

Noordwijk, 29th September 2009

Memorandum: Ref.: TEC-QT/2009/1107/

From/de : Mikko Nikulainen
To/a : All Project PA Managers
Cc : TEC-Q, QT, QTM, QTC, QQM, QEM, QE, Skills training school
Managers and <http://esmat.esa.int>, CNES

**Subject: Verification to ECSS-Q-ST-70-38C.
Status of Surface Mount technology (SMT) as of September 2009**

Please find hereafter the actual status of the verification status of the assembly per ECSS-Q-ST-70-38C of the companies verified for ESA projects. The verification of a company is not a general approval, but relates uniquely to the materials (i.e. Type of PCB laminate, type of solder, type of conformal coating, etc.) and to the precise types of components/packages and to the design of the foot print that were subjected to the verification programme performed in accordance to the ECSS-Q-ST-70-38C. The Summary Table, listing the verified components packages, PCB, etc. indicates the status of the company. The Summary Table verification details of each company are confidential documents and are kept in dedicated files. Each Summary Table has a unique TEC-QM or TEC-QT reference number and this number should be identified in the relevant ESA Project's Declared Process List.

The attached listing is in company alphabetical order. During company assessment TEC-QTM has inspected a Technology Sample, performed an audit of the manufacturing line, approved the verification programme to be compliant to the ECSS-Q-ST-70-38C, reviewed and approved the verification report.

The cover page of the annex indicates the change status of the document since the previous release (ref. QM/07-721/BD/MH). 39 companies have currently verified lines and 34 companies are presently engaged in verification programme or delta verification, and some have expressed an interest to become verified.

For further details, please contact Carole Villette (TEC-QTM, carole.villette@esa.int)



Mikko Nikulainen
Head of Materials and Components Technology Division (TEC-QT)

Ref. of the letter	Date	Change Records	Author
QM/07-721/BD/MH	12 July 2007	First issue	B.D. Dunn
TEC- QT/2009/1107/MN		<p>-Companies previously ESA Approved having ceased the activity have been removed from the list. Alcatel Space Bell, Alcatel Space Denmark, Ylinen Electronics.</p> <p>-Companies having not started any Verification programme but which have been in contact to start have been removed from the list. Baumer Electric, CCM, C-MAC, Comdev Cambridge, Comdev Europe, EADS-Astrium Bristol, EMS, Eremis, GEC Silverkoves, Hitech Electronica, Sener, Sira, SSTL, VTT Electronics, Westover.</p> <p>-Companies not yet ESA Approved having starting the verification programme per ECSS-Q-ST-70-38C have been added to the list. Blue Electronic, CAEN, DAS Photonic, Effacec, OEAW, Lusospace, MPI, MEL, RESA, SABCA, SEA, Steel Electronic, Tecnotron, Temex, UBI.</p> <p>-Companies not yet ESA Approved having successfully passed a verification programme per ECSS-Q-70-38 have been added. Montena EMC.</p>	M. Nikulainen

COMPANY	Contact person	e-mail address	LOCATION	ESA reference for verified summary table and date (or other situation)
AUSTRIAN AEROSPACE	Mr. G. Guttler	Gerd.quettler@space.at	Vienna (A)	QM/05-057/BD table 1 to 4 of 4th March 2005,
Bluelectronic	Terry stock-Valentino Tordiglione	terry.stock@bluelectronic.it , valentino.tordiglione@bluelectronic.it	Desio (It)	Info Note sent TEC-QT/2009/1097/CV. Verification programme starting in 2009 in the frame of S1.
BRADFORD ENG.	Mr. E. Van der Kroon	e.vanderkroon@bradford-space.com	Heerle (NL)	TEC-QT/2009/1039/CV Table 1
CAEN	Mr. G. Vitale	Giuseppe Vitale <g.vitale@caen.it>	Viareggio (I)	Request letter 24/06/2008 ref: QM/08-917/CV. Verification programme starting in 2009 in the frame of S3
CARLO GAVASSI SPACE (CGS)	Mr. E. Della Nave		Milan (I)	QM/02-440, Table 1 and 2 31 January 2002
C-MAC	Mr. Ph Bunel	PhilippeBunel@cmac.com	Argenteuil (Fr)	QM/95J458, Table 1 of 31 October 1995, Table 2, of 2 January 1996
CODECHAMP	Mr. J-L. Lagagne		Champagnat (Fr)	QM/95J402, Table 1, 3 Oct. 95
DAS Photonics	O. Navasquillo	olga.navasquillo@dasphotonics.com	Valencia (E)	Info Note QT/09-1027/CV. Verification programme starting in 2009 in the frame of @sat project.
EADS-ASTRIUM Stevenage (MMS-UK)	Dr. D. Bradwell		Stevenage (GB)	QM/96A98, Table 1, of 28 Feb. 96. Additional components were tested in March 97 but not added to Summary Table
EADS-ASTRIUM Bremen	Jens Wendorff	jens.wendorff@astrium.eads.net	Bremen (D)	QM/03-063/BD Tables 1-3 of 20 January 2003
EADS-ASTRIUM CRISA	Mr. F. Gracia	fggracia@crisa.es	Tres Cantos (E)	TEC-QT/2009/1060/CV Table 1, 2,3 and 4
EADS-ASTRIUM Friedrichshafen (Dasa-FN, Dornier)	Wifried Pfeffer	Wilfried.Pfeffer@astrium.eads.net	Friedrichshafen (D)	QM/97B66, Tables 1 – 6, of April 2000
EADS-ASTRIUM Ottobrunn (Dasa-OTN)	Mr.F. Koeberlin	Friedrich.Koeberlin@astrium.eads.net	Ottobrunn (D)	<u>QM/08-1001/CV table 1 to 10 dated on 10 december 2008.</u>
EADS-ASTRIUM Portsmouth (MMS-UK)	Mr. P. Fletcher	peter.fletcher@astrium.eads.net	Portsmouth (GB)	QM/05-210/BD, Tables 1 –7, of 8 August 2005
EADS-ASTRIUM Velizy (matra, MMS-F)	Mrs. Veronique Deschamps Benoit	"DESCHAMPS BENOIT, Veronique" <veronique.deschampsbenoit@astrium.eads.net>	Velizy (Fr)	QM/03-062/BD, Tables 1-3 of 20 february 2003

