mellom Russland og tredjeland.

I tredje ledd skal innledningen lyde:

Som unntak fra § 17e og § 17g kan Utenriksdepartementet tillate import eller overføring av varer oppført i vedlegg XVII og XXI til *30. september 2024*, dersom importen eller overføringen er strengt nødvendig for avhendelser fra Russland eller avvikling av forretningsvirksomhet i Russland, forutsatt at følgende vilkår er oppfylt:

I fjerde ledd skal innledningen lyde:

Som unntak fra § 19c kan Utenriksdepartementet tillate videreføring av tjenesteyting til *31. oktober 2024*, dersom nevnte tjenesteyting er strengt nødvendig for avhendelser fra Russland eller avvikling av forretningsvirksomhet i Russland, forutsatt at følgende vilkår er oppfylt:

§ 19e skal lyde:

§ 19e. Lostjenester til fartøyer

Forbudene fastsatt i denne forskriften får ikke anvendelse på yting av lostjenester som er nødvendige av hensyn til sjøsikkerheten.

Ny § 19g skal lyde:

§ 19g. Kontraktsforpliktelser vedrørende reeksport av varer i vedlegg XII, XX, XXXV og XL

Ved salg, levering, overføring eller eksport til et tredjeland, med unntak av et partnerland til EU som oppført i vedlegg VIII til forordning (EU) 833/2014, av varer eller teknologi oppført i vedlegg XII, XX og XXXV, felles høyt prioriterte produkter oppført i vedlegg XL eller skytevåpen og ammunisjon oppført i vedlegg I til forordning (EU) nr. 258/2012, skal eksportører fra og med 20. juni 2024 i kontrakt forby reeksport til Russland og reeksport for bruk i Russland.

Første ledd gjelder ikke oppfyllelse av kontrakter innen 22. mars 2025 eller kontraktenes utløpsdato, avhengig av hva som inntreffer først, såfremt kontraktene er inngått før 20. mars 2024.

Ved anvendelse av første ledd skal eksportørene sikre at avtalen med motparten i et tredjeland inneholder egnede rettsmidler i tilfelle av mislighold av en avtaleforpliktelse som er inngått i samsvar med første ledd.

Dersom motparten i et tredjeland overtrer noen av avtaleforpliktelsene som er inngått i samsvar med første ledd, skal eksportørene underrette Utenriksdepartementet, så snart de blir klar over overtredelsen.

Vedlegg VI skal lyde:

Vedlegg VI. Personer omtalt i § 16 og § 16a

Vedlegget omfatter fysiske og juridiske personer som er militære sluttbrukere, del av Russlands militærindustrielle kompleks, har kommersielle eller andre forbindelser med eller som på annen måte støtter Russlands forsvars- og sikkerhetssektor. Disse fysiske eller juridiske personene bidrar til Russlands militære og teknologiske styrking eller til utviklingen av Russlands forsvars- og sikkerhetssektor. Vedlegget omfatter også fysiske og juridiske personer i andre tredjeland enn Russland. Deres inkluderingen i dette vedlegget medfører ikke at de tilskrives ansvar for deres handlinger under jurisdiksjonen der hvor de opererer.

1. JSC Sirius (Russia)
2. OJSC Stankoinstrument (Russia)

3. OAO JSC Chemcomposite (Russia)
4. JSC Kalashnikov (Russia)
5. JSC Tula Arms Plant (Russia)
6. NPK Technologii Maschinostrojenija (Russia)
7. OAO Wysokototschnye Kompleksi (Russia)
8. OAO Almaz Antey (Russia)
9. OAO NPO Bazalt (Russia)
10. Admiralty Shipyard JSC (Russia)
11. Aleksandrov Scientific Research Technological Institute NITI (Russia)
12. Argut OOO (Russia)
13. Communication center of the Ministry of Defense (Russia)
14. Federal Research Center Boreskov Institute of Catalysis (Russia)
15. Federal State Budgetary Enterprise of the Administration of the President of Russia (Russia)
16. Federal State Budgetary Enterprise Special Flight Unit Rossiya of the Administration of the President of Russia (Russia)
17. Federal State Unitary Enterprise Dukhov Automatics Research Institute (VNIIA) (Russia)
18. Foreign Intelligence Service (SVR) (Russia)
19. Forensic Center of Nizhniy Novgorod Region Main Directorate of the Ministry of Interior Affairs (Russia)
20. International Center for Quantum Optics and Quantum Technologies (the Russian Quantum Center) (Russia)
21. Irkut Corporation (Russia)
22. Irkut Research and Production Corporation Public Joint Stock Company (Russia)
23. Joint Stock Company Scientific Research Institute of Computing Machinery (Russia)
24. JSC Central Research Institute of Machine Building (JSC TsNIIMash) (Russia)
25. JSC Kazan Helicopter Plant Repair Service (Russia)
26. JSC Shipyard Zaliv (Zaliv Shipbuilding yard) (Autonomous Republic of Crimea, illegally annexed by Russia)
27. JSC Rocket and Space Centre – Progress (Russia)
28. Kamensk-Uralsky Metallurgical Works J.S. Co. (Russia)
29. Kazan Helicopter Plant PJSC (Russia)
30. Komsomolsk-na-Amur Aviation Production Organization (KNAAPO) (Russia)
31. Ministry of Defence RF (Russia)

32. Moscow Institute of Physics and Technology (Russia)
33. NPO High Precision Systems JSC (Russia)
34. NPO Splav JSC (Russia)
35. OPK Oboronprom (Russia)
36. PJSC Beriev Aircraft Company (Russia)
37. PJSC Irkut Corporation (Russia)
38. PJSC Kazan Helicopters (Russia)
39. POLYUS Research Institute of M.F. Stelmakh Joint Stock Company (Russia)
40. Promtech-Dubna, JSC (Russia)
41. Public Joint Stock Company United Aircraft Corporation (Russia)
42. Radiotechnical and Information Systems (RTI) Concern (Russia)
43. Rapart Services LLC (Russia)
44. Rosoboronexport OJSC (ROE) (Russia)
45. Rostec (Russian Technologies State Corporation) (Russia)
46. Rostekh – Azimuth (Russia)
47. Russian Aircraft Corporation MiG (Russia)
48. Russian Helicopters JSC (Russia)
49. SP KVANT (Sovmestnoe Predpriyatie Kvantovye Tekhnologii) (Russia)
50. Sukhoi Aviation JSC (Russia)
51. Sukhoi Civil Aircraft (Russia)
52. Tactical Missiles Corporation JSC (Russia)
53. Tupolev JSC (Russia)
54. UEC-Saturn (Russia)
55. United Aircraft Corporation (Russia)
56. JSC AeroKompozit (Russia)
57. United Engine Corporation (Russia)
58. UEC-Aviadvigatel JSC (Russia)
59. United Instrument Manufacturing Corporation (Russia)
60. United Shipbuilding Corporation (Russia)
61. JSC PO Sevmash (Russia)
62. Krasnoye Sormovo Shipyard (Russia)
63. Severnaya Shipyard (Russia)

64. Shipyard Yantar (Russia)
65. UralVagonZavod (Russia)
66. Baikal Electronics (Russia)
67. Center for Technological Competencies in Radiophtonics (Russia)
68. Central Research and Development Institute Tsiklon (Russia)
69. Crocus Nano Electronics (Russia)
70. Dalzavod Ship-Repair Center (Russia)
71. Elara (Russia)
72. Electronic Computing and Information Systems (Russia)
73. ELPROM (Russia)
74. Engineering Center Ltd. (Russia)
75. Forss Technology Ltd. (Russia)
76. Integral SPB (Russia)
77. JSC Element (Russia)
78. JSC Pella-Mash (Russia)
79. JSC Shipyard Vympel (Russia)
80. Kranark LLC (Russia)
81. Lev Anatolyevich Yershov (Ershov) (Russia)
82. LLC Center (Russia)
83. MCST Lebedev (Russia)
84. Miass Machine-Building Factory (Russia)
85. Microelectronic Research and Development Center Novosibirsk (Russia)
86. MPI VOLNA (Russia)
87. N.A. Dollezhal Order of Lenin Research and Design Institute of Power Engineering (Russia)
88. Nerpa Shipyard (Russia)
89. NM-Tekh (Russia)
90. Novorossiysk Shipyard JSC (Russia)
91. NPO Electronic Systems (Russia)
92. NPP Istok (Russia)
93. NTC Metrotek (Russia)
94. OAO GosNIIkhimanalit (Russia)
95. OAO Svetlovskoye Predpriyatiye Era (Russia)

96. OJSC TSRY (Russia)
97. OOO Elkomtekh (Elkomtex) (Russia)
98. OOO Planar (Russia)
99. OOO Sertal (Russia)
100. Photon Pro LLC (Russia)
101. PJSC Zvezda (Russia)
102. Amur Shipbuilding Factory PJSC (Russia)
103. AO Center of Shipbuilding and Ship Repairing JSC (Russia)
104. AO Kronshtadt (Russia)
105. Avant Space LLC (Russia)
106. Production Association Strela (Russia)
107. Radioavtomatika (Russia)
108. Research Center Module (Russia)
109. Robin Trade Limited (Russia)
110. R.Ye. Alekseyev Central Design Bureau for Hydrofoil Ships (Russia)
111. Rubin Sever Design Bureau (Russia)
112. Russian Space Systems (Russia)
113. Rybinsk Shipyard Engineering (Russia)
114. Scientific Research Institute of Applied Chemistry (Russia)
115. Scientific-Research Institute of Electronics (Russia)
116. Scientific Research Institute of Hypersonic Systems (Russia)
117. Scientific Research Institute NII Submikron (Russia)
118. Sergey IONOV (Russia)
119. Serniya Engineering (Russia)
120. Severnaya Verf Shipbuilding Factory (Russia)
121. Ship Maintenance Center Zvezdochka (Russia)
122. State Governmental Scientific Testing Area of Aircraft Systems (GkNIPAS) (Russia)
123. State Machine Building Design Bureau Raduga Bereznya (Russia)
124. State Scientific Center AO GNTs RF—FEI A.I. Leypunskiy Physico-Energy Institute (Russia)
125. State Scientific Research Institute of Machine Building Bakhirev (GosNIImash) (Russia)

126. Tomsk Microwave and Photonic Integrated Circuits and Modules Collective Design Center (Russia)
127. UAB Pella-Fjord (Russia)
128. United Shipbuilding Corporation JSC “35th Shipyard” (Russia)
129. United Shipbuilding Corporation JSC “Astrakhan Shipyard” (Russia)
130. United Shipbuilding Corporation JSC “Aysberg Central Design Bureau” (Russia)
131. United Shipbuilding Corporation JSC “Baltic Shipbuilding Factory” (Russia)
132. United Shipbuilding Corporation JSC “Krasnoye Sormovo Plant OJSC” (Russia)
133. United Shipbuilding Corporation JSC SC “Zvyozdochka” (Russia)
134. United Shipbuilding Corporation “Pribaltic Shipbuilding Factory Yantar” (Russia)
135. United Shipbuilding Corporation “Scientific Research Design Technological Bureau Onega” (Russia)
136. United Shipbuilding Corporation “Sredne-Nevsky Shipyard” (Russia)
137. Ural Scientific Research Institute for Composite Materials (Russia)
138. Urals Project Design Bureau Detal (Russia)
139. Vega Pilot Plant (Russia)
140. Vertikal LLC(Russia)
141. Vladislav Vladimirovich Fedorenko (Russia)
142. VTK Ltd (Russia)
143. Yaroslavl Shipbuilding Factory (Russia)
144. ZAO Elmiks-VS (Russia)
145. ZAO Sparta (Russia)
146. ZAO Svyaz Inzhiniring (Russia)
147. 46th TSNII Central Scientific Research Institute (Russia)
148. Alagir Resistor Factory (Russia)
149. All-Russian Research Institute of Optical and Physical Measurements (Russia)
150. All-Russian Scientific-Research Institute Etalon JSC (Russia)
151. Almaz JSC (Russia)
152. Arzam Scientific Production Enterprise Temp Avia (Russia)
153. Automated Procurement System for State Defense Orders, LLC (Russia)
154. Dolgoprudniy Design Bureau of Automatics (DDBA JSC) (Russia)
155. Electronic Computing Technology Scientific-Research Center JSC (Russia)

156. Electrosignal JSC (Russia)
157. Energiya JSC (Russia)
158. Engineering Center Moselectronproekt (Russia)
159. Etalon Scientific and Production Association (Russia)
160. Evgeny Krayushin (Russia)
161. Foreign Trade Association Mashpriborintorg (Russia)
162. Ineko LLC (Russia)
163. Informakustika JSC (Russia)
164. Institute of High Energy Physics (Russia)
165. Institute of Theoretical and Experimental Physics (Russia)
166. Inteltech PJSC (Russia)
167. ISE SO RAN Institute of High-Current Electronics (Russia)
168. Kaluga Scientific-Research Institute of Telemechanical Devices JSC (Russia)
169. Kulon Scientific-Research Institute JSC (Russia)
170. Lutch Design Office JSC (Russia)
171. Meteor Plant JSC (Russia)
172. Moscow Communications Research Institute JSC (Russia)
173. Moscow Order of the Red Banner of Labor Research Radio Engineering Institute JSC (Russia)
174. NPO Elektromechaniki JSC (Russia)
175. Omsk Production Union Irtysh JSC (Russia)
176. Omsk Scientific-Research Institute of Instrument Engineering JSC (Russia)
177. Optron, JSC (Russia)
178. Pella Shipyard OJSC (Russia)
179. Polyot Chelyabinsk Radio Plant JSC (Russia)
180. Pskov Distance Communications Equipment Plant (Russia)
181. Radiozavod JSC (Russia)
182. Razryad JSC (Russia)
183. Research Production Association Mars (Russia)
184. Ryazan Radio-Plant (Russia)
185. Scientific Production Center Vigstar JSC (Russia)
186. Scientific Production Enterprise “Radiosviaz” (Russia)

187. Scientific Research Institute Ferrite-Domen (Russia)

188. Scientific Research Institute of Communication Management Systems (Russia)

189. Scientific-Production Association and Scientific-Research Institute of Radio-Components (Russia)

190. Scientific-Production Enterprise “Kant” (Russia)

191. Scientific-Production Enterprise “Svyaz” (Russia)

192. Scientific-Production Enterprise Almaz JSC (Russia)

193. Scientific-Production Enterprise Salyut JSC (Russia)

194. Scientific-Production Enterprise Volna (Russia)

195. Scientific-Production Enterprise Vostok JSC (Russia)

196. Scientific-Research Institute “Argon” (Russia)

197. Scientific-Research Institute and Factory Platan (Russia)

198. Scientific-Research Institute of Automated Systems and Communications Complexes Neptune JSC (Russia)

199. Special Design and Technical Bureau for Relay Technology (Russia)

200. Special Design Bureau Salute JSC (Russia)

201. Tactical Missile Company, Joint Stock Company “Salute” (Russia)

202. Tactical Missile Company, Joint Stock Company “State Machine Building Design Bureau ‘Vympel’ By Name I.I.Toropov” (Russia)

203. Tactical Missile Company, Joint Stock Company “URALELEMENT” (Russia)

204. Tactical Missile Company, Joint Stock Company “Plant Dagdiesel” (Russia)

205. Tactical Missile Company, Joint Stock Company “Scientific Research Institute of Marine Heat Engineering” (Russia)

206. Tactical Missile Company, Joint Stock Company PA Strela (Russia)

207. Tactical Missile Company, Joint Stock Company Plant Kulakov (Russia)

208. Tactical Missile Company, Joint Stock Company Ravenstvo (Russia)

209. Tactical Missile Company, Joint Stock Company Ravenstvo-service (Russia)

210. Tactical Missile Company, Joint Stock Company Saratov Radio Instrument Plant (Russia)

211. Tactical Missile Company, Joint Stock Company Severny Press (Russia)

212. Tactical Missile Company, Joint-Stock Company “Research Center for Automated Design” (Russia)

213. Tactical Missile Company, KB Mashinostroeniya (Russia)

214. Tactical Missile Company, NPO Electromechanics (Russia)

215. Tactical Missile Company, NPO Lightning (Russia)
216. Tactical Missile Company, Petrovsky Electromechanical Plant “Molot” (Russia)
217. Tactical Missile Company, PJSC “MBDB ‘ISKRA’” (Russia)
218. Tactical Missile Company, PJSC ANPP Temp Avia (Russia)
219. Tactical Missile Company, Raduga Design Bureau (Russia)
220. Tactical Missile Corporation, “Central Design Bureau of Automation” (Russia)
221. Tactical Missile Corporation, 711 Aircraft Repair Plant (Russia)
222. Tactical Missile Corporation, AO GNPP “Region” (Russia)
223. Tactical Missile Corporation, AO TMKB “Soyuz” (Russia)
224. Tactical Missile Corporation, Azov Optical and Mechanical Plant (Russia)
225. Tactical Missile Corporation, Concern “MPO – Gidropribor” (Russia)
226. Tactical Missile Corporation, Joint Stock Company “KRASNY GIDROPRESS” (Russia)
227. Tactical Missile Corporation, Joint Stock Company Avangard (Russia)
228. Tactical Missile Corporation, Joint Stock Company Concern Granit-Electron (Russia)
229. Tactical Missile Corporation, Joint Stock Company Elektrotyaga (Russia)
230. Tactical Missile Corporation, Joint Stock Company GosNIIMash (Russia)
231. Tactical Missile Corporation, RKB Globus (Russia)
232. Tactical Missile Corporation, Smolensk Aviation Plant (Russia)
233. Tactical Missile Corporation, TRV Engineering (Russia)
234. Tactical Missile Corporation, Ural Design Bureau “Detal” (Russia)
235. Tactical Missile Corporation, Zvezda-Strela Limited Liability Company (Russia)
236. Tambov Plant (TZ) “October” (Russia)
237. United Shipbuilding Corporation “Production Association Northern Machine Building Enterprise” (Russia)
238. United Shipbuilding Corporation “5th Shipyard” (Russia)
239. Federal Center for Dual-Use Technology (FTsDT) Soyuz (Russia)
240. Turayev Machine Building Design Bureau Soyuz (Russia)
241. Zhukovskiy Central Aerohydrodynamics Institute (TsAGI) (Russia)
242. Rosatomflot (Russia)
243. Lyulki Experimental-Design Bureau (Russia)
244. Lyulki Science and Technology Center (Russia)
245. AO Aviaagregat (Russia)

246. Central Aerohydrodynamic Institute (TsAGI) (Russia)

247. Closed Joint Stock Company Turborus (Turborus) (Russia)

248. Federal Autonomous Institution Central Institute of Engine-Building N.A. P.I. Baranov; Central Institute of Aviation Motors (CIAM) (Russia)

249. Federal State Budgetary Institution National Research Center Institute N.A. N.E. Zhukovsky (Zhukovsky National Research Institute) (Russia)

250. Federal State Unitary Enterprise "State Scientific-Research Institute for Aviation Systems" (GosNIIAS) (Russia)

251. Joint Stock Company 123 Aviation Repair Plant (123 ARZ) (Russia)

252. Joint Stock Company 218 Aviation Repair Plant (218 ARZ) (Russia)

253. Joint Stock Company 360 Aviation Repair Plant (360 ARZ) (Russia)

254. Joint Stock Company 514 Aviation Repair Plant (514 ARZ) (Russia)

255. Joint Stock Company 766 UPTK (Russia)

256. Joint Stock Company Aramil Aviation Repair Plant (AARZ) (Russia)

257. Joint Stock Company Aviaremont (Aviaremont) (Russia)

258. Joint Stock Company Flight Research Institute N.A. M.M. Gromov (FRI Gromov) (Russia)

259. Joint Stock Company Metallist Samara (Metallist Samara) (Russia)

260. Joint Stock Company Moscow Machine-Building Enterprise Named After V.V. Chernyshev (MMP V.V. Chernyshev) (Russia)

261. JSC NII Steel (Russia)

262. Joint Stock Company Remdizel (Russia)

263. Joint Stock Company Special Industrial and Technical Base Zvezdochka (SPTB Zvezdochka) (Russia)

264. Joint Stock Company STAR (Russia)

265. Joint Stock Company Votkinsk Machine Building Plant (Russia)

266. Joint Stock Company Yaroslav Radio Factory (Russia)

267. Joint Stock Company Zlatoustovsky Machine Building Plant (JSC Zlatmash) (Russia)

268. Limited Liability Company Center for Specialized Production OSK Propulsion (OSK Propulsion) (Russia)

269. Lytkarino Machine-Building Plant (Russia)

270. Moscow Aviation Institute (Russia)

271. Moscow Institute of Thermal Technology (Russia)

272. Omsk Motor-Manufacturing Design Bureau (Russia)

273. Open Joint Stock Company 170 Flight Support Equipment Repair Plant (170 RZ SOP) (Russia)

274. Open Joint Stock Company 20 Aviation Repair Plant (20 ARZ) (Russia)

275. Open Joint Stock Company 275 Aviation Repair Plant (275 ARZ) (Russia)

276. Open Joint Stock Company 308 Aviation Repair Plant (308 ARZ) (Russia)

277. Open Joint Stock Company 32 Repair Plant of Flight Support Equipment (32 RZ SOP) (Russia)

278. Open Joint Stock Company 322 Aviation Repair Plant (322 ARZ) (Russia)

279. Open Joint Stock Company 325 Aviation Repair Plant (325 ARZ) (Russia)

280. Open Joint Stock Company 680 Aircraft Repair Plant (680 ARZ) (Russia)

281. Open Joint Stock Company 720 Special Flight Support Equipment Repair Plant (720 RZ SOP) (Russia)

282. Open Joint Stock Company Volgograd Radio-Technical Equipment Plant (VZ RTO) (Russia)

283. Public Joint Stock Company Agregat (PJSC Agregat) (Russia)

284. Salute Gas Turbine Research and Production Center (Russia)

285. Scientific-Production Association Vint of Zvezdochka Shipyard (SPU Vint) (Russia)

286. Scientific Research Institute of Applied Acoustics (NIIPA) (Russia)

287. Siberian Scientific-Research Institute of Aviation N.A. S.A. Chaplygin (SibNIA) (Russia)

288. Software Research Institute (Russia)

289. Subsidiary Sevastopol Naval Plant of Zvezdochka Shipyard (Sevastopol Naval Plant) (City of Sevastopol, illegally annexed by Russia)

290. Tula Arms Plant (Russia)

291. Russian Institute of Radio Navigation and Time (Russia)

292. Federal Technical Regulation and Metrology Agency (Rosstandart) (Russia)

293. Federal State Budgetary Institution of Science P.I. K.A. Valiev RAS of the Ministry of Science and Higher Education of Russia (FTIAN) (Russia)

294. Federal State Unitary Enterprise All-Russian Research Institute of Physical, Technical and Radio Engineering Measurements (VNIIFTRI) (Russia)

295. Institute of Physics Named After P.N. Lebedev of the Russian Academy of Sciences (LPI) (Russia)

296. The Institute of Solid-State Physics of the Russian Academy of Sciences (ISSP) (Russia)

297. Rzhanov Institute of Semiconductor Physics, Siberian Branch of Russian Academy of Sciences (IPP SB RAS) (Russia)

298. UEC-Perm Engines, JSC (Russia)

299. Ural Works of Civil Aviation, JSC (Russia)

300. Central Design Bureau for Marine Engineering “Rubin”, JSC (Russia)

301. “Aeropribor-Voskhod”, JSC (Russia)

302. Aerospace Equipment Corporation, JSC (Russia)

303. Central Research Institute of Automation and Hydraulics (CNIIAG), JSC (Russia)

304. Aerospace Systems Design Bureau, JSC (Russia)

305. Afanasyev Technomac, JSC (Russia)

306. Ak Bars Shipbuilding Corporation, CJSC (Russia)

307. AGAT, Gavrilov-Yaminskiy Machine-Building Plant, JSC (Russia)

308. Almaz Central Marine Design Bureau, JSC (Russia)

309. Joint Stock Company Eleron (Russia)

310. AO Rubin (Russia)

311. Branch of AO Company Sukhoi Yuri Gagarin Komsomolsk-on-Amur Aircraft Plant (Russia)

312. Branch of PAO II – Aviastar (Russia)

313. Branch of RSK MiG Nizhny Novgorod Aircraft-Construction Plant Sokol (Russia)

314. Chkalov Novosibirsk Aviation Plant (Russia)

315. Joint Stock Company All-Russian Scientific-Research Institute Gradient (Russia)

316. Joint Stock Company Almatyevsk Radiopribor Plant (JSC AZRP) (Russia)

317. Joint Stock Company Experimental-Design Bureau Elektroavtomatika in the name of P.A. Efimov (Russia)

318. Joint Stock Company Industrial Controls Design Bureau (Russia)

319. Joint Stock Company Kazan Instrument-Engineering and Design Bureau (Russia)

320. Joint Stok Company Microtechnology (Russia)

321. Phasotron Scientific-Research Institute of Radio-Engineering (Russia)

322. Joint Stock Company Radiopribor (Russia)

323. Joint Stock Company Ramensk Instrument-Engineering Bureau (Russia)

324. Joint Stock Company Research and Production Center SAPSAN (Russia)

325. Joint Stock Company Rychag (Russia)

326. Joint Stock Company Scientific Production Enterprise Izmeritel (Russia)

327. Joint Stock Company Scientific-Production Union for Radioelectronics Named After V.I. Shimko (Russia)

328. Joint Stock Company Taganrog Communications Scientific-Research Institute (Russia)

329. Joint Stock Company Urals Instrument-Engineering Plant (Russia)

330. Joint Stock Company Vzlet Engineering Testing Support (Russia)

331. Joint Stock Company Zhiguli Radio Plant (Russia)

332. Joint Stock Company Bryansk Electromechanical Plant (Russia)

333. Public Joint Stock Company Moscow Institute of Electro-Mechanics and Automation (Russia)

334. Public Joint Stock Company Stavropol Radio Plant Signal (Russia)

335. Public Joint Stock Company Techpribor (Russia)

336. Joint Stock Company Ramensky Instrument-Engineering Plant (Russia)

337. V.V. Tarasov Avia Avtomatika (Russia)

338. Design Bureau of Chemical Machine Building KBKhM (Russia)

339. Far Eastern Shipbuilding and Ship Repair Center (Russia)

340. Ilyushin Aviation Complex Branch: Myasishcheva Experimental Mechanical Engineering Plant (Russia)

341. Institute of Marine Technology Problems Far East Branch Russian Academy of Sciences (Russia)

342. Irkutsk Aviation Plant (Russia)

343. Joint Stock Company Aerocomposit Ulyanovsk Plant (Russia)

344.Joint Stock Company Experimental Design Bureau Named After A.S. Yakovlev (Russia)

345. Joint Stock Company Federal Research and Production Center Altai (Russia)

346. Joint Stock Company “Head Special Design Bureau Prozhektor” (Russia)

347. Joint Stock Company Ilyushin Aviation Complex (Russia)

348. Joint Stock Company Lazurit Central Design Bureau (Russia)

349. Joint Stock Company Research and Development Enterprise Protek (Russia)

350. Joint Stock Company SPMDB Malachite (Russia)

351. Joint Stock Company Votkinsky Zavod (Russia)

352. Kalyazinsky Machine Building Factory – Branch of RSK MiG (Russia)

353. Main Directorate of Deep-Sea Research of the Ministry of Defense of the Russian Federation (Russia)

354. NPP Start (Russia)

355. OAO Radiofizika (Russia)

356. P.A. Voronin Lukhovitsk Aviation Plant, branch of RSK MiG (Russia)

357. Public Joint Stock Company Bryansk Special Design Bureau (Russia)

358. Public Joint Stock Company Voronezh Joint Stock Aircraft Company (Russia)

359. Radio Technical Institute Named After A. L. Mints (Russia)

360. Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics (Russia)

361. Shvabe JSC (Russia)

362. Special Technological Center LLC (Russia)

363. St. Petersburg Marine Bureau of Machine Building Malakhit (Russia)

364. St. Petersburg Naval Design Bureau Almaz (Russia)

365. St. Petersburg Shipbuilding Institution Krylov 45 (Russia)

366. Strategic Control Posts Corporation (Russia)

367. V.A. Trapeznikov Institute of Control Sciences of Russian Academy of Sciences (Russia)

368. Vladimir Design Bureau for Radio Communications OJSC (Russia)

369. Voentelecom JSC (Russia)

370. A.A. Kharkevich Institute for Information Transmission Problems (IITP), Russian Academy of Sciences (RAS) (Russia)

371. Ak Bars Holding (Russia)

372. Special Research Bureau for Automation of Marine Researches Far East Branch Russian Academy of Sciences (Russia)

373. Systems of Biological Synthesis LLC (Russia)

374. Borisfen, JSC (Russia)

375. Barnaul cartridge plant, JSC (Russia)

376. Concern Avrora Scientific and Production Association, JSC (Russia)

377. Bryansk Automobile Plant, JSC (Russia)

378. Burevestnik Central Research Institute, JSC (Russia)

379. Research Institute of Space Instrumentation, JSC (Russia)

380. Arsenal Machine-building plant, OJSC (Russia)

381. Central Design Bureau of Automatics, JSC (Russia)

382. Zelenodolsk Design Bureau, JSC (Russia)

383. Zavod Elecon, JSC (Russia)

384. VMP “Avitec”, JSC (Russia)

385. JSC V. Tikhomirov Scientific Research Institute of Instrument Design (Russia)

386. Tulatochmash, JSC (Russia)

387. PJSC “I.S. Brook” INEUM (Russia)
388. SPE “Krasnoznamenets”, JSC (Russia)
389. SPA Pribor Named After S.S. Golembiovsky, SC (Russia)
390. SPA “Impuls”, JSC (Russia)
391. RusBITech (Russia)
392. ROTOR 43 (Russia)
393. Rostov optical and mechanical plant, PJSC (Russia)
394. RATEP, JSC (Russia)
395. PLAZ (Russia)
396. OKB “Technika” (Russia)
397. Ocean Chips (Russia)
398. Nudelman Precision Engineering Design Bureau (Russia)
399. Angstrem JSC (Russia)
400. NPCAP (Russia)
401. Novosibirsk Plant of Artificial Fibre (Russia)
402. Novosibirsk Cartridge Plant, JSC (SIBFIRE) (Russia)
403. Novator DB (Russia)
404. NIMI Named After V.V. BAHIREV, JSC (Russia)
405. NII Stali JSC (Russia)
406. Nevskoe Design Bureau, JSC (Russia)
407. Neva Electronica JSC (Russia)
408. ENICS (Russia)
409. The JSC Makeyev Design Bureau (Russia)
410. KURGANPRIBOR, JSC (Russia)
411. Ural Optical-Mechanical Plant E.S. Yalamova, JSC (Russia)
412. Ramenskoye Engineering Design Office, JSC (Russia)
413. Vologda Optical and Mechanical Plant, JSC (Russia)
414. Videoglaz Project (Russia)
415. Innovative Underwater Technologies, LLC (Russia)
416. Ulyanovsk Mechanical Plant (Russia)
417. All-Russian Research Institute of Radio Engineering (Russia)

