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Government of India
Ministry of Commerce & Industry
Department of Commerce
Directorate General of Foreign Trade
Udyog Bhavan

Notification No. 10 /2015-2020
New Delhi, dated: 11th June, 2020

Subject: SCOMET Updates 2020 - Amendment in Appendix 3 (SCOMET items) to Schedule-2 of ITC (HS) Classification of Export and Import Items, 2018.

S.O.(E) In exercise of the powers conferred by Section 5 and Section 14A of the Foreign Trade (Development and Regulation) Act, 1992, as amended, read with Para 1.02 of the Foreign Trade Policy 2015-2020, the Central Government hereby makes the amendment in Appendix 3 (SCOMET Items) to Schedule -2 of ITC (HS) Classification of Export and Import Items 2018, as enclosed in the Annexure to this Notification.

2. The updated Appendix 3 (SCOMET Items) to Schedule- 2 of ITC (HS) Classification of Export and Import Items, 2018 including annexure to this notification would be uploaded on the web-portal of DGFT under heading Policies and Sub-heading SCOMET (http://dgft.gov.in/scomet).

3. In order to provide transition time to industry, this Notification shall come into force after 30 days of the issue. However, changes to the Annex on Scheduled Chemicals, as at Sl. No. 63 to 66 of the Annexure to the Notification, shall come into force, with immediate effect.

4. **Effect of this Notification:-**

Annual SCOMET Updates - 2020 has been notified to amend Appendix 3 (SCOMET Items) to Schedule - 2 of ITC (HS) Classification of Export and Import Items, 2018.

11/06/2020

(Amit Yadav)
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(Issued from F.No. 01/91/171/37/AM10/EC / E-65)

Note : Principal Notification No. 05 dated 24th April 2017, Notification No. 13 dated 28th June 2017, Notification No. 29 dated 21st September 2017, Notification No. 17 dated 3rd July, 2018 and Notification No. 04 dated 24th April, 2019

Annexure

Annexure referred to in DGFT Notification No.10/2015-20 dated11.06.2020 regarding amendment in Appendix 3 (SCOMET Items) to Schedule -2 of ITC (HS) Classification of Export and Import Items 2018

S. No.	Entry No. in SCOMET Control List	Existing entry in SCOMET List	Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]
1	2	3	4
1.	**Change in the heading of 1A chemicals**	**1A**Export of the following chemicals is prohibited:	**1A** Export of the following chemicals, related technology and software is prohibited :
2.	**Change in 3D001 (6) Valves** **Addition of Technical Note 3 at the end of 3D001 (6) Valves**	**3D001 (6)**Valves (i) Valves, having both of the following: a. A nominal size greater than 1.0 cm (3/8"), and b. All surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry (ii) Valves, not already identified in 3D001(6)(i), having all of the following: a. A nominal size equal to or greater than 2.54 cm (1") and equal to or less than 10.16 cm (4") b. Casings (valve bodies) or preformed casing liners, c. A closure element designed to be interchangeable, and d. All surfaces of the casing (valve body) or preformed case liner that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry (iii) Components, as follows: a. Casings (valve bodies) designed for valves in paragraphs 6.a.or 6.b., in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry; b. Preformed casing liners designed for valves in paragraphs 6.a.or 6.b., in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry. *Technical Note 1. Materials of construction for valves include any of the following:* a. nickel or alloys with more than 40% nickel by weight; b. alloys with more than 25% nickel and 20% chromium by weight; c. fluoropolymers (polymeric or elastomeric materials with more than 35% fluorine by weight); d. glass or glass-lined (including vitrified or enamelled coating); e. tantalum or tantalum alloys;	**3D001(6)**Valves (i) Valves, having both of the following: a. A nominal size greater than DN 10 or NPS 3/8 or *national equivalents*, and b. All surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry (ii) Valves, not already identified in 3D001(6)(i), having all of the following: a. A nominal size equal to or greater than DN 25 or NPS 1 and equal to or less than DN 100 or NPS 4 or *national equivalents.* b. Casings (valve bodies) or preformed casing liners, c. A closure element designed to be interchangeable, and d. All surfaces of the casing (valve body) or preformed case liner that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry (iii) Components, as follows: a. Casings (valve bodies) designed for valves in paragraphs 6.a.or 6.b., in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry; b. Preformed casing liners designed for valves in paragraphs 6.a.or 6.b., in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the materials of construction in Technical Note 1 of this entry. *Technical Note 1. Materials of construction for valves include any of the following:* *a. nickel or alloys with more than 40% nickel by weight;* *b. alloys with more than 25% nickel and 20% chromium by weight;* *c. fluoropolymers (polymeric or elastomeric materials with more than 35% fluorine by weight);* *d. glass or glass-lined (including vitrified or enamelled coating);*

<table>
<tr><td></td><td></td><td>f. titanium or titanium alloys;
g. zirconium or zirconium alloys;
h. niobium (columbium) or niobium alloys; or
i. ceramic materials as follows:
1.silicon carbide with a purity of 80% or more by weight;
2.aluminum oxide (alumina) with a purity of 99.9% or more by weight;
3.zirconium oxide (zirconia).

Technical Note 2. The 'nominal size' is defined as the smaller of the inlet and outlet port diameters.</td><td>e. tantalum or tantalum alloys;
f. titanium or titanium alloys;
g. zirconium or zirconium alloys;
h. niobium (columbium) or niobium alloys; or
i. ceramic materials as follows:
1.silicon carbide with a purity of 80% or more by weight;
2.aluminum oxide (alumina) with a purity of 99.9% or more by weight;
3.zirconium oxide (zirconia).

Technical Note 2. The 'nominal size' is defined as the smaller of the inlet and outlet port diameters.

Technical Note 3.Metric nominal sizes (DN) of valves are in accordance with ISO6708:1995. National Pipe Sizes (NPS) are in accordance with ASME B36.10 or B36.19, or national equivalents.</td></tr>
<tr><td>3.</td><td>Change in 1A (6)</td><td>1A(6) Nitrogen mustard HN2: Bis (2-chloroethyl) Cloroarsine</td><td>1A(6)Nitrogen mustard HN2: Bis (2-chloroethyl) Methylamine</td></tr>
<tr><td>4.</td><td>Change in 3D006 Fermenters:

Addition of Technical Note 1 and 2</td><td>3D006 Fermenters:

(1) Fermenters capable of cultivation of micro-organisms or of live cells for the production of viruses or toxins, without the propagation of aerosols, having a total internal volume of 20 litres or greater;
(2) Components designed for such fermenters, as follows:-
a. Cultivation chambers designed to be sterilized or disinfected in situ;
b. cultivation chamber holding devices; or
c. process control units capable of simultaneously monitoring and controlling two or more fermentation system parameters (e.g. temperature, pH, nutrients, agitation, dissolved oxygen, air flow, foam control).

Technical Note
Fermenters include bioreactors (including single-use (disposable) bioreactors), chemostats and continuous-flow systems.</td><td>3D006Fermenters:

(1) Fermenters capable of cultivation of micro-organisms or of live cells for the production of viruses or toxins, without the propagation of aerosols, having a total internal volume of 20 litres or greater;
(2) Components designed for such fermenters, as follows:-
a. Cultivation chambers designed to be sterilized or disinfected in situ;
b. cultivation chamber holding devices; or
c. process control units capable of simultaneously monitoring and controlling two or more fermentation system parameters (e.g. temperature, pH, nutrients, agitation, dissolved oxygen, air flow, foam control).

Technical Note 1 Fermenters include bioreactors (including single-use (disposable) bioreactors), chemostats and continuous-flow systems.

Technical Note 2 Cultivation chamber holding devices include single-use cultivation chambers with rigid walls.</td></tr>
<tr><td>5.</td><td>New Entries added at 1D026 to 1D049</td><td>New entries entered from sub-category 1D026 to 1D049</td><td>
<table>
<tr><th>Sl.No.</th><th>SCOMET Entry</th><th>Chemical</th><th>CAS Number</th></tr>
<tr><td>1</td><td>1D001</td><td>2-Chloroethanol</td><td>(107-07-3)</td></tr>
<tr><td>2</td><td>1D002</td><td>3-Hydroxy-1-methylpiperidine</td><td>(3554-74-3)</td></tr>
<tr><td>3</td><td>1D003</td><td>3-Quinuclidone</td><td>(3731-38-2)</td></tr>
<tr><td>4</td><td>1D004</td><td>Ammonium bifluoride</td><td>(1341-49-7)</td></tr>
<tr><td>5</td><td>1D005</td><td>Diethylaminoethanol</td><td>(100-37-8)</td></tr>
<tr><td>6</td><td>1D006</td><td>Diisopropylamine</td><td>(108-18-9)</td></tr>
<tr><td>7</td><td>1D007</td><td>Dimethylamine</td><td>(124-40-3)</td></tr>
<tr><td>8</td><td>1D008</td><td>Dimethylamine hydrochloride</td><td>(506-59-2)</td></tr>
<tr><td>9</td><td>1D009</td><td>Hydrogen fluoride</td><td>(7664-39-3)</td></tr>
<tr><td>10</td><td>1D010</td><td>Methyl benzilate</td><td>(76-89-1)</td></tr>
<tr><td>11</td><td>1D011</td><td>O,O-Diethyl phosphorothioate</td><td>(2465-65-8)</td></tr>
</table>
</td></tr>
</table>

12	1D012	O,O-Diethyl phosphorodithioate	(298-06-6)		
13	1D013	Pinacolone	(75-97-8)		
14	1D014	Phosphorus pentasulphide	(1314-80-3)		
15	1D015	Potassium bifluoride	(7789-23-3)		
16	1D016	Potassium cyanide	(151-50-8)		
17	1D017	Potassium fluoride	(7789-23-3)		
18	1D018	Sodium bifluoride	(1333-83-1)		
19	1D019	Sodium cyanide	(143-33-9)		
20	1D020	Sodium fluoride	(7681-49-4)		
21	1D021	Sodium hexafluorosilicate	(16893-85-9)		
22	1D022	Sodium sulphide	(1313-82-2)		
23	1D023	Triethanolamine hydrochloride	(637-39-8)		
24	1D024	Triisopropyl phosphate	(116-17-6)		
25	1D025	Diethylamine	(109-89-7)		
26	1D026	Methyl dichlorophosphate	677-24-7		
27	1D027	Ethyl dichlorophosphate	1498-51-7		
28	1D028	Methyl difluorophosphate	22382-13-4		
29	1D029	Ethyl difluorophosphate	460-52-6		
30	1D030	Diethyl chlorophosphite	589-57-1		
31	1D031	Methyl chlorofluorophosphate	754-01-8		
32	1D032	Ethyl chlorofluorophosphate	762-77-6		
33	1D033	N,N-Dimethylformamidine	44205-42-7		
34	1D034	N,N-Diethylformamidine	90324-67-7		
35	1D035	N,N-Dipropylformamidine	48044-20-8		
36	1D036	N,N-Diisopropylformamidine	857522-08-8		
37	1D037	N,N-Dimethylacetamidine	2909-14-0		
38	1D038	N,N-Diethylacetamidine	14277-06-6		
39	1D039	N,N-Dipropylacetamidine	1339586-99-0		
40	1D040	N,N-Dimethylpropanamidine	56776-14-8		
41	1D041	N,N-Diethylpropanamidine	84764-73-8		
42	1D042	N,N-Diprophypropanamidine	1341496-89-6		
43	1D043	N,N-Dimethylbutanamidine	1340437-35-5		
44	1D044	N,N-Diethylbutanamidine	53510-30-8		
45	1D045	N,N-Diprophylbutanamidine	1342422-35-8		
46	1D046	N,N-	1315467-17-4		

					Diisopropylbutanamidine	
			47	1D047	N,N-Dimethylisobutanamidine	321881-25-8
			48	1D048	N,N-Diethylisobutanamidine	1342789-47-2
			49	1D049	N,N-Dipropylisobutanamidine	13422700-45-1

