

SUMMARY OF CHANGES

LIST OF DUAL-USE GOODS & TECHNOLOGIES AND MUNITIONS LIST

as of 7 December 2017

The following table outlines the changes made by the 2017 Plenary to the 2016 List of Dual-Use Goods & Technologies and Munitions List (WA-LIST (16) 1 Corr.1). The table should be used as a reference only. The new version of the Control Lists is WA-LIST (17) 1.

Category/Item	Comments
Category 1	
1.A.2.	- chapeau and para. a. amended- «prepregs or preforms» added
1.A.2.b.	- «Consisting of» replaced by «Made from»
1.C.1.	- «use as absorbers of» replaced by the function of «absorbing» and «waves» replaced by «radiation»
1.C.1.b.	- amended
1.C.2.c.2.; 1.C.2.d.3.	- global definitions (double quotes) changed to local definitions (single quotes) in 1.C.2.c.2. entries a. to h. and 1.C.2.d.3. entries a. to c. (new Technical Notes 1 to 10)
1.C.7.c.2., 1.C.7.d., 1.C.7.f.	- editorial correction: «listed under» replaced by «specified by» in the N.B.s
1.C.10.d.2.	- 'commingled' changed from a global to a local definition (new Technical Note)
1.C.10.e. and Technical Notes	- 'carbon fibre preforms' changed from global to local definition (new Technical Note 1) in the chapeau and in Note 1
1.C.12.a. Note b.	- 'effective grams' changed from global to local definition (new Technical Note)
1.C.12.b.	- 'Previously separated' changed from global to local definition (new Technical Note)
Category 2	
2.A.1. Note	- (or national equivalents) added
2.B.1.a. Note 2	- «and» deleted after «drilling»
2.B.1.c.1.b.	- «more» replaced by «four»
2.B.6.	- entire entry rewritten
2.B.7.a.	- deleted
2.B.8.	- chapeau amended - paras. a. and b. deleted
2.B.8.c.	- entry amended including new paras. 1 and 2 - 'Compound rotary tables' changed from global to local definition (new Technical Note)
2.B.8.d.	- new entry
2.E.3.a.	- deleted
2.E.3.b.1.c., 2.E.3.b.2.c.	- 'Direct-acting hydraulic pressing' changed from global to local definition (new Technical Note 1)
2.E.3.b.2.d.	- 'Hot isostatic densification' changed from global to local definition (new Technical Note 2)
2.E.3.d.	- deleted

Category/Item	Comments
Category 3	
3.A. Notes 1 & 2 and N.B.	- entries corrected to restore reference to 3.A.1.a.13. (3.A.1.a.12. <i>to</i> 3.A.1.a.14.)
3.A.1.a.2.	- EEPROMs, flash memories, MRAMs deleted from entry - 'non-volatile memories' added (new Technical Note)
3.A.1.a.5.a. and Technical Notes	- output rate replaced by "sample rate" in paras. 1 to 5 - new definition for "sample rate" - Technical Notes are amended including deletion of 3, 6, 7, 8 and 9 - "multiple channel ADCs" changed from a local to a global definition - "interleaved ADCs" changed from a local to a global definition
3.A.1.a.5.b.2.a.	- «arrive at or within» added
3.A.1.a.7. Note	- Simple Programmable Logic Devices (SPLDs) deleted
3.A.1.a.14.	- chapeau amended - input sample rate replaced by "sample rate" in paras. a.1 to 5 - new Technical Notes 1 to 4
3.A.1.b.2. Notes 2 and 3	- editorial correction: double quotes added to "MMIC"
3.A.1.b.4.	- new N.B.3.
3.A.1.b.11.	- 'Frequency synthesiser' changed from global to local definition (new Technical Note)
3.A.1.e.	- para. a. amended including new sub-paras. 1 and 2 - new local definition for 'continuous power density' (new Technical Note 5)
3.A.1.i.	- new entry for electro-optic modulators including a Note and Technical Note
3.A.2.c.1.	- 10 MHz replaced by 40 MHz
3.A.2.c.4.	- 'Real-time bandwidth' changed from global to local definition in para. a. (new Technical Note 1) - 'frequency mask trigger' changed from global to local definition in para. b.2. (new Technical Note 4)
3.A.2.h.	- input sample rate replaced by "sample rate" in paras. 1.a. to e. - new Technical Notes 1 to 4
3.B.1.j.	- new entry for mask "substrate blanks" - new local definition for 'Extreme Ultraviolet (EUV)' (new Technical Note)
3.B.2.	- paras. a. and c. amended
3.C.2.a.1.	- 245 nm changed to 193 nm
3.C.5.	- new para. b.
3.C.6.	- amended
3.E.1.	- new Note 3 and new Technical Note for local definition of 'Process Design Kit' ('PDK')
Category 4	
introductory Note 2	- 'main storage' changed from global to local definition (new Technical Note)
4.A.3.b.	- 16 WT changed to 29 WT
4.A.4.	- global definitions (double quotes) changed to local definitions (single quotes) in entries a. to c. (new Technical Notes 1 to 3)
4.D.1.b.1.	- 8.0 WT changed to 15 WT
4.D.4.	- new decontrol Note
4.E.1.	- new Notes 1 and 2 - new Technical Notes 1 and 2 for the local definitions 'vulnerability disclosure' and 'cyber incident response' - new Statement of Understanding
Technical Note on 'APP'	- in the Note to para. 1, «and» is deleted after «floating point additions»

