		APPLICATION FOR ESCC QUALIFICATION APPROVAL				Page 1	
		Component Title: AXOMACH AND SPACEFIBRE CONNECTORS AND ACCESSORIES				Appl. No.	
		Executive Member: CNES				Date: 18/01/2024	
						386	
Components (including series and families) submitted for Qualification Approval						1	
ESCC COMPONENT. NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR		
3401089	01, 02, 03, 06	N.A.	AxoMach	See annex 1	Variants 05, 07		
3401089	04, 08	N.A.	SpaceFibre	See annex 1	None		
3401090	03, 05	N.A.	AxoMach	See annex 1	Variants 01, 02, 04, 06		
3401090	07	N.A.	SpaceFibre	See annex 1	None		
Component Manufacturer Axon' Cable		2		Location of Manufacturing Plant Route de Châlons, 51210 Montmirail, France		3	
				ESCC Specification used for Qualification		4	
				Generic: 3401 Issue: 5 Detail/s: 3401/089 3401/090 Issues: 4			
Qualification Report Reference and date: 17035-QTR-0001-AXON, 17035-QTR-0002-AXON, 17035-QTR-0003-AXON, 17035-QTR-0004-AXON (1 per group) Date: 22/09/2023				5		PID used for manufacturing Qualification Lot	
				Ref No: G. Quadri, CNES-PID-20 Issue: 1 Date: 03/02/2020		6	
PID changes since start of qualification				7		Current PID Verified by CNES	
None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> (* Details not published, provided in confidential annex 2.)						Name of Executive Representative	
				Ref No: CNES-PID-20 Issue: 2 Date: 22/07/2022		8	
Current Manufacturing facilities surveyed by:							
Jean-Baptiste SAUVEPLANE (CNES), Denis LACOMBE (ESA), François NOUALS (CNES)				12/06/2019			
(Name of Executive Responsible)				(Date)			
AXON-AUD-2019							
Report Reference							
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain Some actions were needed on Axon's side, all actions are now closed							
Quality and Reliability Data				10			
Evaluation testing performed Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Failure analysis, DPA, NCCS Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Report Ref. No.: 07072-TR-MDSA HDR -01 issue D; 07072-TR-MDSA HDR02A-Axon' ED.1, Rev.1				(supply data)			
Equivalent Data:							
Certification:				Ref Nos. and purpose: 2-C-AXO-2-01			
				Shielding effectiveness degradation: DCR 1598, 1599 and 1600 issued to modify the detailed specification accordingly			



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The undersigned hereby certifies on behalf of the ESCC Executive, that the above information is correct; that the appropriate documentation has been evaluated; that full compliance to all ESCC requirements is evidence except as stated in box 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC qualification status to be given to the component(s) listed herein.

Date: 15/11/2023

Gianandrea Quadri
G. QUADRI, CNES

(Signature of the Executive Coordinator)

