

SUMMARY OF CHANGES

LIST OF DUAL-USE GOODS & TECHNOLOGIES AND MUNITIONS LIST

as of 03 December 2009

The following table outlines the changes made to the last published List of Dual-Use Goods & Technologies and Munitions List. However, it should be used only as a reference. The changes include all amendments approved by the Plenary held 2 and 3 December 2009.

Category/Item	Comments
GTN/GSN	
	New Note 2 added at the start of the Lists re CAS numbers
Category 1	
1.A.1.b.	CAS number added; «having all of the following» added
1.A.2. Note 1	Last part of Note 1 concerning «size» deleted; «having all of the following» and new sub-paras. a., b. & c. added
1.B.1.	Entry rewritten
1.B.1.a.	Comma added after Filament winding machines; Term 'primary servo positioning' added before axes
1.B.1.b.	Tow placement and tows deleted; Comma added after Tape-laying machines; two replaced by five axes; Term 'primary servo positioning' added before axes
1.B.1.g.	New entry for tow placement machines previously specified by 1.B.1.b.
1.B.1. Technical Note	New Technical Note added after 1.B.1.g. for the definition of 'primary servo positioning'
1.C.2.b.	«the powder or particulate» added before material
1.C.6.c.1.	CAS number added
1.C.7.f.1.	CAS number added
1.C.8.b.1.a.	CAS numbers added
1.C.8.b.2.a., b., c.	CAS numbers added
1.C.10.	Part of the entry has been deleted
1.C.10.a.1. & 2. 1.C.10.b.1. & 2. 1.C.10.c.1. & 2.	Editorial changes
1.C.10.b.1. & 2.	Parameters amended

Category/Item	Comments
Category 1 cont.	
1.C.10.b. Note	Note has been rewritten and expanded
1.C.10.e.	Entire entry has been rewritten, including Notes 1 & 2 and the Technical Note
1.C.11.c.	CAS number added
1.E.2.c.1.c.1.	CAS number added
Annex to Category 1, numbers 6, 35-42	CAS number added
Category 2	
2.B.6.a.	Editorial changes and new Technical Note
Category 3	
3.A.1.b.1.a.4.c.	Editorial change
3.A.1.b.8.b.	«density» deleted after output power (editorial change)
3.A.1.b.11.	New entry including a Nota Bene
3.A.1.e.4.	Editorial change
3.A.2.a.3.	Editorial change
3.A.2.b.	Deleted – text has been incorporated into new 3.A.1.b.11.
3.A.2.e.	Entry amended to include new sub-paras. 1. and 2.
3.A.2.g.1. and 3.	Editorial changes
3.B.1.c.1. and 2.	Entries rewritten
3.B.1.e.	Entry rewritten including local definitions for 'semiconductor process tools' and 'sequential multiple wafer processing' (Technical Notes 1 and 2)
3.B.1.e., Note	Note rewritten
Category 4	
4.A.1.b.	Entry deleted; Nota Bene added referring to Cat 5-Part 2
4.A.3.b.	Parameter changed to 1.5 WT
4.A.3.g.	Entry rewritten including amended parameter for data rates
4.D., Note	Last sentence of the Note deleted
4.D.1.b.1.	Parameter amended to 0.25 WT
4.D.3.	Entry deleted; Nota Bene added referring to Cat 5-Part 2
4.E.1.b.1.	Parameter amended to 0.25 WT