6.	**Sub Category 2D (Addition of Middle East respiratory syndrome coronavirus (MERS-CoV) at Sl. No. 2D031 and change in order of items (Sequence maintained in alphabetical order as international practice)**	**2D**Viruses, whether natural, enhanced or modified, either in the form of isolated live cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures, related technology and software:			**2D**Viruses, whether natural, enhanced or modified, either in the form of isolated live cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures, related technology and software:	
		2D001	African Horse Sickness virus		2D001	African Horse Sickness virus
		2D002	African Swine Fever virus		2D002	African Swine Fever virus
		2D003	Avian influenza virus *Note This includes only those Avian influer viruses of high pathogenicity as defined by t World Organization for Animal Health (OI the European Union (EU), or compete national regulatory bodies.*		2D003	Avian influenza virus *Note This includes only those Avi influenza viruses of high pathogenicity defined by the World Organization f Animal Health (OIE), the European Uni (EU), or competent national regulato bodies.*
		2D004	Blue tongue virus		2D004	Blue tongue virus
		2D005	Camel pox virus		2D005	Camel pox virus
		2D006	Chikungunya virus		2D006	Chikungunya virus
		2D007	Crimean-Congo hemorrhagic fever virus		2D007	Crimean-Congo hemorrhagic fever virus
		2D008	Dengue virus		2D008	Dengue virus
		2D009	Eastern equine encephalitis virus		2D009	Eastern equine encephalitis virus
		2D010	Ebolavirus: all members of the Ebolavir genus		2D010	Ebolavirus: all members of the Ebolavir genus
		2D011	Encephalomyocarditis virus (EMC)		2D011	Encephalomyocarditis virus (EMC)
		2D012	Foot and Mouth Disease virus (all serotyp and subtypes)		2D012	Foot and Mouth Disease virus (all serotyp and subtypes)
		2D013	Guanarito virus		2D013	Guanarito virus
		2D014	Goatpox virus		2D014	Goatpox virus
		2D015	Hantaan virus		2D015	Hantaan virus
		2D016	Herpes virus simiae (monkey B virus)		2D016	Herpes virus simiae (monkey B virus)
		2D017	Herpes ateles, Herpes saimiri		2D017	Herpes ateles, Herpes saimiri
		2D018	HIV- 1 & HIV-2 and other strains of SIV		2D018	HIV- 1 & HIV-2 and other strains of SIV
		2D019	Classical swine fever virus (Hog cholera virus		2D019	Classical swine fever virus (Hog chole virus)
		2D020	Human T-cell Leukemia virus		2D020	Human T-cell Leukemia virus
		2D021	Junin virus		2D021	Junin virus
		2D022	Japanese encephalitis virus		2D022	Japanese encephalitis virus
		2D023	Kyasanur Forest Disease virus		2D023	Kyasanur Forest Disease virus
		2D024	Korean hemorrhagic fever virus		2D024	Korean hemorrhagic fever virus
		2D025	Lymphocytic choriomeningitis virus (LCM)		2D025	Lymphocytic choriomeningitis virus (LCM
		2D026	Lassa virus		2D026	Lassa virus
		2D027	Marburgvirus: all members of the Marburgvir genus		2D027	Marburgvirus: all members of the Marburgvirus genus
		2D028	Murray valley encephalitis virus		2D028	Murray valley encephalitis virus
		2D029	Machupo virus		2D029	Machupo virus
		2D030	Mason-pfizer monkey virus ---		2D030	Mason-pfizer monkey virus
					2D031	Middle East respiratory syndrome

			coronavirus (MERS-CoV)
		2D031 Monkey pox virus	2D032 Monkey pox virus
		2D032 Newcastle disease virus	2D033 Newcastle disease virus
		2D033 Omsk hemorrhagic fever virus	2D034 Omsk hemorrhagic fever virus
		2D034 Peste des petits ruminant virus	2D035 Peste des petits ruminant virus
		2D035 Teschen disease virus (Porcine entero virus type 1)	2D036 Teschen disease virus (Porcine entero virus type 1)
		2D036 Powassan virus	2D037 Powassan virus
		2D037 Rabies virus and other members of the Lyssavirus genus	2D038 Rabies virus and other members of the Lyssavirus genus
		2D038 Respiratory syncitial virus	2D039 Respiratory syncitial virus
		2D039 Rift Valley Fever virus	2D040 Rift Valley Fever virus
		2D040 Rinderpest virus	2D041 Rinderpest virus
		2D041 Sabia virus	2D042 Sabia virus
		2D042 Sheeppox virus	2D043 Sheeppox virus
		2D043 Sin Nombre virus	2D044 Sin Nombre virus
		2D044 Smallpox virus	2D045 Smallpox virus
		2D045 St.Louisencephalitis virus	2D046 St.Louisencephalitis virus
		2D046 Swine vesicular disease virus	2D047 Swine vesicular disease virus
		2D047 Tick-borne encephalitis virus (Far Eastern subtype)	2D048 Tick-borne encephalitis virus (Far Eastern subtype)
		2D048 (Reserved)	2D049 (Reserved)
		2D049 Variola virus	2D050 Variola virus
		2D050 Venezuelan equine encephalitis virus	2D051 Venezuelan equine encephalitis virus
		2D051 Vesicular stomatitis virus	2D052 Vesicular stomatitis virus
		2D052 Western equine encephalitis virus	2D053 Western equine encephalitis virus
		2D053 Yellow fever virus	2D054 Yellow fever virus
		2D054 Andes virus	2D055 Andes virus
		2D055 Chapare virus	2D056 Chapare virus
		2D056 Choclo virus	2D057 Choclo virus
		2D057 Dobrava-Belgrade virus	2D058 Dobrava-Belgrade virus
		2D058 Suidherpesvirus 1 (Pseudorabies virus; Aujeszky's disease)	2D059 Suidherpesvirus 1 (Pseudorabies virus; Aujeszky's disease)
		2D059 Hendra virus (Equine morbillivirus)	2D060 Hendra virus (Equine morbillivirus)
		2D060 Laguna Negra virus	2D061 Laguna Negra virus
		2D061 Louping ill virus	2D062 Louping ill virus
		2D062 Lujo virus	2D063 Lujo virus
		2D063 Lumpy skin disease virus	2D064 Lumpy skin disease virus
		2D064 (Reserved)	2D065 (Reserved)
		2D065 Nipah virus	2D066 Nipah virus
		2D066 Oropouche virus	2D067 Oropouche virus
		2D067 (Reserved)	2D068 (Reserved)
		2D068 Rocio virus	2D069 Rocio virus
		2D069 Seoul virus	2D070 Seoul virus
		2D070 Severe acute respiratory syndrome-related coronavirus (SARS-related coronavirus)	2D071 Severe acute respiratory syndrome-related coronavirus (SARS-related coronavirus)
		2D071 Reconstructed 1918 influenza virus	2D072 Reconstructed 1918 influenza virus

S. No.	Entry No. in SCOMET Control List	Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)	Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]
1	2	3	4
7.	**Category 5A102** **Addition of para and alignment in control text to bring clarity in scope of control under SCOMET Cat. 5A102**	**5A102** Subsystems and components usable in missiles and rocketsincluding: a. rocket motor cases, interior lining, insulation andnozzles; b. rocket staging mechanisms, separation mechanisms andinter-stages; c. Liquid, slurry and gel propellant (including oxidisers) control systems, and specially designedcomponents therefor, usable in missiles and rockets, designed or modified to operate in vibration environments greater than 10 g rms between 20 Hz and 2 kHz. *Notes* *1. The only servo valves, pumps and gas turbines specified in 5A102.c are the following:* • *Servo valves designed for flow rates equal to or greater than 24 litres per minute, atan absolute pressure equal to or greater than 7 MPa, that have an actuator response time of less than 100ms.* • *Pumps, for liquid propellants, with shaft speeds equal to or greater than 8,000 rpmat the maximum operating mode or with discharge pressures equal to or greater than 7 MPa* • *Gas turbines, for liquid propellant turbopumps, with shaft speeds equal to or greater than 8,000 rpm at the maximum operating mode.* *2. Systems and components specified in this clause may be exported as part of a satellite;* **d.** re-entry vehicles and equipmentincluding 1. Heat-shields and components thereof, fabricated of ceramic orablative materials; 2. Heat sinks and components thereof, fabricated of light weight, high heat capacity materials; **3.** Electronic equipment specially designed for re-entryvehicles. e. guidance systems and their components such as gyros and inertial referenceunits; f. thrust-vector control subsystems including methods of achieving thrust vector control such as flexible nozzle, fluid or secondary gas injection, movable engine or nozzle, deflection of exhaust gas stream (jet vanes or probes) and use of thrust tabs; g. hybrid rocket motors and components thereof; h. safing, arming, fusing and firing mechanisms for	**5A102** Subsystems and components usable in missiles and rocketsincluding: a. rocket motor cases, interior lining, insulation andnozzles; b. rocket staging mechanisms, separation mechanisms andinter-stages; c. Liquid, slurry and gel propellant (including oxidisers) control systems, and specially designedcomponents therefor, usable in missiles and rockets, designed or modified to operate in vibration environments greater than 10 grms between 20 Hz and 2 kHz. *Notes* *1. The only servo valves, pumps and gas turbines specified in 5A102.c are the following:* *a. Servo valves designed for flow rates equal to or greater than 24 litres per minute, atan absolute pressure equal to or greater than 7 MPa, that have an actuator response time of less than 100ms.* *b. Pumps, for liquid propellants, with shaft speeds equal to or greater than 8,000 rpmat the maximum operating mode or with discharge pressures equal to or greater than 7 MPa* *c. Gas turbines, for liquid propellant turbopumps, with shaft speeds equal to or greater than 8,000 rpm at the maximum operating mode.* *2. Systems and components specified in this clause may be exported as part of a satellite;* **d.** re-entry vehicles and equipmentincluding 1. Heat-shields and components thereof, fabricated of ceramic orablative materials; 2. Heat sinks and components thereof, fabricated of light weight, high heat capacitymaterials; 3. Electronic equipment specially designed for re-entryvehicles. e. guidance systems and their components such as gyros and inertial referenceunits; f. thrust-vector control subsystems including methods of achieving thrust vector control such as flexible nozzle, fluid or secondary gas injection, movable engine or nozzle, deflection of exhaust gas stream (jet vanes or probes) and use of thrust tabs; g.hybrid rocket motors and components thereof; h.safing, arming, fusing and firing mechanisms for weapons orwarhead.

		weapons orwarhead. i. software specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acousticsignatures. j. Combustion chambers and nozzles for liquid propellant rocket engines or gel propellant rocket motors	i. software specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acousticsignatures. j. Combustion chambers and nozzles for liquid propellant rocket engines or gel propellant rocket motors
8.	**New entry added at 5A102 (k) and (l)**	**New entry added at 5A102(k) and (l)**	**5A102** k. Turbojet and turbofan engines (including turbo compound engines). l. "Ramjet, Scramjet, pulse jet, combined cycle engines, including devices to regulate combustion, and specially designed components."
9.	**Change in 5B.e.**	**5B Unmanned aerial vehicles including cruise missiles, target dronesandreconnaissance drones and related equipment, and specially designed componentstherefor:** e. Light weightTurbojet / turbofan engines (including turbo compound engines).	**5B Unmanned aerial vehicles including cruise missiles, target dronesandreconnaissance drones and related equipment, and specially designed componentstherefor:** e. Light weightTurbojet and turbofan engines (including turbo compound engines).
10.	**Entry under 5B.f amended.**	**5B** f. Ramjet / Scramjet / pulse jet/ combined cycle engines, including devices to regulate combustion, and specially designedcomponents	**5B** f. "Ramjet, scramjet, pulse jet, detonation, or 'combined cycle' engines, including devices to regulate combustion, and specially designed components."
11.	**Change in 5A203**	**5A203** Test benches/stands, usable for complete rocket systems and subsystems (including ballistic missile systems, space launch vehicles and sounding rockets) which have the capacity to handle solid or liquid propellant rockets, motors or engines, or which are capable of simultaneously measuring the three axial thrustcomponents.	**5A203**Test benches or test stands,usable forcomplete rocket systems and subsystems (including ballistic missile systems, space launch vehicles and sounding rockets) which have the capacity to handle solid or liquid propellant rockets, motors or engines, or which are capable of simultaneously measuring the three axial thrustcomponents.
S. No.	**Entry No. in SCOMET Control List**	**Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)**	**Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]**
1	**2**	**3**	**4**
12.	**Change in 0B002**	**0B002.d.**Tritium facilities or plants for the production, recovery, extraction, concentration or handling of tritium and equipment therefor including hydrogen or helium refrigeration units; and hydrogen isotope storage or purification systems using metal hydrides as the storage or purification medium.	**0B002 .d.** Tritium facilities or plants, and equipment therefor, as follows: 1. Facilities or plants for the production, recovery, extraction, concentration or handling oftritium; 2. Equipment for tritium facilities or plants, asfollows: i. Hydrogen or helium refrigeration units capable of cooling to 23 K (-250 °C) or less, with heat removalcapacity greater than 150 W; ii. Hydrogen isotope storage or hydrogen isotope purification systems using metal hydrides as the storage or purificationmedium.
13.	**0A302** **Entry 0A302.b deleted and Note 2 added**	**0A.302** Nuclear grade graphite Nuclear grade graphite having a purity level better than 5 parts per million (ppm) boron equivalent and with a density greater than 1.5 gram/cc - a. for use in a nuclear reactor or any other nuclear activities in quantities exceeding 1 kilogram; b. for use in non-nuclear activities in quantities	**0A302** Nuclear grade graphite Nuclear grade graphite having a purity level better than 5 parts per million (ppm) boron equivalent and with a density greater than 1.5 gram/cc,for use in a nuclear reactor or any other nuclear activities in quantities exceeding 1 kilogram.