418. PJSC “Scientific and Production Association ‘Almaz’ Named After Academician A.A. Raspletin” (Russia)
419. Concern OJSC – KIZLYAR ELECTRO-MECHANICAL PLANT (Russia)
420. Concern Oceanpribor, JSC (Russia)
421. JSC Zelenogradsky Nanotechnology Center (Russia)
422. JSC Elektronstandart Pribor (Russia)
423. JSC “Urals Optical-Mechanical Plant Named After Mr E.S Yalamov” (Russia)
424. Ramenskoye Instrument-Making Design Bureau, JSC (Russia)
425. Special Technology Centre Limited Liability Company (Russia)
426. Vest Ost Limited Liability (Russia)
427. Trade-Component LLC (Russia)
428. Radiant Electronic Components JSC (Russia)
429. JSC ICC Milandr (Russia)
430. SMT iLogic LLC (Russia)
431. Device Consulting (Russia)
432. Concern Radio-Electronic Technologies (Russia)
433. Technodinamika, JSC (Russia)
434. OOO “UNITEK” (Russia)
435. Closed Joint Stock Company TPK LINKOS (Russia)
436. Closed Joint Stock Company TPK LINKOS, SUBDIVISION IN ASTRAKHAN (Russia)
437. Design and Manufacturing of Aircraft Engines (DAMA) (Iran)
438. Islamic Revolutionary Guard Corps Aerospace Force (Iran)
439. Islamic Revolutionary Guard Corps Research and Self-Sufficiency Jihad Organization (IRGC SSJO) (Iran)
440. Oje Parvaz Mado Nafar Company (Mado) (Iran)
441. Paravar Pars Company (Iran)
442. Qods Aviation Industries (Iran)
443. Shahed Aviation Industries (Iran)
444. Concern Morinformsystem–Agat (Russia)
445. AO Papilon (Russia)
446. IT-Papillon OOO (Russia)
447. OOO Adis (Russia)

448. Papilon Systems Limited Liability Company (Russia)

449. Advanced Research Foundation (Russia)

450. Federal Service for Military-Technical Cooperation (Russia)

451. Federal State Budgetary Scientific Institution Research and Production Complex Technology Center (Russia)

452. Federal State Institution Federal Scientific Center Scientific Research Institute for System Analysis of the Russian Academy of Sciences (Russia)

453. Joint Stock Company All-Russian Research Institute Signal (Russia)

454. Joint Stock Company Center of Research and Technology Services Dinamika (Russia)

455. Joint Stock Company Concern Avtomatika (Russia)

456. Joint Stock Company Corporation Moscow Institute of Heat Technology (Russia)

457. Joint Stock Company Design Center Soyuz (Russia)

458. Joint Stock Company Design Technology Center Elektronika (Russia)

459. Joint Stock Company Institute for Scientific Research Microelectronic Equipment Progress (Russia)

460. Joint Stock Company Machine-Building Engineering Office Fakel Named After Akademika P.D. Grushina (Russia)

461. Joint Stock Company Moscow Institute of Electromechanics and Automatics (Russia)

462. Joint Stock Company North Western Regional Center of Almaz Antey Concern Obukhovsky Plant (Russia)

463. Joint Stock Company Obninsk Research and Production Enterprise Technologiya Named After A.G. Romashin (Russia)

464. Joint Stock Company Penza Electrotechnical Research Institute (Russia)

465. Joint Stock Company Production Association Sever (Russia)

466. Joint Stock Company Research Center ELINS (Russia)

467. Joint Stock Company Research and Production Association of Measuring Equipment (Russia)

468. Joint Stock Company Research and Production Enterprise Radar MMS (Russia)

469. Joint Stock Company Research and Production Enterprise Sapfir (Russia)

470. Joint Stock Company RT-Tekhpriemka (Russia)

471. Joint Stock Company Russian Research Institute Electronstandart (Russia)

472. Joint Stock Company Ryazan Plant of Metal Ceramic Instruments (Russia)

473. Joint Stock Company Scientific Production Enterprise Digital Solutions (Russia)

474. Joint Stock Company Scientific Production Enterprise Kontakt (Russia)

475. Joint Stock Company Scientific Production Enterprise Topaz (Russia)

476. Joint Stock Company Scientific Research Institute Giricond (Russia)

477. Joint Stock Company Scientific Research Institute of Computer Engineering NII SVT (Russia)

478. Joint Stock Company Scientific Research Institute of Electrical Carbon Products (Russia)

479. Joint Stock Company Scientific Research Institute of Electronic and Mechanical Devices (Russia)

480. Joint Stock Company Scientific Research Institute of Electronic Engineering Materials (Russia)

481. Joint Stock Company Scientific Research Institute of Gas Discharge Devices Plasma (Russia)

482. Joint Stock Company Scientific Research Institute of Industrial Television Rastr (Russia)

483. Joint Stock Company Scientific Research Institute of Precision Mechanical Engineering (Russia)

484. Joint Stock Company Special Design Bureau of Computer Engineering (Russia)

485. Joint Stock Company Special Design Bureau of Control Means (Russia)

486. Joint Stock Company Special Design Bureau Turbina (Russia)

487. Joint Stock Company State Scientific Research Institute Kristall (Russia)

488. Joint Stock Company Svetlana Semiconductors (Russia)

489. Joint Stock Company Tekhnodinamika (Russia)

490. Joint Stock Company Voronezh Semiconductor Devices Factory Assembly (Russia)

491. KAMAZ Publicly Traded Company (Russia)

492. Keldysh Institute of Applied Mathematics of the Russian Academy of Sciences (Russia)

493. Limited Liability Company Research and Production Association Radiovolna (Russia)

494. Limited Liability Company RSBGroup (Russia)

495. Mitishinskiy Scientific Research Institute of Radio Measuring Instruments (Russia)

496. Open Joint Stock Company Khabarovsk Radio Engineering Plant (Russia)

497. Open Joint Stock Company Mariyskiy Machine-Building Plant (Russia)

498. Open Joint Stock Company Scientific and Production Enterprise Pulsar (Russia)

499. Public Joint Stock Company Megafon (Russia)

500. Public Joint Stock Company Tutaev Motor Plant (Russia)

501. Public Joint Stock Company Vympel Interstate Corporation (Russia)

502. RT-Inform Limited Liability Company (Russia)

503. Skolkovo Foundation (Russia)

504. Skolkovo Institute of Science and Technology (Russia)

505. State Flight Testing Center Named After V.P. Chkalov (Russia)

506. Joint Stock Company Research and Production Association Named After S.A. Lavochkina (Russia)

507. VMK Limited Liability Company (Russia)

508. TESTKOMPLEKT LLC (Russia)

509. Radiopriborsnab LLC (Russia)

510. CJSC Radiotekhkomplekt (Russia)

511. Asia Pacific Links Ltd. (Hong Kong, China)

512. Tordan Industry Limited (Hong Kong, China)

513. Alpha Trading Investments Limited (Hong Kong, China)

514. JSC NICEVT (Russia)

515. A-CONTRAKT (Russia)

516. JCS Izhevsk Motozavod Axion-holding (Russia)

517. Gorky Plant of Communication Equipment (GZAS) (Russia)

518. Nizhny Novgorod Research Institute of Radio Engineering (NNIIRT) (Russia)

519. Nizhegorodskiy televizionnyy zavod (NITEL JSC) (Russia)

520. LLC Rezonit (Russia)

521. ZAO Promelektronika (Russia)

522. TD Promelektronika LLC (Russia)

523. Tako LLC (Armenia)

524. Art Logistics LLC (Russia)

525. GFK Logistics LLC (Russia)

526. Novastream Limited (Russia)

527. SKS Elektron Broker (Russia)

528. Trust Logistics (Russia)

529. Trust Logistics LLC (Russia)

530. Alfa Beta Creative LLC (Uzbekistan)

531. GFK Logistics Asia LLC (Uzbekistan)

532. I Jet Global DMCC (Syria)

533. I Jet Global DMCC (United Arab Emirates)

534. Success Aviation Services FZC (United Arab Emirates)

535. LLC CST (Zala Aero Group) (Russia)

536. Iran Aircraft Manufacturing Industries Corporation (HESA) (Iran)

537. Closed Joint Stock Company Special Design Bureau (Russia)

538. Federal State Enterprise Kazan State Gunpowder Plant (Russia)

539. Federal State Unitary Enterprise Central Scientific Research Institute of Chemistry and Mechanics (Russia)

540. Federal State Unitary Enterprise Rostov-On-Don Research Institute of Radio Communications (Russia)

541. Informtest Firm Limited Liability Company (Russia)

542. Joint Stock Company 150 Aircraft Repair Plant (Russia)

543. Joint Stock Company 810 Aircraft Repair Plant (Russia)

544. Joint Stock Company Arzamas Instrument-Making Plant Named After P.I. Plandin (Russia)

545. Joint Stock Company Concern Central Institute for Scientific Research Elektropribor (Russia)

546. Joint Stock Company Dux (Russia)

547. Joint Stock Company Eastern Shipyard (Russia)

548. Joint Stock Company Information Satellite Systems Named After Academician M.F. Reshetnev (Russia)

549. Joint Stock Company Izhevsk Electromechanical Plant Kupol (Russia)

550. Joint Stock Company Kazan Optical-Mechanical Plant (Russia)

551. Joint Stock Company Khabarovsk Shipbuilding Yard (Russia)

552. Joint Stock Company Machine Building Company Vityaz (Russia)

553. Joint Stock Company Management Company Radiostandard (Russia)

554. Joint Stock Company Marine Instrument Engineering Corporation (Russia)

555. Joint Stock Company NII Gidrosvyazi Shtil (Russia)

556. Joint Stock Company Nizhny Novgorod Plant of the 70th Anniversary of Victory (Russia)

557. Joint Stock Company Northern Production Association Arktika (Russia)

558. Joint Stock Company Perm Machine Building Plant (Russia)

559. Joint Stock Company Production Complex Akhtuba (Russia)

560. Joint Stock Company Project Design Bureau RIO (Russia)

561. Joint Stock Company Scientific Production Association Orion (Russia)

562. Joint Stock Company Scientific Production Association Volna Plant (Russia)

563. Joint Stock Company Scientific Production Center of Automatics and Instrument Building Named After Academician N.A. Pilyugin (Russia)

564. Joint Stock Company Scientific Production Concern Tekhmash (Russia)

565. Joint Stock Company Scientific Research Engineering Institute (Russia)

566. Joint Stock Company Scientific Research Institute of Computing Complexes Named After M.A. Kartsev (Russia)

567. Joint Stock Company Scientific Technical Institute Radiosvyaz (Russia)

568. Joint Stock Company Taganrog Plant Priboy (Russia)

569. Joint Stock Company Tula Cartridge Works (Russia)

570. Joint Stock Company Tula Machine-Building Plant (Russia)

571. Joint Stock Company Ulan-Ude Aviation Plant (Russia)

572. Joint Stock Company Ulyanovsk Cartridge Works (Russia)

573. Joint Stock Company Ural Automotive Plant (Russia)

574. Joint Stock Company Vodtranspribor (Russia)

575. Joint Stock Company Zavolzhskiy Plant of Caterpillar Tractors (Russia)

576. Joint Stock Company Zelenodolsk Plant Named After A.M. Gorky (Russia)

577. Machine Building Group Limited Liability Company (Russia)

578. Military Industrial Company Limited Liability Company (Russia)

579. Open Joint Stock Company Degtyaryov Plant (Russia)

580. Promtekhnologiya Limited Liability Company (Russia)

581. Public Joint Stock Company Kurganmashzavod (Russia)

582. Public Joint Stock Company Motovilikha Plants (Russia)

583. Public Joint Stock Company Proletarsky Plant (Russia)

584. Public Joint Stock Company Rostvertol (Russia)

585. Scientific Production Association Izhevsk Unmanned Systems Limited Liability Company (Russia)

586. Scientific Production Enterprise Prima Limited Liability Company (Russia)

587. United Machine Building Group Limited Liability Company (Russia)

588. Volgograd Machine Building Company Limited Liability Company (Russia)

589. VXI-Systems Limited Liability Company (Russia)

590. LLC Yadro (Russia)

591. Perm Powder Plant (Russia)

592. RPA Kazan Machine Building Plant (Russia)
593. Proton JSC (Russia)
594. Grant Instrument (Russia)
595. Streloy (Russia)
596. LLC Research and Production Enterprise Itelma (Russia)
597. TTK Kammarket LLC (Russia)
598. JSC Kompel (Russia)
599. LLC MBR-AVIA (Russia)
600. LLC NeoTech (Russia)
601. JSC Sozvezdie Concern (Russia)
602. Serov Machine-Building Plant JSC (Russia)
603. Aeroscan LLC (Russia)
604. STC Orion LLC (Russia)
605. Technical Center Windeq LLC (Russia)
606. OrelMetallPolimer LLC (Russia)
607. OMP LLC (Russia)
608. Spetstehnotreyd LLC (Russia)
609. BIC-inform (Russia)
610. Spel LLC (Russia)
611. Alfakomponent LLC (Russia)
612. ID Solution LLC (Russia)
613. Inelso LLC (Russia)
614. Elitan Trade LLC (Russia)
615. Hartis Dv LLV (Russia)
616. SFT LLC (Russia)
617. Kami Group LLC (Russia)
618. AGT Systems LLC (Russia)
619. Entep LLC (Russia)
620. Mvizion LLC (Uzbekistan)
621. Design Bureau of Navigation Systems (NAVIS) (Russia)
622. Deflog Technologies PTE LTD (Singapore)
623. JSC VNIIR Progress (Russia)

624. Si2 Microsystems Pvt Ltd (India)

625. Spark TT (Russia)

626. Euro Asia Cargo (Private) Ltd. (Sri Lanka)

627. Ultran Electronic Components LLC (Russia)

628. RG Solutions Limited (Hong Kong, China)

629. JSC SEZ Alabuga (Russia)

630. LLC Alabuga Development (Russia)

631. AO Geomir (Russia)

632. OOO Albatross (Russia)

633. AO SET-1 (Russia)

634. OOO Alabuga Volokno (Russia)

635. SuperCam (Russia)

636. AviatestAero (Russia)

637. Conex Doo Beograd-Stari Grad (Serbia)

638. Guangzhou Ausay Technology Co Limited (China)

639. Shenzhen Biguang Trading Co. Ltd (China)

640. Yilufa Electronics Ltd. (China)

641. TOO Elem Group (Kazakhstan)

642. Thai IT Hardware Co., Ltd (Thailand)

643. Yildiz Çip Teknoloji Elektronik Elektrik Bilgisayar Malzemeleri Ticaret Sanayi Limited Sirketi (Türkiye)

644. LLC Fregat (Russia)

645. IC Specpostavka (Russia)

646. Nordlase LLC (Russia)

647. Leningrad Laser Systems (Russia)

648. LLS Mark (Russia)

649. OOO Staut (Russia).

Vedlegg IX skal lyde:

Vedlegg IX. Liste over varer og teknologi som omtalt i § 16a første ledd og § 16b første ledd

Part A

General Notes, Acronyms and Abbreviations, and Definitions in Annex I to Regulation (EU) 2021/821 apply to this Annex, with the exception of "Part I – General Notes, Acronyms and Abbreviations, and Definitions, General Notes to Annex I, point 2".

Definitions of Terms used in the Common Military List (CML) of the European Union (2020/C 85/01) apply to this Annex.

Without prejudice to Article 12 of this Regulation, non-controlled items containing one or more components listed in this Annex are not subject to the controls under Articles 2a and 2b of this Regulation.

Category I – Electronics

X.A.I.001 Electronic devices and components.

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;

b. Storage integrated circuits, as follows:

1. Electrically erasable programmable read-only memories (EEPROMs) with a storage capacity;

a. Exceeding 16 Mbit 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;

c. Analogue-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);

d. Field programmable logic devices having a maximum number of single-ended digital input/outputs between 200 and 700;

e. Fast Fourier Transform (FFT) processors having a rated execution time for a 1 024 point complex FFT of less than 1 ms;

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;

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 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;

h. Flexible waveguides designed for use at frequencies exceeding 40 GHz;

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 μs and bandwidth in MHz) of more than 100; or

c. A dispersive delay of more than 10 μs;

Technical Note: For the purpose of X.A.I.001.i "frequency side-lobe rejection" is the maximum rejection value specified in data sheet.

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);

Note: X.A.I.001.j does not control batteries, including single cell batteries.

Technical Notes:

1. *For the purpose of X.A.I.001.j energy density (Wh/kg) is calculated from the nominal voltage multiplied by the nominal capacity in ampere-hours (Ah) divided by the mass in kilograms. If the nominal capacity is not stated, energy density is calculated from the nominal voltage squared then multiplied by the discharge duration in hours divided by the discharge load in Ohms and the mass in kilograms.*
2. *For the purpose of X.A.I.001.j, a "cell" is defined as an electrochemical device, which has positive and negative electrodes, and electrolyte, and is a source of electrical energy. It is the basic building block of a battery.*
3. *For the purpose of X.A.I.001.j.1, a "primary cell" is a "cell" that is not designed to be charged by any other source.*
4. *For the purpose of X.A.I.001.j.2, a "secondary cell" is a "cell" that is designed to be charged by an external electrical source.*

k."Superconductive" electromagnets or solenoids specially designed to be fully charged or discharged in less than one minute, having all of the following:

Note: X.A.I.001.k does not control "superconductive" electromagnets or solenoids designed for Magnetic Resonance Imaging (MRI) medical equipment.

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^2;

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^3 or more; and

3. A discharge time of less than 1 ms;

m.Hydrogen/hydrogen-isotope thyratrons of ceramic-metal construction and rate for a peak current of 500 A or more;

n. Ceramic frequency filters;

o. Solar cells, cell-interconnect-coverglass (CIC) assemblies, solar panels, and solar arrays, which are "space qualified" and not controlled by 3A001.e.4;

p. Cermet trimmers.

X.A.I.002 General purpose "electronic assemblies", modules and equipment.

a. Electronic test equipment, other than those specified in the CML or in Regulation (EU) 2021/821;

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";

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;

d. Non-modular analogue oscilloscopes having a bandwidth of 1 GHz or greater;

e. Modular analogue 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;

f. Analogue sampling oscilloscopes for the analysis of recurring phenomena with an effective bandwidth greater than 4 GHz;

g. Digital oscilloscopes and transient recorders, using analogue-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.

Note : X.A.I.002 controls the following specially designed components for analogue oscilloscopes:

1. *Plug-in units;*
2. *External amplifiers;*
3. *Pre-amplifiers;*
4. *Sampling devices;*
5. *Cathode ray tubes.*

X.A.I.003 Specific processing equipment, other than those specified in the CML or in Regulation (EU) 2021/821, as follows:

a.Frequency changers and their specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821;

b.Mass spectrometers, other than those specified in the CML or in Regulation (EU) 2021/821;

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;

d.Pulse amplifiers, other than those specified in the CML or in Regulation (EU) 2021/821;

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 μs 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 μs or greater;

f. Chromatography and spectrometry analytical instruments.

X.B.I.001 Equipment for the manufacture of electronic components or materials, as follows and specially designed components and accessories therefor:

a.Equipment specially designed for the manufacture of electron tubes, optical elements and specially designed components therefor controlled by 3A001 or X.A.I.001;

b.Equipment specially designed for the manufacture of semiconductor devices, integrated circuits and “electronic assemblies”, as follows, and systems incorporating or having the characteristics of such equipment:

Note : X.B.I.001.b. also controls equipment used or modified for use in the manufacture of other devices, such as imaging devices, electro-optical devices, acoustic-wave devices.

1.Equipment for the processing of materials for the manufacture of devices and components as specified in the heading of X.B.I.001.b, as follows:

Note : X.B.I.001 does not control quartz furnace tubes, furnace liners, paddles, boats (except specially designed caged boats), bubblers, cassettes or crucibles specially designed for the processing equipment controlled by X.B.I.001.b.1.

a.Equipment for producing polycrystalline silicon and materials controlled by 3C001;

b.Equipment specially designed for purifying or processing III/V and II/VI semiconductor materials controlled by 3C001, 3C002, 3C003, 3C004, or 3C005 [1] except crystal pullers, for which see X.B.I.001.b.1.c below;

c.Crystal pullers and furnaces, as follows:

Note : X.B.I.001.b.1.c does not control diffusion and oxidation furnaces.

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^2 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 10^5 Pa; or

   c. Capable of pulling crystals of a diameter exceeding 100 mm;

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 ± 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 ± 3,5 %; or

   3. Rotation of individual wafers during processing;

e. Molecular beam epitaxial growth equipment;

f. Magnetically enhanced "sputtering" equipment with specially designed integral load locks capable of transferring wafers in an isolated vacuum environment;

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";

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;

Notes:

1. *"Batch types" refers to machines not specially designed for production processing of single wafers. Such machines can process two or more wafers simultaneously with common process parameters, e.g., RF power, temperature, etch gas species, flow rates.*
2. *"Single wafer types" refers to machines specially designed for production processing of single wafers. These machines may use automatic wafer handling techniques to load a single wafer into the equipment for processing. The definition includes equipment that can load and process several wafers but where the etching parameters, e.g., RF power or end point, can be independently determined for each individual wafer.*

i. Chemical vapour 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 vapour deposition equipment operating below 10^5 Pa; or

2. PECVD equipment operating either below 60 Pa or having automatic cassette-to-cassette and load lock wafer handling;

Note : X.B.I.001.b.1.i does not control low pressure chemical vapour deposition (LPCVD) systems or reactive "sputtering" equipment.

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;

Note : X.B.I.001.b.1.j does not control electron beam deposition systems or general purpose scanning electron microscopes.

k. Surface finishing equipment for the processing of semiconductor wafers as follows:

1. Specially designed equipment for backside processing of wafers thinner than 100 μm 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 μm or less, total indicator reading (TIR);

Note : X.B.I.001.b.1.k does not control single-side lapping and polishing equipment for wafer surface finishing.

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;

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 μm; or

2. Spot size (kerf width) less than 3 μm.

Technical Note : For the purpose of X.B.I.001.b.1, "sputtering" is an overlay coating process wherein positively charged ions are accelerated by an electric field towards the surface of a target (coating material). The kinetic energy of the impacting ions is sufficient to cause target surface atoms to be released and deposited on the substrate. (Note : Triode, magnetron or radio frequency sputtering to increase adhesion of coating and rate of deposition are ordinary modifications of the process.).

2. Masks, mask substrates, mask-making equipment and image transfer equipment for the manufacture of devices and components as specified in the heading of X.B.I.001, as follows:

Note : The term masks refers to those used in electron beam lithography, X-ray lithography, and ultraviolet lithography, as well as the usual ultraviolet and visible photo-lithography.

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 μm or more; and

b. The design does not include special features to alter the intended use by means of production equipment or "software";

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;

c. Equipment, other than general purpose computers, specially designed for computer aided design (CAD) of semiconductor devices or integrated circuits;

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 μm 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 μm; or

3.Equipment or holders for altering masks or reticles or adding pellicles to remove defects;

Note : X.B.I.001.b.2.d.1 and b.2.d.2 do not control mask fabrication equipment using photo-optical methods which was either commercially available before the 1st January 1980, or has a performance no better than such equipment.

e."Stored program controlled" equipment for the inspection of masks, reticles or pellicles with:

1. A resolution of 0,25 μm or finer; and

2.A precision of 0,75 μm or finer over a distance in one or two coordinates of 63,5 mm or more;

Note : X.B.I.001.b.2.e does not control general purpose scanning electron microscopes except when specially designed and instrumented for automatic pattern inspection.

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:

Note : X.B.I.001.b.2.f does not control photo-optical contact and proximity mask align and expose equipment or contact image transfer equipment.

1. Production of a pattern size of less than 2,5 μm;

2. Alignment with a precision finer than ± 0,25 μm (3 sigma);

3. Machine-to-machine overlay no better than ± 0,3 μm; or

4. A light source wavelength shorter than 400 nm;

g.Electron beam, ion beam or X-ray equipment for projection image transfer capable of producing patterns less than 2,5 μm;

Note : For focused, deflected-beam systems (direct write systems), see X.B.I.001.b.1.j.

h.Equipment using "lasers" for direct write on wafers capable of producing patterns less than 2,5 μm.

3.Equipment for the assembly of integrated circuits, as follows:

a.“Stored program controlled” die bonders having all of the following characteristics:

1. Specially designed for “hybrid integrated circuits”;

2. X-Y stage positioning travel exceeding 37,5 x 37,5 mm; and

3. Placement accuracy in the X-Y plane of finer than ± 10 μm;

b.“Stored program controlled” equipment for producing multiple bonds in a single operation (e.g., beam lead bonders, chip carrier bonders, tape bonders);

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.

Note : X.B.I.001.b.3 does not control general purpose resistance type spot welders.

4.Filters for clean rooms capable of providing an air environment of 10 or less particles of 0,3 μm or smaller per 0,02832 m^3 and filter materials therefor.

Technical Note : For the purpose of X.B.I.001, “stored program controlled” is a control using instructions stored in an electronic storage that a processor can execute in order to direct the performance of predetermined functions. Equipment may be “stored program controlled” whether the electronic storage is internal or external to the equipment.

X.B.I.002 Equipment for the inspection or testing of electronic components and materials, and specially designed components and accessories therefor.

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;

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:

Note : X.B.I.002.b also controls equipment used or modified for use in the inspection or testing of other devices, such as imaging devices, electro-optical devices, acoustic-wave devices.

1.“Stored program controlled” inspection equipment for the automatic detection of defects, errors or contaminants of 0,6 μm or less in or on processed wafers, substrates, other than printed circuit boards or chips, using optical image acquisition techniques for pattern comparison;

Note : X.B.I.002.b.1 does not control general purpose scanning electron microscopes, except when specially designed and instrumented for automatic pattern inspection.

2. Specially designed "stored program controlled" measuring and analysis equipment, as follows:

   a. Specially designed for the measurement of oxygen or carbon content in semiconductor materials;

   b. Equipment for line width measurement with a resolution of 1 μm or finer;

   c. Specially designed flatness measurement instruments capable of measuring deviations from flatness of 10 μm or less with a resolution of 1 μm or finer.

3. "Stored program controlled" wafer probing equipment having any of the following characteristics:

   a. Positioning accuracy finer than 3,5 μm;

   b. Capable of testing devices having more than 68 terminals; or

   c. Capable of testing at a frequency exceeding 1 GHz;

4. Test equipment as follows:

   a. "Stored program controlled" equipment specially designed for testing discrete semiconductor devices and unencapsulated dice, capable of testing at frequencies exceeding 18 GHz;

      Technical Note : Discrete semiconductor devices include photocells and solar cells.

   b. "Stored program controlled" equipment specially designed for testing integrated circuits and "electronic assemblies" thereof, capable of functional testing:

      1. At a "pattern rate" exceeding 20 MHz; or

      2. At a "pattern rate" exceeding 10 MHz but not exceeding 20 MHz and capable of testing packages of more than 68 terminals.

      Notes : X.B.I.002.b.4.b does not control test equipment specially designed for testing:

      1. *Memories;*
      2. *Assemblies or a class of "electronic assemblies" for home and entertainment applications; and*
      3. *Electronic components, "electronic assemblies" and integrated circuits not controlled by 3A001 or X.A.I.001 provided such test equipment does not incorporate computing facilities with "user accessible programmability".*

      Technical Note : For purposes of X.B.I.002.b.4.b, "pattern rate" is defined as the maximum frequency of digital operation of a tester. It is therefore equivalent to the highest data rate that a tester can provide in non-multiplexed mode. It is also referred to as test speed, maximum digital frequency or maximum digital speed.

c. Equipment specially designed for determining the performance of focal-plane arrays at wavelengths of more than 1 200 nm, using "stored program controlled" measurements or computer aided evaluation and having any of the following characteristics:

1. Using scanning light spot diameters of less than 0,12 mm;

2. Designed for measuring photosensitive performance parameters and for evaluating frequency response, modulation transfer function, uniformity of responsivity or noise; or

3. Designed for evaluating arrays capable of creating images with more than 32 x 32 line elements;

5. Electron beam test systems designed for operation at 3 keV or below, or "laser" beam systems, for non-contactive probing of powered-up semiconductor devices having any of the following:

a. Stroboscopic capability with either beam blanking or detector strobing;

b. An electron spectrometer for voltage measurements with a resolution of less than 0,5 V; or

c. Electrical tests fixtures for performance analysis of integrated circuits;

Note : X.B.I.002.b.5 does not control scanning electron microscopes, except when specially designed and instrumented for non-contactive probing of a powered-up semiconductor device.

6. "Stored program controlled" multifunctional focused ion beam systems specially designed for manufacturing, repairing, physical layout analysis and testing of masks or semiconductor devices and having either of the following characteristics:

a. Target-to-beam position feedback control precision of 1 μm or finer; or

b. Digital-to-analogue conversion accuracy exceeding 12 bit;

7. Particle measuring systems employing "lasers" designed for measuring particle size and concentration in air having both of the following characteristics:

a. Capable of measuring particle sizes of 0,2 μm or less at a flow rate of 0,02832 m^3 per minute or more; and

b. Capable of characterizing Class 10 clean air or better.

Technical Note: For the purpose of X.B.I.002, "stored program controlled" is a control using instructions stored in an electronic storage that a processor can execute in order to direct the performance of predetermined functions. Equipment may be "stored program controlled" whether the electronic storage is internal or external to the equipment.

X.B.I.003 Equipment for the manufacture of Printed Circuit Boards (PCBs) and specially designed components and accessories therefor, as follows:

a. Film processing equipment;

b. Solder mask coating equipment;

c. Photo plotter equipment;

d. Plating or electroplating deposition equipment;

e. Vacuum chambers and presses;

f. Roll laminators;

g. Alignment equipment; or

h. Etching equipment.

X.B.I.004 Automated optical inspection equipment for testing Printed Circuit Boards (PCBs), based on optical or electrical sensors, and capable to detect any of the following quality defects:

a. Spacing, area, volume or height;

b. Bill boarding;

c. Components (presence, absence, flipped, offset, polarity, or skew);

d. Solder (bridging, insufficient solder joints);

e. Leads (insufficient paste, lifting);

f. Tombstoning; or

g. Electrical (shorts, opens, resistance, capacitance, power, grid performance).

X.C.I.001 Positive resists designed for semiconductor lithography specially adjusted (optimised) for use at wavelengths between 370 and 193 nm.