Category/Item	Comments
Category 5 – Part 1	
5.A.1.a.	- para. 3 is now written in two paras – 5.A.1.a.3. and 4. - the corresponding Notes are amended and numbered 1 and 2
5.A.1.d. and Note 1	- 'Electronically steerable phased array antennae' changed from global to local definition (new Technical Note) - new decontrol Note 2 (existing Note numbered 1)
Category 5 – Part 2	
5.A.2.a.	- amended
5.A.2.b.	- amended
5.D.2.b.	- amended
5.E.2.b.	- amended
Category 6	
6.A.2.f.	- new entry for 'Read-out integrated circuits' ('ROIC') - new Technical Note for the local definition of 'ROIC' - new decontrol Note
6.A.3.a.1. and 2.	- deleted (mechanical high-speed cameras)
6.A.3.a.3.	- chapeau and para. a. deleted
6.A.4.a.1.	- 'Deformable mirrors' changed from global to local definition (new Technical Note)
6.A.4.f.	- new entry for dynamic wavefront measuring equipment - new Technical Note for the local definition of 'frame rate'
6.A.5.a.6.b. Note 1	- «and» deleted after «beam conditioning»
6.A.5.d.5.c.	- 'Transfer lasers' changed from global to local definition (new Technical Note)
6.A.5.f.1.	- deleted - new N.B.
6.A.5.f.2.	- amended including «capable of» replaced by «specially designed for»
6.A.5.f.3.	- amended including new sub-paras. a. and b.
6.A.8.e.	- «steerable» replaced by «scanned» - new Technical Note
6.A.8.1.1.	- 'Automatic target tracking' changed from global to local definition (new Technical Note)
6.A.8.1.4.	- 'geographically dispersed' changed from global to local definition (new Technical Note)
6.D.3.h.2.	- «and» deleted - in para. a., "electronically steerable phased array antennae" has been replaced by electronically scanned array antennae
Category 7	
7.A.6.a.	- 'Power management' changed from global to local definition (new Technical Note)
7.E.4.a.5.	- 'primary flight control' changed from global to local definition (new Technical Note)
7.E.4.a.6.	- 'Flight control optical sensor array' changed from global to local definition (new Technical Note)
7.E.4.b.5. Note	- 'flight path optimisation' changed from global to local definition (new Technical Note)
7.E.4.c.3.	- 'variable geometry airfoils' changed from global to local definition (new Technical Note)