		exceeding 30 metric tons for any one recipient country within a period of one calendar year. *Note The item 0A302 does not cover graphite powder.*	*Note 1The item 0A302 does not cover graphite powder.* *Note 2* For the purpose of export control, the Government will determine whether or not the exports of graphite meeting the above specifications are for nuclear reactor use. Graphite having a purity level better than 5 ppm (parts per million) boron equivalent and with a density greater than 1.50 g/cm3 not for use in a nuclear reactor or any other nuclear activities is not covered by this paragraph. Boron Equivalent (BE) may be determined experimentally or is calculated as the sum of BEz for impurities (excluding BEcarbon since carbon is not considered an impurity) including boron, where: BEz ppm = CF x concentration of element Z (in ppm); B x Az);σz x AB) divided by (σCF is the conversion factor: (z are the thermal neutron capture cross sections (in barns) for naturallyσB and σ occurring boron and element Z respectively; and AB and Az are the atomic masses of naturally occurring boron and element Z respectively
14.	**Change in Entry at 0B003**	**0B003** Plants for reprocessing of irradiated nuclear fuel and equipment, components and systems especially designed, prepared or adapted or used or intended to be used in such plants, including but not limited to: a. Irradiated fuel element chopping machines designed for remote operation b. Dissolvers capable of withstanding hot and highly corrosive liquid for dissolution of irradiated nuclear fuel and which can be remotely loaded and maintain c. Solvent extractors and solvent extraction equipment resistant to the corrosive effect of nitric acid d. Chemical holding or storage vessels resistant to the corrosive effect of nitric acid	**0B003** Plants for reprocessing of irradiated nuclear fuel and equipment, components and systems especially designed, prepared or adapted or used or intended to be used in such plants, including but not limited to: **a.** Irradiated fuel element decladding equipment and chopping machines: Remotely operated equipment especially designed or prepared for use in a reprocessing plant as identified above and intended to expose or prepare the irradiated nuclear material in fuel assemblies, bundles or rods for processing. **b.** Dissolvers: Dissolver vessels or dissolvers employing mechanical devices especially designed or prepared for use in a reprocessing plant as identified above, intended for dissolution of irradiated nuclear fuel and which are capable of withstanding hot, highly corrosive liquid, and which can be remotely loaded, operated, and maintained. **c.** Solvent extractors and solvent extraction equipment: Especially designed or prepared solvent extractors (such as packed or pulse columns, mixer settlers or centrifugal contactors) for use in a plant for the reprocessing of irradiated fuel. Solvent extractors must be resistant to the corrosive effect of nitric acid. Solvent extractors are normally fabricated to extremely high standards special welding and inspection and quality assurance and quality control techniques) out of low carbon stainless steels, titanium, zirconium, or other high quality materials. **d.** Chemical holding or storage vessels: Especially designed or prepared holding or storage vessels for use in a plant for the reprocessing of irradiated fuel. The holding or storage vessels must be resistant to the corrosive effect of nitric acid. The holding or storage vessels are normally fabricated of materials such as low carbon stainless steels, titanium or zirconium, or other high quality materials. Holding or storage vessels may be designed for remote operation and maintenance and may have the following features for control of nuclear criticality:

		e. Neutron measurement systems for integration and use with automated process control systems for the reprocessing of irradiated fuel elements. f. Industrial equipment including assemblies and components as follows: 1. High density (lead glass or other) radiation shielding windows 2. Radiation hardened TV cameras, or lenses therefor 3. 'Robots' or 'end effectors' especially designed for handling high explosives; and control units therefor 4. Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells	1. Walls or internal structures with a boron equivalent of at least 2%; 2. A maximum diameter of 175 mm for cylindrical vessels; or 3. A maximum width of 75 mm for either a slab or annular vessel. **e.** Neutron measurement systems for process control Neutron measurement systems especially designed or prepared for integration and use with automated process control systems in a plant for the reprocessing of irradiated fuel elements. **f.** (Deleted)
15.	**0A301(b) Entry (b) deleted**	**0A301** Deuterium and heavy water Deuterium, heavy water (deuterium oxide) and any other deuterium compound, in which the ratio of deuterium to hydrogen atoms exceeds 1:5000, a. for use in a nuclear reactor in quantities exceeding 5 kilograms of deuterium atoms in one consignment or 25 kilograms of deuterium atoms, for any one recipient country within a period of one calendar year; b. for use in a non-nuclear activity in quantities exceeding 200 kilograms of deuterium atoms, for any one recipient country within a period of one calendar year.	**0A301** Deuterium and heavy water Deuterium, heavy water (deuterium oxide) and any other deuterium compound, in which the ratio of deuterium to hydrogen atoms exceeds 1:5000,for use in a nuclear reactor in quantities exceeding 5 kilograms of deuterium atoms in one consignment or 25 kilograms of deuterium atoms, for any one recipient country within a period of one calendar year;
S. No.	**Entry No. in SCOMET Control List**	**Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)**	**Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]**
1	**2**	**3**	**4**
16.	**New Note 5 added to clarify applicability of 8A102.b.1**	8A102 "Composite" structures or laminates, as follows: a. Made from any of the following: 1. An organic "matrix" and "fibrous or filamentary materials" specified by 8C110.c, 8C110.dor 2. Prepregs or preforms specified by 8C110.e; b. Made from a metal or carbon "matrix", and any of the following: 1. Carbon "fibrous or filamentary materials" having all of the following: a. A "specific modulus" exceeding 10.15 x 10^6 m; and b. A "specific tensile strength" exceeding 17.7 x 104 m; or 2. Materials specified by 8C110.c. *Note 1 8A102 does not apply to "composite" structures or laminates, made from epoxy resin impregnated carbon "fibrous or filamentary materials", for the repair of "civil aircraft" structures or laminates, having all of the following:* *a. An area not exceeding 1 m2;* *b. A length not exceeding 2.5 m; and* *c. A width exceeding 15 mm.* *Note 2 8A102 does not apply to semi-finished items, specially designed for purely civilian applications as follows:* *a. Sporting goods;* *b. Automotive industry;* *c. Machine tool industry;* *d. Medical applications.*	8A102 "Composite" structures or laminates, as follows: a. Made from any of the following: 1. An organic "matrix" and "fibrous or filamentary materials" specified by 8C110.c, 8C110.dor 2. Prepregs or preforms specified by 8C110.e; b. Made from a metal or carbon "matrix", and any of the following: 1. Carbon "fibrous or filamentary materials" having all of the following: a. A "specific modulus" exceeding 10.15 x 10^6 m; and b. A "specific tensile strength" exceeding 17.7 x 104 m; or 2. Materials specified by 8C110.c. *Note 1 8A102 does not apply to "composite" structures or laminates, made from epoxy resin impregnated carbon "fibrous or filamentary materials", for the repair of "civil aircraft" structures or laminates, having all of the following:* *a. An area not exceeding 1 m2;* *b. A length not exceeding 2.5 m; and* *c. A width exceeding 15 mm.* *Note 2 8A102 does not apply to semi-finished items, specially designed for purely civilian applications as follows:* *a. Sporting goods;* *b. Automotive industry;*

		Note 3 8A102.b.1. does not apply to semi-finished items containing a maximum of two dimensions of interwoven filaments and specially designed for applications as follows: *a. Metal heat-treatment furnaces for tempering metals;* *b. Silicon boule production equipment.* *Note 4 8A102 does not apply to finished items specially designed for a specific application.*	*c. Machine tool industry;* *d. Medical applications.* *Note 3 8A102.b.1. does not apply to semi-finished items containing a maximum of two dimensions of interwoven filaments and specially designed for applications as follows:* *a. Metal heat-treatment furnaces for tempering metals;* *b. Silicon boule production equipment.* *Note 4 8A102 does not apply to finished items specially designed for a specific application.* Note 5 8A102.b.1. does not apply to mechanically chopped, milled, or cut carbon "fibrous or filamentary materials" 25.0 mm or less in length.
17.	**Change in entry against 8A105.b.**	**8A105** Body armour and components therefor, as follows: a.Soft body armour not manufactured to military standards or specifications, or to their equivalents, and specially designed components therefor; b. Hard body armour plates providing ballistic protection equal to or less than level IIIA (NIJ 0101.06, July 2008) *N.B.1. For "fibrous or filamentary materials" used in the manufacture of body armour, see 8C110.* *N.B.2. For body armour manufactured to military standards or specifications, see 6A013.d.* *Note 1 8A105 does not apply to body armour when accompanying its user for the user's own personal protection.* *Note 2 8A105 does not apply to body armour designed to provide frontal protection only from both fragment and blast from non-military explosive devices.* *Note 3 8A105 does not apply to body armour designed to provide protection only from knife, spike, needle or blunt trauma.*	**8A105** Body armour and components therefor, as follows: a.Soft body armour not manufactured to military standards or specifications, or to their equivalents, and specially designed components therefor; b.Hard body armour plates providing ballistic protection equal to or less than level IIIA (NIJ 0101.06, July 2008), or "equivalent standards". *N.B.1. For "fibrous or filamentary materials" used in the manufacture of body armour, see 8C110.* *N.B.2. For body armour manufactured to military standards or specifications, see 6A013.d.* *Note 1 8A105 does not apply to body armour when accompanying its user for the user's own personal protection.* *Note 2 8A105 does not apply to body armour designed to provide frontal protection only from both fragment and blast from non-military explosive devices.* *Note 3 8A105 does not apply to body armour designed to provide protection only from knife, spike, needle or blunt trauma.*
18.	**Slight amendment in the entry 8A106**	**8A106**Equipment, specially designed or modified for the disposal of improvised explosive devices, as follows, and specially designed components and accessories therefor: a. Remotely operated vehicles; b. 'Disruptors'; *Technical Note* *'Disruptors' – Devices specially designed for the purpose of preventing the operation of an explosive device by projecting a liquid, solid or frangible projectile.* *N.B. For equipment specially designed for military use for the disposal of improvised explosive devices, see also 6A004.* *Note 8A106 does not apply to equipment when accompanying its operator.*	**8A106** Equipment, specially designed or modified for the disposal of Improvised Explosive Devices (IEDs), as follows, and specially designed components and accessories therefor: a. Remotely operated vehicles; b. 'Disruptors'; *Technical Note* *For the purpose of 8A106.b., 'disruptors' are devices specially designed for the purpose of preventing the operation of an explosive device by projecting a liquid, solid or frangible projectile.* *N.B. For equipment specially designed for military use for the disposal of IEDs, see also 6A004.* *Note 8A106 does not apply to equipment when accompanying its operator.*
19.	**Change in the entry at 8B102**	Equipment for producing metal alloys, metal alloy powder or alloyed materials, specially designed to avoid contamination and specially designed for use in one of the processes specified by 8C102.c.2.	Equipment designed to produce metal alloy powder or particulate materials and having all of the following: a. Specially designed to avoid contamination; and b. Specially designed for use in one of the processes specified by 8C102.c.2.
20.	**New Entry and Technical Note added to 8C101.a.**	**8C101** Materials specially designed for absorbing electromagnetic radiation, or intrinsically conductive polymers, as follows: a. Materials for absorbing frequencies exceeding 2 x 108 Hz but less than 3 x 1012 Hz; *Note 1: 8C101.a does not apply to:*	**8C101** Materials specially designed for absorbing electromagnetic radiation, or intrinsically conductive polymers, as follows: a. Materials for absorbing frequencies exceeding 2 x 108 Hz but less than 3 x 1012 Hz; *Note 1: 8C101.a does not apply to:*