X.C.I.002 Chemicals and materials of the type used in the production of Printed Circuit Boards (PCBs), as follows:

a. PCB composite substrates made of glass fibre or cotton (e.g. FR-4, FR-2, FR 6, CEM-1, G-10, etc.);

b. Multilayer PCB substrates, containing at least one layer of any of the following materials:

1. Aluminium;

2. Polytetrafluoroethylene (PTFE); or

3. Ceramic materials (e.g. alumina, titanium oxide, etc.);

c. Etchant chemicals;

1. Ferric chloride (7705-08-0);

2. Cupric chloride (7447-39-4);

3. Ammonium persulphate (7727-54-0);

4. Sodium persulphate (7775-27-1); or

5. Chemical preparations specially designed for etching and containing any of the chemicals included in X.C.I.002.c.1 to X.C.I.002.c.4.

Note : X.C.I.002.c does not control "chemical mixtures" containing one or more of the chemicals specified in entry X.C.I.002.c in which no individually specified chemical constitutes more than 10 % by the weight of the mixture.

d. Copper foil with a minimum purity 95 % and of a thickness less than 100 μm;

e. Polymeric substances and films thereof of less than 0,5 mm of thickness, as follows:

1. Aromatic polyimides;
2. Parylenes;
3. Benzocyclobutenes (BCBs); or
4. Polybenzoxazoles.

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.

X.D.I.002 "Software" specially designed for the test, "development" or "production" of Printed Circuit Boards (PCBs).

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.

X.E.I.002 "Technology" for the "development", "production" or "use" of Printed Circuit Boards (PCBs).

Category II – Computers

Note : Category II does not control goods for the personal use of the natural persons.

X.A.II.001 Computers, "electronic assemblies" and related equipment, not controlled by 4A001 or 4A003 [1] , and specially designed components therefor.

Note : The control status of the "digital computers" and related equipment described in X.A.II.001 is determined by the control status of other equipment or systems provided:

a. *The "digital computers" or related equipment are essential for the operation of the other equipment or systems;*
b. *The "digital computers" or related equipment are not a "principal element" of the other equipment or systems; and*

N.B.1 : The control status of "signal processing" or "image enhancement" equipment specially designed for other equipment with functions limited to those required for the other equipment is determined by the control status of the other equipment even if it exceeds the "principal element" criterion.

N.B.2 : For the control status of "digital computers" or related equipment for telecommunications equipment, see Category 5, Part 1 (Telecommunications) (9) .

c. *The "technology" for the "digital computers" and related equipment is determined by 4E* [1] .

a. Electronic computers and related equipment, and "electronic assemblies" and specially designed components therefor, rated for operation at an ambient temperature above 343 K (70 °C);

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);

c. "Electronic assemblies" that are specially designed or modified to enhance performance by aggregation of processors, as follows:

1. Designed to be capable of aggregation in configurations of 16 or more processors;

2. Not used;

Note 1: X.A.II.001.c applies only to "electronic assemblies" and programmable interconnections with a "APP" not exceeding the limits in X.A.II.001.b, when shipped as unintegrated "electronic assemblies". It does not apply to "electronic assemblies" inherently limited by nature of their design for use as related equipment controlled by X.A.II.001.k.

Note 2: X.A.II.001.c does not control any "electronic assembly" specially designed for a product or family of products whose maximum configuration does not exceed the limits of X.A.II.001.b.

d. Not used;

e. Not used;

f. Equipment for "signal processing" or "image enhancement" having an "Adjusted Peak Performance" ("APP") equal to or greater than 0,0128 Weighted TeraFLOPS WT;

g. Not used;

h. Not used;

i. Equipment containing "terminal interface equipment" exceeding the limits in X.A.III.101;

Technical Note : For the purpose of X.A.II.001.i, "terminal interface equipment" means equipment at which information enters or leaves the telecommunication system, e.g. telephone, data device, computer, etc.

j. Equipment specially designed to provide external interconnection of "digital computers" or associated equipment that allows communications at data rates exceeding 80 Mbyte/s.

Note : X.A.II.001.j does not control internal interconnection equipment (e.g., backplanes, buses) passive interconnection equipment, "network access controllers" or "communication channel controllers".

Technical Note : For the purpose of X.A.II.001.j, "communication channel controllers" is the physical interface which controls the flow of synchronous or asynchronous digital information. It is an assembly that can be integrated into computer or telecommunications equipment to provide communications access.

k. Hybrid computers and "electronic assemblies" and specially designed components therefor containing analogue-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.

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 μs.

Technical Note : For the purpose of X.D.II.001, "global interrupt latency time" is the time taken by the computer system to recognise an interrupt due to the event, service the interrupt and perform a context switch to an alternate memory-resident task waiting on the interrupt.

X.D.II.002 "Software" other than that controlled in 4D001 (10) specially designed or modified for the "development", "production" or "use" of equipment controlled by 4A101 [1] .

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.

X.E.II.002 "Technology" for the "development" or "production" of equipment designed for "multi-data-stream processing".

Technical Note : For the purpose of X.E.II.002, "multi-data-stream processing" is a microprogram or equipment architecture technique that permits simultaneous processing of two or more data sequences under the control of one or more instruction sequences by means such as:

1. *Single Instruction Multiple Data (SIMD) architectures such as vector or array processors;*
2. *Multiple Single Instruction Multiple Data (MSIMD) architectures;*
3. *Multiple Instruction Multiple Data (MIMD) architectures, including those that are tightly coupled, closely coupled or loosely coupled; or*
4. *Structured arrays of processing elements, including systolic arrays.*

Category III. Part 1 – Telecommunications

Note : Category III. Part 1 does not control goods for the personal use of the natural persons.

X.A.III.101 Telecommunication equipment.

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).

b. Telecommunication transmission equipment and systems, and specially designed components and accessories therefor, having any of the following characteristics, functions or features:

Note : Telecommunication transmission equipment:

a. Categorised as follows, or combinations thereof:

1. Radio equipment (e.g., transmitters, receivers and transceivers);
2. Line terminating equipment;
3. Intermediate amplifier equipment;
4. Repeater equipment;
5. Regenerator equipment;
6. Translation encoders (transcoders);
7. Multiplex equipment (statistical mutiplex included);
8. Modulators/demodulators (modems);
9. Transmultiplex equipment (see CCITT Rec. G701);
10. "Stored program controlled" digital crossconnection equipment;
11. "Gateways" and bridges;
12. "Media access units"; and

b. Designed for use in single or multi-channel communication via any of the following:

1. Wire (line);

2. *Coaxial cable;*
3. *Optical fibre cable;*
4. *Electromagnetic radiation; or*
5. *Underwater acoustic wave propagation.*

1.Employing digital techniques, including digital processing of analogue 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;

Note : X.A.III.101.b.1 does not control equipment specially designed to be integrated and operated in any satellite system for civil use.

2.Modems using the "bandwidth of one voice channel" with a "data signalling rate" exceeding 9 600 bits per second;

3.Being "stored program controlled" digital cross connect equipment with "digital transfer rate" exceeding 8,5 Mbit/s per port;

4.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;

Note : If any uncontrolled equipment contains a "network access controller", it cannot have any type of telecommunications interface, except those described in, but not controlled by X.A.III.101.b.4.

5.Employing a "laser" and having any of the following characteristics:

a. A transmission wavelength exceeding 1 000 nm; or

b.Employing analogue 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";

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;

Note : X.A.III.101.b.6 does not control equipment for civil use when conforming with an International Telecommunications Union (ITU) allocated band between 26,5 GHz and 31 GHz.

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.

Notes:

1. *X.A.III.101.b.7 does not control equipment specially designed to be integrated and operated in any satellite system for civil use.*
2. *X.A.III.101.b.7 does not control radio relay equipment for operation in an International Telecommunications Union (ITU) allocated band:*

a. Having any of the following:

1. Not exceeding 960 MHz; or

2. With a "total digital transfer rate" not exceeding 8,5 Mbit/s; and

b. Having a "spectral efficiency" not exceeding 4 bit/s/Hz.

c. "Stored program controlled" switching equipment and related signalling systems, having any of the following characteristics, functions or features, and specially designed components and accessories therefor:

Note : Statistical multiplexers with digital input and digital output which provide switching are treated as "stored program controlled" switches.

1. "Data (message) switching" equipment or systems designed for "packet-mode operation", "electronic assemblies" and components therefor, other than those specified in the CML or in Regulation (EU) 2021/821;

2. Not used;

3. Routing or switching of "datagram" packets;

Note : X.A.III.101.c.3 does not control networks restricted to using only "network access controllers" or to "network access controllers" themselves.

4. Not used;

5. Multi-level priority and pre-emption for circuit switching;

Note : X.A.III.101.c.5 does not control single-level call pre-emption.

6. Designed for automatic hand-off of cellular radio calls to other cellular switches or automatic connection to a centralised subscriber data base common to more than one switch;

7. Containing "stored program controlled" digital cross connect equipment with "digital transfer rate" exceeding 8,5 Mbit/s per port:

8. "Common channel signalling" operating in either non-associated or quasi-associated mode of operation;

9. "Dynamic adaptive routing";

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

Note : X.A.III.101.c.10.a does not control multiplex composite links composed only of communication channels not individually controlled by X.A.III.101.b.1.

b. A "digital transfer rate" of 33 Mbit/s for a "network access controller" and related common media;

Note : X.A.III.101.c.10 does not control packet switches or routers with ports or lines not exceeding the limits in X.A.III.101.c.10.

11. "Optical switching";

12. Employing "Asynchronous Transfer Mode" ("ATM") techniques.

d. Optical fibres and optical fibre cables of more than 50 m in length designed for single mode operation;

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";

Note 1: X.A.III.101.e does not include cases of routing decisions taken on predefined information.

Note 2: X.A.III.101.e does not preclude control of traffic as a function of predictable statistical traffic conditions.

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));

g. Mobile communications equipment other than those specified in the CML or in Regulation (EU) 2021/821, "electronic assemblies" and components therefor; or

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.

Technical Note : For the purpose of X.A.III.101:

1) *"Asynchronous transfer mode" ("ATM") is a transfer mode in which the information is organised into cells; it is asynchronous in the sense that the recurrence of cells depends on the required or instantaneous bit rate.*
2) *"Bandwidth of one voice channel" is data communication equipment designed to operate in one voice channel of 3 100 Hz, as defined in CCITT Recommendation G.151.*
3) *"Communications channel controller" is the physical interface that controls the flow of synchronous or asynchronous digital information. It is an assembly that can be integrated into computer or telecommunications equipment to provide communications access.*
4) *"Datagram" is a self-contained, independent entity of data carrying sufficient information to be routed from the source to the destination data terminal equipment without reliance on earlier exchanges between this source and destination data terminal equipment and the transporting network.*
5) *"Fast select" is a facility applicable to virtual calls that allows data terminal equipment to expand the possibility to transmit data in call set-up and clearing "packets" beyond the basic capabilities of a virtual call.*
6) *"Gateway" is the function, realised by any combination of equipment and "software", to carry out the conversion of conventions for representing, processing or communicating information used on one system into the corresponding, but different conventions used in another system.*
7) *"Integrated Services Digital Network" (ISDN) is a unified end- to-end digital network, in which data originating from all types of communication (e.g., voice, text, data, still and moving pictures) are transmitted from one port (terminal) in the exchange (switch) over one access line to and from the subscriber.*
8) *"Packet" is a group of binary digits including data and call control signals that is switched as a composite whole. The data, call control signals, and possible error control information are arranged in a specified format.*
9) *"Common channel signalling" means the transmission of control information (signalling) via a separate channel than that used for the messages. The signalling channel usually controls multiple message channels.*
10) *"Data signalling rate" means the rate, as defined in ITU Recommendation 53-36, taking into account that, for non-binary modulation, baud and bit per second are not equal. Bits for coding, checking and synchronization functions are to be included.*
11) *"Dynamic adaptive routing" means Automatic rerouting of traffic based on sensing and analysis of current actual network conditions*
12) *"Media access unit" means equipment that contains one or more communication interfaces ("network access controller", "communications channel controller", modem or computer bus) to connect terminal equipment to a network.*
13) *"Spectral efficiency" is the "digital transfer rate" [bits/s] / 6 dB spectrum bandwidth in Hz.*
14) *"Stored program controlled" is a control using instructions stored in an electronic storage that a processor can execute in order to direct the performance of predetermined functions.*

Note : Equipment may be "stored program controlled" whether the electronic storage is internal or external to the equipment.

X.B.III.101 Telecommunications test equipment, other than those specified in the CML or in Regulation (EU) 2021/821.

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.

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";

b. Not used.

X.E.III.101 "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.

Technical Note : For the purpose of X.E.III.101:

1) "Synchronous digital hierarchy" (SDH) is a digital hierarchy providing a means to manage, multiplex, and access various forms of digital traffic using a synchronous transmission format on different types of media. The format is based on the Synchronous Transport Module (STM) that is defined by CCITT Recommendation G.703, G.707, G.708, G.709 and others yet to be published. The first level rate of "SDH" is 155,52 Mbit/s.

2) "Synchronous optical network" (SONET) is a network providing a means to manage, multiplex and access various forms of digital traffic using a synchronous transmission format on fibre optics. The format is the North America version of "SDH" and also uses the Synchronous Transport Module (STM). However, it uses the Synchronous Transport Signal (STS) as the basic transport module with a first level rate of 51,81 Mbit/s. The SONET standards are being integrated into those of "SDH".

Category III. Part 2 – Information Security

Note : Category III. Part 2 does not control goods for the personal use of the natural persons.

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 (12).

X.D.III.201 "Information Security" "software" as follows:

Note : This entry does not control "software" designed or modified to protect against malicious computer damage, e.g., viruses, where the use of "cryptography" is limited to authentication, digital signature and/or the decryption of data or files.

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 (13).

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.

Category 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.

X.A.IV.002 Optical Sensors as follows:

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 (centre-to-centre spacing) of less than 25 μm; 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 (centre-to-centre spacing) of less than 25 μm.

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.

X.A.IV.003 Cameras as follows:

a. Cameras that meet the criteria of Note 3 to 6A003.b.4. (14);

b. Not used;

X.A.IV.004 Optics as follows:

Note : X.A.IV.004 does not control optical filters with fixed air gaps or Lyot-type filters.

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;

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;

Technical Note : For the purpose of X.A.IV.004.b “Fluoride fibres” are fibres manufactured from bulk fluoride compounds.

X.A.IV.005 “Lasers” as follows:

a.Carbon dioxide (CO_2) “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;

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 wave-length exceeding 1 050 nm;

c. Ruby “lasers” having an output energy exceeding 20 J per pulse;

d.Non-“tunable”“pulsed lasers” having an output wavelength exceeding 975 nm but not exceeding 1 150 nm and having any of the following:

1.A “pulse duration” equal to or exceeding 1 ns but not exceeding 1 μs, and having any of the following:

a.A single transverse mode output and having any of the following:

1.A “wall-plug efficiency” exceeding 12 % and an “average output power” exceeding 10 W and capable of operating at a pulse repetition frequency greater than 1 kHz; or

2. An “average output power” exceeding 20 W; or

b.A multiple transverse mode output and having any of the following:

1.A “wall-plug efficiency” exceeding 18 % and an “average output power” exceeding 30 W;

2. A “peak power” exceeding 200 MW; or

3. An “average output power” exceeding 50 W; or

2.A “pulse duration” exceeding 1 μs and having any of the following:

a.A single transverse mode output and having any of the following:

1.A “wall-plug efficiency” exceeding 12 % and an “average output power” exceeding 10 W and capable of operating at a pulse repetition frequency greater than 1 kHz; or

2. An “average output power” exceeding 20 W; or

b.A multiple transverse mode output and having any of the following:

1.A “wall-plug efficiency” exceeding 18 % and an “average output power” exceeding 30 W; or

2. An “average output power” exceeding 500 W;

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:

1.A single transverse mode output and having any of the following:

a.A “wall-plug efficiency” exceeding 12 % and an “average output power” exceeding 10 W and capable of operating at a pulse repetition frequency greater than 1 kHz; or

b. An “average output power” exceeding 50 W; or

2.A multiple transverse mode output and having any of the following:

a.A “wall-plug efficiency” exceeding 18 % and an “average output power” exceeding 30 W; or

b.An “average output power” exceeding 500 W;

Note : X.A.IV.005.e.2.b does not control multiple transverse mode, industrial “lasers” with output power less than or equal to 2 kW with a total mass greater than 1 200 kg. For the purpose of this note, total mass includes all components required to operate the “laser”, e.g., “laser”, power supply, heat exchanger, but excludes external optics for beam conditioning and/or delivery.

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;

g.Free electron “lasers”.

Technical Note : For the purpose of X.A.IV.005 “wall-plug efficiency” is defined as the ratio of “laser” output power (or “average output power”) to total electrical input power required to operate the “laser”, including the power supply/conditioning and thermal conditioning/heat exchanger.

X.A.IV.006 “Magnetometers”, “Superconductive” electromagnetic sensors, and specially designed components therefor, as follows:

a.“Magnetometers”, other than those specified in the CML or in Regulation (EU) 2021/821, having a “sensitivity” lower (better) than 1,0 nT (rms) per square root Hz.

Technical Note : For the purposes of X.A.IV.006.a, “sensitivity” (noise level) is the root mean square of the device-limited noise floor which is the lowest signal that can be measured.

b.“Superconductive” electromagnetic sensors, components manufactured from “superconductive” materials:

1.Designed for operation at temperatures below the “critical temperature” of at least one of their “superconductive” constituents (including Josephson effect devices or “superconductive” quantum interference devices (SQUIDS));

2.Designed for sensing electromagnetic field variations at frequencies of 1 kHz or less; and

3.Having any of the following characteristics:

a.Incorporating thin-film SQUIDS with a minimum feature size of less than 2 μm and with associated input and output coupling circuits;

b.Designed to operate with a magnetic field slew rate exceeding 1×10^6 magnetic flux quanta per second;

c.Designed to function without magnetic shielding in the earth’s ambient magnetic field; or

d.Having a temperature coefficient less (smaller) than 0,1 magnetic flux quantum/K.

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.

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:

1. Operates at a frequency of 94 GHz;

2. An average output power of less than 20 mW;

3. Radar beam width of 1 degree; and

4. Operating range equal to or greater than 1 500 m.

X.A.IV.009 Specific processing equipment, as follows:

a. Seismic detection equipment not controlled by X.A.IV.009.c;

b.Radiation hardened TV cameras, other than those specified in the CML or in Regulation (EU) 2021/821; or

c.Seismic intrusion detection systems that detect, classify and determine the bearing on the source of a detected signal.

X.B.IV.001 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;

b. For the adjustment, to required tolerances, of the longitudinal magnetic field of free electron “lasers”.

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 ([15]) and having a zinc content of equal to or more than 6 % by “mole fraction.”

Technical Note : For the purpose of X.C.IV.001:

1) “Mole fraction” is defined as the ratio of moles of ZnTe to the sum of the moles of CdTe and ZnTe present in the crystal.

2) “Beat length” is the distance over which two orthogonally polarised signals, initially in phase, must pass in order to achieve a 2 Pi radian(s) phase difference.

X.C.IV.002 Optical materials, as follows:

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 aluminium and variants.

2. Bulk fluoride glass made from compounds controlled by 6C004.e.1 ([16]);

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.

Technical Note : For the purpose of X.C.IV.002:

1) “Fluoride fibres” are fibres manufactured from bulk fluoride compounds.

2) “Optical fibre preforms” are bars, ingots, or rods of glass, plastic or other materials that have been specially processed for use in fabricating optical fibres. The characteristics of the preform determine the basic parameters of the resultant drawn optical fibres.

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 ([17]), X.A.IV.001, X.A.IV.006, X.A.IV.007, or X.A.IV.008.

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.

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 centres, and capable of automatically handing over primary radar target data (if not correlated with secondary surveillance radar (SSR) data) from the host ATC centre to another ATC centre;

b. "Software" specially designed for seismic intrusion detection systems in X.A.IV.009.c; or

c. "Source code" specially designed for seismic intrusion detection systems in X.A.IV.009.c.

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.

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.

X.E.IV.003 Other "technology" as follows:

a. Optical fabrication technologies for serially producing optical components at a rate exceeding 10 m^2 of surface area per year on any single spindle and having all of the following:

1. Area exceeding 1 m^2; 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:

1. "Sensitivity" lower (better) than 0,05 nT (rms) per square root Hz at frequencies of less than 1 Hz; or

2. "Sensitivity" lower (better) than 1 x 10^{-3} nT (rms) per square root Hz at frequencies of 1 Hz or more.

e. "Technology""required" for the "development" or "production" of infrared up-conversion devices having all of the following:

1. A response in the wavelength range exceeding 700 nm but not exceeding 1 500 nm; and

2. A combination of an infrared photodetector, light emitting diode (OLED), and nanocrystal to convert infrared light into visible light.

Technical Note : For the purposes of X.E.IV.003, "sensitivity" (or noise level) is the root mean square of the device-limited noise floor which is the lowest signal that can be measured.

Category 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.

Note 1 : X.A.V.001. does not control headsets or microphones.

Note 2 : X.A.V.001. does not control goods for the personal use of the natural persons.

X.B.V.001 Other equipment specially designed for the test, inspection, or "production" of navigation and avionics equipment.

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.

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.

Category VI – Marine

X.A.VI.001 Vessels, marine systems or equipment, and specially designed components therefor, components and accessories as follows:

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;

Technical Note : Limiting resolution in television is a measure of horizontal resolution usually expressed in terms of the maximum number of lines per picture height discriminated on a test chart, using IEEE Standard 208/1960 or any equivalent standard.

b. Photographic still cameras specially designed or modified for underwater use, having a film format of 35 mm or larger, and having autofocusing or remote focusing specially designed for underwater use;

c. Stroboscopic light systems, specially designed or modified for underwater use, capable of a light output energy of more than 300 J per flash;

d.Other underwater camera equipment, other than those specified in the CML or in Regulation (EU) 2021/821;

e.Marine boilers designed to have any of the following characteristics:

1.Heat release rate (at maximum rating) equal to or in excess of 1 966,4 kW/m^3 of furnace volume; or

2.Ratio of steam generated in kilogram per hour (at maximum rating) to the dry weight of the boiler in kilograms equal to or in excess of 37,6.;

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;

Note : X.A.VI.001.f does not control vessels on temporary sojourn, used for private transport or for the transport of passengers or goods from or through the customs territory of the Union.

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;

h.Self-contained underwater breathing apparatus (scuba gear) and accessories therefor, other than those specified in the CML or in Regulation (EU) 2021/821;

i.Life jackets, inflation cartridges, dive compasses and dive computers;

Note : X.A.VI.001.i does not control goods for the personal use of the natural persons.

j.Underwater lights and propulsion equipment; or

Note : X.A.VI.001.j does not control goods for the personal use of the natural persons.

k.Air compressors and filtration system specially designed for filling air cylinders.

X.D.VI.001 "Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by X.A.VI.001.

X.D.VI.002 "Software" specially designed for the operation of unmanned submersible vehicles used in the oil and gas industry.

X.E.VI.001 "Technology" for the "development", "production" or "use" of equipment controlled by X.A.VI.001.

Category VII – Aerospace and Propulsion

X.A.VII.001 Diesel engines, and tractors and specially designed components therefor, other than those specified in the CML or in Regulation (EU) 2021/821:

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 298 kW or more.

b. Off highway wheel tractors of carriage capacity 9 tonnes or more; and major components and accessories, other than those specified in the CML or in Regulation (EU) 2021/821.

c. Road tractors for semi-trailers, with single or tandem rear axles rated for 9 tonnes per axel or more and specially designed major components.

Note : X.A.VII.001.b and X.A.VII.001.c do not control vehicles on temporary sojourn, used for private transport or for the transport of passengers or goods from or through the customs territory of the Union.

X.A.VII.002 Gas turbine engines and components, other than those specified in the CML or in Regulation (EU) 2021/821.

a. Not used.

b. Not used.

c. Aero gas turbine engines and components specially designed therefor.

d. Not used.

e. Pressurised aircraft breathing equipment components specially designed therefor, other than those specified in the CML or in Regulation (EU) 2021/821.

X.A.VII.003 Aircraft engines, other than those specified in X.A.VII.002, the CML or in 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.

X.B.VII.001 Vibration test equipment and specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821.

Note : X.B.VII.001. controls only equipment for the "development" or "production". It does not control condition monitoring systems.

X.B.VII.002 Specially designed equipment, tooling or fixtures for manufacturing or measuring gas turbine blades, vanes or tip shroud castings, as follows:

a. Automated equipment using non-mechanical methods for measuring airfoil wall thickness;

b. Tooling, fixtures or measuring equipment for the "laser", water jet or ECM/EDM hole drilling processes controlled by 9E003.c ([18]);

c. Ceramic core leaching equipment;

d. Ceramic core manufacturing equipment or tools;

e. Ceramic shell wax pattern preparation equipment;

f. Ceramic shell burn out or firing equipment.

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.

X.D.VII.002 "Software", for the "development" or "production" of equipment controlled by X.A.VII.002 or X.B.VII.002.

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.

X.E.VII.002 "Technology", for the "development", "production" or "use" of equipment controlled by X.A.VII.002 or X.B.VII.002.

X.E.VII.003 Other "technology", not described by 9E003 ([19]), 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.

Category VIII – Miscellaneous items

X.A.VIII.001 Equipment for oil production or oil exploration as follows:

a. Drill head integrated measurement equipment, including inertial navigation systems for measurement while drilling (MWD);

b. Gas monitoring systems and detectors therefor, designed for continuous operation and detection of hydrogen sulphide;

c. Equipment for seismological measurements, including reflection seismetics and seismic vibrators;

d. Sediment echo sounders.

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.

Note 1 : Quantum computers perform computations that harness the collective properties of quantum states, such as superposition, interference and entanglement.

Note 2 : Units, circuits and devices include but are not limited to superconducting circuits, Quantum annealing, Ion Trap, photonic interaction, silicon/spin, cold atoms.

X.A.VIII.003 Microscopes, related equipment and detectors as follows:

a. Scanning electron microscopes (SEM);

b. Scanning auger microscopes;

c. Transmission electron microscopes (TEM);

d. Atomic force microscopes (AFM);

e. Scanning force microscopes (SFM);

f. Equipment and detectors, specially designed for use with the microscopes specified in X.A.VIII.003.a to X.A.VIII.0003.e, employing any of the following material analysis techniques:

1. X-ray photo spectroscopy (XPS);

2. Energy-dispersive X-ray spectroscopy (EDX, EDS) or

3. Electron spectroscopy for chemical analysis (ESCA).

X.A.VIII.004 Collector equipment for metal ores in deep seabed.

X.A.VIII.005 Manufacturing equipment and machine tools as follows:

a. Additive manufacturing equipment for the "production" of metal parts;

Note : X.A.VIII.005.a only applies to the following systems:

1. *Powder-bed systems using selective laser melting (SLM), laser cusing, direct metal laser sintering (DMLS) or electron beam melting (EBM); or*
2. *Powder-fed systems using laser cladding, direct energy deposition or laser metal deposition.*

b. Additive manufacturing equipment for "energetic materials", including equipment using ultrasonic extrusion;

c. Vat photopolymerization (VVP) additive manufacturing equipment using stereo lithography (SLA) or digital light processing (DLP).

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).

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.

X.A.VIII.008 Equipment, specially designed for the production of E-Fuels (electrofuels and synthetic fuels) or ultra efficient solar cells (efficiency 30 %).

X.A.VIII.009 Equipment for Ultra-High-Vacuum (UHV) as follows:

a. UHV pumps (sublimation, turbomolecular, diffusion, cryogenic, ion getter);

b. UHV pressure gauges.

Note : UHV means 100 nanoPascals (nPa) or lower.

X.A.VIII.010 "Cryogenic refrigeration systems" designed to maintain temperatures below 1,1 K for 48 hrs or more and related cryogenic refrigeration equipment as follows:

a. Pulse Tubes;

b. Cryostats;

c. Dewars;

d. Gas Handling System (GHS);

e. Compressors; or

f.Control Units.

Note : "Cryogenic refrigeration systems" include but are not limited to Dilution Refrigeration, Adiabatic Demagnisation Refrigerators and Laser Cooling Systems.

X.A.VIII.011 "Decapsulation" equipment for semiconductor devices.

Note : "Decapsulation" is the removal of a cap, lid, or encapsulating material from a packaged integrated circuit by mechanical, thermal, or chemical means.

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 1 600 nm.

X.AVIII.013 Numerical controlled machine tools, having one or more linear axis with a travel length greater than 8 000 mm.

X.A.VIII.014 Water cannon systems for riot or crowd control, and components specially designed therefor.

Note : X.A.VIII.014 water cannon systems include, for example: vehicles or fixed stations equipped with remotely operated water cannon that are designed to protect the operator from an outside riot with features such as armor, shatter resistant windows, metal screens, bull-bars, or run-flat tires. Components specially designed for water cannons may include, for example: deck gun water nozzles, pumps, reservoirs, cameras, and lights that are hardened or shielded against projectiles, elevating masts for those items, and teleoperation systems for those items.

X.A.VIII.015 Law enforcement striking weapons, including saps, police batons, side handle batons, tonfas, sjamboks, and whips.

X.A.VIII.016 Police helmets and shields; and specially designed components, other than those specified in the CML or in Regulation (EU) 2021/821.

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; and specially designed components and accessories, other than those specified in the CML or in Regulation (EU) 2021/821.

Note : X.A.VIII.017 applies to restraint devices used in law enforcement activities. It does not apply to medical devices that are equipped to restrain patient movement during medical procedures. It does not apply to devices that confine memory impaired patients to appropriate medical facilities. It does not apply to safety equipment such as safety belts or child automobile safety seats.

X.A.VIII.018 Oil and gas exploration equipment, “software”, and data, as follows (see List of Items Controlled):

a. Not used.

b. Hydraulic fracturing items, as follows:

1. Hydraulic fracturing design and analysis “software” and data;

2. Hydraulic fracturing “proppant”, “fracking fluid”, and chemical additives therefor; or

3. High pressure pumps.

Technical Note:

A “proppant” is a solid material, typically treated sand or man-made ceramic materials, designed to keep an induced hydraulic fracture open, during or following a fracturing treatment. It is added to a “fracking fluid” which may vary in composition depending on the type of fracturing used, and can be gel, foam or slickwater-based.

X.A.VIII.019 Specific processing equipment, as follows (see List of Items Controlled):

a. Ring magnets;

b. Not used.

X.A.VIII.020 Weapons and devices designed for the purpose of riot control or self-protection, as follows:

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;

b. Kits containing all essential components for assembly of portable electric discharge weapons controlled by item X.A.VIII.020.a; or

Note : The following goods are considered to be essential components:

1. *The unit producing an electric shock;*
2. *The switch, whether or not on a remote control; and*
3. *The electrodes or, where applicable, the wires through which the electrical shock is to be administered.*

c. Fixed or mountable electric discharge weapons that cover a wide area and can target multiple individuals with electrical shocks.