Category/Item	Comments
Category 8	No amendments were made to Category 8
Category 9	
9.A.2.	- amended including new paras. a. and b. - new Technical Note for the local definition of 'corrected specific fuel consumption'
9.A.4.f.	- amended including new sub-paras 1.a. and b. - new Technical Note for the local definition of 'verification of operational procedures' - entry agreed with a two-year Validity Note
9.D.1. and 9.D.2.	- «not specified in 9.D.3. or 9.D.4.» added after "Software"
9.D.4.b.	- amended including new paras 1 and 2 and a new Note
9.E.3.a.2. Technical Note 2 9.E.3.a.5. Technical Note	- "steady state mode" changed from a local to a global definition - former Technical Note 2 deleted
9.E.3.c. Technical Note 4	- amended
Sensitive List	
1.A.2.a.1.	- replaces former 1.A.2. for "Composite" structures or laminates
1.C.1.	- consequential change following amendment to corresponding entry in the Dual-Use List
2.D.1.; 2.E.1.; 2.E.2.	- rewritten (references replace descriptions)
Very Sensitive List	
1.A.2.a.1.	- replaces former 1.A.2.a. for "Composite" structures or laminates
1.C.1.	- consequential change following amendment to corresponding entry in the Dual-Use List
6.A.1.a.2.c. and 6.A.1.a.2.f.	- editorial correction: hyphen added in "user-accessible programmability"
Munitions List	
ML1.d.	- positive text replaces decontrol Note
ML8.a.42	- new entry for an explosive
ML8.c.1.	- new Note 1 (existing Note numbered 2)
ML8.c.10.b. Note	- «JP-4, JP-8,» deleted – Note now applies to all fuels for civil use aviation
ML8.e.16.	- editorial correction: parenthesis added before (nitratomethylmethyloxetane)
ML8.e.21.	- new entry for an energetic material
ML8.f.5.	- copper beta-resorcylate added
ML9.b.1.	- paras. a. and b. deleted (performance parameters)
ML13.a. N.B.	- editorial: «s» added to «plate»
ML15. Note 1	- list of components deleted
ML17.1.	- amended
ML17.o.	- «and» replaced by «or» in parenthetical example
ML20.b.	- «and» replaced by «or» in parenthetical example

Category/Item	Comments
Definitions	
"Automatic target tracking" "Carbon fibre preforms" "Commingled" "Comminution" "Compound rotary table" "Deformable mirrors" "Direct-acting hydraulic pressing" "Effective gram" "Electronically steerable phased array antenna" "Flight control optical sensor array" "Flight path optimization" "Frequency mask trigger" "Frequency synthesiser" "Gas atomisation" "Geographically dispersed" "Hot isostatic densification" "Linearity" "Main storage" "Mechanical alloying" "Melt extraction" "Melt spinning" "Neural computer" "Optical computer" "Plasma atomisation" "Power management" "Previously separated" "Primary flight control" "Real-time bandwidth" "Resolution" "Rotary atomisation" "Settling time" "Solidify rapidly" "Splat quenching" "Systolic array computer" "Transfer laser" "Vacuum atomisation" "Variable geometry airfoils"	- these global definitions have been deleted from the Definitions section of the Lists. They have been replaced by local definitions in the form of Technical Notes
"Compensation systems"	- editorial correction: double quotes added to "magnetometers" (Cat 6)
"Cryptographic activation"	- «specifically» added before «activates» (Category 5 – Part 2) - «secure» deleted before «mechanism»
"Interleaved Analogue-to-Digital Converter (ADC)"	- new definition (Category 3)
"Multiple channel Analogue-to-Digital Converter (ADC)"	- new definition (Category 3)
"Sample rate"	- new definition (Category 3)
"Steady state mode"	- new definition (Category 9)
"User-accessible programmability"	- reference to Categories 4 and 5 have been deleted

Category/Item	Comments
Acronyms and Abbreviations	No amendments were made to the Acronyms and Abbreviations
Statements of Understanding and Validity Notes	
4.E.1.	- new SOU
9.A.4.f.	- new Validity Note until 31 December 2019
9.A.12.	- SOU deleted
9.B.1.c.	- Validity Note extended until 31 December 2020