		a. Hair type absorbers, constructed of natural or synthetic fibres, with non-magnetic loading to provide absorption; *b. Absorbers having no magnetic loss and whose incident surface is non-planar in shape, including pyramids, cones, wedges and convoluted surfaces;* *c. Planar absorbers, having all of the following:* *1. Made from any of the following:* *a. Plastic foam materials (flexible or non-flexible) with carbon-loading, or organic materials, including binders, providing more than 5% echo compared with metal over a bandwidth exceeding ±15% of the centre frequency of the incident energy, and not capable of withstanding temperatures exceeding 450 K (177° C); or* *b. Ceramic materials providing more than 20% echo compared with metal over a bandwidth exceeding ±15% of the centre frequency of the incident energy, and not capable of withstanding temperatures exceeding 800 K (527°C);* *2. Tensile strength less than 7×10^6 N/m^2 ; and* *3. Compressive strength less than 14×10^6 N/m^2 ;* *d. Planar absorbers made of sintered ferrite, having all of the following:* *1. A specific gravity exceeding 4.4; and* *2. A maximum operating temperature of 548 K (275°C) or less;*	*a. Hair type absorbers, constructed of natural or synthetic fibres, with non-magnetic loading to provide absorption;* *b. Absorbers having no magnetic loss and whose incident surface is non-planar in shape, including pyramids, cones, wedges and convoluted surfaces;* *c. Planar absorbers, having all of the following:* *1. Made from any of the following:* *a. Plastic foam materials (flexible or non-flexible) with carbon-loading, or organic materials, including binders, providing more than 5% echo compared with metal over a bandwidth exceeding ±15% of the centre frequency of the incident energy, and not capable of withstanding temperatures exceeding 450 K (177° C); or* *b. Ceramic materials providing more than 20% echo compared with metal over a bandwidth exceeding ±15% of the centre frequency of the incident energy, and not capable of withstanding temperatures exceeding 800 K (527°C);* *2. Tensile strength less than 7×10^6 N/m^2 ; and* *3. Compressive strength less than 14×10^6 N/m^2 ;* *d. Planar absorbers made of sintered ferrite, having all of the following:* *1. A specific gravity exceeding 4.4; and* *2. A maximum operating temperature of 548 K (275°C) or less;* *e. Planar absorbers having no magnetic loss and fabricated from 'open-cell foam' plastic material with a density of 0.15 grams/cm3 or less.* *Technical Note* *'Open-cell foams' are flexible and porous materials, having an inner structure open to the atmosphere. 'Open-cell foams' are also known as reticulated foams.* *Note 2: Nothing in Note 1 releases magnetic materials to provide absorption when contained in paint.*
21.	**Technical Note changed in 8C102**	**8C102** Metal alloys, metal alloy powder and alloyed materials, as follows: *(See Commodity Identification Note 1 of SCOMET list)* *Note 8C102 does not apply to metal alloys, metal alloy powder andalloyed materials, specially formulated for coating purposes.* *Technical Notes* *1.The metal alloys in 8C102 are those containing a higher percentage by weight of the stated metal than of any other element.* *2.'Stress-rupture life' should be measured in accordance with ASTM standard E-139.* *3. 'Low cycle fatigue life' should be measured in accordance with ASTM Standard E-606 'Recommended Practice for Constant-Amplitude Low-Cycle Fatigue Testing' or national equivalents. Testing should be axial with an average stress ratio equal to 1 and a stress-concentration factor (Kt) equal to 1. The average stress ratio is defined as maximum stress minus minimum stress divided by maximum stress.*	**8C102** Metal alloys, metal alloy powder and alloyed materials, as follows: *(See Commodity Identification Note 1 of SCOMET list)* *Note 8C102 does not apply to metal alloys, metal alloy powder andalloyed materials, specially formulated for coating purposes.* *Technical Notes* *1.The metal alloys in 8C102 are those containing a higher percentage by weight of the stated metal than of any other element.* *2.'Stress-rupture life' should be measured in accordance with ASTM standard E-139.* *3.'Low cycle fatigue life' should be measured in accordance with ASTM Standard E-606 'Recommended Practice for Constant-Amplitude Low-Cycle Fatigue Testing' or national equivalents. Testing should be axial with an average stress ratio equal to 1 and a stress-concentration factor (Kt) equal to 1. The average stress ratio is defined as maximum stress minus minimum stress divided by maximum stress.*
22.	**Change in 8C106.d.**	8C106 Fluids and lubricating materials, as follows: a. (Reserved) b. Lubricating materials containing, as their principal	**8C106** Fluids and lubricating materials, as follows: a. (Reserved) b. Lubricating materials containing, as their principal

		ingredients, any of the following: 1. Phenylene or alkylphenylene ethers or thio-ethers, or their mixtures, containing more than two ether or thio-ether functions or mixtures thereof; or 2. Fluorinated silicone fluids with a kinematic viscosity of less than 5,000 mm2/s (5,000 centistokes) measured at 298 K (25°C); c. Damping or flotation fluids having all of the following: 1. Purity exceeding 99.8%; 2. Containing less than 25 particles of 200 µm or larger in size per 100 ml; and 3. Made from at least 85% of any of the following: a. Dibromotetrafluoroethane (CAS 25497-30-7, 124-73-2, 27336-23-8); b. Polychlorotrifluoroethylene (oily and waxy modifications only); or c. Polybromotrifluoroethylene; d. Fluorocarbon fluids designed for electronic cooling and having all of the following: 1. Containing 85% by weight or more of any of the following, or mixtures thereof: a. Monomeric forms of perfluoropolyalkylether-triazines or perfluoroaliphatic-ethers; b. Perfluoroalkylamines; c. Perfluorocycloalkanes; or d. Perfluoroalkanes; 2. Density at 298 K (25°C) of 1.5 g/ml or more; 3. In a liquid state at 273 K (0°C); and 4. Containing 60% or more by weight of fluorine. Note 8C106.d. does not apply to materials specified and packaged as medical products.	ingredients, any of the following: 1. Phenylene or alkylphenylene ethers or thio-ethers, or their mixtures, containing more than two ether or thio-ether functions or mixtures thereof; or 2. Fluorinated silicone fluids with a kinematic viscosity of less than 5,000 mm2/s (5,000 centistokes) measured at 298 K (25°C); c. Damping or flotation fluids having all of the following: 1. Purity exceeding 99.8%; 2. Containing less than 25 particles of 200 µm or larger in size per 100 ml; and 3. Made from at least 85% of any of the following: a. Dibromotetrafluoroethane (CAS 25497-30-7, 124-73-2, 27336-23-8); b. Polychlorotrifluoroethylene (oily and waxy modifications only); or c. Polybromotrifluoroethylene; d. Fluorocarbon fluids designed for electronic cooling and having all of the following: 1. Containing 85% by weight or more of any of the following, or mixtures thereof: a. Monomeric forms of perfluoropolyalkylether-triazines or perfluoroaliphatic-ethers; b. Perfluoroalkylamines; c. Perfluorocycloalkanes; or d. Perfluoroalkanes; 2. Density at 298 K (25°C) of 1.5 g/ml or more; 3. In a liquid state at 273 K (0°C); and 4. Containing 60% or more by weight of fluorine. Note 8C106.d. does not apply to materials specified and packaged as medical products.
23.	**Change in 8C110.c and Note**	**8C110** a. Organic "fibrous or filamentary materials", having all of the following: 1. "Specific modulus" exceeding 12.7 x 10^6 m; and 2. "Specific tensile strength" exceeding 23.5 x 10^4 m; *Note* *8C110.a does not apply to polyethylene.* b. Carbon "fibrous or filamentary materials", having all of the following: 1. "Specific modulus" exceeding 14.65 x 10^6 m; and 2. "Specific tensile strength" exceeding 26.82 x 10^4 m; *Note* *8C110.b does not apply to:* *a.* *"Fibrous or filamentary materials", for the repair of "civil aircraft" structures or laminates, having all of the following:* *1.* *An area not exceeding 1 m^2;* *2.* *A length not exceeding 2.5 m; and* *3.* *A width exceeding 15 mm.* *b.* *Mechanically chopped, milled or cut carbon "fibrous or filamentary materials" 25.0 mm or less in length* c. Inorganic "fibrous or filamentary materials", having all of the following: 1. "Specific modulus" exceeding 2.54 x 106 m; and 2. Melting, softening, decomposition or sublimation point exceeding 1,922 K (1,649°C) in an inert environment;	**8C110** a. Organic "fibrous or filamentary materials", having all of the following: 1. "Specific modulus" exceeding 12.7 x 10^6 m; and 2. "Specific tensile strength" exceeding 23.5 x 10^4 m; *Note* *8C110.a does not apply to polyethylene.* b. Carbon "fibrous or filamentary materials", having all of the following: 1. "Specific modulus" exceeding 14.65 x 10^6 m; and 2. "Specific tensile strength" exceeding 26.82 x 10^4 m; *Note* *8C110.b does not apply to:* *a.* *"Fibrous or filamentary materials", for the repair of "civil aircraft" structures or laminates, having all of the following:* *1.* *An area not exceeding 1 m^2;* *2.* *A length not exceeding 2.5 m; and* *3.* *A width exceeding 15 mm.* *b.* *Mechanically chopped, milled or cut carbon "fibrous or filamentary materials" 25.0 mm or less in length.* c. Inorganic "fibrous or filamentary materials", having all of the following: 1. Having any of the following: a. Composed of 50% or more by weight silicon dioxide and having a "specific modulus" exceeding 2.54 x 106 m; or b. Not specified in 1.C.10.c.1.a. and having a "specific