X.A.VIII.021 Weapons and equipment disseminating incapacitating or irritating chemical substances for the purpose of riot control or self-protection and certain related substances, as follows:

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;

Note 1 : This item does not control equipment controlled by item ML7(e) of the CML of the European Union.

Note 2 : This item does not control individual portable equipment, even if containing a chemical substance, when accompanying their user for the user's own personal protection.

Note 3 : In addition to relevant chemical substances, such as riot control agents or PAVA, the goods controlled by items X.A.VIII.021.c and X.A.VIII.021.d shall be deemed to be incapacitating or irritating chemical substances.

b. Pelargonic acid vanillylamide (PAVA) (CAS 2444-46-4);

c. Oleoresin capsicum (OC) (CAS 8023-77-6);

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;

Note 1 : This item does not control sauces and preparations therefor, soups or preparations therefor and mixed condiments or seasonings, provided that PAVA or OC is not the only constituent flavour in them.

Note 2 : This item does not control medicinal products for which a marketing authorisation has been granted in accordance with Union law.

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; or

Note : In addition to relevant chemical substances, such as riot control agents or PAVA, the goods controlled by items X.A.VIII.021.c and X.A.VIII.021.d shall be deemed to be incapacitating or irritating chemical substances.

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;

Note 1 : This item does not control equipment controlled by item ML7(e) of the CML of the European Union.

Note 2 : In addition to relevant chemical substances, such as riot control agents or PAVA, the goods controlled by items X.A.VIII.021.c and X.A.VIII.021.d shall be deemed to be incapacitating or irritating chemical substances.

g. Other irritating chemical substances, and mixtures thereof containing at least 0,3 % by weight of the active substance, as follows:

1. Dibenzo[b,f][1,4]oxazepine (CR) (CAS 257-07-8);

2. 8-Methyl-N-vanillyl-trans-6-nonenamide (capsaicin) (CAS 404-86-4);

3. 8-Methyl-N-vanillylnonamide (dihydrocapsaicin) (CAS 19408-84-5);

4. N-Vanillyl-9-methyldec-7-(E)-enamide (homocapsaicin) (CAS 58493-48-4);

5. N-Vanillyl-9-methyldecanamide (homodihydrocapsaicin) (CAS 20279-06-5);

6. N-Vanillyl-7-methyloctanamide (nordihydrocapsaicin) (CAS 28789-35-7);

7. 4-Nonanolylmorpholine (MPA) (CAS 5299-64-9);

8. Cis-4-acetylaminodicyclohexylmethane (CAS 37794-87-9);

9. N,N'-Bis(isopropyl)ethylenediimine; or

10. N,N'-Bis(tert-butyl)ethylenediimine.

X.A.VIII.022 Products which could be used for the execution of human beings by means of lethal injection, as follows:

a. Short and intermediate acting barbiturate anaesthetic agents including, but not limited to:

1. Amobarbital (CAS 57-43-2);

2. Amobarbital sodium salt (CAS 64-43-7);

3. Pentobarbital (CAS 76-74-4);

4. Pentobarbital sodium salt (CAS 57-33-0);

5. Secobarbital (CAS 76-73-3);

6. Secobarbital sodium salt (CAS 309-43-3);

7. Thiopental (CAS 76-75-5); or

8. Thiopental sodium salt (CAS 71-73-8), also known as thiopentone sodium;

b. Products containing one of the anaesthetic agents listed under X.A.VIII.022.a.

X.A.VIII.023 Nettings, canopies, tents, blankets and apparel, specially designed for camouflage.

X.B.VIII.001 Specific processing equipment, as follows (see List of Items Controlled):

a. Hot cells; or

b. Glove boxes suitable for use with radioactive materials.

X.C.VIII.001 Metal powders and metal alloy powders, usable for any of the systems listed in X.A.VIII.005.a.

X.C.VIII.002 Advanced materials as follows:

a. Materials for cloaking or adaptive camouflage;

b. Metamaterials, e.g. with a negative refractive index;

c. Not used;

d. High entropy alloys (HEA);

e. Heusler compounds; or

f. Kitaev materials, including kitaev spin liquids.

X.C.VIII.003 Conjugated polymers (conductive, semiconductive, electroluminescent) for printed or organic electronics.

X.C.VIII.004 Energetic materials as follows and mixtures thereof:

a. Ammonium picrate (CAS 131-74-8);

b. Black powder;

c. Hexanitrodiphenylamine (CAS 131-73-7);

d. Difluoroamine (CAS 10405-27-3);

e. Nitrostarch (CAS9056-38-6);

f. Not used;

g. Tetranitronaphthalene;

h. Trinitroanisole;

i. Trinitronaphthalene;

j. Trinitroxylene;

k. N-pyrrolidinone; 1-methyl-2-pyrrolidinone (CAS 872-50-4);

l. Dioctylmaleate (CAS 142-16-5);

m. Ethylhexylacrylate (CAS 103-11-7);

n. 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;

o. Nitrocellulose (CAS 9004-70-0);

p. Nitroglycerin (or glyceroltrinitrate, trinitroglycerine) (NG) (CAS 55-63-0);

q. 2,4,6-trinitrotoluene (TNT) (CAS 118-96-7);

r. Ethylenediaminedinitrate (EDDN) (CAS 20829-66-7);

s. Pentaerythritoltetranitrate (PETN) (CAS 78-11-5);

t. 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;

u. Not used;

v. Not used;

w. Diethyldiphenylurea (CAS 85-98-3); dimethyldiphenylurea (CAS 611-92-7); methylethyldiphenyl urea.

x. N,N-diphenylurea (unsymmetrical diphenylurea) (CAS 603-54-3);

y. Methyl-N,N-diphenylurea (methyl unsymmetrical diphenylurea) (CAS 13114-72-2);

z. Ethyl-N,N-diphenylurea (ethyl unsymmetrical diphenylurea) (CAS 64544-71-4);

aa. Not used;

bb. 4-Nitrodiphenylamine (4-NDPA) (CAS 836-30-6);

cc. 2,2-dinitropropanol (CAS 918-52-5); or

dd. Not used.

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.

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.

X.D.VIII.003 "Software" for digital twins of additive manufacturing products or for the determination of the reliability of additive manufacturing products.

X.D.VIII.004 "Software" specially designed for the "development", "production" or "use" of commodities controlled by X.A.VIII.014.

X.D.VIII.005 Specific "software", as follows (see List of Items Controlled):

a. "Software" for neutronic calculations/modeling;

b. "Software" for radiation transport calculations/modeling; or

c. "Software" for hydrodynamic calculations/modeling.

X.E.VIII.001 "Technology" for the "development", "production" or "use" of equipment specified in X.A.VIII.001 to X.A.VIII.0013.

X.E.VIII.002 "Technology" for the "development", "production" or "use" of materials specified in X.C.VIII.002 or X.C.VIII.003

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.

X.E.VIII.004 "Technology" for the "development", "production" or "use" of "software" specified in X.D.VIII.001 to X.D.VIII.002.

X.E.VIII.005 "Technology""required" for the "development" or "production" of commodities controlled by X.A.VIII.014.

X.E.VIII.006 "Technology" exclusively for the "development" or "production" of equipment controlled by X.A.VIII.017.

Category IX – Special Materials and Related Equipment

X.A.IX.001 Chemical agents, including tear gas formulation containing 1 % or less of orthochlorobenzalmalononitrile (CS), or 1 % or less of chloroacetophenone (CN), except in individual containers with a net weight of 20 g or less; liquid pepper except when packaged in individual containers with a net weight of 85,05 g or less; smoke bombs; non-irritant smoke flares, canisters, grenades and charges; and other pyrotechnic articles having dual military and commercial use, and components specially designed therefor, other than those specified in the CML or in Regulation (EU) 2021/821.

X.A.IX.002 Fingerprinting powders, dyes, and inks.

X.A.IX.003 Protective and detection equipment not specially designed for military use and not controlled by 1A004 or 2B351 ([20]), as follows (see List of Items Controlled), and components not specially designed for military use and not controlled by 1A004 or 2B351 therefor:

a. Personal radiation monitoring dosimeters; or

b. Equipment limited by design or function to protect against hazards specific to civil industries, such as mining, quarrying, agriculture, pharmaceuticals, medical, veterinary, environmental, waste management, or to the food industry.

Note : X.A.IX.003 does not control items for protection against chemical or biological agents that are consumer goods, packaged for retail sale or personal use, or medical products, such as latex exam gloves, latex surgical gloves, liquid disinfectant soap, disposable surgical drapes, surgical gowns, surgical foot covers, and surgical masks.

X.A.IX.004 Specific processing equipment, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled):

a. Radiation detection, monitoring and measurement equipment, other than those specified in the CML or in Regulation (EU) 2021/821; or

b. Radiographic detection equipment such as X-ray converters, and storage phosphor image plates.

X.B.IX.001 Specific processing equipment, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled):

a. Electrolytic cells for fluorine production, other than those specified in the CML or in Regulation (EU) 2021/821;

b. Particle accelerators;

c. Industrial process control hardware/systems designed for power industries, other than those specified in the CML or in Regulation (EU) 2021/821;

d. Freon and chilled water cooling systems capable of continuous cooling duties of 29,3 kW/hr or greater; or

e. Equipment for the production of structural composites, fibres, prepregs and preforms.

X.C.IX.001 Separate chemically defined compounds according to Note 1 to Chapters 28 and 29 of the Combined Nomenclature:

a. In concentrations of 95 % weight or greater, as follows:

1. Ethylene dichloride (CAS 107-06-2);
2. Nitromethane (CAS 75-52-5);
3. Picric acid (CAS 88-89-1);
4. Aluminium chloride (CAS 7446-70-0);
5. Arsenic (CAS 7440-38-2);
6. Arsenic trioxide (CAS 1327-53-3);
7. Bis(2-chloroethyl)ethylamine hydrochloride (CAS 3590-07-6);
8. Bis(2-chloroethyl)methylamine hydrochloride (CAS 55-86-7);
9. Tris(2-chloroethyl)amine hydrochloride (CAS 817-09-4);
10. Tributylphosphite (CAS 102-85-2);
11. Isocyanatomethane (CAS 624-83-9);
12. Quinaldine (CAS 91-63-4);
13. 2-bromochloroethane (CAS 107-04-0);
14. Benzil (CAS 134-81-6);
15. Diethyl ether (CAS 60-29-7);
16. Dimethyl ether (CAS 115-10-6);
17. Dimethylaminoethanol (CAS 108-01-0);
18. 2-methoxyethanol (CAS 109-86-4);
19. Butyrylcholinesterase (BCHE);
20. Diethylenetriamine (CAS 111-40-0);
21. Dichloromethane (CAS 75-09-2);
22. Dimethylaniline (CAS 121-69-7);
23. Ethyl bromide (CAS 74-96-4);
24. Ethyl chloride (CAS 75-00-3);
25. Ethylamine (CAS 75-04-7);
26. Hexamine (CAS 100-97-0);

27. Isopropanol (CAS 67- 63-0);
28. Isopropyl bromide (CAS 75-26-3);
29. Isopropyl ether (CAS 108-20-3);
30. Methylamine (CAS 74-89-5);
31. Methyl bromide (CAS 74-83-9);
32. Monoisopropylamine (CAS 75-31-0);
33. Obidoxime chloride (CAS 114-90-9);
34. Potassium bromide (CAS 7758-02-3);
35. Pyridine (CAS 110-86-1);
36. Pyridostigmine bromide (CAS 101-26-8);
37. Sodium bromide (CAS 7647-15-6);
38. Sodium metal (CAS 7440-23-5);
39. Tributylamine (CAS 102-82-9);
40. Triethylamine (CAS 121-44-8); or
41. Trimethylamine (CAS 75-50-3).

b. In concentrations of 90 % weight or greater, as follows:

1. Acetone (CAS 67-64-1);
2. Acetylene (CAS 74-86-2);
3. Ammonia (CAS 7664-41-7);
4. Antimony (CAS 7440-36-0);
5. Benzaldehyde (CAS 100-52-7);
6. Benzoin (CAS 119-53-9);
7. 1-Butanol (CAS 71-36-3);
8. 2-Butanol (CAS 78-92-2);
9. Iso-Butanol (CAS 78-83-1);
10. Tert-Butanol (CAS 75-65-0);
11. Calcium carbide (CAS 75-20-7);
12. Carbon monoxide (CAS 630-08-0);
13. Chlorine (CAS 7782-50-5);
14. Cyclohexanol (CAS 108-93-0);
15. Dicyclohexylamine (CAS 101-83-7);
16. Ethanol (CAS 64-17-5);

17. Ethylene (CAS 74-85-1);
18. Ethylene oxide (CAS 75-21-8);
19. Fluoroapatite (CAS 1306-05-4);
20. Hydrogen chloride (CAS 7647-01-0);
21. Hydrogen sulfide (CAS 7783-06-4);
22. Mandelic acid (CAS 90-64-2);
23. Methanol (CAS 67-56-1);
24. Methyl chloride (CAS 74-87-3);
25. Methyl iodide (CAS 74-88-4);
26. Methyl mercaptan (CAS 74-93-1);
27. Monoethyleneglycol (CAS 107-21-1);
28. Oxalyl chloride (CAS 79-37-8);
29. Potassium sulphide (CAS 1312-73-8);
30. Potassium thiocyanate (CAS 333-20-0);
31. Sodium hypochlorite (CAS 7681-52-9);
32. Sulphur (CAS 7704-34-9);
33. Sulphur dioxide (CAS 7446-09-5);
34. Sulphur trioxide (CAS 7446-11-9);
35. Thiophosphoryl chloride (CAS 3982-91-0);
36. Tri-isobutyl phosphite (CAS 1606-96-8);
37. White phosphorus (CAS 12185-10-3);
38. Yellow phosphorus (CAS 7723-14-0);
39. Mercury (CAS 7439-97-6);
40. Barium chloride (CAS 10361-37-2);
41. Sulphuric acid (CAS 7664-93-9);
42. 3,3-dimethyl-1-butene (CAS 558-37-2);
43. 2,2-dimethylpropanal (CAS 630-19-3);
44. 2,2-dimethylpropylchloride (CAS 753-89-9);
45. 2-methylbutene (CAS 26760-64-5);
46. 2-chloro-3-methylbutane (CAS 631-65-2);
47. 2,3-dimethyl–2,3-butanediol (CAS 76-09-5);
48. 2-methyl-2-butene (CAS 513-35-9);

49. Butyl lithium (CAS 109-72-8);
50. Bromo(methyl)magnesium (CAS 75-16-1);
51. Formaldehyde (CAS 50-00-0);
52. Diethanolamine (CAS 111-42-2);
53. Dimethylcarbonate (CAS 616-38-6);
54. Methyldiethanolamine hydrochloride (CAS 54060-15-0);
55. Diethylamine hydrochloride (CAS 660-68-4);
56. Diisopropylamine hydrochloride (CAS 819-79-4);
57. 3-Quinuclidinone hydrochloride (CAS 1193-65-3);
58. 3-Quinuclidinol hydrochloride (CAS 6238-13-7);
59. (R)-3- Quinuclidinol hydrochloride (CAS 42437-96-7);
60. N,N-Diethylaminoethanol hydrochloride (CAS 14426-20-1);
61. Dialkyl(≤C10) chlorophosphates;
62. Dialkyl(≤C10) fluorophosphates;
63. N,N-Methylisopropylacetamidine (CAS 1339185-57-7);
64. N,N-Methylethylacetamidine (CAS 1339632-40-4);
65. N,N-Ethylisopropylacetamidine (CAS 1339156-10-3);
66. N,N-Methylpropylacetamidine (CAS 1344238-28-3);
67. N,N-Ethylpropylacetamidine (CAS 1339737-43-7);
68. N,N-Isopropylpropylacetamidine (CAS 1341389-98-7);
69. N,N-Methylethylpropanamidine (CAS 1339424-26-8);
70. N,N-Ethylisopropylpropanamidine (CAS 1344354-09-1);
71. N,N-Methylpropylpropanamidine (CAS 1340216-25-2);
72. N,N-Ethylpropylpropanamidine (CAS 1341493-60-4);
73. N,N-Isopropylpropylpropanamidine (CAS 1343225-93-3);
74. N,N-Methylisopropylpropanamidine (CAS 1339042-55-5);
75. N,N-Methylethylbutanamidine (CAS 1341049-51-1);
76. N,N-Methylpropylbutanamidine (CAS 1343721-02-7);
77. N,N-Ethylpropylbutanamidine (CAS 1343806-12-1);
78. N,N-Isopropylpropylbutanamidine (CAS 1343316-02-8);
79. N,N-Methylisopropylbutanamidine (CAS 1340219-94-4);
80. N,N-Ethylisopropylbutanamidine (CAS 1342204-10-7);

81. N,N-Methylethylisobutanamidine (CAS 1342365-47-2);

82. N,N-Ethylpropylisobutanamidine (CAS 1342566-58-8);

83. N,N-Methylpropylisobutanamidine (CAS 1342270-21-6);

84. N,N-Isopropylpropylisobutanamidine (CAS 1342156-11-9);

85. N,N-Methylisopropylisobutanamidine (CAS 1341992-96-8);

86. N,N-Ethylisopropylisobutanamidine (CAS 1339048-76-8);

87. N,N-Dimethylacetamidine hydrobromide (CAS 1801188-12-4);

88. N,N-Dimethylacetamidine hydrochloride (CAS 2909-15-1);

89. N,N-Diethylacetamidine hydrochloride (CAS 91400-32-7);

90. N,N-Diethylacetamidine hydrobromide (CAS 78053-54-0);

91. N,N-Dimethylpropanamidine dihydrochloride (CAS 79972-73-9); or

92. N,N-Dimethylpropanamidine hydrochloride (CAS 56776-15-9).

X.C.IX.002 Fentanyl and its derivatives Alfentanil, Sufentanil, Remifentanil, Carfentanil, and salts thereof.

Note : X.C.IX.002 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.

X.C.IX.003 Chemical precursors to Central Nervous System Acting Chemicals, as follows:

a. 4-anilino-N-phenethylpiperidine (CAS 21409-26-7); or

b.N-phenethyl-4-piperidone (CAS 39742-60-4).

Notes:

1. *X.C.IX.003 does not control "chemical mixtures" containing one or more of the chemicals specified in entry X.C.IX.003 in which no individually specified chemical constitutes more than 1 % by the weight of the mixture.*
2. *X.C.IX.003 does not control products identified as consumer goods packaged for retail sale for personal use or packaged for individual use.*

X.C.IX.004 Fibrous and filamentary materials, not controlled by 1C010 or 1C210 ([21]), for use in "composite" structures and with a specific modulus of 3,18 x 10^6 m or greater and a specific tensile strength of 7,62 x 10^4 m or greater.

X.C.IX.005 "Vaccines", "immunotoxins", "medical products", "diagnostic and food testing kits", as follows (see List of Items controlled):

a."Vaccines" containing, or designed for use against, items controlled by 1C351, 1C353 or 1C354;

b. "Immunotoxins" containing items controlled by 1C351.d; or

c."Medical products" that contain any of the following:

1. "Toxins" controlled by 1C351.d (except for botulinum toxins controlled by 1C351.d.1, conotoxins controlled by 1C351.d.3, or items controlled for CW reasons under 1C351.d.4 or .d.5); or

2. 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.1 or conotoxins controlled by 1C351.d.3);

d. "Medical products" not controlled by X.C.IX.005.c that contain any of the following:

1. Botulinum toxins controlled by 1C351.d.1;

2. Conotoxins controlled by 1C351.d.3; or

3. Genetically modified organisms or genetic elements controlled by 1C353.a.3 that contain, or code for, botulinum toxins controlled by 1C351.d.1 or conotoxins controlled by 1C351.d.3; or

e. "Diagnostic and food testing kits" containing items controlled by 1C351.d (except for items controlled for CW reasons under 1C351.d.4 or .d.5).

Technical Notes:

1. *"Medical products" are: (1) pharmaceutical formulations designed for testing and human (or veterinary) administration in the treatment of medical conditions, (2) pre-packaged for distribution as clinical or medical products, and (3) approved by the European Medicines Agency (EMA) either to be marketed as clinical or medical products or for use as research new drug.*
2. *"Diagnostic and food testing kits" are specifically developed, packaged and marketed for diagnostic or public health purposes. Biological toxins in any other configuration, including bulk shipments, or for any other end-uses are controlled by 1C351.*

X.C.IX.006 Commercial charges and devices containing energetic materials, other than those specified in the CML or in Regulation (EU) 2021/821, and nitrogen trifluoride in a gaseous state (see List of Items Controlled):

a. Shaped charges specially designed for oil well operations, utilizing one charge functioning along a single axis, that upon detonation produce a hole, and

1. Contain any formulation of "controlled materials";

2. Have only a uniform shaped conical liner with an included angle of 90 degrees or less;

3. Contain more than 0,010 kg but less than or equal to 0,090 kg of "controlled materials"; and

4. Have a diameter not exceeding 114,3 cm;

b. Shaped charges specially designed for oil well operations containing less than or equal to 0,010 kg of "controlled materials";

c. Detonation cord or shock tubes containing less than or equal to 0,064 kg/m of "controlled materials";

d. Cartridge power devices, that contain less than or equal to 0,70 kg of "controlled materials" in the deflagration material;

e. Detonators (electric or nonelectric) and assemblies thereof, that contain less than or equal to 0,01 kg of "controlled materials";

f. Igniters, that contain less than or equal to 0,01 kg of "controlled materials";

g. Oil well cartridges, that contain less than or equal to 0,015 kg of controlled "energetic materials";

h. Commercial cast or pressed boosters containing less than or equal to 1,0 kg of "controlled materials";

i. Commercial prefabricated slurries and emulsions containing less than or equal to 10,0 kg and less than or equal to 35 % by weight of ML8 "controlled materials";

j. Cutters and severing tools containing less than or equal to 3,5 kg of "controlled materials";

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";

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"; or

Note : X.C.IX.006.l includes automotive safety devices; extinguishing systems; cartridges for riveting guns; explosive charges for agricultural, oil and gas operations, sporting goods, commercial mining, or public works purposes; and delay tubes used in the assembly of commercial explosive devices.

m. Nitrogen trifluoride (NF_3) in a gaseous state.

Notes:

1. *"Controlled materials" means controlled energetic materials (see 1C011, 1C111, 1C239 or ML8).*
2. *Nitrogen trifluoride when not in a gaseous state is controlled under ML8.d by the CML.*

X.C.IX.007 Mixtures not controlled by 1C350 or 1C450 (22) that contain chemicals controlled by 1C350 or 1C450 and medical, analytical, diagnostic, and food testing kits not controlled by 1C350 or 1C450 that contain chemicals controlled by 1C350, as follows (see List of Items Controlled):

a. Mixtures containing the following concentrations of precursor chemicals controlled by 1C350:

1. Mixtures containing 10 % or less, by weight, of any single CWC Schedule 2 chemical controlled by 1C350;

2. Mixtures containing less than 30 %, by weight, of:

a. Any single CWC Schedule 3 chemical controlled by 1C350; or

b. Any single non-CWC precursor chemical controlled by 1C350;

b. Mixtures containing the following concentrations of toxic or precursor chemicals controlled by 1C450:

1. Mixtures containing the following concentrations of CWC Schedule 2 chemicals controlled by 1C450:

a. Mixtures containing 1 % or less, by weight, of any single CWC Schedule 2 chemical controlled by 1C450.a.1 and a.2 (i.e., mixtures containing Amiton or PFIB); or

b. Mixtures containing 10 % or less, by weight, of any single CWC Schedule 2 chemical controlled by 1C450.b.1, b.2, b.3, b.4, b.5, or b.6;

2. Mixtures containing less than 30 %, by weight, of any single CWC Schedule 3 chemical controlled by 1C450.a.4, a.5., a.6., a.7, or 1C450.b.8;

c. "Medical, analytical, diagnostic, and food testing kits" that contain precursor chemicals controlled by 1C350 in an amount not exceeding 300 grams per chemical.

Technical Note:

For the purpose of this entry, "medical, analytical, diagnostic, and food testing kits" are pre-packaged materials of defined composition that are specifically developed, packaged and marketed for medical, analytical, diagnostic, or public health purposes. Replacement reagents for medical, analytical, diagnostic, and food testing kits described in X.C.IX.007.c are controlled by 1C350 if the reagents contain at least one of the precursor chemicals identified in that entry in concentrations equal to or greater than the control levels for mixtures indicated in 1C350.

X.C.IX.008 Non-fluorinated polymeric substances, not controlled by 1C008 ([23]), as follows (see List of Items Controlled):

a. Polyarylene ether ketones, as follows:

1. Polyether ether ketone (PEEK);

2. Polyether ketone ketone (PEKK);

3. Polyether ketone (PEK); or

4. Polyether ketone ether ketone ketone (PEKEKK);

b. Not used.

X.C.IX.009 Specific materials, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled):

a. Hardened steel and tungsten carbide precision ball bearings (3 mm or greater diameter);

b.304 and 316 stainless steel plate, other than those specified in the CML or in Regulation (EU) 2021/821;

c. Monel plate;

d. Tributyl phosphate (CAS 126-73-8);

e.Nitric acid (CAS 7697-37-2) in concentrations of 20 % weight or greater;

f. Fluorine (CAS 7782-41-4); or

g.Alpha-emitting radionuclides, other than those specified in the CML or in Regulation (EU) 2021/821.

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;

b. Filament yarn or monofilaments;

c. Filament tows;

d. Rovings;

e. Staple or chopped fibres;

f. Fabrics;

g. Pulp or flocks.

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.

Notes : For the purpose of X.C.IX.011, nanomaterial means a material that meets at least one of the following criteria:

1. *Consists of particles, with one or more external dimensions in the size range 1 - 100 nm for more than 1 % of their number size distribution;*
2. *Has internal or surface structures in one or more dimensions in the size range 1 - 100 nm; or*
3. *Has a specific surface area by volume greater than 60 m^2/cm^3, excluding materials consisting of particles with a size lower than 1 nm.*

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 individual metal or compound specified in this entry constitutes more than 5 % by the weight of the mixture.

X.C.IX.013 Tungsten, tungsten carbide and alloys, not controlled by 1C117 or 1C226 ([24]), containing more than 90 % tungsten by weight.

Note 1 : For the purpose of the control X.C.IX.013, wire is excluded.

Note 2 : For the purpose of the control X.C.IX.013, surgical or medical instruments are excluded.

X.C.IX.014 Lithium and lithium compounds, as follows:

a. Lithium (CAS 7439-93-2);

b. Lithium carbonate (CAS 554-13-2);

c. Lithium hydroxide (CAS 1310-65-2 and CAS 1310-66-3);

d. Lithium oxide (CAS 12057-24-8);

e. Lithium cobalt oxide (CAS 12190-79-3);

f. Lithium iron phosphate (CAS 15365-14-7);

g. Lithium manganese oxide (CAS 12057-17-9);

h. Lithium nickel manganese cobalt oxide (CAS 346417-97-8); or

i. Lithium titanate (CAS 12031-82-2).

X.C.IX.015 Ultra-High-Molecular-Weight Polyethylene (UHMWPE), not controlled by 1C010 or 1C210 ([25]), presented in any of the following forms:

a. Primary forms;

b. Filament yarn or monofilaments;

c. Filament tows;

d. Rovings;

e. Staple or chopped fibres;

f. Fabrics;

g. Pulp or flocks.

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.

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.

X.E.IX.002 "Technology" for the "development", "production", or "use" of nanomaterials controlled by X.C.IX.011.

Category X – Materials Processing

X.A.X.001 Explosives or detonator detection equipment, both bulk and trace based, consisting of an automated device, or combination of devices for automated decision making to detect the presence of different types of explosives, explosive residue, or detonators; and components, other than those specified in the CML or in Regulation (EU) 2021/821:

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 gamma resonance absorption), or electromagnetic techniques (e.g., quadropole resonance and dielectrometry);

b. Not used;

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.

Note : Explosives or detonation detection equipment in X.A.X.001 includes equipment for screening people, documents, baggage, other personal effects, cargo and/or mail.

Technical Notes:

1. *"Automated decision making" is the ability of the equipment to detect explosives or detonators at the design or operator- selected level of sensitivity and provide an automated alarm when explosives or detonators at or above the sensitivity level are detected.*
2. *This entry does not control equipment that depends on operator interpretation of indicators such as inorganic/organic color mapping of the items(s) being scanned.*
3. *Explosives and detonators include commercial charges and devices controlled by X.C.VIII.004 and X.C.IX.006 and energetic materials controlled by 1C011, 1C111 and 1C239* [26].

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.

Note : Concealed object detection equipment includes but is not limited to equipment for screening people, documents, baggage, other personal effects, cargo and/or mail.

Technical Note:

The range of frequencies span what is generally considered as the millimetre-wave, submillimetre-wave and terahertz frequency regions.

X.A.X.003 Bearings and bearing systems not controlled by 2A001 (see List of Items Controlled):

a. Ball bearings or Solid ball bearings, having tolerances specified by the manufacturer in accordance with ABEC 7, ABEC 7P, or ABEC 7T or ISO Standard Class 4 or better (or equivalents) and having any of the following characteristics;

1. Manufactured for use at operating temperatures above 573 K (300 °C) either by using special materials or by special heat treatment; or

2. With lubricating elements or component modifications that, according to the manufacturer's specifications, are specially designed to enable the bearings to operate at speeds exceeding 2,3 million "DN";

b. Solid tapered roller bearings, having tolerances specified by the manufacturer in accordance with ANSI/AFBMA Class 00 (inch) or Class A (metric) or better (or equivalents) and having either of the following characteristics:

1. With lubricating elements or component modifications that, according to the manufacturer's specifications, are specially designed to enable the bearings to operate at speeds exceeding 2,3 million "DN"; or

2. Manufactured for use at operating temperatures below 219 K (– 54 °C) or above 423 K (150 °C);

c. Gas-lubricated foil bearing manufactured for use at operating temperatures of 561 K (288 °C) or higher and a unit load capacity exceeding 1 MPa;

d. Active magnetic bearing systems;

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).

Technical Notes:

1. *"DN" is the product of the bearing bore diameter in mm and the bearing rotational velocity in rpm.*

2. *Operating temperatures include those temperatures obtained when a gas turbine engine has stopped after operation.*

X.A.X.004 Piping, fittings and valves made of, or lined with stainless, copper-nickel alloy or other alloy steel containing 10 % or more nickel and/or chromium:

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;

b. Pipe valves having all of the following characteristics that are not controlled by 2B350.g ([27]):

1. A pipe size connection of 200 mm or more inside diameter; and

2. Rated at 10,3 MPa or more.

Notes:

1. *See X.D.X.005 for "software" for items controlled under this entry.*
2. *See 2E001 ("development"), 2E002 ("production"), and X.E.X.003 ("use") for technology for items controlled under this entry.*
3. *See related controls 2A226, 2B350 and X.B.X.010.*

X.A.X.005 Pumps designed to move molten metals by electromagnetic forces.