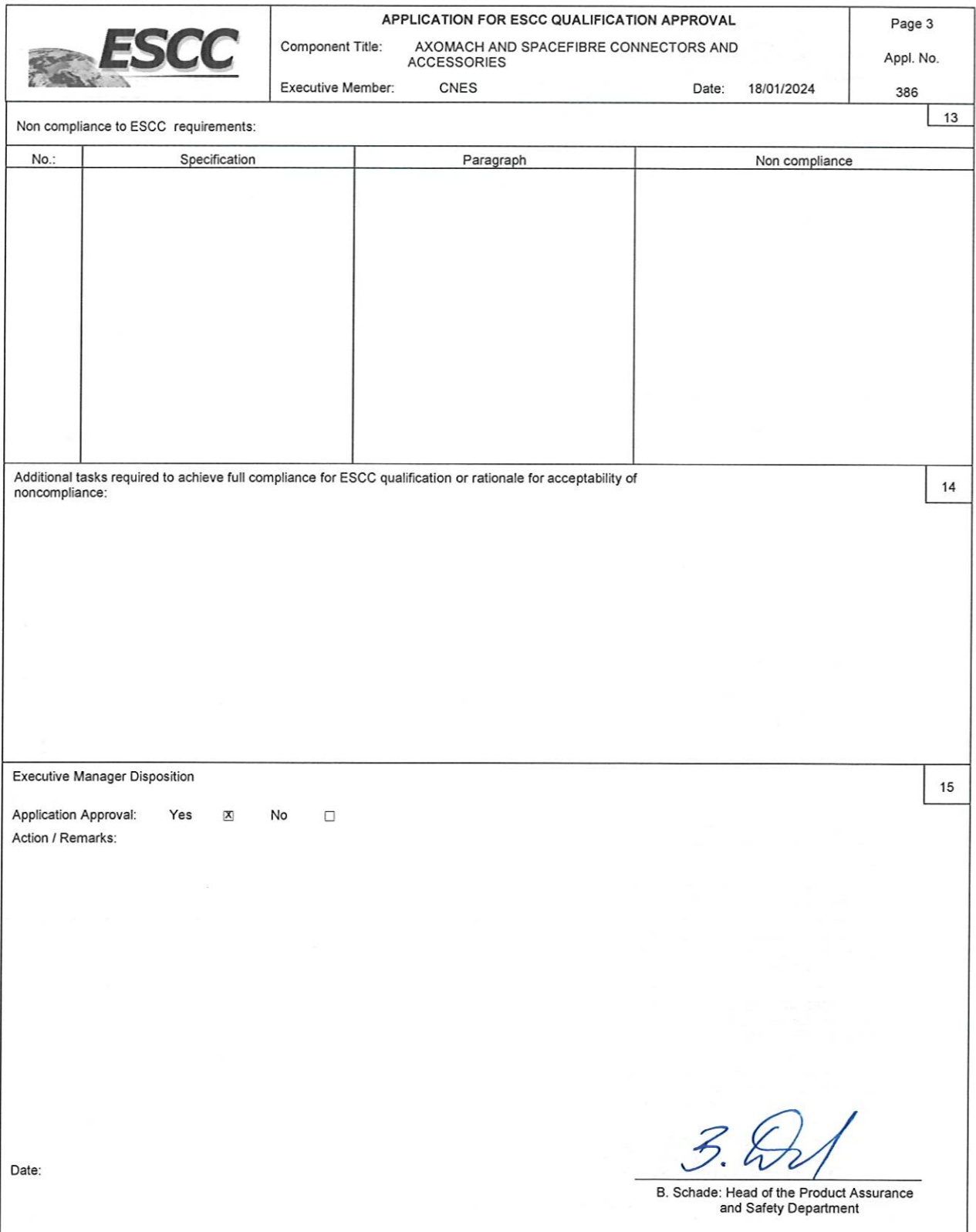
Continuation of Boxes above: (Only non-confidential comments)

Box 1: in conjunction with application C218 dealing with AXOMACH AND SPACEFIBRE CABLE ASSEMBLIES

Box 4: refer to appendix A for applied agreed deviations referring to ESCC 3401/089 issue 4 and for ESCC 3401/089 issue 4

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

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Tests conducted in compliance with:

- ESCC 3409 generic specification; Chart F4 (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

<p>[TV1 – P568742] Assembly of : Connector 340108903B + Cable assembly 3409001 with connector codes 03 & 09 (340900101571583) + Saver 340109003B + Cable assembly 3409001 with connector codes 03 & 17 & 01 & 02 (340900101571584) + Connectors 340108906B & 340108901B</p>	<p>340108903B 340900101571583 340109003B 340900101571584 340108906B 340108901B</p>
<p>[TV2 – P568743] Assembly of : Connector 340108904B + Cable assembly 3409001 with connector codes 10 & 18 (340900101571585) + Saver 340109007B + Cable assembly 3409001 with connector codes 10 (340900101571586) + Connector 340108908B</p>	<p>340108904B 340900101571585 340109007B 340900101571586 340108908B</p>
<p>[TV3 – P568744] Assembly of connector 340108902B with blanking plate 340109005B</p>	
<p>[TV4 – P568745] Cable assembly 3409001 with connector codes 17 (340900101568745)</p>	
<p>[TV5 – P568746] Assembly of 3409001 pigtail, with connector code 01 (340900101571587), with connector 340108901B</p>	
<p>[TV6 – P568747] Assembly of 3409001 pigtail, with connector code 02 (340900101571588), with connector 340108902B</p>	
<p>[TV7 – P568748] Assembly of 3409001 pigtail, with connector code 03 (340900101571589), with saver 340109003B and connector 340108903B</p>	
<p>[TV8 – P568749] Assembly of 3409001 pigtail, with connector code 10 (340900101571590), with saver 340109007B and connector 340108904B</p>	