		Note 8C110.c does not apply to: *a. Discontinuous, multiphase, polycrystalline alumina fibres in chopped fibre or random mat form, containing 3% by weight or more silica, with a "specific modulus" of less than 10 x 106 m;* *b. Molybdenum and molybdenum alloy fibres;* *c. Boron fibres;* *d. Discontinuous ceramic fibres with a melting, softening, decomposition or sublimation point lower than 2,043 K (1,770°C) in an inert environment.*	modulus" exceeding 5.6 x 106 m; and 2. Melting, softening, decomposition or sublimation point exceeding 1,922 K (1,649°C) in an inert environment Note *8C110.c does not apply to:* *a. Discontinuous, multiphase, polycrystalline alumina fibres in chopped fibre or random mat form, containing 3% by weight or more silica, with a "specific modulus" of less than 10 x 10^6 m;* *b. Molybdenum and molybdenum alloy fibres;* *c. Boron fibres;* *d. Discontinuous ceramic fibres with a melting, softening, decomposition or sublimation point lower than 2,043 K (1,770°C) in an inert environment.*
24.	**Changes in 8A201 1.**	**8A201** 1. Anti-friction bearings and bearing systems, as follows, and components therefor: *Note 8A201 does not apply to balls with tolerances specified by the manufacturer in accordance with ISO 3290:2001 as grade G5 (or national equivalents) or worse.* a. Ball bearings and solid roller bearings, having all tolerances specified by the manufacturer in accordance with ISO 492 Tolerance Class 4 , or better, and having both 'rings' and 'rolling elements' (ISO 5593), made from monel or beryllium; *Note 8A201.a does not apply to tapered roller bearings.* *Technical Notes* *1. 'Ring' - annular part of a radial rolling bearing incorporating one or more raceways (ISO 5593:1997).* *2. 'Rolling element'- ball or roller which rolls between raceways (ISO 5593:1997).* b. (Reserved) c. Active magnetic bearing systems using any of the following: 1. Materials with flux densities of 2.0 T or greater and yield strengths greater than 414 MPa; 2. All-electromagnetic 3D homopolar bias designs for actuators; or 3. High temperature (450 K (177°C) and above) position sensors.	**8A201** 1. Anti-friction bearings, bearing systems and components, as follows: a. Ball bearings and solid roller bearings, having all tolerances specified by the manufacturer in accordance with ISO 492 Tolerance Class 4 or Class 2 (or national equivalents), or better, and having both 'rings' and 'rolling elements', made from monel or beryllium; Note: *8A201.a does not apply to tapered roller bearings.* *Technical Notes* *1. 'Ring' - annular part of a radial rolling bearing incorporating one or more raceways (ISO 5593:1997).* *2. 'Rolling element'- ball or roller which rolls between raceways (ISO 5593:1997).* b. (Reserved) c. Active magnetic bearing systems using any of the following, and specially designed components therefor: 1. Materials with flux densities of 2.0 T or greater and yield strengths greater than 414 MPa; 2. All-electromagnetic 3D homopolar bias designs for actuators; or 3. High temperature(450 K (177°C) and above) position sensors.
25.	**Change in entry at 8A201.c.**	**8A201.c** Active magnetic bearing systems using any of the following: 1. Materials with flux densities of 2.0 T or greater and yield strengths greater than 414 MPa; 2. All-electromagnetic 3D homopolar bias designs for actuators; or 3. High temperature (450 K (177°C) and above) position sensors.	**8A201.c**Active magnetic bearing systems using any of the following, and specially designed components therefor: 1. Materials with flux densities of 2.0 T or greater and yield strengths greater than 414 MPa; 2. All-electromagnetic 3D homopolar bias designs for actuators; or 3. High temperature(450 K (177°C) and above) position sensors.
26.	**New Note 4 is added to 8B201**	**8B201** 1. Machine tools and any combination thereof, for removing (or cutting) metals, ceramics or "composites", which, according to the manufacturer's technical specification, can be equipped with electronic devices for "numerical control", as follows: *Note 1 8B201 does not apply to special purpose machine tools limited to the manufacture of gears. For such machines, see 8B203.*	**8B201** 1. Machine tools and any combination thereof, for removing (or cutting) metals, ceramics or "composites", which, according to the manufacturer's technical specification, can be equipped with electronic devices for "numerical control", as follows: *Note 1 8B201 does not apply to special purpose machine tools limited to the manufacture of*

		Note 2 8B201 does not apply to special purpose machine tools limited to the manufacture of any of the following: *a. Crank shafts or cam shafts;* *b. Tools or cutters;* *c. Extruder worms;* *d. Engraved or facetted jewellery parts; or* *e. Dental prostheses;* *Note 3 A machine tool having at least two of the three turning, milling or grinding capabilities (e.g., a turning machine with milling capability), must be evaluated against each applicable entry 8B201.a, b. or c.*	*gears. For such machines, see 8B203.* *Note 2 8B201 does not apply to special purpose machine tools limited to the manufacture of any of the following:* *a. Crank shafts or cam shafts;* *b. Tools or cutters;* *c. Extruder worms;* *d. Engraved or facetted jewellery parts; or* *e. Dental prostheses;* *Note 3 A machine tool having at least two of the three turning, milling or grinding capabilities (e.g., a turning machine with milling capability), must be evaluated against each applicable entry 8B201.a, b. or c.* *Note 4 A machine tool having an additive manufacturing capability in addition to a turning, milling or grinding capability must be evaluated against each applicable entry 8B201.a., b. or c.*
27.	**Change in 8B301.h. and note bene added**	**8B301 h.** Multi-layer masks with a phase shift layer not specified by 8B301.g. and designed to be used by lithography equipment having a light source wavelength less than 245 nm; Note 8B301.h. does not apply to multi-layer masks with a phase shift layer designed for the fabrication of memory devices not specified by 8A301.	**8B301.h.** Multi-layer masks with a phase shift layer not specified by 8b301.g. and designed to be used by lithography equipment having a light source wavelength less than 245 nm; Note 8B301.h. does not apply to multi-layer masks with a phase shift layer designed for the fabrication of memory devices not specified by 8A301. N.B. For masks and reticles, specially designed for optical sensors, see 8B602.
28.	**Change in 8D303 and old technical note deleted new technical added**	**8D303** 'Physics-based' simulation "software" specially designed for the "development" of lithographic, etching or deposition processes for translating masking patterns into specific topographical patterns in conductors, dielectrics or semiconductor materials. *Technical Note* *'Physics-based' in 8D303 means using computations to determine a sequence of physical cause and effect events based on physical properties (e.g., temperature, pressure, diffusion constants and semiconductor materials properties).* *Note* *Libraries, design attributes or associated data for the design of semiconductor devices or integrated circuits are considered as "technology".*	**8D303**'Computational lithography' "software" specially designed for the "development" of patterns on EUV-lithography masks or reticles. *Technical Note* *'Computational lithography' is the use of computer modelling to predict, correct, optimise and verify imaging performance of the lithography process over a range of patterns, processes, and system conditions.*
29.	**Change in note 2 and 3 and technical note is added to 8E302**	**8E302** a. A 'vector processor unit' designed to perform more than two calculations on floating-point vectors (one-dimensional arrays of 32-bit or larger numbers) simultaneously; *Technical Note* *A 'vector processor unit' is a processor element with built-in instructions that perform multiple calculations on floating-point vectors (one-dimensional arrays of 32-bit or larger numbers) simultaneously, having at least one vector arithmetic logic unit and vector registers of at least 32 elements each.* b. Designed to perform more than four 64-bit or larger floating-point operation results per cycle; or c. Designed to perform more than eight 16-bit fixed-	**8E302** a. A 'vector processor unit' designed to perform more than two calculations on 'floating-point' vectors (one-dimensional arrays of 32-bit or larger numbers) simultaneously; *Technical Note* *A 'vector processor unit' is a processor element with built-in instructions that perform multiple calculations on 'floating-point' vectors (one-dimensional arrays of 32-bit or larger numbers) simultaneously, having at least one vector arithmetic logic unit and vector registers of at least 32 elements each.* b. Designed to perform more than four 64-bit or larger 'floating-point' operation results per cycle; or

		point multiply-accumulate results per cycle (e.g., digital manipulation of analogue information that has been previously converted into digital form, also known as digital "signal processing"). *Note 1* 8E302 *does not apply to "technology" for multimedia extensions.* *Note 2*8E302 *does not apply to "technology" for micro-processor cores, having all of the* following: *a Using "technology" at or above 0.130 µm; and* *b. Incorporating multi-layer structures* ***with five or fewer metal layers.*** *Note 3*8E302 *includes "technology" for the "development" or "production" of digital signal* processors and digital array processors.	c. Designed to perform more than eight 16-bit 'fixed-point' multiply-accumulate results per cycle (e.g., digital manipulation of analogue information that has been previously converted into digital form, also known as digital "signal processing"). *Note 1* 8E302 *does not apply to "technology" for multimedia extensions.* *Note 2*8E302 *does not apply to "technology" for micro-processor cores, having all of the following:* *a Using "technology" at or above 0.130 µm; and* *b. Incorporating multi-layer structures* ***with five or fewer metal layers.*** *Note 3*8E302 *includes "technology" for the "development" or "production"of digital signal processors and digital array processors.* *Technical Notes* *1. For the purpose of 8E302.a. and 8E302.b., 'floating-point' is defined by IEEE-754.* *2. For the purpose of 8E302.c.,'fixed-point' refers to a fixed-width real number with both an integer component and a fractional component, and which does not include integer-only formats.*
30.	**New entry added as 8E304**	**Not exist. New Entry at 8E304 added**	**8E304** "Technology" "required" for the slicing, grinding and polishing of 300 mm diameter silicon wafers toachieve a'Site Front least sQuares Range' ('SFQR') less than or equal to 20 nm at any site of 26 mm x 8 mm on the front surface of the wafer and an edge exclusion less than or equal to 2 mm. *Technical Note* *For the purpose of 8E304, 'SFQR' is the range of maximum deviation and minimum deviation from front reference plane, calculated by least square method with all front surface data including site boundary within a site.*
31.	**Change in 8E401.c. (Note 1) and Technical Notes- deleted**	**8E401** "Technology" as follows: a. "Technology" according to the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified by 8A4 or 8D4. b. "Technology" according to the General Technology Note, other than that specified by 8E401.a., for the "development" or "production" of equipment as follows: 1. "Digital computers" having an 'Adjusted Peak Performance' ('APP') exceeding 8.0 Weighted TeraFLOPS (WT); 2. "Electronic assemblies" specially designed or modified for enhancing performance by aggregation of processors so that the 'APP' of the aggregation exceeds the limit in 8E401.b.1. c. "Technology" for the "development" of "intrusion software". *Note 1: 8E401.a and 8E401.c do not apply to 'vulnerability disclosure' or 'cyber incident response'.* *Note 2 Note 1 does not diminish national authorities' rights to ascertain compliance with 8E401.a and 8E401.c*	**8E401** "Technology" as follows: a. "Technology" according to the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified by 8A4 or 8D4. b. "Technology" according to the General Technology Note, other than that specified by 8E401.a., for the "development" or "production" of equipment as follows: 1. "Digital computers" having an 'Adjusted Peak Performance' ('APP') exceeding 8.0 Weighted TeraFLOPS (WT); 2."Electronic assemblies" specially designed or modified for enhancing performance by aggregation of processors so that the 'APP' of the aggregation exceeds the limit in 8E401.b.1. c. "Technology" for the "development" of "intrusion software". *Note 1: 8E401.a and 8E401.c do not apply to "vulnerability disclosure" or "cyber incident response".* *Note 2 Note 1 does not diminish national authorities' rights to ascertain*

		Technical Notes *1. 'Vulnerability disclosure' means the process of identifying, reporting, or communicating a vulnerability to, or analysing a vulnerability with, individuals or organizations responsible for conducting or coordinating remediation for the purpose of resolving the vulnerability.* *2. 'Cyber incident response' means the process of exchanging necessary information on a cyber security incident with individuals or organizations responsible for conducting or coordinating remediation to address the cyber security incident.*	*compliance with 8E401.a and 8E401.c.* *Technical Notes- Deleted*
32.	**Changes in 8A501.h.1**	**8A501.h.** Counter Improvised Explosive Device (IED) equipment and related equipment, as follows: 1. Radio Frequency (RF) transmitting equipment, not specified by 8A501.f, designed or modified for prematurely activating or preventing the initiation of Improvised Explosive Devices; 2. Equipment using techniques designed to enable radio communications in the same frequency channels on which co-located equipment specified by 8A501.h.1 is transmitting. *N.B. See also Category 6.*	**8A501**.h.Counter Improvised Explosive Device (IED) equipment and related equipment, as follows: 1. Radio Frequency (RF) transmitting equipment, not specified by 8A501.f, designed or modified for prematurely activating or preventing the initiation of Improvised Explosive Devices (IEDs); 2. Equipment using techniques designed to enable radio communications in the same frequency channels on which co-located equipment specified by 8A501.h.1 is transmitting. *N.B. See also Category 6.*
33.	**Changes in 8A501.j.2.a and technical note is deleted**	**8A501 j.** IP network communications surveillance systems or equipment, and specially designed components therefor, having all of the following: 1. Performing all of the following on a carrier class IP network (e.g, national grade IP backbone): a. Analysis at the application layer (e.g, Layer 7 of Open Systems Interconnection (OSI) model (ISO/IEC 7498-1)); b. Extraction of selected metadata and application content (e.g, voice, video, messages, attachments); and c. Indexing of extracted data; and 2. Being specially designed to carry out all of the following: a. Execution of searches on the basis of 'hard selectors'; and b. Mapping of the relational network of an individual or of a group of people. *Note 8A501.j does not apply to systems or equipment, specially designed for any of the following:* *a. Marketing purpose;* *b. Network Quality of Service (QoS);or* *c. Quality of Experience (QoE).* *Technical Note* *'Hard selectors': data or set of data, related to an individual (e.g, family name, given name, e-mail, street address, phone number or group affiliations).*	**8A501 j.**IP network communications surveillance systems or equipment, and specially designed components therefor, having all of the following: 1. Performing all of the following on a carrier class IP network (e.g, national grade IP backbone): a. Analysis at the application layer (e.g, Layer 7 of Open Systems Interconnection (OSI) model (ISO/IEC 7498-1)); b. Extraction of selected metadata and application content (e.g, voice, video, messages, attachments); and c. Indexing of extracted data; and 2.Being specially designed to carry out all of the following: a.Execution of searches on the basis of "hard selectors"; and b. Mapping of the relational network of an individual or of a group of people. *Note 8A501.j does not apply to systems or equipment, specially designed for any of the following:* *Marketing purpose;* *Network Quality of Service (QoS);or* *Quality of Experience (QoE).* *Technical Note - Deleted*
34.	**New entry at 8D501.e. added**	**New Entry at 8D501.e added**	**8D501** e. "Software", other than that specified by 8D501.a. or 8D501.c., specially designed or modified for monitoring or analysis by law enforcement, providing all of the following: 1. Execution of searches on the basis of "hard selectors" of either the content of communication or metadata acquired from a communications service provider using a 'handover interface'; and *Technical Notes* *1. For the purposes of 5.D.1.e., a 'handover interface' is a physical and logical interface, designed for use by an authorised law enforcement authority,*