Notes:

1. *See X.D.X.005 for "software" for items controlled under this entry.*
2. *See 2E001 ("development"), 2E002 ("production"), and X.E.X.003 ("use") for "technology" for items controlled under this entry.*
3. *Pumps for use in liquid-metal-cooled reactors are controlled by 0A001.*

X.A.X.006 "Portable electric generators" and specially designed components.

Technical Note:

"Portable electric generators" – The generators that are in X.A.X.006 are portable – 2 268 kg or less on wheels or transportable in a 2,5 tonnes truck without a special set up requirement.

X.A.X.007 Specific processing equipment, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled):

a. Bellows sealed valves;

b. Not used.

X.B.X.001 "Continuous flow reactors" and their "modular components".

Technical Notes:

1. *For the purposes of X.B.X.001, "continuous flow reactors" consist in plug and play systems where reactants are continuously fed into the reactor and the resultant product is collected at the outlet.*
2. *For purposes of X.B.X.001, "modular components" are fluidic modules, liquid pumps, valves, packed-bed modules, mixer modules, pressure gauges, liquid-liquid separators, etc.*

X.B.X.002 Nucleic acid assemblers and synthesizers not controlled by 2B352.i, which are partly or entirely automated, and designed to generate nucleic acids greater than 50 bases.

X.B.X.003 Automated peptide synthesizers capable to work under controlled atmosphere conditions.

X.B.X.004 Numerical control units for machine tools and “numerically controlled” machine tools, other than those specified in the CML or in Regulation (EU) 2021/821 (see List of Items Controlled):

a. “Numerical control” units for machine tools:

1. Having four interpolating axes that can be coordinated simultaneously for contouring control; or

2. Having two or more axes that can be coordinated simultaneously for contouring control and a minimum programmable increment better (less) than 0,001 mm;

3. “Numerical control” units for machine tools having two, three or four interpolating axes that can be coordinated simultaneously for contouring control, and capable of receiving directly (on-line) and processing computer-aided-design (CAD) data for internal preparation of machine instructions; or

b. Motion control boards specially designed for machine tools and having any of the following characteristics:

1. Interpolation in more than four axes;

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:

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. 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; or

3. Capable of receiving and processing CAD data for internal preparation of machine instructions;

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

d. Machine tools, as follows, for removing or cutting metals, ceramics or composites, that, according to the manufacturer's technical specifications, can be equipped with electronic devices for simultaneous contouring control in two or more axes:

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

d. The positioning accuracies, with all compensations available, are less (better) than: 0,001° on any rotary axis;

2. Electrical discharge machines (EDM) of the wire feed type that have five or more axes that can be coordinated simultaneously for contouring control.

X.B.X.005 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;

Technical Note:

The bidirectional slide positioning repeatability (R) of an axis is the maximum value of the repeatability of positioning at any position along or around the

axis determined using the procedure and under the conditions specified in part 2.11 of ISO 230/2: 1988.

b.Fly cutting machines having all of the following characteristics:

1.Spindle "run-out" and "camming" less (better) than 0,0004 mm TIR; and

2.Angular deviation of slide movement (yaw, pitch and roll) less (better) than 2 seconds of arc, TIR, over full travel.

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.

X.B.X.007 Dimensional inspection or measuring systems or equipment not controlled by 2B006 or 2B206, as follows (see List of Items Controlled):

a.Manual dimensional inspection machines, having both of the following characteristics:

1. Two or more axes; and

2.A measurement uncertainty equal to or less (better) than (3 + L/300) μm in any axes (L measured length in mm).

X.B.X.008 "Robots" not controlled by 2B007 or 2B207 that are capable of employing feedback information in real-time processing from one or more sensors to generate or modify programs or to generate or modify numerical program data.

X.B.X.009 Assemblies, circuit boards or inserts specially designed for machine tools controlled by X.B.X.004, or for equipment controlled by X.B.X.006, X.B.X.007 or X.B.X.008:

a.Spindle assemblies, consisting of spindles and bearings as a minimal assembly, with radial ("run-out") or axial ("camming") axis motion in one revolution of the spindle less (better) than 0,0006 mm total indicator reading (TIR);

b.Single point diamond cutting tool inserts, having all of the following characteristics:

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.

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.

Technical Note:

This entry does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine-tools, dimensional inspection machines or similar equipment.

X.B.X.010 Specific processing equipment, other than those specified in the CML or in Regulation (EU) 2021/821, as follows (see List of Items Controlled):

a. Isostatic presses, other than those specified in the CML or in Regulation (EU) 2021/821;

b. Bellows manufacturing equipment, including hydraulic forming equipment and bellows forming dies;

c. Laser welding machines;

d. MIG welders;

e. E-beam welders;

f. Monel equipment, including valves, piping, tanks and vessels;

g. 304 and 316 stainless steel valves, piping, tanks and vessels;

Note : Fittings are considered part of piping for purposes of X.B.X.010.g.

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;

i. Electroplating equipment designed for coating parts with nickel or aluminium;

j. Pumps designed for industrial service and for use with an electrical motor of 5 HP or greater;

k. Vacuum valves, piping, flanges, gaskets and related equipment specially designed for use in high-vacuum service, other than those specified in the CML or in Regulation (EU) 2021/821;

l. Spin forming and flow forming machines, other than those specified in the CML or in Regulation (EU) 2021/821;

m. Centrifugal multiplane balancing machines, other than those specified in the CML or in Regulation (EU) 2021/821; or

n. Austenitic stainless steel plate, valves, piping, tanks and vessels.

X.B.X.011 Floor-mounted fume hoods (walk-in style) with a minimum nominal width of 2,5 metres.

X.B.X.012 Class II biosafety cabinets and glove boxes.

X.B.X.013 Batch centrifuges with a rotor capacity of 4 litres or greater, usable with biological materials.

X.B.X.014 Fermenters with an internal volume of 10–20 litres, usable with biological materials.

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 meet performance

parameters of the control 2B350 ([28]), regardless of their materials of construction.

Note : For the purpose of the control X.B.X.015, plumbing valves and storage tanks with total internal (geometric) volume less than 1 m^3 (1 000 litres) designed for domestic water or gas systems are excluded.

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.

X.B.X.017 Vacuum pumps with a manufacturer's specified maximum flow-rate greater than 1 m^3/h (under standard temperature and pressure conditions), casings (pump bodies), preformed casing-liners, impellers, rotors, and jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemicals being processed are made from controlled materials.

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.

X.B.X.019 Whole chlor-alkali electrolysis cells – mercury, diaphragm, and membrane.

X.B.X.020 Titanium electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.

X.B.X.021 Nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.

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.

X.B.X.023 Asbestos diaphragms specially designed for use in chlor-alkali cells.

X.B.X.024 Fluoropolymer based diaphragms specially designed for use in chlor-alkali cells.

X.B.X.025 Fluoropolymer based ion exchange membranes specially designed for use in chlor-alkali cells.

X.B.X.026 Compressors specially designed to compress wet or dry chlorine, regardless of material of construction.

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.

X.D.X.001 "Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by X.A.X.001.

X.D.X.002 "Software""required" for the "development", "production" or "use" of concealed object detection equipment controlled by X.A.X.002.

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.

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.

Note: X.D.X.004.a does not control "software" which only provides rescheduling of functionally identical equipment within "flexible manufacturing units" using pre-stored part programs and a pre-stored strategy for the distribution of the part programs.

b. Not used.

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.

Note: See 2E001 ("development") for "technology" for "software" controlled under this entry.

X.D.X.006 "Software" specially designed for the "development" or "production" of portable electric generators controlled by X.A.X.006.

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.

Note: See X.A.X.002 and X.D.X.002 for related commodity and "software" controls.

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.

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.

X.E.X.004 "Technology" for the "use" of portable electric generators controlled by X.A.X.006.

Part B

1. Semiconductor devices

CN Code	Description
8541 10	Diodes, other than photosensitive or light-emitting diodes (LED)
8541 21	Transistors, other than photosensitive transistors with a dissipation rate of less than 1 W
8541 29	Other transistors, other than photosensitive transistors
8541 30	Thyristors, diacs and triacs (excl. photosensitive semiconductor devices)
8541 49	Photosensitive semiconductor devices (excl. Photovoltaic generators and cells)
8541 51	Other semiconductor devices: Semiconductor-based transducers
8541 59	Other semiconductor devices
8541 60	Mounted piezo-electric crystals
8541 90	Semiconductor devices: Parts

2. Electronic integrated circuits, manufacturing and testing equipment

CN Code	Description
3818 00	Chemical elements doped for use in electronics, in the form of discs, wafers or similar forms; chemical compounds doped for use in electronics
8486 10	Machines and apparatus for the manufacture of boules or wafers
8486 20	Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits
8486 40	Machines and apparatus specified in note 11(C) to this chapter
8534 00	Printed 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
8542 31	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits
8542 32	Memories
8542 33	Amplifiers

8542 39	Other Electronic Integrated Circuits
8542 90	Electronic integrated circuits: Parts
8543 20	Signal generators
9027 50	Other instruments and apparatus using optical radiation (UV, visible, IR)
9030 20	Oscilloscopes and oscillographs
9030 32	Multimeters with recording device
9030 39	Instruments and apparatus for measuring or checking voltage, current, resistance or electrical power, with recording device
9030 82	Instruments and apparatus for measuring or checking semiconductor wafers or devices

3. Photographic cameras, sensors and optical components

CN Code	Description
8525 89	Other television cameras, digital cameras and video camera recorders
8529 90	Other parts suitable for use solely or principally with the apparatus of headings 8524 to 8528
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
9013 10	Telescopic sights for fitting to arms; periscopes; telescopes designed to form parts of machines, appliances, instruments or apparatus of this chapter or Section XVI
9013 80	Other optical devices, appliances and instruments
9025 19	Other thermometers and pyrometers, not combined with other instruments
9032 10	Thermostats

4. Other electrical/magnetic components

CN Code	Description
8501 32	DC motors and DC generators of an output exceeding 750 W but not exceeding 75 kW (excluding photovoltaic generators)
8504 31	Transformers having a power handling capacity not exceeding 1 kVA (excluding liquid dielectric transformers)
8504 40	Static converters

8505 11	Permanent magnets and articles intended to become permanent magnets after magnetisation; of metal
8529 10	Aerials and aerial reflectors of all kinds; parts suitable for use therewith
8532 21	Other fixed capacitors of tantalum
8532 22	Aluminium electrolytic fixed electrical capacitors (excluding power capacitors)
8532 24	Ceramic dielectric multilayer capacitors
8533 21	Fixed electrical resistors for a power handling capacity not exceeding 20 W (excluding heating resistors, and fixed carbon resistors)
8533 40	Electrical variable resistors, including rheostats and potentiometers (excluding wirewound variable resistors and heating resistors)
8536 41	Relays, for a voltage not exceeding 60 V
8536 49	Relays for a voltage exceeding 60 V but not exceeding 1 000 V
8536 50	Other switches
8536 69	Plugs and sockets
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
8548 00	Electrical parts of machinery or apparatus, not specified or included elsewhere in Chapter 85

5. Machine tools, additive manufacturing equipment, and related items

CN Code	Description
8205 59 80	Hand tools, including glaziers' diamonds, excluding household tools, and tool for masons, moulders, cement workers, plasterers and painters
8456 11	Machine tools for working any material by removal of material, operated by laser
8457 10	Machining centres for working metal
8458 11	Horizontal lathes, including turning centres, for removing metal, numerically controlled
8466 10	Tool holders, for any type of tool for working in the hand and for machine tools; self-opening dieheads
8485 20	Machines for additive manufacturing by plastics or rubber deposit

8485 30	Machines for additive manufacturing by plaster, cement, ceramics or glass deposit
8485 90	Parts of machines for additive manufacturing

6. Energetic materials and precursors

CN Code	Description
2829 90	Perchlorates; bromates and perbromates; iodates and periodates
4706 10	Pulps of fibres derived from recovered (waste and scrap) paper or paperboard or of other fibrous cellulosic material: Cotton linters pulp

7. Electronic devices, modules and assemblies

CN Code	Description
8471 50	Processing units other than those of subheading 8471 41 or 8471 49 , whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units
8471 70 98	Other storage units
8471 80	Units for automatic data-processing machines (excl. processing units, input or output units and storage units)
8517 62	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus
8517 69	Other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network
8517 79	Parts of telephone sets, telephones for cellular networks or for other wireless networks and of other apparatus for the transmission or reception of voice, images or other data, excluding aerials and aerial reflectors of all kinds and their parts
8526 91	Radio navigational aid apparatus
9014 20	Instruments and appliances for aeronautical or space navigation (other than compasses)
9014 80	Other navigational instruments and appliances

8. Chemicals, metals, alloys, composites and other advanced materials

CN Code	Description
8112 41	Unwrought rhenium and rhenium waste, scrap and powders
8112 49	Rhenium, other than unwrought, waste, scrap and powders

9. Machinery parts, assemblies and components

CN Code	Description
8482 10	Ball bearings
8482 20	Tapered roller bearings, including cone and tapered roller assemblies
8482 30	Spherical roller bearings
8482 50	Other cylindrical roller bearings, including cage and roller assemblies

Vedlegg XXI skal lyde:

Vedlegg XXI. Liste over varer og teknologi omtalt i § 17g

CN code	Name of the good
0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked crustaceans, whether in shell or not, whether or not cooked before or during the smoking process; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine
1604 31 00	Caviar
1604 32 00	Caviar substitutes
2208	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol; spirits, liqueurs and other spirituous beverages
2303	Residues of starch manufacture and similar residues, beet-pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste, whether or not in the form of pellets
2402	Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes
2523	Portland cement, aluminous cement, slag cement, supersulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers
2701	Coal; briquettes, ovoids and similar solid fuels manufactured from coal
2702	Lignite, whether or not agglomerated, excluding jet
2703	Peat, including peat litter, whether or not agglomerated
2704	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon

2705	Coal gas, water gas, producer gas and similar gases, other than petroleum gases and other gaseous hydrocarbons
2706	Tar distilled from coal, from lignite or from peat, and other mineral tars, whether or not dehydrated or partially distilled, including reconstituted tars
2707	Oils and other products of the distillation of high temperature coal tar; similar products in which the weight of the aromatic constituents exceeds that of the non-aromatic constituents
2708	Pitch and pitch coke, obtained from coal tar or from other mineral tars
2711 12	Propane, liquefied
2711 13	Butanes, liquefied
2711 14	Ethylene, propylene, butylene and butadiene, liquefied
2711 19	Gaseous hydrocarbons, liquified, n.e.s.
2712	Petroleum jelly, paraffin wax, micro- crystalline petroleum wax, slack wax, ozokerite, lignite wax, peat wax, other mineral waxes, and similar products obtained by synthesis or by other processes, whether or not coloured
2713	Petroleum coke, petroleum bitumen and other residues of petroleum oil or of oil obtained from bituminous minerals
2714	Bitumen and asphalt, natural; bituminous or oil-shale and tar sands; asphaltites and asphaltic rocks
2715	Bituminous mastics, cut-backs and other bituminous mixtures based on natural asphalt, on natural bitumen, on petroleum bitumen, on mineral tar or on mineral tar pitch
2803	Carbon (carbon blacks and other forms of carbon not elsewhere specified or included)
2811	Inorganic acids and inorganic oxygen compounds of non-metals (excl. hydrogen chloride (hydrochloric acid), chlorosulphuric acid, sulphuric acid, oleum, nitric acid, sulphonitric acids, diphosphorus pentaoxide, phosphoric acid, polyphosphoric acids, oxides of boron and boric acids)
2818	Artificial corundum, whether or not chemically defined; aluminium oxide; aluminium hydroxide
ex 2825	Hydrazine and hydroxylamine and their inorganic salts; other inorganic bases; other metal oxides, hydroxides and peroxides, except for CN codes 28252000 and 28253000
2834	Nitrites; nitrates
ex 2835	Phosphinates (hypophosphites), phosphonates (phosphites) and phosphates; polyphosphates, whether or not chemically defined, except for CN code 28352600

2836	Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate
ex 2901	Acyclic hydrocarbons, except for CN code 29011000
2902	Cyclic hydrocarbons
2903	Halogenated derivatives of hydrocarbons
2905	Acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives
2907	Phenols; phenol-alcohols
2909	Ethers, ether-alcohols, ether-phenols, ether-alcohol-phenols, alcohol peroxides, ether peroxides, acetal and hemiacetal peroxides, ketone peroxides (whether or not chemically defined), and their halogenated, sulphonated, nitrated or nitrosated derivatives
2914	Ketones and quinones, whether or not with other oxygen function, and their halogenated, sulphonated, nitrated or nitrosated derivatives
2915	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives
2917	Polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives
2922	Oxygen-function amino-compounds
2923	Quaternary ammonium salts and hydroxides; lecithins and other phosphoaminolipids, whether or not chemically defined
2931	Separate chemically defined organo-inorganic compounds (excl. organo-sulphur compounds and those of mercury)
2933	Heterocyclic compounds with nitrogen hetero-atom[s] only
3104 20	Potassium chloride
3105 20	Mineral or chemical fertilisers containing the three fertilising elements nitrogen, phosphorus and potassium
3105 60	Mineral or chemical fertilisers containing the two fertilising elements phosphorus and potassium
ex 3105 90 20	Other fertilising containing photassium chloride
ex 3105 90 80	Other fertilising containing photassium chloride
3301	Essential oils, whether or not terpeneless, incl. concretes and absolutes; resinoids; extracted oleoresins; concentrates of essential oils in fats, fixed oils, waxes or the like, obtained by enfleurage or maceration; terpenic by-

	products of the deterpenation of essential oils; aqueous distillates and aqueous solutions of essential oils
3304	Beauty or make-up preparations and preparations for the care of the skin, incl. sunscreen or suntan preparations (excl. medicaments); manicure or pedicure preparations
3305	Preparations for use on the hair
3306	Preparations for oral or dental hygiene, incl. denture fixative pastes and powders; yarn used to clean between the teeth (dental floss), in individual retail packages
3307	Shaving preparations, incl. pre-shave and aftershave products, personal deodorants, bath and shower preparations, depilatories and other perfumery, toilet or cosmetic preparations, n.e.s.; prepared room deodorisers, whether or not perfumed or having disinfectant properties
3401	Soap; organic surface-active products and preparations for use as soap, in the form of bars, cakes, moulded pieces or shapes, whether or not containing soap; organic surface-active products and preparations for washing the skin, in the form of liquid or cream and put up for retail sale, whether or not containing soap; paper, wadding, felt and nonwovens, impregnated, coated or covered with soap or detergent
3402	Organic surface-active agents (excl. soap); surface-active preparations, washing preparations, incl. auxiliary washing preparations, and cleaning preparations, whether or not containing soap (excl. those of heading 3401)
3404	Artificial waxes and prepared waxes
3801	Artificial graphite; colloidal or semi-colloidal graphite; preparations based on graphite or other carbon in the form of pastes, blocks, plates or other semi-manufactures
3811	Anti-knock preparations, oxidation inhibitors, gum inhibitors, viscosity improvers, anti-corrosive preparations and other prepared additives, for mineral oils, incl. gasoline, or for other liquids used for the same purposes as mineral oils
3812	Prepared rubber accelerators; compound plasticisers for rubber or plastics, not elsewhere specified or included; anti-oxidising preparations and other compound stabilisers for rubber or plastics
3817	Mixed alkylbenzenes and mixed alkylnaphthalenes produced by the alkylation of benzene and naphthalene (excl. mixed isomers of cyclic hydrocarbons)
3819	Hydraulic brake fluids and other prepared liquids for hydraulic transmission not containing petroleum oil or bituminous mineral oil, or containing < 70 % petroleum oil or bituminous mineral oil by weight

3823	Industrial monocarboxylic fatty acids; acid oils from refining; industrial fatty alcohols
3824	Prepared binders for foundry moulds or cores; chemical products and preparations for the chemical or allied industries, incl. mixtures of natural products, n.e.s.
3901	Polymers of ethylene, in primary forms
3902	Polymers of propylene or of other olefins, in primary forms
3903	Polymers of styrene, in primary forms
3904	Polymers of vinyl chloride or of other halogenated olefins, in primary forms
3907	Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms
3908	Polyamides, in primary forms
3916	Monofilament of which any cross-sectional dimension > 1 mm, rods, sticks and profile shapes, of plastics, whether or not surface-worked but not further worked
3917	Tubes, pipes and hoses, and fittings therefor, e.g. joints, elbows, flanges, of plastics
3919	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls (excl. floor, wall and ceiling coverings of heading 3918)
3920	Plates, sheets, film, foil and strip, of non-cellular plastics, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
3921	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, or of cellular plastic, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
3923	Articles for the conveyance or packaging of goods, of plastics; stoppers, lids, caps and other closures, of plastics
3925	Builders’ ware of plastics, n.e.s.
3926	Articles of plastics and articles of other materials of heading 3901 to 3914 , n.e.s.

4002	Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of natural rubber, balata, gutta-percha, guayule, chicle or similar types of natural rubber with synthetic rubber or factice, in primary forms or in plates, sheets or strip
4011	New pneumatic tyres, of rubber
4107	Leather further prepared after tanning or crusting (incl. parchment-dressed leather), of bovine (incl. buffalo) or equine animals, without hair on, whether or not split (excl. chamois leather, patent leather and patent laminated leather, and metallised leather)
4202	Trunks, suitcases, vanity cases, executive-cases, briefcases, school satchels, spectacle cases, binocular cases, camera cases, musical instrument cases, gun cases, holsters and similar containers; travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, handbags, shopping-bags, wallets, purses, map-cases, cigarette-cases, tobacco-pouches, tool bags, sports bags, bottle-cases, jewellery boxes, powder-boxes, cutlery cases and similar containers, of leather or of composition leather, of sheeting of plastics, of textile materials, of vulcanised fibre or of paperboard, or wholly or mainly covered with such materials or with paper
4301	Raw furskins, incl. heads, tails, paws and other pieces or cuttings suitable for use in furriery (excl. raw hides and skins of heading 4101 , 4102 or 4103)
44	Wood and articles of wood; wood charcoal
4703	Chemical wood pulp, soda or sulphate (excl. dissolving grades)
4705	Wood pulp obtained by a combination of mechanical and chemical pulping processes
4801	Newsprint as specified in note 4 to Chapter 48, in rolls of a width > 28 cm or in square or rectangular sheets with one side > 28 cm and the other side > 15 cm in the unfolded state
4802	Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punchcards and punch-tape paper, in rolls or in square or rectangular sheets, of any size, and handmade paper and paperboard (excl. newsprint of heading 4801 and paper of heading 4803)
4803	Toilet or facial tissue stock, towel or napkin stock and similar paper for household or sanitary purposes, cellulose wadding and webs of cellulose fibres, whether or not creped, crinkled, embossed, perforated, surface-coloured, surface-decorated or printed, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state

4804	Uncoated kraft paper and paperboard, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state (excl. goods of heading 4802 or 4803)
4805	Other paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, not worked other than as specified in note 3 to this chapter, n.e.s.
4810	Paper and paperboard, coated on one or both sides with kaolin (China clay) or other inorganic substances, with or without a binder, and with no other coating, whether or not surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. all other coated papers and paperboards)
4811	Paper, paperboard, cellulose wadding and webs of cellulose fibres, coated, impregnated, covered, surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. goods of heading 4803 , 4809 and 4810)
4818	Toilet paper and similar paper, cellulose wadding or webs of cellulose fibres, of a kind used for household or sanitary purposes, in rolls of a width <= 36 cm, or cut to size or shape; handkerchiefs, cleansing tissues, towels, tablecloths, serviettes, bedsheets and similar household, sanitary or hospital articles, articles of apparel and clothing accessories, of paper pulp, paper, cellulose wadding or webs of cellulose fibres
4819	Cartons, boxes, cases, bags and other packing containers, of paper, paperboard, cellulose wadding or webs of cellulose fibres, n.e.s.; box files, letter trays, and similar articles, of paperboard of a kind used in offices, shops or the like
4823	Paper, paperboard, cellulose wadding and webs of cellulose fibres, in strips or rolls of a width <= 36 cm, in rectangular or square sheets of which no side > 36 cm in the unfolded state, or cut to shape other than rectangular or square, and articles of paper pulp, paper, paperboard, cellulose wadding or webs or cellulose fibres, n.e.s.
5402	Synthetic filament yarn, incl. synthetic monofilaments of < 67 decitex (excl. sewing thread and yarn put up for retail sale)
5601	Wadding of textile materials and articles thereof; textile fibres with a length of <= 5 mm “flock”, textile dust and mill neps (excl. wadding and articles thereof impregnated or coated with pharmaceutical substances or put up for retail sale for medical, surgical, dental or veterinary purposes, and products impregnated, coated or covered with perfumes, cosmetics, soaps etc.)
5603	Nonwovens, whether or not impregnated, coated, covered or laminated, n.e.s.

6204	Women’s or girls’ suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts (excl. knitted or crocheted, wind-jackets and similar articles, slips, petticoats and panties, tracksuits, ski suits and swimwear)
6305	Sacks and bags, of a kind used for the packing of goods, of all types of textile materials
6403	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather (excl. orthopaedic footwear, skating boots with ice or roller skates attached, and toy footwear)
6806	Slag-wool, rock-wool and similar mineral wools; exfoliated vermiculite, expanded clays, foamed slag and similar expanded mineral materials; mixtures and articles of heat-insulating, sound-insulating or sound absorbing mineral materials (excl. articles of light concrete, asbestos, asbestos-cement, cellulose fibre-cement or the like, mixtures and other articles of or based on asbestos, and ceramic products)
6807	Articles of asphalt or of similar materials, e.g. petroleum bitumen or coal tar pitch
6808	Panels, boards, tiles, blocks and similar articles of vegetable fibre, of straw or of shavings, chips, particles, sawdust or other waste of wood, agglomerated with cement, plaster or other mineral binders (excl. articles of asbestos-cement, cellulose fibre-cement or the like)
6810	Articles of cement, of concrete or of artificial stone, whether or not reinforced
6814	Worked mica and articles of mica, incl. agglomerated or reconstituted mica, whether or not on a support of paper, paperboard or other materials (excl. electrical insulators, insulating fittings, resistors and capacitors, protective goggles of mica and their glasses, and mica in the form of christmas tree decorations)
6815	Articles of stone or of other mineral substances, incl. carbon fibres, articles of carbon fibres and articles of peat, n.e.s.
6902	Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods (excl. those of siliceous fossil meals or similar siliceous earths)
6907	Ceramic flags and paving, hearth or wall tiles; ceramic mosaic cubes and the like, whether or not on a backing (excl. of siliceous fossil meals or similar siliceous earths, refractory goods, tiles specially adapted as table mats, ornamental articles and tiles specifically manufactured for stoves)
7005	Float glass and surface ground or polished glass, in sheets, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked

7007	Safety glass, consisting of toughened (tempered) or laminated glass
7010	Carboys, bottles, flasks, jars, pots, phials, ampoules and other containers, of glass, of a kind used for the conveyance or packing of goods; preserving jars of glass; stoppers, lids and other closures, of glass
7019	Glass fibres (including glass wool) and articles thereof (for example, yarn, rovings, woven fabrics)
7104	Precious and semi-precious stones, synthetic or reconstructed, whether or not worked or graded but not strung, mounted or set; ungraded synthetic or reconstructed precious or semi-precious stones, temporarily strung for convenience of transport
7106	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form
7112	Waste and scrap of precious metal or of metal clad with precious metal; other waste and scrap containing precious metal or precious-metal compounds, of a kind used principally for the recovery of precious metal (excl. waste and scrap melted down into unworked blocks, ingots, or similar forms)
7115	Articles of precious metal or of metal clad with precious metal, n.e.s.
7201	Pig iron and spiegeleisen, in pigs, blocks or other primary forms
7202	Ferro-alloys
7203	Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or similar forms; iron having a minimum purity by weight of 99,94 %, in lumps, pellets or similar forms
7205	Granules and powders of pig iron, spiegeleisen, iron or steel
7408	Copper wire
7604	Aluminium bars, rods and profiles
7605	Aluminium wire
7606	Aluminium plates, sheets and strip, of a thickness exceeding 0,2 mm
7607	Aluminium foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials), of a thickness (excluding any backing) not exceeding 0,2 mm
7608	Aluminium tubes and pipes
7801	Unwrought lead
8207	Tools, interchangeable, for hand tools, whether or not power-operated, or for machine tools (e.g. for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), incl. dies for drawing or extruding metal, and rock-drilling or earth-boring tools

8212	Non-electric razors and razor blades of base metal, incl. razor blade blanks in strips
8302	Base metal mountings, fittings and similar articles suitable for furniture, doors, staircases, windows, blinds, coachwork, saddlery, trunks, chests, caskets or the like; base metal hat-racks, hat-pegs, brackets and similar fixtures; castors with mountings of base metal; automatic door closers of base metal
8309	Stoppers, caps and lids, incl. crown corks, screw caps and pouring stoppers, capsules for bottles, threaded bungs, bung covers, seals and other packing accessories, of base metal
8407	Spark-ignition reciprocating or rotary internal combustion piston engine
8408	Compression-ignition internal combustion piston engine (diesel or semi-diesel engine)
8409	Parts suitable for use solely or principally with internal combustion piston engine of heading 8407 or 8408
Ex84 11	Turbojets, turbopropellers and other gas turbines with the exception of parts of turbojets or turbopropellers of CN code 8411 91 00
8412	Engines and motors (excl. steam turbines, internal combustion piston engine, hydraulic turbines, water wheels, gas turbines and electric motors); parts thereof
8413	Pumps for liquids, whether or not fitted with a measuring device (excl. ceramic pumps and secretion aspirating pumps for medical use and medical pumps carried on or implanted in the body); liquid elevators (excl. pumps); parts thereof
8414	Air or vacuum pumps (excl. gas compound elevators and pneumatic elevators and conveyors); air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters; parts thereof
8418	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps; parts thereof (excl. air conditioning machines of heading 8415)
8419	Machinery, plant or laboratory equipment whether or not electrically heated (excl. furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilising, pasteurising, steaming, drying, evaporating, vaporising, condensing or cooling (excl. those used for domestic purposes); instantaneous or storage water heaters, non-electric; parts thereof