Category/Item	Comments
Category 5 – Part 1	
Note 1	At the start of the Category, a new Nota Bene referring to 6.A.5. added to Note 1
5.B.1.b.1.	Entry and Technical Note deleted
5.B.1.b.3.	Entry deleted
5.D.1.d.1.	Entry and Technical Note deleted
5.D.1.d.3.	Entry deleted
5.E.1.c.1.	Parameter changed to 50 Gbit/s; Technical Note modified
5.E.1.c.3.	Entry expanded to include switching time
Category 5 – Part 2	
Note 4	At the start of the Category, a new Note 4 added Statement of Understanding added to the Lists to clarify scope of Note 4
5.A.2.a.	«other specially designed» deleted before components; «specially designed for "information security» added to end of entry
5.A.2., N.B.	Parenthetical reference to GPS or GLONASS deleted
5.A.2., Note - Paragraph a.	Para. a. rewritten including local definitions for 'personal data' and 'readers/writers' (Technical Notes)
5.A.2., Note - Paragraph b.	Para. b. deleted because it is now covered by new Note 4; Nota Bene added referring to Note 4
5.A.2., Note - Paragraph c.	Para. c. deleted because it is now covered by new Note 4; Nota Bene added referring to Note 4
5.A.2., Note - Paragraph h.	Para. h. deleted because it is now covered by new Note 4; Nota Bene added referring to Note 4
5.D.2., Note	Validity Note added
Category 6	
6.A.1.a.1.a.	«Wide-swath» deleted before «bathymetric survey systems»
6.A.1.a.1.a.2.	«seabed topography at seabed» added before «depths»; «below the water surface» deleted
6.A.1.a.1.d.	Entry rewritten including sub-paras 1 and 2
6.A.1.a.1.e.	New entry including a new Nota Bene and new Note
6.A.2.c.2.	Reference to 6.A.2.e. deleted (editorial change)
6.A.3., Nota Bene	N.B. amended
6.A.3.b.2.	New Note added
6.A.3.b.4.c., Note 4.c.	New sub-para. 3 added to Note 4.c.
6.A.5.d.1.b.1.	Average or CW output power parameter changed to 15 W
6.A.5.d.1.c.	'bars' added after "laser"; 'arrays' deleted
6.A.5.d.1.c.1.	Average or CW output power parameter changed to 100 W
6.A.5.d.1.d.	Entry rewritten including sub-paras. 1 to 4 and a Technical Note; Validity Note added for 6.A.5.d.1.d.1.d.

Category/Item	Comments
Category 6 cont.	
6.A.5.d.1.e.	New entry including Notes 1, 2 and 3.; Technical Notes 2 and 3 rewritten
6.A.8., Note	«having no more than 12 resolvable elements per mm» deleted from 3rd dash; New entry added for Precision Approach Radar equipment
6.A.8.e.	Double quotation marks deleted from around electronically steerable phased array antennae; «phased» deleted before array antennae;
6.A.8.f.	Note deleted – text incorporated in Note to 6.A.8.
6.A.8.j.	«or» moved from after entry 1 to after entry 2
6.A.8.1.4.	Entry rewritten
6.C.4.b.1., 2., 3.	CAS numbers added
6.C.4.e.	CAS numbers added
6.D.3.a.5.	New entry added, including a Nota Bene
6.D.3.h.1.a.	Entry deleted; 6.D.3.h.1. rewritten to include sub-para. b.
Category 7	
7.A.5.	Entry rewritten, including a Nota Bene, a Note and Technical Note
7.B.1., Technical Note 2	Last sentence amended
7.D.3.b.2.	Abbreviation GNSS added in parenthesis; Parenthetical reference to GPS or GLONASS deleted
7.E.4.b.6., Nota Bene	N.B. amended
Category 8	
8.A.2.f.	Entry deleted; Text moved to Category 6
8.A.2.f.1.	Nota Bene added referring to Category 6
8.A.2.f.2.	Nota Bene added referring to Category 6
Category 9	
9.A.1.a.	Reference to 9.E.3.h. added
9.A.3.	Reference to 9.E.3.h. added; «and» deleted after «systems»
9.B.2.	Reference to 9.E.3.h. added
9.D.3.	«Systems» added after Full Authority Digital Electronic Engine Control and after "FADEC" as a defined term – "FADEC Systems"
9.D.3.b.	«Systems» added after "FADEC" as a defined term – "FADEC systems"
9.E.3.a.9.	Entry deleted; Text moved to new entry 9.E.3.h. Nota Bene added referring to 9.E.3.h.
9.E.3.h.	New entry including a Note