COMPANY	Contact person	e-mail address	LOCATION	ESA reference for verified summary table and date (or other situation)
EADS-SODERN	Mr. J.M. Lebreton	<a href="mailto:LE_BRETON_jean-michel<jean-michel.lebreton@sodern.fr>">LE BRETON jean-michel <jean-michel.lebreton@sodern.fr>	Limeil-Brevannes (Fr)	QM/08-968/CV Tables 1 and 2 dated on 17/10/2008
EFACEC	<u>Mr. Pedro Luis</u>	pluis@efacec.pt	Moreira Maia(P)	Info note QT/09-1011/CV. Verification programme starting in 2009 in the frame of @sat project.
ETEL	Mr. V. Schorer		Motiers (CH)	QMM/98I179/BD, Table 1 and 2 of 17 Sept. 98, QM/01-327/BD Table 3 of 28 Nov. 01
GALILEO AVIONICA (Fiar, Officine Galileo)	Mr. R. Banti	riccardo.banti@galileoavionica.it	Milan (I)	QMM/99A06/BD, Tables 1 & 2, 3 January 1999
GALILEO AVIONICA SpA	Mrs. S. Nesi	stefania.nesi@galileoavionica.it maurizio.giustini@galileoavionica.it	Firenze (I)	QM/02-632/Tables 1-5, 17 October 2002
Institut fur Weltraumforschung (OEAW)	<u>Mr. M. Steller</u>	Manfred.Steller@oeaw.ac.at	Graz (Au)	Verification programme starting in 2009 in the frame of Bepi-Colombo
JENOPTIK (Dasa-Jenoptik)	Mr. R. Hunger	Ronald.hunger@jena-optronik.de	Jena (D)	QM/98F97/BD, Table 1, of 3 June 1998
KAYSER THREDE	Mr. H. Meinl	heribert.meinl@kayser-threde.com	Munich (D)	QMM/98J204/BD, Table 1, of 14 Oct. 98
LusoSpace	Mr. C. Borda	CBorda@lusospace.com	Lisbon (P)	Preliminary meeting QM/08-935/CV. Verification programme starting in 2009 in the frame of sentinel programmes
Max Planck Institut	M Ivor Krause	krausei@mps.mpg.de	Katenburg-Lindau (D)	Info note TEC-QT/2009/1079/CV Verification programme starting in 2009 in the frame of Bepi Colombo and Exomars
MEL	Mr. JJ Picarda	picarda@matra-electronique.fr	La croix St Ouen (Fr)	Info note TEC-QT/2009/1098/CV. Verification programme starting in 2009 in the frame of Exomars
MIER COMUNICACIONES	Mr. E. Garcia	egarcia@mier.es	Barcelona (E)	QM/06-416/BD table 1,2, 3 dated on the 2 May 2006.
Montena EMC	Mr. W Hirschi	Werner.hirschi@montena.com	Rossens (CH)	QT/09-1016/CV Table 1 and 2
NORSPACE (Amespace and Alcatel Norway)	Mrs. Tone Lund	harald.bjorn.hansen@norspace.no tone.lund@norspace.no	Horten (N)	QM/2000H122, Table 1, 29/08/2000
NTE SA	Mrs. E. Creus	eva.creus@nte.es	Barcelona (E)	QM/05-246/BD Table 1
OHB SYSTEMS	Mr. J. Bitomsky		Bremen (D)	QM/02-402, Table 1, of 3 January 2002