8421	Centrifuges, incl. centrifugal dryers (excl. those for isotope separation); filtering or purifying machinery and apparatus, for liquids or gases; parts thereof (excl. artificial kidneys)
8422	Dishwashing machines; machinery for cleaning or drying bottles or other containers; machinery for filling, closing, sealing or labelling bottles, cans, boxes, bags or other containers; machinery for capsuling bottles, jars, tubes and similar containers; other packing or wrapping machinery, incl. heat-shrink wrapping machinery; machinery for aerating beverages; parts thereof
8424	Mechanical appliances, whether or not hand-operated, for projecting, dispersing or spraying liquids or powders, n.e.s.; fire extinguishers, charged or not (excl. fire-extinguishing bombs and grenades); spray guns and similar appliances (excl. electric machines and apparatus for hot spraying of metals or sintered metal carbides of heading 8515); steam or sand blasting machines and similar jet projecting machines; parts thereof, n.e.s.
8426	Ships' derricks; cranes, incl. cable cranes (excl. wheel-mounted cranes and vehicle cranes for railways); mobile lifting frames, straddle carriers and works trucks fitted with a crane
8431	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430
8450	Household or laundry-type washing machines, incl. machines which both wash and dry; parts thereof
8455	Metal-rolling mills and rolls therefor; parts of metal-rolling mills
8466	Parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465 , incl. work or tool holders, self-opening dieheads, dividing heads and other special attachments for the machines, n.e.s.; tool holders for any type of tool for working in the hand
8467	Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor; parts thereof
8471	Automatic data-processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, n.e.s.
8474	Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid, incl. powder or paste, form; machinery for agglomerating, shaping or moulding 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; parts thereof

8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter, parts thereof
8479	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter; parts thereof
8480	Moulding boxes for metal foundry; mould bases; moulding patterns; moulds for metal (other than ingot moulds), metal carbides, glass, mineral materials, rubber or plastics (excl. moulds of graphite or other carbons, ceramic or glass moulds and linotype moulds or matrices)
8481	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, incl. pressure-reducing valves and thermostatically controlled valves; parts thereof
8482	Ball or roller bearings (excl. steel balls of heading 7326); parts thereof
8483	Transmission shafts, incl. camshafts and crankshafts, and cranks; bearing housings and plain shaft bearings for machines; gears and gearing; ball or roller screws, gear boxes and other speed changers, incl. torque converters; flywheels and pulleys, incl. pulley blocks, clutches and shaft couplings, incl. universal joints; parts thereof
8487	Machinery parts, n.e.s. in Chapter 84 (excl. parts containing electrical connectors, insulators, coils, contacts or other electrical features)
8501	Electric motors and generators (excl. generating sets)
8502	Electric generating sets and rotary converters
8503	Parts suitable for use solely or principally with electric motors and generators, electric generating sets and rotary converters, n.e.s.
8504	Electrical transformers, static converters, e.g. rectifiers, and inductors; parts thereof
8511	Electrical ignition or starting equipment of a kind used for spark-ignition or compression-ignition internal combustion engines, e.g. ignition magnetos, magneto-dynamos, ignition coils, sparking plugs, glow plugs and starter motors; generators, e.g. dynamos and alternators, and cut-outs of a kind used in conjunction with such engines; parts thereof
8516	Electric instantaneous or storage water heaters and immersion heaters; electric space-heating apparatus and soil-heating apparatus; electro-thermic hairdressing apparatus, e.g. hairdryers, hair curlers and curling tong heaters, and hand dryers; electric smoothing irons; other electro-thermic appliances of a kind used for domestic purposes; electric heating resistors (other than those of heading 8545); parts thereof

8517	Telephone sets, incl. telephones for cellular networks or for other wireless networks; other 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]; parts thereof (excl. than transmission or reception apparatus of heading 8443 , 8525 , 8527 or 8528)
8523	Discs, tapes, solid-state non-volatile storage devices, “smart cards” and other media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices and masters for the production of discs (excl. products of Chapter 37)
8525	Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders
8526	Radar apparatus, radio navigational aid apparatus and radio remote control apparatus
8531	Electric sound or visual signalling apparatus, e.g. bells, sirens, indicator panels, burglar or fire alarms (excl. those for cycles, motor vehicles and traffic signalling); parts thereof
8535	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits, e.g., switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes, for a voltage > 1 000 V (excl. control desks, cabinets, panels etc. of heading 8537)
8536	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits, e.g., switches, relays, fuses, surge suppressors, plugs, sockets, lamp holders and junction boxes, for a voltage <= 1 000 V (excl. control desks, cabinets, panels etc. of heading 8537)
8537	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, incl. those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus (excl. switching apparatus for line telephony or line telegraphy)
8538	Parts suitable for use solely or principally with the apparatus of heading 8535 , 8536 or 8537 , n.e.s.
8539	Electric filament or discharge lamps, incl. sealed beam lamp units and ultraviolet or infra-red lamps; arc lamps; light-emitting diode (LED) lamps; parts thereof
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled in

	modules or made up into panels (excl. photovoltaic generators); light emitting diodes (LED); mounted piezoelectric crystals; parts thereof
8542	Electronic integrated circuits; parts thereof
8543	Electrical machines and apparatus, having individual functions, n.e.s. in Chapter 85 and parts thereof
8544	Insulated (incl. enamelled or anodised) wire, cable (incl. coaxial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors
8545	Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon, with or without metal, of a kind used for electrical purposes
8603	Self-propelled railway or tramway coaches, vans and trucks (excl. those of heading 8604)
8606	Railway or tramway goods vans and wagons (excl. self-propelled and luggage vans and post office coaches)
8701	Tractors (other than tractors of heading 8709)
8703	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars (excl. motor vehicles of heading 8702)
8704	Motor vehicles for the transport of goods, incl. chassis with engine and cab
8716	Trailers and semi-trailers; other vehicles, not mechanically propelled (excl. railway and tramway vehicles); parts thereof, n.e.s.
8802	Powered aircraft (e.g. helicopters and aeroplanes); spacecraft, incl. satellites, and suborbital and spacecraft launch vehicles
8901	Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods
8903	Yachts and other vessels for pleasure or sports; rowing boats and canoes
8904	Tugs and pusher craft
8905	Light-vessels, fire-floats, dredgers, floating cranes, and other vessels the navigability of which is subsidiary to their main function; floating docks; floating or submersible drilling or production platforms
9001	Optical fibres and optical fibre bundles; optical fibre cables (excl. made up of individually sheathed fibres of heading 8544); sheets and plates of polarising material; lenses, incl. contact lenses, prisms, mirrors and other optical elements of any material, unmounted (excl. such elements of glass not optically worked)

9006	Photographic cameras, photographic flashlight apparatus and flashbulbs (excl. discharge lamps of heading 8539)
9013	Liquid crystal devices not constituting articles provided for more specifically in other heading; lasers (excl. laser diodes); other optical appliances and instruments not elsewhere specified in Chapter 90
9014	Direction finding compasses; other navigational instruments and appliances (excl. radio navigational equipment)
9026	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases, e.g. flow meters, level gauges, manometers, heat meters (excl. instruments and apparatus of heading 9014 , 9015 , 9028 or 9032)
9027	Instruments and apparatus for physical or chemical analysis, e.g. polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus; instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light, incl. exposure meters; microtomes
9030	Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities (excl. meters of heading 9028); instruments and apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic or other ionising radiations
9031	Measuring or checking instruments, appliances and machines not elsewhere specified in Chapter 90; profile projectors
9032	Regulating or controlling instruments and apparatus (excl. taps, cocks and valves of heading 8481)
9401	Seats, whether or not convertible into beds, and parts thereof, n.e.s. (excl. medical, surgical, dental or veterinary of heading 9402)
9403	Other furniture and parts thereof
9404	Mattress supports (excl. spring interiors for seats); articles of bedding and similar furnishing, e.g. mattresses, quilts, eiderdowns, cushions, pouffes and pillows, fitted with springs or stuffed or internally filled with any material or of cellular rubber or plastics, whether or not covered (excl. pneumatic or water mattresses and pillows, blankets and covers)
9405	Lamps and lighting fittings, incl. searchlights and spotlights, and parts thereof, n.e.s.; illuminated signs, illuminated nameplates and the like having a permanently fixed light source, and parts thereof, n.e.s.
9406	Prefabricated buildings, whether or not complete or already assembled

Vedlegg XXIII skal lyde:

Vedlegg XXIII. Liste over varer og teknologi som omtalt i § 17i

CN code	Description
0601	Bulbs, tubers, tuberous roots, corms, crowns and rhizomes, dormant, in growth or in flower, chicory plants and roots other than roots of heading 1212
0602 30	Rhododendrons and azaleas, grafted or not
0602 40	Roses, grafted or not
0602 90	Other live plants (including their roots), cuttings and slips; mushroom spawn – Other
0604 20	Foliage, branches and other parts of plants, without flowers or flower buds, and grasses, mosses and lichens, being goods of a kind suitable for bouquets or for ornamental purposes, fresh, dried, dyed, bleached, impregnated or otherwise prepared – Fresh
2508	Clays, andalusite, kyanite and sillimanite, whether or not calcined; mullite; chamotte or dinas earths (excl. kaolin and other kaolinic clays, and expanded clay)
2509	Chalk
2512	Siliceous fossil meals (for example, kieselguhr, tripolite and diatomite) and similar siliceous earths, whether or not calcined, of an apparent specific gravity of 1 or less
2515	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent specific gravity of >= 2,5, and alabaster, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a square or rectangular shape
2518 20	Calcined or sintered dolomite
2519 10	Natural magnesium carbonate (magnesite)
2520 10	Gypsum; anhydrite
2521	Limestone flux; limestone and other calcareous stone, of a kind used for the manufacture of lime or cement
2522	Quicklime, slaked lime and hydraulic lime other than calcium oxide and hydroxide of heading 2825
2525	Mica, whether or not rifted into sheets or splittings; mica waste

2526	Natural steatite, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape; talc
2530 20	Kieserite, epsomite (natural magnesium sulphates)
2701	Coal; briquettes, ovoids and similar solid fuels manufactured from coal
2702	Lignite, whether or not agglomerated, excluding jet
2703	Peat (including peat litter), whether or not agglomerated
2704	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon
2707 30	Xylol (xylenes)
2708	Pitch and Pitch coke, obtained from coal tar or from other mineral tars
2710	Petroleum oils and oils obtained from bituminous minerals (excl. crude); preparations containing >= 70 % by weight of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations, n.e.s.; waste oils containing mainly petroleum or bituminous minerals
2712	Petroleum jelly, paraffin wax, micro- crystalline petroleum wax, slack wax, ozokerite, lignite wax, peat wax, other mineral waxes, and similar products obtained by synthesis or by other processes, whether or not coloured
2715	Bituminous mastics, cut-backs and other bituminous mixtures based on natural asphalt, on natural bitumen, on petroleum bitumen, on mineral tar or on mineral tar pitch – Other
Ex28 04	Hydrogen and other non-metals (excluding rare gases)
2806	Hydrogen chloride (hydrochloric acid); chlorosulphuric acid
2811 29	Other inorganic oxygen compounds of non-metals – Other
2813 10	Carbon disulphide
2814	Ammonia, anhydrous or in aqueous solution
2815 12	Sodium hydroxide (caustic soda) – In aqueous solution (soda lye or liquid soda)
2818 30	Aluminium hydroxide
2819	Chromium oxides and hydroxides
2820	Manganese oxides
2825	Hydrazine and hydroxylamine and their inorganic salts; inorganic bases, metal oxides, hydroxides and peroxides, n.e.s.
2827 31	Other chlorides – Of magnesium
2827 35	Other chlorides – Of nickel

2828	Hypochlorites; commercial calcium hypochlorite; chlorites; hypobromites
2829 11	Chlorates – Of sodium
2832 20	Sulphites (excluding sodium)
2833 24	Sulphates of nickel
2833 30	Alums
2834 10	Nitrites
2836 30	Sodium hydrogencarbonate (sodium bicarbonate)
2836 50	Calcium carbonate
2839	Silicates; commercial alkali metal silicates
2840 30	Peroxoborates (perborates)
2841 50	Other chromates and dichromates; peroxochromates
2841 80	Tungstates (wolframates)
2843	Colloidal precious metals; inorganic or organic compounds of precious metals, whether or not chemically defined; amalgams of precious metals
2847	Hydrogen peroxide, whether or not solidified with urea
2901	Acyclic hydrocarbons
2902	Cyclic hydrocarbons
2903	Halogenated derivatives of hydrocarbons
2904	Sulphonated, nitrated or nitrosated derivatives of hydrocarbons, whether or not halogenated
2905 13	Butan-1-ol (n-butyl alcohol)
2905 16	Octanol (octyl alcohol) and isomers thereof
2905 19	Saturated monohydric alcohols – Other
2905 31	Ethylene glycol (ethanediol)
2905 41	2-Ethyl-2-(hydroxymethyl)propane-1,3-diol (trimethylolpropane)
2905 59	Other polyhydric alcohols – Other
2906	Cyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives
2907	Phenols; phenol-alcohols
2909	Ethers, ether-alcohols, ether-phenols, ether-alcohol-phenols, alcohol peroxides, ether peroxide, ketone peroxides, whether or not chemically defined, and their halogenated, sulphonated, nitrated or nitrosated derivatives

2910	Epoxides, epoxyalcohols, epoxyphenols and epoxyethers, with a three-membered ring, and their halogenated, sulphonated, nitrated or nitrosated derivatives
2911	Acetals and hemiacetals, whether or not with other oxygen function, and their halogenated, sulphonated, nitrated or nitrosated derivatives
2912	Aldehydes, whether or not with other oxygen function; cyclic polymers of aldehydes; paraformaldehyde
2914 11	Acetone
2914 61	Anthraquinone
2915 13	Esters of formic acid
2915 90	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives – Other
2916	Unsaturated acyclic monocarboxylic acids, cyclic monocarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives
2917 33	Dinonyl or didecyl orthophthalates
2920 11	Parathion (ISO) and parathion-methyl (ISO) (methyl-parathion)
2921 22	Hexamethylenediamine and its salts
2921 41	Aniline and its salts
2922 11	Monoethanolamine and its salts
2922 43	Anthranilic acid and its salts
2923 20	Lecithins and other phosphoaminolipids
2930 40	Methionine
2933 54	Other derivatives of malonylurea (barbituric acid); salts thereof
2933 71	6-Hexanelactam (epsilon-caprolactam)
3201	Tanning extracts of vegetable origin; tannins and their salts, ethers, esters and other derivatives
3202	Synthetic organic tanning substances; inorganic tanning substances; tanning preparations, whether or not containing natural tanning substances; enzymatic preparations for pre-tanning
3203	Colouring matter of vegetable or animal origin, incl. dye extracts (excl. animal black), whether or not chemically defined; preparations based on colouring matter of vegetable or animal origin of a kind used to dye fabrics or

	produce colorant preparations (excl. preparations of heading 3207 , 3208 , 3209 , 3210 , 3213 and 3215) – Other
3204 90	Synthetic organic colouring matter, whether or not chemically defined; preparations as specified in note 3 to this chapter based on synthetic organic colouring matter; synthetic organic products of a kind used as fluorescent brightening agents or as luminophores, whether or not chemically defined
3205	Colour lakes (other than chinese or japanese lacquer and paints); preparations based on colour lakes of a kind used to dye fabrics or produce colorant preparations (excl. preparations of heading 3207 , 3208 , 3209 , 3210 , 3213 and 3215)
3206 41	Ultramarine and preparations based thereon of a kind used for colouring any material or produce colorant preparations (excl. preparations of heading 3207 , 3208 , 3209 , 3210 , 3213 and 3215)
3206 49	Inorganic or mineral colouring matter, n.e.s.; preparations based on inorganic or mineral colouring matter of a kind used for colouring any material or produce colorant preparations, n.e.s. (excl. preparations of heading 3207 , 3208 , 3209 , 3210 , 3213 and 3215 and inorganic products of a kind used as liminophores) – Other
3207	Prepared pigments, prepared opacifiers and prepared colours, vitrifiable enamels and glazes, engobes, liquid lustres and similar preparations of a kind used in the ceramic, enamelling or glass industry; glass frit and other glass in the form of powder, granules or flakes
3208	Paints and varnishes, incl. enamels and lacquers, based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in a non-aqueous medium; solutions of products of headings 3901 to 3913 in volatile organic solvents, containing > 50 % solvent by weight (excl. solutions of collodion)
3209	Paints and varnishes, incl. enamels and lacquers, based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in an aqueous medium
3210	Other paints and varnishes (including enamels, lacquers and distempers); prepared water pigments of a kind used for finishing leather
3212 90	Pigments (including metallic powders and flakes) dispersed in non- aqueous media, in liquid or paste form, of a kind used in the manufacture of paints (including enamels); stamping foils; dyes and other colouring matter put up in forms or packings for retail sale – Other
3214	Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics; painters' fillings; non-refractory surfacing preparations for façades, indoor walls, floors, ceilings or the like

3215 11	Printing ink – Black
3215 19	Printing ink – Other
3403	Lubricant preparations, incl. cutting-oil preparations, bolt or nut release preparations, anti-rust or anti-corrosion preparations and mould-release preparations based on lubricants; textile lubricant preparations and preparations of a kind used for the oil or grease treatment of textile materials, leather, furskins or other materials (excl. preparations containing, as basic constituents, >= 70 % petroleum oil or bituminous mineral oil by weight)
3505 10	Dextrins and other modified starches
3506 99	Prepared glues and other prepared adhesives, not elsewhere specified or included; products suitable for use as glues or adhesives, put up for retail sale as glues or adhesives, not exceeding a net weight of 1 kg – Other
3701 20	Instant print film
3701 91	For colour photography (polychrome)
3702	Photographic film in rolls, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in rolls, sensitised, unexposed
3703	Photographic paper, paperboard and textiles, sensitised, unexposed
3705	Photographic plates and film, exposed and developed (excl. products made of paper, paperboard or textiles, cinematographic film and ready-to-use printing plates)
3706	Cinematographic film, exposed and developed, whether or not incorporating soundtrack or consisting only of soundtrack
3801 20	Colloidal or semi-colloidal graphite
3806 20	Salts of rosin, of resin acids or of derivatives of rosin or resin acids (excl. salts of rosin adducts)
3807	Wood tar; wood tar oils; wood creosote; wood naphtha; vegetable pitch; brewer’s pitch and similar preparations based on rosin, resin acids or vegetable pitch (excl. burgundy pitch, yellow pitch, stearin pitch, fatty acid pitch, fatty tar and glycerin pitch)
3809	Finishing agents, dye carriers to accelerate the dyeing or fixing of dyestuffs and other products and preparations such as dressings and mordants of a kind used in the textile, paper, leather or like industries, n.e.s.
3810	Pickling preparations for metal surfaces; fluxes and other auxiliary preparations for soldering, brazing or welding; soldering, brazing or welding pastes and powders consisting of metal and other materials; preparations of a kind used as coatings or cores for welding electrodes or rods

3811	Anti-knock preparations, oxidation inhibitors, gum inhibitors, viscosity improvers, anti-corrosive preparations and other prepared additives, for mineral oils, incl. gasoline, or for other liquids used for the same purposes as mineral oils
3812	Prepared rubber accelerators; compound plasticisers for rubber or plastics, not elsewhere specified or included; anti-oxidising preparations and other compound stabilisers for rubber or plastics
3813	Preparations and charges for fire-extinguishers; charged fire-extinguishing grenades (excl. full or empty fire-extinguishing devices, whether or not portable, unmixed chemically undefined products with fire-extinguishing properties in other forms)
3814	Organic composite solvents and thinners, n.e.s.; prepared paint or varnish removers (excl. nail varnish remover)
3815	Reaction initiators, reaction accelerators and catalytic preparations, n.e.s. (excl. rubber accelerators)
3816	Refractory cements, mortars, concretes and similar compositions, including dolomite ramming mix, other than products of heading 3801
3817	Mixed alkylbenzenes and mixed alkylnaphthalenes produced by the alkylation of benzene and naphthalene (excl. mixed isomers of cyclic hydrocarbons)
3819	Hydraulic brake fluids and other prepared liquids for hydraulic transmission not containing petroleum oil or bituminous mineral oil, or containing < 70 % petroleum oil or bituminous mineral oil by weight
3820	Anti-freezing preparations and prepared de-icing fluids (excl. prepared additives for mineral oils or other liquids used for the same purposes as mineral oils)
3823 13	Tall oil fatty acids, industrial
3827 90	Mixtures containing halogenated derivatives of methane, ethane or propane (excl. those of subheadings 3824.71.00 to 3824.78.00)
3824 81	Mixtures and preparations containing oxirane (ethylene oxide)
3824 84	Mixtures and preparations containing aldrin (ISO), camphechlor (ISO) (toxaphene), chlordane (ISO), chlordecone (ISO), DDT (ISO) (clofenotane (INN), 1,1,1-trichloro–2,2 -bis(p-chlorophenyl)ethane), dieldrin (ISO, INN), endosulfan (ISO), endrin (ISO), heptachlor (ISO) or mirex (ISO)
3824 99	Chemical products and preparations of the chemical or allied industries, incl. those consisting of mixtures of natural products, n.e.s.
3825 90	Residual products of the chemical or allied industries, n.e.s. (excl. waste)
3826	Biodiesel and mixtures thereof, not containing or containing < 70 % by weight of petroleum oils or oils obtained from bituminous minerals

3901 40	Ethylene-alpha-olefin copolymers, having a specific gravity of < 0,94, in primary forms
3902 20	Polyisobutylene, in primary forms
3902 30	Propylene copolymers, in primary forms
3902 90	Polymers of propylene or of other olefins, in primary forms (excl. polypropylene, polyisobutylene and propylene copolymers)
3903 19	Polystyrene, in primary forms (excl. expansible)
3903 90	Polymers of styrene, in primary forms (excl. polystyrene, styrene-acrylonitrile copolymers (SAN) and acrylonitrile-butadiene-styrene (ABS))
3904 10	Poly(vinyl chloride), in primary forms, not mixed with any other substances
3904 50	Vinylidene chloride polymers, in primary forms
3905	Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers, in primary forms
3906	Acrylic polymers, in primary forms
3907 21	Polyethers, in primary forms (excl. polyacetals and goods of 3002 10)
3907 40	Polycarbonates, in primary forms
3907 70	Poly(lactic acid), in primary forms
3907 91	Unsaturated polyallyl esters and other polyesters, in primary forms (excl. polycarbonates, alkyd resins, poly(ethylene terephthalate) and poly(lactic acid))
3908	Polyamides, in primary forms
3909 20	Melamine resins, in primary forms
3909 39	Amino-resins, in primary forms (excl. urea, thiourea and melamine resins and mdi)
3909 40	Phenolic resins, in primary forms
3909 50	Polyurethanes, in primary forms
3910	Silicones in primary forms
3911 90	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary form
3912	Cellulose and its chemical derivatives, not elsewhere specified or included, in primary forms
3915 20	Waste, parings and scrap, of polymers of styrene
3917	Tubes, pipes and hoses, and fittings therefor (for example joints, elbows, flanges), of plastics

3920 10	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
3920 61	Plates, sheets, film, foil and strip, of non-cellular polycarbonates, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly(methyl methacrylate), self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
3920 69	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes (excl. polycarbonates, polythylene terephthalate and other unsaturated polyesters, self-adhesive products, and floor, wall and ceiling coverings in heading 3918)
3920 73	Plates, sheets, film, foil and strip, of non-cellular cellulose acetates, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
3920 91	Plates, sheets, film, foil and strip, of non-cellular poly(vinyl butyral), not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
3921 19	Plates, sheets, film, foil and strip, of cellular plastic, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of polymers of styrene, vinyl chloride, polyurethanes and regenerated cellulose, self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
3922 90	Bidets, lavatory pans, flushing cisterns and similar sanitary ware, of plastics (excl. baths, shower-baths, sinks, washbasins, lavatory seats and covers)
3925 20	Doors, windows and their frames and thresholds for doors, of plastics
4002	Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of natural rubber, balata, gutta-percha, guayule, chicle or similar types of natural rubber with synthetic rubber or factice, in primary forms or in plates, sheets or strip
4005	Compounded rubber, unvulcanised, in primary forms or in plates, sheets or strip
4006 10	“Camel-back” strips of unvulcanised rubber, for retreading rubber tyres

4008 21	Plates, sheets and strip, of non-cellular rubber
4009 12	Tubes, pipes and hoses, of vulcanised rubber (excl. hard rubber), not reinforced or otherwise combined with other materials, with fittings
4009 41	Tubes, pipes and hoses, of vulcanised rubber (excl. hard rubber), reinforced or otherwise combined with materials other than metal or textile materials, without fittings
4010	Conveyor or transmission belts or belting, of vulcanised rubber
4011 20	New pneumatic tyres, of rubber, of a kind used for buses and lorries
4011 80	New pneumatic tyres, of rubber, of a kind used on construction, mining or industrial handling vehicles and machines
4012	Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber
4016 93	Gaskets, washers and other seals, of vulcanised rubber (excl. hard rubber and those of cellular rubber)
4407	Wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm
4408 10	Sheets for veneering, incl. those obtained by slicing laminated wood, for coniferous plywood or for other similar laminated coniferous wood and other coniferous wood, sawn lengthwise, sliced or peeled, whether or not planed, sanded, spliced or end-jointed, of a thickness of <= 6 mm
4411 13	Medium density fibreboard (MDF) of wood, of a thickness > 5 mm but <= 9 mm
4411 94	Fibreboard of wood or other ligneous materials, whether or not agglomerated with resins or other organic bonding agents, of a density of <= 0,5 g/cm^3 (excl. medium density fibreboard (MDF); particle board, whether or not bonded with one or more sheets of fibreboard; laminated wood with a layer of plywood; cellular wood panels of which both sides are fibreboard; paperboard; identifiable furniture components)
4412	Plywood, veneered panel and similar laminated wood
4416	Casks, barrels, vats, tubs and other coopers' products parts thereof, of wood, incl. staves
4418 40	Wooden shuttering for concrete constructional work (excl. plywood boarding)
4418 60	Posts and beams, of wood
4418 79	Flooring panels, assembled, of wood other than bamboo (excl. multilayer panels and panels for mosaic floors)
4503	Articles of natural cork

4504	Agglomerated cork (with or without a binding substance) and articles of agglomerated cork
4701	Mechanical wood pulp, not chemically treated
4703	Chemical wood pulp, soda or sulphate (excl. dissolving grades)
4704	Chemical wood pulp, sulphite (excl. dissolving grades)
4705	Wood pulp obtained by a combination of mechanical and chemical pulping processes
4706	Pulps of fibres derived from recovered (waste and scrap) paper or paperboard or of other fibrous cellulosic material
4707	Recovered (waste and scrap) paper or paperboard
4802 20	Paper and paperboard of a kind used as a base for photosensitive, heat-sensitive or electrosensitive paper and paperboard, uncoated, in rolls or in square or rectangular sheets, of any size
4802 40	Wallpaper base, uncoated
4802 58	Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punchcards and punch-tape paper, in rolls or in square or rectangular sheets, of any size, not containing fibres obtained by a mechanical or chemi-mechanical process or of which <= 10 % by weight of the total fibre content consists of such fibres, weighing > 150 g/m^2, n.e.s.
4802 61	Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punchcards and punch-tape paper, in rolls of any size, of which > 10 % by weight of the total fibre content consists of fibres obtained by a mechanical or chemi-mechanical process, n.e.s.
4804	Uncoated kraft paper and paperboard, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state (excl. goods of heading 4802 or 4803)
4805	Other paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, not worked other than as specified in note 3 to this chapter, n.e.s.
4806	Vegetable parchment, greaseproof papers, tracing papers and glassine and other glazed transparent or translucent papers, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state
4807	Composite paper and paperboard (made by sticking flat layers of paper or paperboard together with an adhesive), not surface-coated or impregnated, whether or not internally reinforced, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state

4808	Corrugated paper and paperboard (with or without glued flat surface sheets), creped, crinkled, embossed or perforated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state (excl. goods of heading 4803)
4809	Carbon paper, self-copy paper and other copying or transfer papers, incl. coated or impregnated paper for duplicator stencils or offset plates, whether or not printed, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state
4810	Paper and paperboard, coated on one or both sides with kaolin (China clay) or other inorganic substances, with or without a binder, and with no other coating, whether or not surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. all other coated papers and paperboards)
4811 10	Tarred, bituminised or asphalted paper and paperboard, in rolls or in square or rectangular sheets, of any size
4811 51	Paper and paperboard, surface-coloured, surface-decorated or printed, coated, impregnated or covered with artificial resins or plastics, in rolls or in square or rectangular sheets, of any size, bleached and weighing > 150 g/m^2 (excl. adhesives)
4811 59	Paper and paperboard, surface-coloured, surface-decorated or printed, coated, impregnated or covered with artificial resins or plastics, in rolls or in square or rectangular sheets, of any size (excl. bleached and weighing > 150 g/m^2, and adhesives)
4811 60	Paper and paperboard, coated, impregnated or covered with wax, paraffin wax, stearin, oil or glycerol, in rolls or in square or rectangular sheets, of any size (excl. goods of heading 4803 , 4809 and 4818)
4811 90	Paper, paperboard, cellulose wadding and webs of soft cellulose, coated, impregnated, covered, surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. goods of heading 4803 , 4809 , 4810 and 4818 , and of subheading 4811.10 to 4811.60)
4814 90	Wallpaper and similar wallcoverings of paper, and window transparencies of paper (excl. wallcoverings of paper, consisting of paper coated or covered, on the face side, with a grained, embossed, coloured or design-printed or otherwise decorated layer of plastics)
4819 20	Folding cartons, boxes and cases, of non-corrugated paper or paperboard
4822	Bobbins, spools, cops and similar supports of paper pulp, paper or paperboard, whether or not perforated or hardened
4823	Paper, paperboard, cellulose wadding and webs of cellulose fibres, in strips or rolls of a width <= 36 cm, in rectangular or square sheets of which no side > 36

	cm in the unfolded state, or cut to shape other than rectangular or square, and articles of paper pulp, paper, paperboard, cellulose wadding or webs or cellulose fibres, n.e.s.
4906	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; handwritten texts; photographic reproductions on sensitised paper and carbon copies of the foregoing
5105	Wool and fine or coarse animal hair, carded or combed, incl. combed wool in fragments
5106	Carded wool yarn (excl. that put up for retail sale)
5107	Yarn of combed wool (excl. that put up for retail sale)
5112	Woven fabrics of combed wool or of combed fine animal hair (excl. fabrics for technical purposes of heading 5911)
5205	Cotton yarn other than sewing thread, containing >= 85 % cotton by weight (excl. that put up for retail sale)
5206 42	Multiple (folded) or cabled cotton yarn containing predominantly, but < 85 % cotton by weight, of combed fibres and with a linear density of 232,56 decitex to < 714,29 decitex (> mn 14 to mn 43) per single yarn (excl. sewing thread and yarn put up for retail sale)
5209 11	Plain woven fabrics of cotton, containing >= 85 % cotton by weight and weighing > 200 g/m^2, unbleached
5211	Woven fabrics of cotton, containing predominantly, but < 85 % cotton by weight, mixed principally or solely with man-made fibres and weighing > 200 g/m^2
5308	Yarn of other vegetable textile fibres; paper yarn
5402 63	Multiple (folded) or cabled filament yarn of polypropylene, incl. monofilament of < 67 decitex (excl. sewing thread, yarn put up for retail sale and textured yarn)
5403	Artificial filament yarn, incl. artificial monofilament of < 67 decitex (excl. sewing thread and yarn put up for retail sale)
5404	Synthetic monofilament of >= 67 decitex and with a cross sectional dimension of <= 1 mm; strip and the like, e.g. artificial straw, of synthetic textile material, with an apparent width of <= 5 mm
5407 30	Woven fabrics of synthetic filament yarn, incl. monofilament of >= 67 decitex and with a cross sectional dimension of <= 1 mm, consisting of layers of parallel textile yarns superimposed on each other at acute or right angles, the layers being bonded at the intersections of the yarns by an adhesive or by thermal bonding