Detail Specification reference:

3409/001, 3401/089, 3401/090

IMPORTANT NOTE: Configuration of test vehicles was adapted depending on the test performed (use of complete TV or use of individual parts of TV (for instance, subharnesses of TV referred as TV1.1, TV1.2, TV2.1, TV2.2, savers and PCB connectors)). Thus date codes and tested quantity may vary depending on test configurations used for Chart F4 Column 2 and 4. Refer to complementary annex for detailed description of test configurations.

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Column 2 3 TVs	Shielding Effectiveness	<input checked="" type="checkbox"/>	IEC Publication No. 61726	19/38, 19/45, 20/02	6	0	
	Cable Retention Force	<input checked="" type="checkbox"/>	As specified in Detail Specification	19/38, 19/45, 20/02	6	0	
	Ageing	<input checked="" type="checkbox"/>	MIL-STD-202, Test Method 108	20/09	6	0	
	Mating Endurance	<input checked="" type="checkbox"/>	ESCC Generic Specification No. 3401	20/09	3	0	
	Contact Retention (in Insert)	<input checked="" type="checkbox"/>	ESCC Generic Specification No. 3401	19/32, 19/38, 19/34, 19/23, 20/02	12	0	
	Bending	<input checked="" type="checkbox"/>	As specified in Detail Specification	19/38, 19/45, 20/02	6	0	
	Vibration (Random and Sine)	<input checked="" type="checkbox"/>	MIL-STD-202 Test Method 214 & 204	20/09	6	0	
	Temperature Cycling (200 cycles)	<input checked="" type="checkbox"/>	As specified in Detail Specification	20/09	3	0	
	Thermal Stability and Skew	<input checked="" type="checkbox"/>	As specified in Detail Specification	20/09	3	0	
	Shielding Effectiveness	<input checked="" type="checkbox"/>	IEC Publication No. 61726	19/38, 19/45, 20/02	6	6	Refer to 2-CNES-AXO-2-01 and DCR 1598, 1599, 1600
	Electrical Measurements at Room, High and Low Temperatures	<input checked="" type="checkbox"/>	As specified in Detail Specification	20/09	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	20/09	3	0	
	Radiographic Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20900	20/09	3	0	
	Destructive Physical Analysis	<input type="checkbox"/>	ESCC Basic Specification No. 21001				
Column 3 1 TV	Radiation	<input checked="" type="checkbox"/>	As specified in Detail Specification	19/48	4	0	



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Component title: AXOMACH AND SPACEFIBRE CABLE ASSEMBLY, AXOMACH AND SPACEFIBRE PCB CONNECTORS, AXOMACH AND SPACEFIBRE ACCESSORIES

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Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Column 4 2 TVs	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 24800	19/39, 19/23, 19/32, 20/02, 19/40	20	0	
	Mating and Unmating Forces	<input checked="" type="checkbox"/>	ESCC Generic Specification No. 3401	20/09	8	0	
	Insert Retention (in Shell)	<input checked="" type="checkbox"/>	ESCC Generic Specification No. 3401	19/39, 19/23, 19/32, 20/02, 19/40	20	0	
	Crimp Contact Tensile Strength	<input type="checkbox"/>	ESCC-Q-ST-70-26				Not applicable
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