COMPANY	Contact person	e-mail address	LOCATION	ESA reference for verified summary table and date (or other situation)
PATRIA ADVANCED SYSTEMS (Finnyards, Patria Finavitec)	Mr. Jens Lundell	Jens.lundell@patria.fi	Tampere (Fi)	QM/05-309/BD Table 1 and Table 2, December 2005
RESA	Thierry Reboul	thierry.reboul@resa-spatiales.fr	Courtaboeuf (Fr)	Audit made the 21/06/2005 (QM/05-200/CV and QM/05-201/CV). Audit of new manufacturing line made the 7/05/2009 (EU30.GENE.MN.14809.V.ASTR). Verification programme shall start in 2009 in the frame of S3.
SAAB- ERICSSON- SPACE	Per Allard	per.allard@ruag.com	Gothenburg (S)	QM/03-270, Tables 1-5, of 11 November 2003.
SABCA	Mr. P. Lenelle	pierre.lenelle@sabca.be	Brussels (B)	Info Note QM/05-079/CV sent on 23 March 2005
SAGEM (previously Alcatel Valence and sextant)	Mr. Patrice Chabannes	patrice.chabannes@sagem.com	Valence (Fr)	QM/02-517/BD Table 1, April 2002
SEA	Mr. K. Ward	Ken.Ward@sea.co.uk	Bristol (UK)	Info Note sent on 12 Jan. 01. Request letter 17/03/2008 ref: SEA/08/KWW/FF2N1860 Internal ref: QM/08-958/MN/MH. Verification programme has started in 2009 in the frame of Earthcare
SPUR ELECTRON	Mr. J. Moth, I. Turner	ITurner@spurelectron.com	Havant (GB)	QM/06-520/BD table 1 to 4
Steel Electronique	Mrs. N.Reynaud	nathalie.reynaud@steel-electronique.fr	Martres Tolosanes (Fr)	QM/06-573/CV Info note sent the 18-12-2006. Verification programme running in the frame of Swarm project.
SYDERAL (Alcatel Space Switzerland and CIR)	M Michel Perrenoud, M Glenn Symons	Michel.perrenoud@syderal.ch , Glenn.symons@syderal.ch	Gals (CH)	QM/96J487, Table 1, 28 Oct. 96, Tables 2-5, 16 Nov. 97; Table 6, 12 July 99; Tables 7-8, 12 Feb.01; Table 9, 20 February 2003
TECNOTRON	Mr. M. Schelten	mschelten@tecnotron.de	Weissenberg (D)	Info Note sent on 11 September 2003 (ref. QM/03-203/BD/GDK). Verification programme running in the frame of multiproject.
TELDIX	Mr. W. Mähringer		Heidelberg (D)	QMM/98J194, Table 1, 7 Oct. 98

COMPANY	Contact person	e-mail address	LOCATION	ESA reference for verified summary table and date (or other situation)
TEMEX	Ms. C. Cagnard	carole.gagnard@temex.fr	Pont St. Marie (Fr)	Info Note sent on 24 July 2003 (ref. QM/03-165/CV). Verification programme running in the frame of multi project.
TERMA	Jesper Erland	je@terma.com	Lystrup (DK)	QM/2000H123, Table 1 and 2, of 29 Aug. 00 and Table 3 of 24 Oct. 00
TESAT Spacecom (ANT/Bosch)	Mr. Andrej Brzoska	Andrej.Brzoska@tesat.de	Backnang (D)	QM/01-121, Table 1, 26 April 2001
Thales Alenia Space Espacio	Angel Fernadez Gonzalvo	Angel.Fernandez_Gonzalvo@thalesaleniastospace.com	Tres Cantos (E)	QM/03-078/BD, Tables 1-8, 12/03/2003
Thales Alenia Space Toulouse	Mr. J.P. Bessaguet	jean-pierre.bessaguet@thalesaleniastospace.com	Toulouse (Fr)	QM/01-348/BD, Tables 1 to 8
Thales Alenia Space-ETCA	Mr. L. Cantagallo	luigi.cantagallo@thalesaleniastospace.com	Charleroi (B)	QM/06-464/BD Table 1 of 24 July 2006
Thales Alenia-Space Milan (former Laben)	Mr. Mazzotti- E. Limoncelli	elio.limoncelli@thalesaleniastospace.com	Milan (I)	QM/03-083/BD; Tables 1-7, of 20 March 2003 and for Hybrid assembly; Table 8, of 28 November 2003
Thales Alenia SPAZIO	Mr. L. Sollecchia	Luca.Sollecchia@aleniastospace.it	L'Aquila (I)	Activity on hold at present (previous Approval status QM/03-290/BD, Tables 1-5 of 28 November 2003)
Thales Systeme Aeroportes	Mr. P Wattier	patrice.wattier@fr.thalesgroup.com	Elancourt (Fr)	QM/05-217/BD Info note. QM/07-738 Table 1 and Table 2 dated on 20 August 2007.
University of Birmingham	David Smith	dcs@star.sr.bham.ac.uk	Edgbaston (UK)	Audit made the 2/02/2006 (QM/06-340). Verification programme made in the frame of LPF. Summary table to be issued.