5501	Synthetic filament tow as specified in note 1 to Chapter 55
5502	Artificial filament tow as specified in note 1 to Chapter 55
5503	Synthetic staple fibres, not carded, combed or otherwise processed for spinning
5504 90	Artificial staple fibres, not carded, combed or otherwise processed for spinning (excl. those of viscose rayon)
5506	Synthetic staple fibres, carded, combed or otherwise processed for spinning
5507	Artificial staple fibres, carded, combed or otherwise processed for spinning
5512 21	Woven fabrics containing >= 85 % acrylic or modacrylic staple fibres by weight, unbleached or bleached
5512 99	Woven fabrics containing >= 85 % synthetic staple fibres by weight, dyed, made of yarn of different colours or printed (excl. those of acrylic, modacrylic or polyester staple fibres)
5516	Woven fabrics of artificial staple fibres
5601 29	Wadding of textile materials and articles thereof (excl. of cotton or man-made fibres; sanitary towels and tampons, napkins and napkin liners for babies and similar sanitary articles, wadding and articles thereof, impregnated or covered with medicated substances or put up for retail for medical, surgical, dental or veterinary purposes, or impregnated, coated or covered with perfumes, make-up, soaps, cleansing agents, etc.)
5601 30	Textile flock and dust and mill neps
5604	Textile-covered rubber thread and cord; textile yarn, strip and the like of heading 5404 and 5405 , impregnated, coated, covered or sheathed with rubber or plastics (excl. imitation catgut, thread and cord with fish-hook attachments or otherwise put up as fishing line)
5605	Metallised yarn, whether or not gimped, being textile yarn, or strip or the like of heading 5404 or 5405 , of textile fibres, combined with metal in the form of thread, strip or powder or covered with metal (excl. yarns manufactured from a mixture of textile fibres and metal fibres, with anti-static properties; yarns reinforced with metal wire; articles with the character of trimmings)
5607 41	Binder or baler twine, of polyethylene or polypropylene
5801 27	Warp pile fabrics, of cotton (excl. terry towelling and similar woven terry fabrics, tufted textile fabrics and narrow woven fabrics of heading 5806)
5803	Gauze (excl. narrow woven fabrics of heading 5806)
5806 40	Narrow fabrics consisting of warp without weft assembled by means of an adhesive (bolducs), with a width of <= 30 cm
5901	Textile fabrics coated with gum or amylaceous substances, of a kind used for the outer covers of books, the manufacture of boxes and articles of cardboard or

	the like; tracing cloth; prepared painting canvas; buckram and similar stiffened textile fabrics of a kind used for hat foundations (excl. plastic-coated textile fabrics)
5905	Textile wallcoverings
5908	Textile wicks, woven, plaited or knitted, for lamps, stoves, lighters, candles or the like; incandescent gas mantles and tubular knitted gas-mantle fabric for incandescent gas mantles, whether or not impregnated (excl. wax-covered wicks of the taper variety, fuses and detonating fuses, wicks in the form of textile yarn and glass-fibre wicks)
5910	Transmission or conveyor belts or belting, of textile material, whether or not impregnated, coated, covered or laminated with plastics, or reinforced with metal or other material (excl. those of a thickness of < 3 mm and of indeterminate length or cut to length only, and those impregnated, coated, covered or laminated with rubber or made of yarn or cord impregnated or coated with rubber)
5911 10	Textile fabrics, felt and felt-lined woven fabrics, coated, covered or laminated with rubber, leather or other material, of a kind used for card clothing, and similar fabrics of a kind used for other technical purposes, incl. narrow fabrics made of velvet impregnated with rubber, for covering weaving spindles (weaving beams)
5911 31	Textile fabrics and felts, endless or fitted with linking devices, of a kind used in papermaking or similar machines, e.g. for paper pulp or asbestos-cement, weighing < 650 g/m^2
5911 32	Textile fabrics and felts, endless or fitted with linking devices, of a kind used in papermaking or similar machines, e.g. for paper pulp or asbestos-cement, weighing >= 650 g/m^2
5911 40	Straining cloth of a kind used in oil-presses or for similar technical purposes, incl. that of human hair
6001 99	Pile fabrics, knitted or crocheted (excl. cotton or man-made fibres and “long pile” fabrics)
6003	Knitted or crocheted fabrics, of a width <= 30 cm (excl. those containing by weight >= 5 % of elastomeric yarn or rubber thread, and pile fabrics, incl. “long pile”, looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)
6005 36	Unbleached or bleached warp knit fabrics of synthetic fibres (incl. those made on galloon knitting machines), of a width of > 30 cm (excl. those containing by weight >= 5 % of elastomeric yarn or rubber thread, and pile fabrics, incl. “long pile”, looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)

6005 44	Printed warp knit fabrics of artificial fibres (incl. those made on galloon knitting machines), of a width of > 30 cm (excl. those containing by weight >= 5 % of elastomeric yarn or rubber thread, and pile fabrics, incl. “long pile”, looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)
6006 10	Fabrics, knitted or crocheted, of a width of > 30 cm, of wool or fine animal hair (excl. warp knit fabrics (incl. those made on galloon knitting machines), those containing by weight >= 5 % of elastomeric yarn or rubber thread, and pile fabrics, incl. “long pile”, looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)
6309	Worn clothing and clothing accessories, blankets and travelling rugs, household linen and articles for interior furnishing, of all types of textile materials, incl. all types of footwear and headgear, showing signs of appreciable wear and presented in bulk or in bales, sacks or similar packings (excl. carpets, other floor coverings and tapestries)
6802 92	Calcareous stone, in any form (excl. marble, travertine and alabaster, tiles, cubes and similar articles of subheading 6802.10, imitation jewellery, clocks, lamps and lighting fittings and parts thereof, original sculptures and statuary, setts, curbstones and flagstones)
6804 23	Millstones, grindstones, grinding wheels and the like, without frameworks, for sharpening, polishing, trueing or cutting, of natural stone (excl. of agglomerated natural abrasives or ceramics, perfumed pumice stones, hand sharpening or polishing stones, and grinding wheels etc. specifically for dental drill engines)
6806	Slag-wool, rock-wool and similar mineral wools; exfoliated vermiculite, expanded clays, foamed slag and similar expanded mineral materials; mixtures and articles of heat-insulating, sound-insulating or sound absorbing mineral materials, other than those of heading 6811 or 6812 or of Chapter 69
6807	Articles of asphalt or of similar materials, e.g. petroleum bitumen or coal tar pitch
6809 19	Boards, sheets, panels, tiles and similar articles, of plaster or compositions based on plaster (excl. ornamented, faced or reinforced with paper or paperboard only, and with plaster agglomerated articles for heat-insulation, sound-insulation or sound absorption)
6810 91	Prefabricated structural components for building or civil engineering of cement, concrete or artificial stone, whether or not reinforced
6811	Articles of asbestos-cement, cellulose fibre-cement or the like
6813	Friction material and articles thereof, e.g., sheets, rolls, strips, segments, discs, washers, pads, not mounted, for brakes, clutches or the like, with a basis of asbestos, other mineral substances or cellulose, whether or not combined with textile or other materials (excl. mounted friction material)

6814 90	Worked mica and articles of mica (excl. electrical insulators, insulating fittings, resistors and capacitors, protective goggles of mica and their glasses, mica in the form of christmas tree decorations, and plates, sheets and strips of agglomerated or reconstituted mica, whether or not on supports)
6901	Bricks, blocks, tiles and other ceramic goods of siliceous fossil meals, e.g. kieselguhr, tripolite or diatomite, or of similar siliceous earths
6904 10	Building bricks (excl. those of siliceous fossil meals or similar siliceous earths, and refractory bricks of heading 6902)
6905	Roofing tiles, chimney pots, cowls, chimney liners, architectural ornaments and other ceramic constructional goods
6906 00	Ceramic pipes, conduits, guttering and pipe fittings (excl. of siliceous fossil meals or similar siliceous earths, refractory ceramic goods, chimney liners, pipes specifically manufactured for laboratories, insulating tubing and fittings and other piping for electrotechnical purposes)
6907 22	Ceramic flags and paving, hearth or wall tiles, of a water absorption coefficient by weight > 0,5 % but <= 10 % (excl. mosaic cubes and finishing ceramics)
6907 40	Finishing ceramics
6909 90	Ceramic troughs, tubs and similar receptacles of a kind used in agriculture; ceramic pots, jars and similar articles of a kind used for the conveyance or packing of goods (excl. general-purpose storage vessels for laboratories, containers for shops and household articles)
7002	Glass in balls (other than microspheres of heading 7018), rods or tubes, unworked
7003	Cast glass and rolled glass, in sheets or profiles, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7004	Sheets of glass, drawn or blown, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7005	Float glass and surface ground or polished glass, in sheets, whether or not having an absorbent, reflecting or non-reflecting layer, but not otherwise worked
7007 11	Toughened (tempered) safety glass, of size and shape suitable for incorporation in motor vehicles, aircraft, spacecraft, vessels and other vehicles
7007 29	Laminated safety glass (excl. glass of size and shape suitable for incorporation in motor vehicles, aircraft, spacecraft, vessels or other vehicles, multiple-walled insulating units)
7011 10	Glass envelopes, incl. bulbs and tubes, open, and glass parts thereof, without fittings, for electric lighting

72	Iron and steel
7301	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel
7302	Railway or tramway track construction material of iron or steel, the following : rails, check-rails and rack rails, switch blades, crossing frogs, point rods and other crossing pieces, sleepers (cross-ties), fish-plates, chairs, chair wedges, sole plates (base plates), rail clips, bedplates, ties and other material specialised for jointing or fixing rails
7303	Tubes, pipes and hollow profiles, of cast iron
7304	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel
7305	Tubes and pipes, n.e.s. (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406,4 mm, of iron or steel
7306	Tubes, pipes and hollow profiles n.e.s. (for example, open seam or welded, riveted or similarly closed), of iron or steel
7307	Tube or pipe fittings (for example couplings, elbows, sleeves), of iron or steel
7308	Structures and parts of structures (for example bridges and bridge-sections, lock-gates, towers, lattice masts, roofs, roofing frameworks, doors and windows and their frames and thresholds for doors, shutters, balustrades, pillars and columns), of iron or steel; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures, of iron or steel (excl. prefabricated buildings of heading 9406
7309	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
7310	Tanks, casks, drums, cans, boxes and similar containers, of iron or steel, for any material (other than compressed or liquefied gas), of a capacity of <= 300 l, not fitted with mechanical or thermal equipment, whether or not lined or heat-insulated, n.e.s.
7311	Containers of iron or steel, for compressed or liquefied gas (excl. containers specifically constructed or equipped for one or more types of transport)
7314 12	Endless bands of stainless steel wire, for machinery
7318 24	Cotters and cotter pins, of iron or steel
7320 20	Helical springs, of iron or steel (excl. flat spiral springs, clock and watch springs, springs for sticks and handles of umbrellas or parasols, and shock absorbers of Section 17)

7322 90	Air heaters and hot-air distributors, incl. distributors which can also distribute fresh or conditioned air, non-electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel
7324 29	Baths of steel sheet
7407	Copper bars, rods and profiles
7408	Copper wire
7409	Copper plates, sheets and strip, of a thickness exceeding 0,15 mm
7411	Copper tubes and pipes
7412	Copper tube or pipe fittings (for example couplings, elbows, sleeves)
7413	Stranded wire, cables, plaited bands and the like, of copper (not electrically insulated)
7415 21	Washers, (incl. spring washers and spring lock washers), of copper
7505	Nickel bars, rods, profiles and wire
7506	Nickel plates, sheets, strip and foil
7507	Tubes, pipes and tube or pipe fittings (e.g., couplings, elbows, sleeves), of nickel
7508	Other articles of nickel
7605	Aluminium wire
7606	Aluminium plates, sheets and strip, of a thickness exceeding 0,2 mm
7607 20	Aluminium foil, backed, of a thickness (excl. any backing) of <= 0,2 mm (excl. stamping foils of heading 3212 , and foil made up as christmas tree decorating material)
7608	Aluminium tubes and pipes
7609	Aluminium tube or pipe fittings (for example couplings, elbows, sleeves)
7610	Structures and parts of structures (e.g., bridges and bridge-sections, towers, lattice masts, pillars and columns, roofs, roofing frameworks, doors and windows and their frames and thresholds for doors, shutters, balustrades), of aluminium (excl. prefabricated buildings of heading 9406); plates, rods, profiles, tubes and the like, prepared for use in structures, of aluminium
7611	Reservoirs, tanks, vats and similar containers, of aluminium, for any material (other than compressed or liquefied gas), of a capacity of > 300 l, not fitted with mechanical or thermal equipment, whether or not lined or heat-insulated (excl. containers specifically constructed or equipped for one or more types of transport)

7612	Casks, drums, cans, boxes and similar containers, incl. rigid or collapsible tubular containers, of aluminium, for any material (other than compressed or liquefied gas), of a capacity of <= 300 l, not fitted with mechanical or thermal equipment, whether or not lined or heat-insulated, n.e.s.
7613	Aluminium containers for compressed or liquefied gas
7616 10	Nails, tacks, staples (other than those of heading 8305), screws, bolts, nuts, screw hooks, rivets, cotters, cotter pins, washers and similar articles
7804	Lead plates, sheets, strip and foil; lead powders and flakes
7905	Zinc plates, sheets, strip and foil
8001	Unwrought tin
8003	Tin bars, rods, profiles and wire
8007	Articles of tin
8101 10	Tungsten powders
8102	Molybdenum and articles thereof, including waste and scrap
8105 90	Articles of cobalt
8109	Zirconium and articles thereof, including waste and scrap
8202 20	Bandsaw blades of base metal
8207	Interchangeable tools, for hand tools, whether or not power-operated, or for machine tools (for example for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock-drilling or earth-boring tools
8208 10	Knives and cutting blades, for machines or for mechanical appliances – for metalworking
8208 20	Knives and cutting blades, for machines or for mechanical appliances – for wood-working
8208 30	Knives and cutting blades, for machines or for mechanical appliances – used by the food industry
8208 90	Knives and cutting blades, for machines or for mechanical appliances – other
8301 20	Locks used for motor vehicles, of base metal
8301 70	Keys presented separately
8302 30	Other mountings, fittings and similar articles suitable for motor vehicles
8307	Flexible tubing of base metal, with or without fittings

8309	Stoppers, caps and lids, incl. crown corks, screw caps and pouring stoppers, capsules for bottles, threaded bungs, bung covers, seals and other packing accessories, of base metal
8402	Steam or other vapour generating boilers (excl. central heating hot water boilers capable also of producing low pressure steam); superheated water boilers; parts thereof
8404	Auxiliary plant for use with boilers of heading 8402 or 8403 , e.g. economizers, superheaters, soot removers and gas recoverers; condensers for steam or other vapour power units; parts thereof
8405	Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas generators, with or without their purifiers; parts thereof (excl. coke ovens, electrolytic process gas generators and carbide lamps)
8406	Steam turbines and other vapour turbines; parts thereof
8407 21	Spark-ignition outboard motors for marine propulsion
8407 29	Spark-ignition reciprocating or rotary engines, for marine propulsion (excl. outboard motors)
8408	Compression-ignition internal combustion piston engine (diesel or semi-diesel engine)
8409 99	Parts suitable for use solely or principally with compression-ignition internal combustion piston engine (diesel or semi-diesel engine), n.e.s.
8410	Hydraulic turbines, water wheels, and regulators therefor (excl. hydraulic power engines and motors of heading 8412)
8412	Engines and motors (excluding steam turbines, internal combustion piston engine, hydraulic turbines, water wheels, turbojets, turbopropellers, and gas turbines); parts thereof
8413	Pumps for liquids, whether or not fitted with a measuring device; liquid elevators; parts thereof
8414 10	Vacuum pumps
8414 90	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 – Parts
8415 83	Other air-conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated – not incorporating a refrigerating unit

8416	Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical stokers, incl. their mechanical grates, mechanical ash dischargers and similar appliances; parts thereof
8417	Industrial or laboratory furnaces and ovens, including incinerators, non-electric
8419 19	Instantaneous or storage water heaters, non-electric (excl. instantaneous gas water heaters and boilers or water heaters for central heating)
8419 40	Distilling or rectifying plant
8419 50	Heat-exchange units (excl. those used with boilers)
8419 89	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, cooking, roasting, sterilising, pasteurising, steaming, evaporating, vaporising, condensing or cooling, n.e.s. (excl. machinery used for domestic purposes and furnaces, ovens and other equipment of heading 8514)
8419 90	Parts of machinery, plant and laboratory equipment, whether or not electrically heated, for the treatment of materials by a process involving a change of temperature, and of non-electric instantaneous and storage water heaters, n.e.s.
8420 99	Parts of calendering or other rolling machines, other than for metals or glass, and cylinders therefor – Other
Ex84 21	Centrifuges, incl. centrifugal dryers (excl. those for isotope separation); filtering or purifying machinery and apparatus, for liquids or gases (excl. such machinery and apparatus for water and other beverages, and excl. artificial kidneys; parts thereof
8424 89	Mechanical appliances, whether or not hand-operated, for projecting, dispersing or spraying liquids or powders, n.e.s.
8424 90	Parts of fire extinguishers, spray guns and similar appliances, steam or sand blasting machines and similar jet projecting machines and machinery and apparatus for projecting, dispersing or spraying liquids or powders, n.e.s.
8425 11	Pulley tackle and hoists other than skip hoists or hoists of a kind used for raising vehicles powered by electric motor
8425 31	Winches and capstans powered by electric motor
8426	Ships’ derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane
8427	Fork-lift trucks; other works trucks fitted with lifting or handling equipment (excl. straddle carriers and works trucks fitted with a crane)
8428 20	Pneumatic elevators and conveyors

8428 31	Continuous-action elevators and conveyors for goods or materials, for underground use (excl. pneumatic elevators and conveyors)
8428 32	Other continuous-action elevators and conveyors, for goods or materials – Other, bucket type
8428 33	Other continuous-action elevators and conveyors, for goods or materials – Other, belt type
8428 39	Continuous-action elevators and conveyors, for goods or materials (excl. those for underground use and bucket, belt or pneumatic types)
8428 70	Industrial robots
8428 90	Other machinery
8429	Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and roadrollers
8430	Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-extractors, n.e.s.; snowploughs and snowblowers
8431 20	Parts of fork-lift trucks and other works trucks fitted with lifting or handling equipment, n.e.s.
8431 39	Parts of machinery of heading 8428 , n.e.s.
8431 41	Buckets, shovels, grabs and grips for machinery of heading 8426 , 8429 and 8430
8431 49	Parts of machinery of heading 8426 , 8429 and 8430 , n.e.s.
8439 10	Machinery for making pulp of fibrous cellulosic material
8439 30	Machinery for finishing paper or paperboard
8440 90	Bookbinding machinery, including book-sewing machines – Parts
8441 30	Machines for making cartons, boxes, cases, tubes, drums or similar containers, other than by moulding
8442 40	Parts of the foregoing machinery, apparatus or equipment
8443 13	Other offset printing machinery
8443 15	Letterpress printing machinery, other than reel fed, excluding flexographic printing
8443 16	Flexographic printing machinery
8443 17	Gravure printing machinery
8443 19	Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442 (excl. hectograph or stencil duplicating machines, addressing machines and other office printing machines of heading

	8469 to 8472 , ink jet printing machines and offset, flexographic, letterpress and gravure printing machinery)
8443 91	Parts and accessories of printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442
8444	Machines for extruding, drawing, texturing or cutting man-made textile materials
8448	Auxiliary machinery for use with machines of heading 8444 , 8445 , 8446 or 8447 , e.g. dobbies, jacquards, automatic stop motions, shuttle changing mechanisms; parts and accessories suitable for use solely or principally with the machines of this heading or of heading 8444 , 8445 , 8446 or 8447 , e.g. spindles and spindle flyers, card clothing, combs, extruding nipples, shuttles, healds and heald-frames, hosiery needles
8451 10	Dry-cleaning machines
8451 29	Drying machines – Other
8451 30	Ironing machines and presses (including fusing presses)
8451 90	Machinery (other than machines of heading 8450) for washing, cleaning, wringing, drying, ironing, pressing (including fusing presses), bleaching, dyeing, dressing, finishing, coating or impregnating textile yarns, fabrics or made-up textile articles and machines for applying the paste to the base fabric or other support used in the manufacture of floor coverings such as linoleum; machines for reeling, unreeling, folding, cutting or pinking textile fabrics – Parts
8453	Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather (excl. drying machines, spray guns, machines for the dehairing of pigs, sewing machines and general purpose presses); parts thereof
8454	Converters, ladles, ingot moulds and casting machines, of a kind used in metallurgy or in metal foundries; parts thereof
8455 22	Cold-rolling mills for metal (excl. tube mills)
8455 30	Rolls for metal-rolling mills
8456	Machine tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam or plasma arc processes; water-jet cutting machines
8457	Machining centres, unit construction machines (single station) and multi-station transfer machines for working metal
8458	Lathes (including turning centres) for removing metal

8459	Machine tools, incl. way-type unit head machines, for drilling, boring, milling, threading or tapping (excl. lathes and turning centres of heading 8458, gear cutting machines of heading 8461 and hand-operated machines)
8460	Machine tools for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal or cermets by means of grinding stones, abrasives or polishing products (excl. gear cutting, gear grinding or gear finishing machines of heading 8461 and machines for working in the hand)
8461	Machine tools for planing, shaping, slotting, broaching, gear cutting, gear grinding or gear finishing, sawing, cutting-off and other machine tools working by removing metal, or cermets, not elsewhere specified or included
8462	Machine tools (including presses) for working metal by forging, hammering or die forging (excluding rolling mills); machine tools (including presses, slitting lines and cut-to-length lines) for working metal by bending, folding, straightening, flattening, shearing, punching, notching or nibbling (excluding draw-benches); presses for working metal or metal carbides, not specified in previous headings
8463	Machine tools for working metal, sintered metal carbides or cermets, without removing material (excl. forging, bending, folding, straightening and flattening presses, shearing machines, punching or notching machines, presses and machines for working in the hand)
8464	Machine tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold-working glass (excl. machines for working in the hand)
8465	Machine tools (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard rubber, hard plastics or similar hard materials
8466	Parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465 , incl. work or tool holders, self-opening dieheads, dividing heads and other special attachments for the machines, n.e.s.; tool holders for any type of tool for working in the hand
8467	Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor; parts thereof
8468	Machinery and apparatus for soldering, brazing or welding, whether or not capable of cutting (other than those of heading 8515); gas-operated surface tempering machines and appliances; parts thereof
Ex84 71	Automatic data-processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included, excluding other units of automatic data-processing machines of CN code

	8471 80 and excluding storage units for automatic data-processing machines not elsewhere specified corresponding to the CN code 8471 70 98
8472 10	Duplicating machines
8472 30	Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps
8473	Parts and accessories (other than covers, carrying cases and the like) suitable for use solely or principally with machines of headings 8470 to 8472
8474	Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or moulding 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; parts thereof
8475	Machines for assembling electric or electronic lamps, tubes or valves or flashbulbs, in glass envelopes; machines for manufacturing or hot working glass or glassware (excl. furnaces and heating apparatus for manufacturing toughened glass); parts thereof
8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter, parts thereof
8479 10	Machinery for public works, building or the like
8479 30	Presses for the manufacture of particle board or fibre building board of wood or other ligneous materials and other machinery for treating wood or cork
8479 50	Industrial robots, not elsewhere specified or included
8479 81	Machinery for treating metal, incl. electric wire coil-winders, n.e.s. (excl. industrial robots, furnaces, dryers, spray guns and the like, high-pressure cleaning equipment and other jet cleaners, rolling mills or machines, machine tools and rope or cable-making machines)
8479 82	Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines, n.e.s. (excl. industrial robots)
8479 89	Machines and mechanical appliances, n.e.s.
8479 90	Machines and mechanical appliances having individual functions, not specified or included elsewhere in Chapter 84 – Parts
8480	Moulding boxes for metal foundry; mould bases; moulding patterns; moulds for metal (other than ingot moulds), metal carbides, glass, mineral materials, rubber or plastics
8481 10	Pressure-reducing valves

8481 20	Valves for oleohydraulic or pneumatic transmissions
8481 30	Check (non-return) valves for pipes, boiler shells, tanks, vats or the like
8481 40	Safety or relief valves
8482	Ball or roller bearings (excl. steel balls of heading 7326); parts thereof
8483	Transmission shafts, incl. camshafts and crankshafts, and cranks; bearing housings and plain shaft bearings for machines; gears and gearing; ball or roller screws, gear boxes and other speed changers, incl. torque converters; flywheels and pulleys, incl. pulley blocks, clutches and shaft couplings, incl. universal joints; parts thereof
8484	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals
8485	Machines for additive manufacturing
8486	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 9 c to Chapter 84; parts and accessories, n.e.s.
8487	Machinery parts, not containing electrical connectors, insulators, coils, contacts or other electrical features, not specified or included elsewhere in Chapter 84
8501	Electric motors and generators (excluding generating sets)
8502	Electric generating sets and rotary converters
8503	Parts suitable for use solely or principally with the machines of heading 8501 or 8502
8504	Electrical transformers, static converters (for example, rectifiers) and inductors
8505	Electromagnets (excl. magnets for medical use); permanent magnets and articles intended to become permanent magnets after magnetization; electromagnetic or permanent magnet chucks, clamps and similar holding devices; electromagnetic couplings, clutches and brakes; electromagnetic lifting heads; parts thereof
8506	Primary cells and primary batteries; parts thereof
8507	Electric accumulators, including separators therefor, whether or not rectangular (including square); parts thereof
8511	Electrical ignition or starting equipment of a kind used for spark-ignition or compression-ignition internal combustion engines, e.g. ignition magnetos, magneto-dynamos, ignition coils, sparking plugs, glow plugs and starter motors;

	generators, e.g. dynamos and alternators, and cut-outs of a kind used in conjunction with such engines; parts thereof
8512 20	Electrical lighting or visual signalling equipment for motor vehicles (excl. lamps of heading 8539)
8512 90	Parts of electrical lighting or signalling equipment, windscreen wipers, defrosters and demisters of a kind used for cycles and motor vehicles, n.e.s.
Ex85 14	Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss), excluding bakery and biscuit ovens of line 85141910; other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss
8515	Electric (including electrically heated gas), laser or other light or photon beam, ultrasonic, electron beam, magnetic pulse or plasma arc soldering, brazing or welding machines and apparatus, whether or not capable of cutting; electric machines and apparatus for hot spraying of metals, or cermets; parts thereof
8516 80	Electric heating resistors (excl. those of agglomerated coal and graphite)
8517 61	Base stations of apparatus for the transmission or reception of voice, images or other data
8523 51	Solid-state, non-volatile data storage devices for recording data from an external source (excl. goods of Chapter 37)
8525	Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders
8526	Radar apparatus, radio navigational aid apparatus and radio remote control apparatus
8527 21	Radio-broadcast receivers not capable of operating without an external source of power, of a kind used in motor vehicles, combined with sound recording or reproducing apparatus
8528 49	Cathode-ray tube monitors (CRT) (excl. computer monitors, with tv receiver)
8530	Electrical signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields (excl. mechanical or electromechanical equipment of heading 8608); parts thereof
8532 10	Fixed capacitors designed for use in 50/60 hz circuits and having a reactive power-handling capacity of >= 0,5 kvar (power capacitors)
8532 29	Fixed electrical capacitors (excl. tantalum, aluminium electrolytic, ceramic, paper, plastic and power capacitors)
8532 30	Variable or adjustable (pre-set) electrical capacitors

8532 90	Parts of electrical (pre-set) capacitors, fixed, variable or adjustable, n.e.s.
8533 29	Other fixed resistors – Other
8533 90	Parts of electrical resistors, incl. rheostats and potentiometers, n.e.s.
8534	Printed circuits
8535	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits, e.g., switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes, for a voltage > 1 000 V (excl. control desks, cabinets, panels etc. of heading 8537)
8538	Parts suitable for use solely or principally with the apparatus of heading 8535, 8536 or 8537
8539 29	Filament lamps, electric (excl. tungsten halogen lamps, lamps of a power <= 200 W and for a voltage > 100 V and ultraviolet or infra-red lamps)
8539 39	Discharge lamps (excl. hot-cathode fluorescent lamps, mercury or sodium vapour lamps, metal halide lamps and ultraviolet lamps)
8539 41	Arc lamps
8539 51	Light-emitting diode (LED) modules
8539 52	Light-emitting diode (LED) lamps
8540	Thermionic, cold cathode or photo-cathode valves and tubes, e.g. vacuum or vapour or gas filled valves and tubes, mercury arc rectifying valves and tubes, cathode ray tubes and television camera tubes; parts thereof
8541 30	Thyristors, diacs and triacs (excl. photosensitive semiconductor devices)
8541 41	Light-emitting diodes (LED)
8541 42	Photovoltaic cells not assembled in modules or made up into panels
8541 43	Photovoltaic cells assembled in modules or made up into panels
8543 10	Particle accelerators
8543 20	Signal generators, electrical
8543 30	Machines and apparatus for electroplating, electrolysis or electrophoresis
8544 11	Winding wire for electrical purposes, of copper, insulated
8544 30	Ignition wiring sets and other wiring sets for vehicles, aircraft or ships
8544 49	Electric conductors, for a voltage <= 1 000 V insulated, not fitted with connectors, n.e.s.
8544 60	Electric conductors, for a voltage > 1 000 V insulated, n.e.s.