			across which targeted interception measures are requested from a communications service provider and the results of interception are delivered from a communications service provider to the requesting authority. The 'handover interface' is implemented within systems or equipment (e.g., mediation devices) that receive and validate the interception request, and deliver to the requesting authority only the results of interception that fulfil the validated request. *2. 'Handover interfaces' may be specified by international standards (including but not limited to ETSI TS 101 331, ETSI TS 101 671, 3GPP TS 33.108) or national equivalents.* 2. Mapping of the relational network or tracking the movement of targeted individuals based on the results of searches on content of communication or metadata or searches as described in5.D.1.e.1. *Note 8D501.e does not apply to "software" specially designed or modified for any of the following:* *a. Billing purposes;* *b. Network Quality of Service (QoS);* *c. Quality of Experience (QoE);* *d. Mediation devices; or* *e. Mobile payment or banking use.*
35.	**Entry at 8E501.a. amended**	**8E501** "Technology" as follows: a. "Technology" according to the General Technology Note for the "development", "production" or "use" (excluding operation) of equipment, functions or features specified by 8A501 or "software" specified by 8D501.a; b. Specific "technology" as follows: 1. "Required" "technology" for the "development" or "production" of telecommunications equipment specially designed to be used on board satellites; 2. "Technology" for the "development" or "use" of "laser" communication techniques with the capability of automatically acquiring and tracking signals and maintaining communications through exoatmosphere or sub-surface (water) media;	**8E501** "Technology" as follows: a."Technology" according to the General Technology Note for the "development", "production" or "use" (excluding operation) of equipment, functions or features specified by 8A501 or "software" specified by 8D501.a. or 8D501.e.; b.Specific "technology" as follows: 1."Required" "technology" for the "development" or "production" of telecommunications equipment specially designed to be used on board satellites; 2."Technology" for the "development" or "use" of "laser" communication techniques with the capability of automatically acquiring and tracking signals and maintaining communications through exoatmosphere or sub-surface (water) media;
36.	**Entry at 8A502.a. amended**	**8A502**"Information security" systems, equipment and components, as follows: *N.B. For "satellite navigation system" receiving equipment containing or employing decryption see 8A705., and for related decryption "software" and "technology" see 8D705., and 8E701.* a. Designed or modified to use 'cryptography for data confidentiality' having a 'described security algorithm', where that cryptographic capability is usable, has been activated, or can be activated by means of "cryptographic activation" not employing a secure mechanism, as follows: Remaining below entries under this sub-categories shall remain unchanged	**8A502**"Information security" systems, equipment and components, as follows: *N.B. For "satellite navigation system" receiving equipment containing or employing decryption see 8A705., and for related decryption "software" and "technology" see 8D705., and 8E701.* a. Designed or modified to use 'cryptography for data confidentiality' having a 'described security algorithm', where that cryptographic capability is usable, has been activated, or can be activated by any means other than secure "cryptographic activation", as follows: Remaining below entries under this sub-categories shall remain unchanged
37.	**Change in 8A502.a. Note 2.f.**	**8A502.a. Note 2.f.** *Items, where the "information security" functionality is limited to wireless "personal area*	**8A502.a. Note 2.f.** *Items, where the "information security" functionality is limited to wireless "personal area network" functionality*

		network" functionality, meeting all of the following: *1. Implement only published or commercial cryptographic standards;and* *2. The cryptographic capability is limited to a nominal operating rangenot exceeding 30 metres according to the manufacturer'sspecifications, or not exceeding 100 metres according to themanufacturer's specifications for equipment that cannot interconnectwith more than seven devices;*	*implementing only published or commercial cryptographic standards retrieve binary data from a;*
38.	**Entry at 8A502.a. Note h. amended**	**8A502.a. Note h** *Routers, switches or relays, where the "information security" functionality is limited tothe tasks of "Operations, Administration or Maintenance" ("OAM") implementing onlypublished or commercial cryptographic standards;*	**8A502.a. Note h** *Routers, switches, gateways or relays, where the "information security" functionality is limited to the tasks of "Operations, Administration or Maintenance" ("OAM") implementing only published or commercial cryptographic standards*
39.	**New Entry addedat 8A504.b.**	**New Entryat 8A504.b added.**	**8A504.b.** Items, not specified by 8A405 or 8A504.a., designed to perform all of the following: 1. 'Extract raw data' from a computing or communications device; and 2. Circumvent "authentication" or authorisation controls of the device, in order to perform the function described in 8A504.b.1. *Technical Note* *'Extract raw data' from a computing or communications device means to retrieve binary data from a storage medium, e.g. RAM, flash or hard disk, of the device without interpretation by the device's operating system or file system.* *Note 1 8A504.b. does not apply to systems or equipment specially designed for the "development" or "production" of a computing or communications device.* *Note 2 8A504.b. does not include:* *a. Debuggers, hypervisors;* *b. Items limited to logical data extraction;* *c. Data extraction items using chip-off or JTAG; or* *d. Items specially designed and limited to jail-breaking or rooting.*
40.	**Entry at 8D502.a.3 amended**	**8D502** "Software" as follows: a. "Software" specially designed or modified for the "development", "production" or "use" of any of the following: 1. Equipment specified by 8A502 or "software" specified by 8D502.c.1; 2. Equipment specified by 8A503 or "software" specified by 8D502.c.2; or 3. Equipment specified by 8A504 or "software" specified by 8D502.c.3; b. "Software" having the characteristics of a 'cryptographic activation token' specified by 8D502.b. c. "Software" having the characteristics of, or performing or simulating the functions of, any of the following: 1. Equipment specified by 8A502.a., 8A502.c., 8A502.d. or 8A502.e.; *Note 8D502.c.1. does not apply to "software" limited to the tasks of "OAM" implementing only published or commercial cryptographic standards.* 2. Equipment specified by 8A503; or 3. Equipment specified by 8A504. d. (Reserved)	**8D502** "Software" as follows: a. "Software" specially designed or modified for the "development", "production" or "use" of any of the following: 1. Equipment specified by 8A502 or "software" specified by 8D502.c.1; 2. Equipment specified by 8A503 or "software" specified by 8D502.c.2; or 3. Equipment or "software", as follows: a. Equipment specified by 8A504.a. or "software" specified by 8D502.c.3.a.; b. Equipment specified by 8A504.b. or "software" specified by 8D502.c.3.b.; b. "Software" having the characteristics of a 'cryptographic activation token' specified by 8D502.b. c. "Software" having the characteristics of, or performing or simulating the functions of, any of the following: 1. Equipment specified by 8A502.a., 8A502.c., 8A502.d. or 8A502.e.; *Note 8D502.c.1. does not apply to "software" limited to the tasks of "OAM" implementing only published or commercial cryptographic standards.*

			2. Equipment specified by 8A503; or 3. Equipment, as follows: a. Equipment specified by 8A504.a.; b. Equipment specified by 8A504.b. *Note 8D502.c.3.b. does not apply to "intrusion software".*
41.	**8D502.c.3**	**8D502.c3.** Equipment specified by 8A504.	**8D502.c.3.** Equipment, as follows: a. Equipment specified by 8A504.a.; b. Equipment specified by 8A504.b. *Note 8D502.c.3.b. does not apply to "intrusion software".*
42.	**Change in 8E502.a.**	**8E502** "Technology" as follows: a. "Technology" according to the General Technology Note for the "development", "production" or "use" of equipment specified by 8A502, 8A503, 8A504 or 8B502, or of "software" specified by 8D502.a or 8D502.c; b. "Technology" having the characteristics of a 'cryptographic activation token' specified by 8E502.b.;	**8E502** "Technology" as follows: "Technology" according to the General Technology Note for the "development", "production" or "use" of equipment specified by 8A502, 8A503,8A504 or 8B502, or of "software" specified by 8D502.a or 8D502.c; *Note 8E502.a. does not apply to "technology" for items specified by 8A504.b.,8D502.a.3.b. or 8D502.c.3.b.*
43.	**8A604.c.4**	**8A604.c.4** c. "Space-qualified" components for optical systems, as follows: 1. Components lightweighted to less than 20% "equivalent density" compared with a solid blank of the same aperture and thickness; 2. Raw substrates, processed substrates having surface coatings (single-layer or multi-layer, metallic or dielectric, conducting, semiconducting or insulating) or having protective films; 3. Segments or assemblies of mirrors designed to be assembled in space into an optical system with a collecting aperture equivalent to or larger than a single optic 1 m in diameter; 4. Components manufactured from "composite" materials having a coefficient of linear thermal expansion equal to or less than 5 x 10-6 in any coordinate direction;	**8A604.c.4** c. "Space-qualified" components for optical systems, as follows: 1. Components lightweighted to less than 20% "equivalent density" compared with a solid blank of the same aperture and thickness; 2. Raw substrates, processed substrates having surface coatings (single-layer or multi-layer, metallic or dielectric, conducting, semiconducting or insulating) or having protective films; 3. Segments or assemblies of mirrors designed to be assembled in space into an optical system with a collecting aperture equivalent to or larger than a single optic 1 m in diameter; 4. Components manufactured from "composite" materials having a coefficient of linear thermal expansion, in any coordinate direction, equal to or less than 5 x 10-6/K;
44.	**Changes in entry at 8A605.a.6.a**	**8a605. a. 6.** Output wavelength exceeding 975 nm but not exceeding 1,150 nm and any of the following: a. 'Single transverse mode' output and any of the following: 1. Average output power exceeding 1,000 W; or 2. Having all of the following: a. Average output power exceeding 500 W; and b. Spectral bandwidth less than 40 GHz; or	**8A605.a. 6.**Output wavelength exceeding 975 nm but not exceeding 1,150 nm and any of the following: a. 'Single transverse mode' output and any of the following: 1. Output power exceeding 1,000 W; or 2. Having all of the following: a. Output power exceeding 500 W; and b. Spectral bandwidth less than 40 GHz; or
45.	**8A605.a.6.b. Technical Note deleted**	**8A605 .a. 6.8A605 .a. 6.** Output wavelength exceeding 975 nm but not exceeding 1,150 nm and any of the following: a. 'Single transverse mode' output and any of the following: 1. Average output power exceeding 1,000 W; or 2. Having all of the following: a. Average output power exceeding 500 W; and b. Spectral bandwidth less than 40 GHz; or b. 'Multiple transverse mode' output and any of the following: 1. 'Wall-plug efficiency' exceeding 18% and	**8A605.a. 6.** Output wavelength exceeding 975 nm but not exceeding 1,150 nm and any of the following: a. 'Single transverse mode' output and any of the following: 1. Output power exceeding 1,000 W; or 2. Having all of the following: a. Output power exceeding 500 W; and b. Spectral bandwidth less than 40 GHz; or b. 'Multiple transverse mode' output and any of the following: 1. 'Wall-plug efficiency' exceeding 18% and output power exceeding 1000