Category/Item	Comments
Sensitive List	
4.D.1.	Single quotation marks placed around 'Adjusted Peak Performance' and 'APP'; Parameter changed to 0.5 WT
4.E.1.	Single quotation marks placed around 'Adjusted Peak Performance' and 'APP'; Parameter changed to 0.5 WT
6.A.1.a.1.e.	New entry for «Active individual sonars...»
6.A.2.e.	Entry deleted (editorial change); "Space-qualified" "focal plane arrays" are covered under "Space-qualified" solid-state detectors (6.A.2.a.1.a., b., c. and d.)
6.A.3.b.3.	New Note added
6.A.3.b.4.	«described in» replaced with «specified by» (editorial change)
6.A.3.b.4.c.	New Note 5 added
6.D.3.a.	It is understood that entry 6.D.3.a.5. on the Basic List is included under 6.D.3.a. on the Sensitive List
9.E.3.h.	Reference to 9.E.3.h. added to last entry in Category 9 for «Other technology»
Very Sensitive List	
6.D.3.a.	It is understood that entry 6.D.3.a.5. on the Basic List is included under 6.D.3.a. on the Very Sensitive List
Munitions List	
Note 2	At the start of the ML, «In some instances» added to the beginning of Note 2
ML1	Notes 1 to 4 realigned (editorial change)
ML2.b.	Entry amended
ML2.d.	New entry
ML5.c.	New Note
ML5.d.	Reference to ML5.c. added
ML6.b.	Hyphen placed between «All-wheel» and deleted between «wheel drive»
ML6, Note 2	Para. b. deleted; following paragraphs relettered
ML7.b.4.b.	CAS numbers added
ML8.	New Nota Bene 2; existing N.B. numbered 1
ML8.a.6.	CAS number added
ML8.a.33.	Entry amended to include paras. a. and b.
ML8.a.34.	Entry amended to include paras. a. and b.
ML8.b.7.	New entry
ML8.d.3., Notes 1 and 2	CAS numbers added
ML8.e.6.	Entry rewritten for clarity; «and» replaced with «or» after «plasticizers»
ML8.e.13.	Entry amended to include paras. a. and b.

Category/Item	Comments
Munitions List	
ML8.f.19.	CAS number added
ML8.g.4.	CAS number added
ML8, Note 5	Note 5 deleted (included in new Nota Bene 2 at start of ML8.)
ML8, Note 6	CAS numbers added to many of the paragraphs from a. to dd.
ML10.h.	Entry rewritten
ML11.	New Nota Bene referring to ML21.
ML17.p.	New entry for "Fuel cells" together with a new definition
Definitions	
"All compensations available"	Definition amended
"FADEC"	Definition deleted
"FADEC Systems"	New definition
"Fuel cell"	New definition
"Interconnected radar sensors"	Definition deleted
"Personalised smart card"	Definition deleted
	The definitions below are no longer used in the Lists and have therefore been deleted:
"CE"	
"Computing Element" ("CE")	
"Data signalling rate"	
"Dynamic adaptive routing"	
"Hybrid computer"	
"Q-switched laser"	
"Terminal interface equipment"	
"Three dimensional Vector Rate"	

Category/Item	Comments
Definitions cont.	
	In the definitions below, the references to relevant Categories of the Lists have been updated:
"Aircraft"	
"Basic scientific research"	
"Civil aircraft"	
"Critical temperature"	
"Digital transfer rate"	
"Electronic assembly"	
"Energetic materials"	
"Expert systems"	
"Fibrous or filamentary materials"	
"Focal plane array"	
"Fractional bandwidth"	
"Laser"	
"Laser duration"	
"Object code"	
"Programme"	
"Real time processing"	
"Source code"	
"Space-qualified"	
"Superconductive"	
"Use"	
SOUs and Validity Notes	
Category 5 – Part 2	New SOU to clarify scope of new Note 4
Category 5 – Part 2	New Validity Note for 5.D.2., Note
Category 6	New Validity Note for 6.A.5.d.1.d.1.d.