8544 70	Optical fibre cables made up of individually sheathed fibres, whether or not containing electric conductors or fitted with connectors
8545 20	Carbon brushes for electrical purposes
8547	Insulating fittings for electrical machines, appliances or equipment, being fittings wholly of insulating material apart from any minor components of metal, e.g., threaded sockets, incorporated during moulding solely for purposes of assembly (other than insulators of heading 8546); electrical conduit tubing and joints therefor, of base metal lined with insulating material
8549	Electrical and electronic waste and scrap
8602	Rail locomotives (excl. those powered from an external source of electricity or by accumulators); locomotive tenders
8604	Railway or tramway maintenance or service vehicles, whether or not self-propelled (for example, workshops, cranes, ballast tampers, trackliners, testing coaches and track inspection vehicles)
8606	Railway or tramway goods vans and wagons (excluding self-propelled and luggage vans and post office coaches)
8701 21	Road tractors for semi-trailers – With only compression-ignition internal combustion piston engine (diesel or semi-diesel)
8701 22	Road tractors for semi-trailers – With both compression-ignition internal combustion piston engine (diesel or semi-diesel) and electric motor as motors for propulsion
8701 23	Road tractors for semi-trailers – With both spark-ignition internal combustion piston engine and electric motor as motors for propulsion
8701 24	Road tractors for semi-trailers – With only electric motor for propulsion
8701 30	Track-laying tractors (excluding pedestrian-controlled)
8703 10	Vehicles for the transport of < 10 persons on snow; golf cars and similar vehicles
Ex87 03 23	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1 900 cm^3 but <= 3 000 cm^3 (excluding ambulances)
Ex87 03 24	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 3 000 cm^3 (excluding ambulances)

Ex87 03 32	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with only diesel engine of a cylinder capacity > 1 900 cm^3 but <= 2 500 cm^3 (excluding ambulances)
Ex87 03 33	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with only diesel engine of a cylinder capacity > 2 500 cm^3 (excluding ambulances)
8703 40	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion (excl. plug-in hybrids)
8703 50	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with both diesel engine and electric motor as motors for propulsion (excl. plug-in hybrids)
8703 60	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power
8703 70	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with both diesel engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power
8703 80	Motor cars and other motor vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with only electric motor for propulsion
8703 90	Motor cars and other vehicles principally designed for the transport of < 10 persons, incl. station wagons and racing cars, with engines other than internal combustion piston engine or electric motor
Ex87 04	Motor vehicles for the transport of goods, incl. chassis with engine and cab, excluding vehicles of CN codes 8704 21 91 and 8704 21 99 with engines of a cylinder capacity not exceeding 1 900 cm^3
8705	Special purpose motor vehicles (other than those principally designed for the transport of persons or goods), e.g. breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobile workshops and mobile radiological units
8709 90	Works trucks, self-propelled, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods; tractors of the type used on railway station platforms; parts of the foregoing vehicles – Parts

8716 20	Self-loading or self-unloading trailers and semi-trailers for agricultural purposes
8716 39	Other trailers and semi-trailers for the transport of goods – Other
8716 90	Parts of trailers and semi-trailers and other vehicles not mechanically propelled, n.e.s.
8903	Yachts and other vessels for pleasure or sports; rowing boats and canoes
8904	Tugs and pusher craft
8905	Light-vessels, fire-floats, dredgers, floating cranes, and other vessels the navigability of which is subsidiary to their main function; floating docks, floating or submersible drilling or production platforms
9001 10	Optical fibres, optical fibre bundles and cables (excl. made up of individually sheathed fibres of heading 8544)
9002 11	Objective lenses for cameras, projectors or photographic enlargers or reducers
9002 19	Objective lenses (excl. for cameras, projectors or photographic enlargers or reducers)
9005	Binoculars, monoculars, other optical telescopes, and mountings therefor; other astronomical instruments and mountings therefor (excl. instruments for radio-astronomy and other instruments or apparatus specified elsewhere)
9007	Cinematographic cameras and projectors, whether or not incorporating sound recording or reproducing apparatus (excl. video equipment)
9010	Apparatus and equipment for photographic or cinematographic laboratories, not elsewhere specified in Chapter 90; negatoscopes; projection screens
9013	Lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in Chapter 90
9014	Direction finding compasses; other navigational instruments and appliances (excl. radio navigational equipment); parts thereof
9015	Surveying, incl. photogrammetrical surveying, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances (excl. compasses); rangefinders
9024	Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics); parts thereof
9025 90	Parts and accessories for hydrometers, areometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, n.e.s.
9026	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges,

	manometers, heat meters), excluding instruments and apparatus of heading 9014 , 9015 , 9028 or 9032
9027	Instruments and apparatus for physical or chemical analysis, (for example polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light, (including exposure meters); microtomes
9029	Revolution counters, production counters, taximeters, milometers, pedometers and the like (excl. gas, liquid and electricity meters); speed indicators and tachometers (excl. those of heading 9014 and 9015); stroboscopes
9030	Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities (excluding meters of heading 9028); instruments and apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic or other ionising radiations
9031	Measuring or checking instruments, appliances and machines not elsewhere specified in Chapter 90; profile projectors
9032 81	Other automatic regulating or controlling instruments and apparatus – Hydraulic or pneumatic – Other
9401 10	Seats for aircraft
9401 20	Seats for motor vehicles
9403 30	Wooden furniture of a kind used in offices
9406	Prefabricated buildings
9503 00 75	Plastic toys and models, incorporating a motor n.e.s. under heading 9503
9503 00 79	Toys and models not made of plastic, incorporating a motor n.e.s. under heading 9503
9606	Buttons, press-fasteners, snap-fasteners and press studs, button moulds and other parts of these articles; button blanks (excl. cuff links)
9608 91	Pen nibs and nib points
9612 20	Of man-made fibres, measuring less than 30 mm in width, permanently put in plastic or metal cartridges of a kind used in automatic typewriters, automatic data-processing equipment and other machines
Ex98	Complete industrial plants, except plants for the production of food and drinks, pharmaceuticals, medicines and medical devices

Vedlegg XXIX skal lyde:

Vedlegg XXIX. Liste over prosjekter referert til i § 17k sjette ledd bokstav c

Scope of exemption	Date of application	Date of expiration
The transport by vessel to Japan, the technical assistance, brokering services, financing or financial assistance related to such transport, of crude oil falling under CN 2709 00 commingled with condensate, originating in the Sakhalin-2 (Сахалин-2) Project, located in Russia	5 December 2022	28 June 2024

Nytt vedlegg skal lyde:

Vedlegg XXIIIA. Liste over varer som omtalt i § 17i fjerde ledd

CN code	Description
2825	Inorganic bases, metal oxides, hydroxides and peroxides, n.e.s.; Hydrazine and hydroxylamine and their inorganic salts
2905 31	Ethylene glycol (ethanediol)
3812 10	Prepared rubber accelerators
3812 31	Mixtures of oligomers of 2,2,4-trimethyl–1,2 -dihydroquinoline (TMQ)
3812 39	Anti-oxidising preparations and other compound stabilisers for rubber or plastics (excluding mixtures of oligomers of 2,2,4-trimethyl–1,2 -dihydroquinoline (TMQ))
3816 00 90	Refractory cements, mortars, concretes and similar compositions (excluding dolomite ramming mix), other than products of heading 3801
3910	Silicones in primary forms
3911 90	Polysulphides, polysulphones and other products specified in note 3 to this chapter, not elsewhere specified or included, in primary forms, excluding poly(1,3-phenylene methylphosphonate)
3912 12	Plasticised cellulose acetates, in primary forms
3912 20	Cellulose nitrates, including collodions, in primary forms
3912 31	Carboxymethylcellulose and its salts, in primary forms
3912 39	Cellulose ethers, in primary forms (excluding carboxymethylcellulose and its salts)

3917 22	Rigid tubes, pipes and hoses of polymers of propylene
3917 29	Rigid tubes, pipes and hoses, of other plastics
4011 80	New pneumatic tyres, of rubber, of a kind used on construction, mining or industrial handling vehicles and machines
7201	Pig iron and spiegeleisen, in pigs, blocks or other primary forms
7202 11	Ferro-manganese, containing by weight more than 2 % of carbon
7202 19	Ferro-manganese, not containing by weight more than 2 % of carbon
7202 21	Ferro-silicon, containing by weight more than 55 % of silicon
7202 29	Ferro-silicon, containing by weight not more than 55 % of silicon
7202 30	Ferro-silico-manganese
7202 41	Ferro-chromium, containing by weight more than 4 % of carbon
7202 49	Ferro-chromium, containing by weight not more than 4 % of carbon
7202 50	Ferro-silico-chromium
7202 60	Ferro-nickel
7202 70	Ferro-molybdenum
7202 80	Ferro-tungsten and ferro-silico-tungsten
7202 91	Ferro-titanium and ferro-silico-titanium
7202 93	Ferro-niobium
7202 99	Other ferro-alloys
7203	Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or similar forms; iron having a minimum purity by weight of 99,94 %, in lumps, pellets or similar forms
7204	Ferrous waste and scrap; remelting scrap ingots of iron or steel
7205	Granules and powders of pig iron, spiegeleisen, iron or steel
7206	Iron and non-alloy steel in ingots or other primary forms (excl. remelting scrap ingots, products obtained by continuous casting and iron of heading 7203)
7214	Bars and rods, of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded, but including those twisted after rolling, n.e.s.
7215 10	Bars and rods, of non-alloy free-cutting steel, not further worked than cold-formed or cold-finished, n.e.s.
7215 90	Bars and rods, of iron or non-alloy steel, further worked than cold-formed or cold-finished, n.e.s.
7217	Wire of iron or non-alloy steel

7221	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel
7222 11	Bars and rods, not further worked than hot-rolled, hot-drawn or extruded, of stainless steel, of circular cross-section
7222 19	Bars and rods, not further worked than hot-rolled, hot-drawn or extruded (excluding of circular cross-section, of stainless steel)
7222 20	Other bars and rods of stainless steel, not further worked than cold-formed or cold-finished
7222 40	Angles, shapes and sections of stainless steel
7223	Wire of stainless steel
7227	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel
7229 20	Wire of silico-manganese steel
7301 10	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements
7302	Railway or tramway track construction material of iron or steel, the following: rails, check-rails and rack rails, switch blades, crossing frogs, point rods and other crossing pieces, sleepers (cross-ties), fish-plates, chairs, chair wedges, sole plates (base plates), rail clips, bedplates, ties and other material specialised for jointing or fixing rails
7303	Tubes, pipes and hollow profiles, of cast iron
7304 11	Line pipe of a kind used for oil or gas pipelines, seamless, of stainless steel
7304 19	Line pipe of a kind used for oil or gas pipelines, seamless, of iron or steel (excluding products of stainless steel or of cast iron)
7304 22	Drill pipe, seamless, of stainless steel, of a kind used in drilling for oil or gas
7304 23	Drill pipe, seamless, of a kind used in drilling for oil or gas, of iron or steel (excluding products of stainless steel or of cast iron)
7304 29	Casing and tubing, seamless, of iron or steel, of a kind used in drilling for oil or gas (excluding products of stainless steel or of cast iron)
7304 31	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of iron or non-alloy steel, cold-drawn or cold-rolled (cold-reduced)
7304 39	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of iron or non-alloy steel, not cold-drawn or cold-rolled (cold-reduced) (excluding cast iron products, line pipe of a kind used for oil or gas pipelines, casing and tubing of a kind used for drilling for oil or gas)
7304 41	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of stainless steel, cold-drawn or cold-rolled (cold-reduced) (excluding line pipe of a kind used for oil or gas pipelines, casing and tubing of a kind used for drilling for oil or gas)

7304 49	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of stainless steel, not cold-drawn or cold-rolled (cold-reduced) (excluding line pipe of a kind used for oil or gas pipelines or of a kind used for drilling for oil or gas)
7304 51	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of alloy steel other than stainless, cold-drawn or cold-rolled (cold-reduced) (excl. line pipe of a kind used for oil or gas pipelines, casing and tubing of a kind used for drilling for oil)
7304 59	Tubes, pipes and hollow profiles, seamless, of circular cross-section, of alloy steel other than stainless, not cold-drawn or cold-rolled (cold-reduced) (excluding line pipe of a kind used for oil or gas pipelines, casing and tubing of a kind used for drilling for oil)
7304 90	Tubes, pipes and hollow profiles, seamless, of non-circular cross-section, of iron or steel (excluding products of cast iron)
7305 12	Line pipe of a kind used for oil or gas pipelines, having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel, longitudinally welded (excluding products submerged arc welded)
7305 19	Line pipe of a kind used for oil or gas pipelines, having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel (excluding products longitudinally welded)
7305 20	Casing of a kind used in drilling for oil or gas, having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel
7305 31	Tubes and pipes having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel, longitudinally welded
7305 90	Tubes and pipes having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel, welded (excluding line pipe of a kind used for oil or gas pipelines and casing of a kind used in drilling for oil or gas)
7306 11	Line pipe of a kind used for oil or gas pipelines, welded, of stainless steel, having a circular cross-section of an external diameter not exceeding 406,4 mm, or having a non-circular cross-section
7306 19	Line pipe of a kind used for oil or gas pipelines, of iron or steel, having a circular cross-section of an external diameter not exceeding 406,4 mm, or having a non-circular cross-section (excluding welded products of stainless steel)
7306 21	Casing and tubing of a kind used in drilling for oil or gas, welded, of stainless steel, having a circular cross-section of an external diameter not exceeding 406,4 mm, or having a non-circular cross-section
7306 29	Casing and tubing of a kind used in drilling for oil or gas, welded, of iron or steel, of an external diameter not exceeding 406,4 mm (excluding products welded and of stainless steel)
7306 30	Tubes, pipes and hollow profiles, welded, of circular cross-section of an external diameter not exceeding 406,4 mm, of iron or non-alloy steel (excluding line pipe of a

	kind used for oil or gas pipelines, and casing and tubing of a kind used in drilling for oil or gas)
7306 40	Tubes, pipes and hollow profiles, welded, of circular cross-section of an external diameter not exceeding 406,4 mm, of stainless steel (excluding line pipe of a kind used for oil or gas pipelines, and casing and tubing of a kind used in drilling for oil or gas)
7306 61	Tubes, pipes and hollow profiles, welded, of square or rectangular cross-section, of iron or steel (excluding line pipe of a kind used for oil or gas pipelines, and casing and tubing of a kind used in drilling for oil or gas)
7306 69	Tubes, pipes and hollow profiles, welded, of cross-section other than circular, rectangular or square, of iron or steel (excluding line pipe of a kind used for oil or gas pipelines, and casing and tubing of a kind used in drilling for oil or gas)
7306 90	Tubes, pipes and hollow profiles, of iron or steel
7411 10	Tubes and pipes of refined copper
7411 21	Tubes and pipes of copper-zinc base alloys (brass)
7411 22	Tubes and pipes of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel silver)
7413	Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated
7606 11	Plates, sheets and strip, of non-alloy aluminium, of a thickness exceeding 0,2 mm, square or rectangular (excl. expanded plates, sheets and strip)
7606 12	Plates, sheets and strip, of aluminium alloys, of a thickness exceeding 0,2 mm, square or rectangular (excl. expanded plates, sheets and strip)
7606 91	Plates, sheets and strip, of non-alloy aluminium, of a thickness exceeding 0,2 mm (other than square or rectangular)
7608	Aluminium tubes and pipes
7609	Aluminium tube or pipe fittings (for example couplings, elbows, sleeves)
8207 13	Rock-drilling or earth-boring tools, interchangeable, with working parts of cermets
8207 19	Rock-drilling or earth-boring tools, interchangeable, and parts therefor, with working parts of materials other than cermets
8207 20	Interchangeable dies for drawing or extruding metal
8207 30	Interchangeable tools for pressing, stamping or punching
8207 40	Tools for tapping or threading, interchangeable
8207 50	Tools for drilling, interchangeable (other than rock-drilling)
8207 70	Interchangeable tools for milling
8207 80	Interchangeable tools for turning

8207 90	Interchangeable tools for hand tools, whether or not power-operated, or for machine tools, n.e.s.
8412 31	Pneumatic power engines and motors, linear-acting, (cylinders)
8412 80	Engines and motors (excluding steam turbines, internal combustion piston engine, hydraulic turbines, water wheels, gas turbines, reaction engines, hydraulic power engines and motors, pneumatic power engines and motors)
8413 20	Hand pumps for liquids (excluding those of subheading 8413 11 and 8413 19)
8413 40	Concrete pumps
8413 82	Liquid elevators
8413 92	Parts of liquid elevators
8417 10	Industrial or laboratory furnaces and ovens, non-electric, for the roasting, melting or other heat treatment of ores, pyrites or metals
8430 20	Snowploughs and snowblowers (excl. those mounted on railway wagons, motor vehicle chassis or lorries)
8430 31	Self-propelled coal or rock cutters and tunnelling machinery
8430 61	Tamping or compacting machinery, not self-propelled
8456 11	Machine tools for working any material by removal of material, operated by laser
8456 12	Machine tools for working any material by removal of material, operated by light or photon beam processes other than laser
8456 30	Machine tools for working any material by removal of material, operated by electro-discharge processes
8456 50	Water-jet cutting machines
8456 90	Machine tools for working any material by removal of material, operated by electro-chemical, electron beam or ionic-beam processes
8461 50	Sawing or cutting-off machines, for working metals, or cermets
8467	Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor
8474 20	Crushing or grinding machines for solid mineral substances
8474 32	Machines for mixing mineral substances with bitumen
8480 10	Moulding boxes for metal foundry
8480 41	Injection or compression-type moulds for metal or metal carbides
8480 49	Moulds for metal or metal carbides
8480 50	Moulds for glass
8480 79	Moulds for rubber or plastics (other than injection or compression types)

8485	Machines for additive manufacturing
8501 10	Motors of an output not exceeding 37,5 W
8501 32	DC motors and DC generators other than photovoltaic generators of an output exceeding 750 W but not exceeding 75 kW
8501 34	DC motors and DC generators other than photovoltaic generators of an output exceeding 375 kW
8501 40	AC motors, single-phase, n.e.s.
8501 51	AC motors, multi-phase, n.e.s., of an output not exceeding 750 W
8501 52	AC motors, multi-phase, n.e.s., of an output exceeding 750 W but not exceeding 75 kW
8501 71	Photovoltaic DC generators, of an output not exceeding 50 W
8501 72	Photovoltaic DC generators, of an output exceeding 50 W
8501 80	Photovoltaic AC generators
8506 10	Manganese dioxide primary cells and primary batteries
8506 30	Mercuric oxide primary cells and primary batteries
8506 40	Silver oxide primary cells and primary batteries
8506 50	Lithium primary cells and primary batteries
8506 80	Primary cells and primary batteries, n.e.s.
8507 50	Nickel-metal hydride electric accumulators
8507 60	Lithium-ion electric accumulators
8507 80	Electric accumulators (excluding lead-acid, nickel-cadmium, nickel-metal hydride and lithium-ion accumulators)
8507 90	Plates, separators and other parts of electric accumulators.
8515 31	Fully or partly automatic machines and apparatus for arc (including plasma arc) welding of metals
8515 39	Machines and apparatus for arc (including plasma arc) welding of metals, other than fully or partly automatic
8515 80	Electric machines and apparatus for laser or other light or photon beam, ultrasonic, electron beam, magnetic pulse soldering, brazing or welding, whether or not capable of cutting; electric machines and apparatus for hot spraying of metals or cermets
8515 90	Parts of machines and apparatus for brazing, soldering, welding, or for hot spraying of metals or cermets
8904	Tugs and pusher craft

8905	Light-vessels, fire-floats, dredgers, floating cranes, and other vessels the navigability of which is subsidiary to their main function; floating docks, floating or submersible drilling or production platforms
9013 20	Lasers, other than laser diodes
9013 90	Parts and accessories for lasers other than laser diodes, other optical appliances and instruments not elsewhere specified in Chapter 90
9027 20	Chromatographs and electrophoresis instruments
9027 30	Spectrometers, spectrophotometers and spectrographs using optical radiations, such as UV, visible, IR
9027 50	Instruments and apparatus using optical radiations (UV, visible, IR) (excluding spectrometers, spectrophotometers, spectrographs, and gas or smoke analysis apparatus)
9027 90	Microtomes; parts and accessories
9030 10	Instruments and apparatus for measuring or detecting ionising radiations
9030 20	Oscilloscopes and oscillographs
9030 31	Multimeters for voltage, current, resistance or electrical power, without recording device
9030 33	Instruments and apparatus for measuring or checking voltage, current, resistance or electrical power, without recording device (excluding multimeters)
9030 84	Instruments and apparatus for measuring or checking electrical quantities, with recording device n.e.s. (excluding appliances specially designed for telecommunications, multimeters, oscilloscopes and oscillographs, and apparatus for measuring or checking semiconductor wafers or devices)
9030 90	Parts and accessories for instruments and apparatus for measuring or checking electrical quantities or for instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionising radiations

Nytt vedlegg skal lyde:

Vedlegg XXIIIB. Liste over varer som omtalt i §17i femte ledd

CN code	Description
3917 21	Rigid tubes, pipes and hoses, of polymers of ethylene
3917 39	Flexible tubes, pipes and hoses, of plastics, whether or not with fittings, reinforced or otherwise combined with other materials (excluding those with a minimum burst pressure of 27,6 MPa)

3917 40	Tubes, pipes and hoses fittings (for example, joints, elbows, flanges), of plastics
7305 11	Line pipe of a kind used for oil or gas pipelines, having circular cross-sections and an external diameter exceeding 406,4 mm, of iron or steel, longitudinally submerged arc welded
7307 11	Tube or pipe fittings of non-malleable cast iron
7307 19	Cast tube or pipe fittings of iron or steel (excluding products of non-malleable cast iron)
7307 21	Flanges of stainless steel (excluding cast products)
7307 23	butt welding tube or pipe fittings of stainless steel (excluding cast products)
7307 29	Tube or pipe fittings of stainless steel (excluding cast products, flanges, threaded elbows, bends and sleeves and butt welding fittings)
7307 91	Flanges of iron or steel (excluding cast or stainless steel products)
7307 92	Threaded elbows, bends and sleeves, of iron or steel (excluding cast or stainless steel products)
7307 93	Butt welding fittings of iron or steel (excluding cast or stainless steel products)
7307 99	Tube or pipe fittings, of iron or steel (excluding cast or stainless steel products; flanges; threaded elbows, bends and sleeves; butt welding fittings)
7412	Copper tube or pipe fittings (for example couplings, elbows, sleeves)
8412 90	Parts of engines and motors (excluding steam turbines, internal combustion piston engine, hydraulic turbines, water wheels, gas turbines, turbojets)
8413 70	Centrifugal pumps, power-driven (excluding those of subheading 8413 11 and 8413 19 , fuel, lubricating or cooling medium pumps for internal combustion piston engine, concrete pumps, reciprocating positive displacement pumps and rotary positive displacement pumps)
8413 91	Parts of pumps for liquids
8417 80	Industrial or laboratory furnaces and ovens, non-electric, including incinerators (excluding those for the roasting, melting or other heat treatment of ores, pyrites or metals, bakery and biscuit ovens)
8417 90	Parts of industrial or laboratory furnaces, non-electric, including. incinerators
8430 41	Self-propelled boring or sinking machinery for boring earth or extracting minerals or ores (excl. those mounted on railway or tramway wagons, motor vehicle chassis or lorries and tunnelling machinery)
8430 49	Boring or sinking machinery for boring earth or extracting minerals or ores, not self-propelled and not hydraulic (excl. tunnelling machinery and hand-operated tools)
8465 10	Machines for working wood, cork, bone, hard rubber, hard plastics or similar hard materials, which can carry out different types of machining operations without tool change between such operations

8465 91	Sawing machines for working wood, cork, bone, hard rubber, hard plastics or similar hard materials
8465 92	Planing, milling or moulding (by cutting) machines, for working wood, cork, bone, hard rubber, hard plastics or similar hard materials
8465 95	Drilling or mortising machines for working wood, cork, bone, hard rubber, hard plastics or similar hard materials
8465 99	Machine tools for working wood, cork, bone, hard rubber, hard plastics or similar hard materials n.e.s.
8474 90	Parts of machinery for working mineral substances of heading 8474
8480 71	Injection or compression-type moulds for rubber or plastics

Nytt vedlegg skal lyde:

Vedlegg XXXVII. Liste over varer og teknologi som omtalt i § 17i annet ledd

CN code	Description
8409 99	Parts suitable for use solely or principally with compression-ignition internal combustion piston engine (diesel or semi-diesel engine), n.e.s.
8412 21	Hydraulic power engines and motors, linear acting (cylinders)
8413 50	Reciprocating positive displacement pumps for liquids, power-driven, n.e.s.
8421 23	Oil or petrol-filters for internal combustion engines
8421 31	Intake air filters for internal combustion engines
8428 39	Continuous-action elevators and conveyors, for goods or materials (excluding those for underground use and bucket, belt or pneumatic types)
8429 59	Self-propelled mechanical shovels, excavators and shovel loaders (excluding machinery with a 360° revolving superstructure and front-end shovel loaders)
8431 39	Parts suitable for use solely or principally with the machinery of heading 8428 , (excluding parts of lifts, skip hoists or escalators), n.e.s.
8471 30	Portable automatic data-processing machines, weighing not more than 10 kg, consisting of at least a central processing unit, a keyboard and a display
8471 70	Storage units for automatic data-processing machines
8481 20	Valves for oleohydraulic or pneumatic transmission

8502 20	Generating sets with spark-ignition internal combustion piston engines
8507 10	Lead-acid accumulators of a kind used for starting piston engines
8705 10	Crane lorries

Nytt vedlegg skal lyde:

Vedlegg XXXVIIIA. Liste over varer og produkter omtalt i § 17m

Part A

	CN code	Description
	7102 10	Unsorted diamonds
	7102 31	Non-industrial diamonds, unworked or simply sawn, cleaved or bruted
	7102 39	Non-industrial diamonds, other than unworked or simply sawn, cleaved or bruted

Part B

	7104 21	Synthetic or reconstructed diamonds, unworked or simply sawn or roughly shaped
	7104 91	Synthetic or reconstructed diamonds, other than unworked or simply sawn or roughly shaped

Part C

Ex	7113	Articles of jewellery and parts thereof, of precious metal or of metal clad with precious metal, incorporating diamonds
Ex	7114	Articles of goldsmiths' or silversmiths' wares and parts thereof, of precious metal or of metal clad with precious metal, incorporating diamonds
Ex	7115 90	Other articles of precious metal or of metal clad with precious metal, incorporating diamonds, not elsewhere specified, excluding platinum catalysts in the form of wire cloth or grill
Ex	7116 20	Articles of natural or cultured pearls, precious or semi-precious stones (natural, synthetic or reconstructed), incorporating diamonds
Ex	9101	Wristwatches, pocket-watches and other watches, including stopwatches, incorporating diamonds, with case of precious metal or of metal clad with precious metal

Nytt vedlegg skal lyde:

Vedlegg XXXIX. Liste over programvare som omtalt i § 19c

Software for the management of enterprises, i.e. systems that digitally represent and steer all processes happening in an enterprise, including:

— enterprise resource planning (ERP),

— customer relationship management (CRM),

— business intelligence (BI),

— supply chain management (SCM),

— enterprise data warehouse (EDW),

— computerized maintenance management system (CMMS),

— project management software,

— product lifecycle management (PLM),

—typical components of the above-mentioned suites, including software for accounting, fleet management, logistics and human resources.

Design and Manufacturing Software used in the areas of architecture, engineering, construction, manufacturing, media, education and entertainment, including:

— building information modelling (BIM),

— computer aided design (CAD),

— computer-aided manufacturing (CAM),

— engineer to order (ETO),

— typical components of above-mentioned suites.

Nytt vedlegg skal lyde:

Vedlegg XL. Liste over varer og teknologi som omtalt i §19g

—8542.31 Electronic integrated circuits: Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits

— 8542.32 Electronic integrated circuits: Memories

— 8542.33 Electronic integrated circuits: Amplifiers

— 8542.39 Electronic integrated circuits: Other

—8517.62 Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus

— 8526.91 Radio navigational aid apparatus

— 8532.21 Other fixed capacitors: Tantalum capacitors

— 8532.24 Other fixed capacitors: Ceramic dielectric, multilayer

—8548.00 Electrical parts of machinery or apparatus, not specified or included elsewhere in chapter 85

—8471.50 Processing units other than those of subheading 8471 41 or 8471 49, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units

— 8504.40 Static converters

—8517.69 Other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network

—8525.89 Other television cameras, digital cameras and video camera recorders

—8529.10 Aerials and aerial reflectors of all kinds; parts suitable for use therewith

—8529.90 Other parts suitable for use solely or principally with the apparatus of headings 8524 to 8528

— 8536.69 Plugs and sockets for a voltage not exceeding 1 000 V

—8536.90 Electrical apparatus for switching electrical circuits, or for making connections to or in electricalcircuits, for a voltage not exceeding 1 000 V (excl. fuses, automatic circuit breakers and other apparatus for protecting electrical circuits, relays and other switches, lamp holders, plugs and sockets)

—8541.10 Diodes, other than photosensitive or light-emitting diodes (LED)

—8541.21 Transistors, other than photosensitive transistors with a dissipation rate of less than 1 W

— 8541.29 Other transistors, other than photosensitive transistors

—8541.30 Thyristors, diacs and triacs (excl. photosensitive semiconductor devices)

—8541.49 Photosensitive semiconductor devices (excl. Photovoltaic generators and cells)

—8541.51 Other semiconductor devices: Semiconductor-based transducers

— 8541.59 Other semiconductor devices

— 8541.60 Mounted piezo-electric crystals

— 8482.10 Ball bearings

—8482.20 Tapered roller bearings, including cone and tapered roller assemblies

— 8482.30 Spherical roller bearings

—8482.50 Other cylindrical roller bearings, including cage and roller assemblies

— 8807.30 Other parts of aeroplanes, helicopters or unmanned aircraft

—9013.10 Telescopic sights for fitting to arms; periscopes; telescopes designed to form parts of machines, appliances, instruments or apparatus of this chapter or Section XVI

— 9013.80 Other optical devices, appliances and instruments

—9014.20 Instruments and appliances for aeronautical or space navigation (other than compasses)

— 9014.80 other navigational instruments and appliances

—8471.80 Units for automatic data-processing machines (excl. processing units, input or output units and storage units)

—8486.10 Machines and apparatus for the manufacture of boules or wafers

—8486.20 Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits

—8486.40 Machines and apparatus specified in note 11(C) to this chapter

— 8534.00 Printed circuits

— 8543.20 Signal generators

—9027.50 Other instruments and apparatus using optical radiations (ultraviolet, visible, infrared)

— 9030.20 Oscilloscopes and oscillographs

— 9030.32 Multimeters with recording device

—9030.39 Instruments and apparatus for measuring or checking voltage, current, resistance or electrical power, with recording device

—9030.82 Instruments and apparatus for measuring or checking semiconductor wafers or devices

II

Forskriften trer i kraft straks.