		output power exceeding 1000 W; or 2. Output power exceeding 2 kW; *Note 1* *8A605.a.6.b. does not apply to 'multiple transverse mode', industrial "lasers"with output power exceeding 2 kW and not exceeding 6 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 or delivery.* *Note 2* *8A605.a.6.b. does not apply to 'multiple transverse mode', industrial "lasers" having any of the following:* *a. (Reserved)* *b. Output power exceeding 1 kW but not exceeding 1.6 kW and having a BPP exceeding 1.25 mm•mrad;* *c. Output power exceeding 1.6 kW but not exceeding 2.5 kW and having a BPP exceeding 1.7 mm•mrad;* *d. Output power exceeding 2.5 kW but not exceeding 3.3 kW and having a BPP exceeding 2.5 mm•mrad;* *e. Output power exceeding 3.3 kW but not exceeding 6 kW and having a BPP exceeding 3.5 mm•mrad;* *f. (Reserved)* *g. (Reserved)* *h. Output power exceeding 6 kW but not exceeding 8 kW and having a BPP exceeding 12 mm•mrad; or* *i. Output power exceeding 8 kW but not exceeding 10 kW and having a BPP exceeding 24 mm•mrad;* *Technical Note* *For the purpose of 6.A.5.a.6.b., Note 2.a., 'brightness' is defined as the output power of the "laser" divided by the squared Beam Parameter Product (BPP), i.e., (output power)/BPP^2.* *Technical Note* *'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.*	W; or 2. Output power exceeding 2 kW; *8A605.a.6.b. does not apply to 'multiple transverse mode', industrial "lasers"with output power exceeding 2 kW and not exceeding 6 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 or delivery.* *8A605.a.6.b. does not apply to 'multiple transverse mode', industrial "lasers" having any of the following:* *(Reserved)* *Output power exceeding 1 kW but not exceeding 1.6 kW and having a BPP exceeding 1.25 mm•mrad;* *Output power exceeding 1.6 kW but not exceeding 2.5 kW and having a BPP exceeding 1.7 mm•mrad;* *Output power exceeding 2.5 kW but not exceeding 3.3 kW and having a BPP exceeding 2.5 mm•mrad;* *Output power exceeding 3.3 kW but not exceeding 6 kW and having a BPP exceeding 3.5 mm•mrad;* *(Reserved)* *(Reserved)* *Output power exceeding 6 kW but not exceeding 8 kW and having a BPP exceeding 12 mm•mrad; or* *Output power exceeding 8 kW but not exceeding 10 kW and having a BPP exceeding 24 mm•mrad;* *Technical Note -deleted* *Technical Note* *'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.*
46.	**Change in 8A608.i**	**8A608.i.** Providing ground-based operation with a maximum 'instrumented range' exceeding 185 km; *Note* 8A608.*i does not apply to:* *a. Fishing ground surveillance radar;* *b. Ground radar equipment specially designed for enroute air traffic control and having all of the following:* *1. A maximum 'instrumented range' of 500 km or less;* *2. Configured so that radar target data can be transmitted only one way from the radar site to one or more civil ATC centres;* *3. Contains no provisions for remote control of the radar scan rate from the enroute ATC centre; and* *4. Permanently installed.* *c. Weather balloon tracking radars.* *Technical Note* *For the purposes of 8A608.i., 'instrumented range' is the specified unambiguous display range of a radar.*	**8A608.**i. Providing ground-based operation with a maximum 'instrumented range' exceeding 185 km; *Note* 8A608.*i does not apply to:* *a. Fishing ground surveillance radar;* *b. Ground radar equipment specially designed for enroute air traffic control and having all of the following:* *1.A maximum 'instrumented range' of 500 km or less;* *2.Configured so that radar target data can be transmitted only one way from the radar site to one or more civil ATC centres;* *3.Contains no provisions for remote control of the radar scan rate from the enroute ATC centre; and* *4.Permanently installed.* *c. Weather balloon tracking radars.* *Technical Note* *For the purposes of 8A608.i., 'instrumented range' is the specified unambiguous display range of a radar.*

47.	**New entry added at 8A904.h.**	**New entry added at 8A904.h.**	8A904.h. "Sub-orbital craft".
48.	**Change in entry at 8A911**	Ramjet/scramjet/pulse jet/'combined cycle engines', including devices to regulate combustion, and specially designed components therefor, usable in the systems specified in 5A101 or 5B.d or 5B.g *Technical Note* *In* 8A911, *'combined cycle engines' are the engines that employ two or more cycles of the following types of engines: gas-turbine engine (turbojet, turboprop, turbofan and turbo shaft), ramjet, scramjet, pulse jet, pulse detonation engine, rocket motor (liquid/gel/solid-propellant and hybrid).*	Ramjet, scramjet or 'combined cycle engines', and specially designed components therefor. *Technical Note* *For the purposes of 8A911., 'combined cycle engines' combine two or more of the following types of engines:* *- Gas turbine engine (turbojet, turboprop and turbofan);* *- Ramjet or scramjet;* *- Rocket motor or engine (liquid/gel/solid-propellant and hybrid).*
49.	**Change in entry at 8A912**	**8A912** "Unmanned Aerial Vehicles" ("UAVs"), unmanned **"airships"**, related equipment and components, as follows: a. "UAVs" or unmanned "airships", designed to have controlled flight out of the direct 'natural vision' of the 'operator' and having any of the following: 1. Having all of the following: a. A maximum 'endurance' greater than or equal to 30 minutes but less than 1 hour; and b. Designed to take-off and have stable controlled flight in wind gusts equal to or exceeding 46.3 km/h (25 knots); or 2. A maximum 'endurance' of 1 hour or greater; *Technical Notes* *1. For the purposes of 8A912.a, 'operator' is a person who initiates or commands the "UAV" or unmanned "airship" flight.* *2. For the purposes of 8A912.a, 'endurance' is to be calculated for ISA conditions (ISO 2533:1975) at sea level in zero wind.* *3. For the purposes of*	**8A912** "Unmanned Aerial Vehicles" ("UAVs"), unmanned **"airships"**, related equipment and components, as follows: *N.B. For "UAVs" that are "sub-orbital craft", see 9.A.4.h.* a. "UAVs" or unmanned "airships", designed to have controlled flight out of the direct 'natural vision' of the 'operator' and having any of the following: 1. Having all of the following: a. A maximum 'endurance' greater than or equal to 30 minutes but less than 1 hour; and b. Designed to take-off and have stable controlled flight in wind gusts equal to or exceeding 46.3 km/h (25 knots); or 2. A maximum 'endurance' of 1 hour or greater; *Technical Notes* *1. For the purposes of 8A912.a, 'operator' is a person who initiates or commands the "UAV" or unmanned "airship" flight.* *2. For the purposes of 8A912.a, 'endurance' is to be calculated for ISA conditions (ISO 2533:1975) at sea level in zero wind.* *3. For the purposes of 8A912.a, 'natural vision' means unaided human sight, with or without corrective lenses.*
50.	**New Noteadded at 8D905**	**8D905** "Software" specially designed or modified for the operation of items specified by 8A904.e or 8A904.f.	**8D905** "Software" specially designed or modified for the operation of items specified by 8A904.e or 8A904.f. *N.B. For "software" for items listed in 8A904.d. that are incorporated into "spacecraft payloads", see the appropriate Categories.*
51.	**Change in entry at 8E903.a.11**	**8E903.a.11** Hollow fan blades;	**8E903.a.11**'Fan blades' having all of the following: a. 20% or more of the total volume being one or more closed cavities containing vacuum or gas only; and b. One or more closed cavities having a volume of 5 cm^3 or larger; *Technical Note* *For the purposes of 8E903.a.11., a 'fan blade' is the aerofoilportion of the rotating stage or stages, which provide both compressor and bypass flow in a gas turbine engine.*
52.	**Note 3 of Category 6 'Munitions List' modified and New entry added at 6A001**	***Note 3 of Category 6:*** *Subject to Notes 4-6 below, an authorization from Department of Defence Production, Ministry of Defence would be required for export of items in this Munitions list. This is as per the Standard Operating Procedures issued by Department of Defence Production.*	***Note 3 of Category 6*** *Subject to Notes 4-6 below, an authorization from Department of Defence Production, Ministry of Defence would be required for export of items in this Munitions list. This is as per the Standard Operating Procedures issued by Department of Defence Production.However, for export of items under sub-Category 6A007 and 6A008, an export authorisation would be*

			required from the Directorate General of Foreign Trade (DGFT), as per SCOMET policy and procedures.
		6A001.a. Rifles and combination guns, handguns, machine,sub-machine and volley guns; *Note 6A001.a does not apply to the following:* *a. Rifles and combination guns, manufactured earlier than 1938;* *b. Reproductions of rifles and combination guns, the originals of which were manufactured earlier than 1890;* *c. Handguns, volley guns and machine guns, manufactured earlier than 1890, and their reproductions;* *d. Rifles or handguns, specially designed to discharge an inert projectile by compressed air or CO_2.*	**6A001.**a.Rifles and combination guns, handguns, machine,sub-machine and volley guns; *Note 6A001.a does not apply to the following:* *a. Rifles and combination guns, manufactured earlier than 1938;* *b. Reproductions of rifles and combination guns, the originals of which were manufactured earlier than 1890;* *c. Handguns, volley guns and machine guns, manufactured earlier than 1890, and their reproductions;* *d. Rifles or handguns, specially designed to discharge an inert projectile by compressed air or CO_2.* *e. Handguns specially designed for any of the following:* *1. Slaughtering of domestic animals* *2. Tranquilising of animals.*
53.	**Change in 6A002**	**6A002** Smooth-bore weapons with a calibre of 20 mm or more, other weapons or armament with a calibre greater than 12.7 mm (calibre 0.50 inches), projectors and accessories, as follows, and specially designed components therefor:	**6A002** Smooth-bore weapons with a calibre of 20 mm or more, other weapons or armament with a calibre greater than 12.7 mm (calibre 0.50 inches), projectors specially designed or modified for military use and accessories, as follows, and specially designed components therefor::
54.	**Change in 6A002.a.**	**6A002.a.** Guns, howitzers, cannon, mortars, anti-tank weapons, projectile launchers, military flame throwers, rifles, recoilless rifles, smooth-bore weapons and signature reduction devices therefor;	**6A002 a.** Guns, howitzers, cannon, mortars, anti-tank weapons, projectile launchers, military flame throwers, rifles, recoilless rifles and smooth-bore weapons;
55.	**Change in 6A002.b.**	**6A002 b.** Smoke, gas and pyrotechnic projectors or generators, specially designed or modified for military use; *Note 6A002.b does not apply to signal pistols.*	**6A002.b.**Projectors, specially designed or modified for military use, as follows: 1. Smoke canister projectors; 2. Gas canister projectors; 3. Pyrotechnics projectors; *Note 6A002.b does not apply to signal pistols.*
56.	**Change in 6A002.c.** **6A002.d. ' Reserved'**	**6A002c**. Weapons sights and weapon sight mounts, having all of the following: 1. Specially designed for military use; and 2. Specially designed for weapons specified in 6A002.a; 6A002 d. Mountings and detachable cartridge magazines, specially designed for the weapons specified in 6A002.a.	**6A002.c.**Accessories specially designed for the weapons specified in 6A002.a., as follows: 1. Weapon sights and weapon sight mounts, specially designed for military use; 2. Signature reduction devices; 3. Mountings; 4. Detachable cartridge magazines; **6A002.d. (Reserved)**
57.	**Change in 6A006.b.1.a. and 6A006.b.2.b**	**6A006. b.** Other ground vehicles and components, as follows: 1. Vehicles having all of the following: a. Manufactured or fitted with materials or components to provide ballistic protection equal to or better than level III (NIJ 0108.01, September 1985, or comparable national standard); b. A transmission to provide drive to both front and rear wheels simultaneously, including those vehicles having additional wheels for load bearing purposes whether driven or not; c. Gross Vehicle Weight Rating (GVWR) greater than 4,500 kg; and d. Designed or modified for off-road use; e. Mine-Protected vehicle 2. Components having all of the following: a. Specially designed for vehicles specified in 6A006.b.1.;	**6A006.b.**Other ground vehicles and components, as follows: 1. Vehicles having all of the following: a. Manufactured or fitted with materials or components to provide ballistic protection equal to or better than level III (NIJ 0108.01, September 1985), or "equivalent standards"; b. A transmission to provide drive to both front and rear wheels simultaneously, including those for vehicles having additional wheels for load bearing purposes whether driven or not; c. Gross Vehicle Weight Rating (GVWR) greater than 4,500 kg; and d. Designed or modified for off-road use; e. Mine-Protected vehicle

		and b. Providing ballistic protection equal to or better than level III (NIJ 0108.01, September 1985, or comparable national standard).	2. Components having all of the following: a. Specially designed for vehicles specified in 6A006.b.1.; and b. Providing ballistic protection equal to or better than level III (NIJ 0108.01, September 1985), or "equivalent standards".
58.	**Change in 6A009.h.**	**6A009.h.** Naval nuclear equipment and related equipment and components, as follows: 1. Nuclear power generating equipment or propulsion equipment, specially designed for vessels specified in 6A009.a. and components therefor specially designed or 'modified' for military use. *Technical Note* *For the purpose of* 6A009.h.*1., 'modified' means any structural, electrical, mechanical, or other change that provides a non-military item with military capabilities equivalent to an item which is specially designed for military use.* Note *6A009.h.1. includes "nuclear reactors".* *N.B See Commodity Identification Note 2 to SCOMET.*	**6A009.h.** Nuclear power generating equipment or propulsion equipment, specially designed for vessels specified in 6A009.a. and components therefor specially designed or 'modified' for military use. *Technical Note* *For the purpose of* 6A009.h.*, 'modified' means any structural, electrical, mechanical, or other change that provides a non-military item with military capabilities equivalent to an item which is specially designed for military use.* *Note 6A009.h. includes "nuclear reactors".*
59.	**Change in 6A013.d.2.**	**6A013.d.2.** Hard body armour plates providing ballistic protection equal to or greater than level III (NIJ 0101.06, July 2008).	**6A013.d.2.** Hard body armour plates providing ballistic protection equal to or greater than level III (NIJ 0101.06, July 2008), or "equivalent standards".
60.	**Change in 6A018**	**6A018** 'Production' equipment and components, as follows: a. Specially designed or modified 'production' equipment for the 'production' of products specified by Category 6, and specially designed components therefor; b. Specially designed environmental test facilities and specially designed equipment therefor, for the certification, qualification or testing of products specified by Category 6.	**6A018** 'Production' equipment, environmental test facilities and components, as follows: a.Specially designed or modified 'production' equipment for the 'production' of products specified by Category 6, and specially designed components therefor; b.Specially designed environmental test facilities and specially designed equipment therefor, for the certification, qualification or testing of products specified by Category 6.
61.	**New entry added to 6A021.b.**	**6A021** "Software" as follows: a. "Software" specially designed or modified for any of the following: 1. "Development", "production", operation or maintenance of equipment specified by Category 6; 2. "Development" or "production" of materials specified by Category 6; or 3. "Development", "production", operation or maintenance of "software" specified by Category 6. b. Specific "software", other than that specified by 6A021.a as follows: 1. "Software" specially designed for military use and specially designed for modelling, simulating or evaluating military weapon systems; 2. "Software" specially designed for military use and specially designed for modelling or simulating military operational scenarios; 3. "Software" for determining the effects of conventional, nuclear, chemical or biological weapons; 4. "Software" specially designed for military use and specially designed for Command, Communications, Control and Intelligence (C3I) or Command, Communications, Control, Computer and Intelligence (C4I) applications;	**6A021.b**"Software" specially designed or modified for the conduct of military offensive cyber operations; *Note 1 6A021.b.5. includes "software" designed to destroy, damage, degrade or disrupt systems, equipment or "software", specified by Category 6, cyber reconnaissance and cyber command and control "software", therefor.* *Note 2 6A021.b.5. does not apply to "vulnerability disclosure" or to "cyber incident response", limited to non-military defensive cybersecurity readiness or response.*
62.	**New note added to 6A021.c.**	**6A021.c.** "Software", not specified by 6A021.a. or 6A021.b., specially designed or modified to enable equipment not specified by the Munitions List to perform the military functions of equipment specified by the Munitions List.	**6A021.c.**"Software", not specified by 6A021.a. or 6A021.b., specially designed or modified to enable equipment not specified by Category 6 to perform the military functions of equipment specified by the Category 6.

			N.B. See systems, equipment or components specified by Category 6 for general purpose "digital computers" with installed "software" specified by 6A021.c.
S. No.	**Entry No. in SCOMET Control List**	**Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)**	**Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]**
1	2	3	4
63.	**New entry at 1A (13) added**	**New entry added at Cat. 1A (13)**	**1A (13)** P-alkyl (H or ≤C10, incl. cycloalkyl) N-(1-(dialkyl(≤C10, incl. cycloalkyl)amino))alkylidene(H or ≤C10, incl. cycloalkyl) phosphonamidic fluorides and corresponding alkylated or protonated salts e.g. N-(1-(di-n-decylamino)-n-decylidene)-P-decylphosphonamidic fluoride (2387495-99-8) Methyl-(1-(diethylamino)ethylidene)phosphonamidofluoridate (2387496-12-8)
64.	**New entry at 1A (14) added**	**New entry added at Cat. 1A (14)**	**1A (14)** O-alkyl (H or ≤C10, incl. cycloalkyl) N-(1-(dialkyl(≤C10, incl. cycloalkyl)amino))alkylidene(H or ≤C10, incl. cycloalkyl) phosphoramidofluoridates and corresponding alkylated or protonated salts e.g. O-n-Decyl N-(1-(di-n-decylamino)-n-decylidene)phosphoramidofluoridate (2387496-00-4) Methyl (1-(diethylamino)ethylidene)phosphoramidofluoridate (2387496-04-8) Ethyl (1-(diethylamino)ethylidene)phosphoramidofluoridate (2387496-06-0)
65.	**New entry at 1A (15) added**	**New entry added at Cat. 1A (15)**	**1A (15)** Methyl-(bis(diethylamino)methylene)phosphonamidofluoridate (2387496-14-0)
66.	**New entry at 1A (16) added**	**New entry added at Cat. 1A (16)**	**1A (16)** Carbamates (quaternaries and bisquaternaries of dimethylcarbamoyloxypyridines) Quaternaries of dimethylcarbamoyloxypyridines: 1-[N,N-dialkyl(≤C10)-N-(n-(hydroxyl, cyano, acetoxy)alkyl(≤C10)) ammonio]-n-[N-(3-dimethylcarbamoxy-α-picolinyl)-N,N-dialkyl(≤C10) ammonio]decanedibromide (n=1-8) e.g. 1-[N,N-dimethyl-N-(2-hydroxy)ethylammonio]-10-[N-(3-dimethylcarbamoxy-α-picolinyl)-N,N-dimethylammonio]decane dibromide (77104-62-2) Bisquaternaries of dimethylcarbamoyloxypyridines: 1,n-Bis[N-(3-dimethylcarbamoxy-α-picolyl)-N,N-dialkyl(≤C10) ammonio]-alkane-(2,(n-1)-dione) dibromide (n=2-12) e.g. 1,10-Bis[N-(3-dimethylcarbamoxy-α-picolyl)-N-ethyl-N-methylammonio]decane-2,9-dione dibromide (77104-00-8)
S. No.	**GLOSSARY of SCOMET List**	**Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)**	**Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]**
1	2	3	4
67.	**"Cyber incident response" re-defined**	**"Cyber incident response"** The process of exchanging necessary information on a cyber security incident with individuals or organizations responsible for conducting or coordinating remediation to	**"Cyber incident response"** The process of exchanging necessary information on a cybersecurity incident with individuals or organisations responsible for conducting or

		address the cyber security incident.	coordinating remediation to address the cybersecurityincident.
68.	**"Equivalent standards"defined**	**- new entry**	**"Equivalent standards"** Comparable national or international standards recognised by one or more Wassenaar Arrangement Participating States and applicable to the relevant entry.
69.	**"Hard selectors" defined**	**- new entry**	**"Hard selectors"** Data or set of data, related to an individual (e.g., family name, given name, e-mail, street address, phone number or group affiliations).
70.	**"Instrumented range" -Deleted**	**"Instrumented range"** The specified unambiguous display range of a radar.	- definition deleted
71.	**New definition of "Personal area network" para. b. is amended and new Technical Note 2 is added**	**"Personal area network"** A data communication system having all of the following characteristics: a. Allows an arbitrary number of independent or interconnected 'data devices' to communicate directly with each other; and b. Is confined to the communication between devices within the immediate vicinity of an individual person or device controller (e.g., single room, office, or automobile, and their nearby surrounding spaces). *Technical Note* *'Data device' means equipment capable of transmitting or receiving sequences of digital information.*	**"Personal area network"** A data communication system having all of the following characteristics: a. Allows an arbitrary number of independent or interconnected 'data devices' to communicate directly with each other; and b. Is confined to the communication between devices within the immediate physical vicinity of an individual person or device controller (e.g., single room, office or automobile). *Technical Notes* *1. 'Data device' means equipment capable of transmitting or receiving sequences of digital information.* *2. The "local area network" extends beyond the geographical area of the "personal area network".*
72.	**"Resolution" - Deleted**	**"Resolution"** The least increment of a measuring device; on digital instruments, the least significant bit. (Ref. American National Standards Institute (ANSI) B-89.1.12)	definition deleted
73.	**New Definition of "Satellite navigation system". Acronyms GNSS and RNSS are deleted**	**"Satellite navigation system"** A system consisting of ground stations, a constellation of satellites, and receivers, that enables receiver locations to be calculated on the basis of signals received from the satellites.	**"Satellite navigation system"** A system consisting of ground stations, a constellation of satellites, and receivers, that enables receiver locations to be calculated on the basis of signals received from the satellites. It includes Global Navigation Satellite Systems and Regional Navigation Satellite Systems.
74.	**"Sub-orbital craft" defined**	**- new entry**	**"Sub-orbital craft"** A craft having an enclosure designed for the transport of people or cargo, which is designed to: a. Operate above the stratosphere; b. Perform a non-orbital trajectory; and c. Land back on Earth with the people or cargo intact.
75.	**New definition of "Superalloy"**	**"Superalloy"** Nickel-, cobalt- or iron-base alloys having strengths superior to any alloys in the AISI 300 series at temperatures over 922 K (649°C) under severe environmental and operating conditions.	**"Superalloy"** Nickel-, cobalt- or iron-base alloys having a stress rupture life greater than 1000 hours at 400 MPa and an ultimate tensile strength greater than 850 MPa, at 922 K (649°C) or higher.
76.	**"Vulnerability disclosure" defined (former local definition)** **Term "CEP" re-defined**	**- new entry** **"Circular Error Probable (CEP)"** In a circular normal distribution, the radius of the circle containing 50% of the individual measurements being made, or the radius of the circle within which there is a 50%	**"Vulnerability disclosure"** The process of identifying, reporting or communicating a vulnerability to, or analysing a vulnerability with, individuals or organisations responsible for conducting or coordinating remediation for the purpose of resolving the vulnerability. **"Circular Error Probable (CEP) or Circle of Equal Probability"** In a circular normal distribution, the radius of the circle containing 50% of the individual measurements being

		probability of being located.	made, or the radius of the circle within which there is a 50% probability of being located.
S.No.	**Acronyms and Abbreviations used in SCOMET List**	**Existing entry in SCOMET List (as notified vide Noti No. 03 dated 24.04.2020)**	**Revised Entry in SCOMET List [The previous entries against relevant items shall be substituted as under in the SCOMET list:] [Text highlighted in purple color has been added]**
1.	**2.**	**3.**	**4.**
77.	**- new entry " AMPS"**	**- new entry**	AMPS: Aircraft Missile Protection System
78.	**- entry deleted " EEPROMS"**	EEPROMS : Electrically Erasable Programmable Read Only Memory	-entry deleted
79.	**- new entry " EMP"**	- new entry	EMP: Electromagnetic Pulse
80.	**- new entry "ESD"**	**- new entry**	ESD: Electrostatic Discharge
81.	**- new entry "HDMI"**	**- new entry**	HDMI: High-Definition Multimedia Interface
82.	**- entry deleted "LVDT"**	LVDT : Linear Variable Differential Transformer	- entry deleted
83.	**- entry deleted " MRAM"**	MRAM: Magnetic Random Access Memory	- entry deleted
84.	**- new entry "NIJ"**	**- new entry**	NIJ : National Institute of Justice
85.	**- entry deleted "SPLD"**	SPLD : Simple Programmable Logic Device	- entry deleted

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