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GRFS: General Requirements for Suppliers Quality Assurance General Requirements

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Summary

This document sets the Quality Assurance General Requirements for Suppliers and regroups all applicable additional specific documents.

Reference Language:

English

Validity:

AH/AHCA/AHD/AHE/AHH/AHMQ/AHQ

Working Group :

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Quality Assurance General Requirements

General core part: all kind of suppliers

| Issue | Modified Part | Description of Change |
|-------|--------------------|--|
| A | | New document replaces: QAE 06-01, EI075-06-001, QAE 06-05, QAE 06-02-05 |
| B | | Issue B supersedes QAE 06-02 Usage of wording shall , may, must etc. reviewed Paragraph related to special processes changed |
| C | All | Replaces ER070 06 03 now included inside Appendix B, deletes QAF 06-03-01 ER070 16 01 now fully harmonized Requirements for Design configuration control transferred 7.3.1. in appendix A New Appendix for specific Governmental Programs, new appendix for tools providers New pagination |
| D | All | Rewording, corrections, new pagination, grouping of requirements Appendix J full rewriting redaction of Governmental Programs specificities issued from specific documentation. (EI101) T 000 M 0981 E05, (EI101) QD S000 N0803 E01(EI101) QD S000 N0849 E01 (all Tiger & NH90 Quality Assurance Requirements for Suppliers), contents have been included in the general text Appendix K list of approved Nadcap Special Processes |
| D2 | Table of contents | Correction of wrong publishing. The minor evolution |
| D3 | P19 P3 | Minor evolution § numbering on French version Ref mistakes between QAE 06-02-04 & QAE 06-03-04 |
| E | All | Updated list of applicable docs Some definitions have been moved for EP 06-12 to this document. An appendix summarizing monitoring of Log Cards has been added Control of docs like log Card, EASA Form1, FAA Form 8130-3 for diverse operations on items has been re-formalized, in answer to several questions from suppliers. (added specific appendix for Log Cards diverse templates filling up) Requirements from EP 06-12, formerly contracted, have been transferred (def. of suppliers, right of access, environmental needs...) List of applicable linked docs has been updated to renaming, mistakes have been corrected. Requirements for EN 9100 formal Risk Analysis of global manufacturing process have been explained Numbering of § in accordance to EN 9100 ones has been corrected from mistakes Specifics for Certificate of Conformity issued from other applicable docs have been fully included and widely described (CoC Wordings) Wording mistakes have been removed Wording for manufacturing date after a Modification was not clear enough Safety management Systems requirements for Part145 perimeter has been added Added new definitions, and extracts of EASA Regulation for DOA responsibility General requirements rewording Remind of QN process analysis Formalisation by suppliers Some more formal request for work environment is proposed due to worldwide differences The possibility that one had on items "not followed in utilization" to take as a new manufacturing date the afterwards date of a design Modification embodiment had to be removed. (dedicated letter detailing all modifications is available) |
| E1 | Minor modification | Appendix M: explanation to attention of suppliers of changes in this issue |
| E2 | Minor modification | Renaming EUROCOPTER by the Purchaser (and corresponding acronym, initials). Appendix L: obsolete info removed & wrong § numbering |
| F | All | General core part of the document Pages 4 to 7: Update of Applicable Documents list §3.3.1 Manufacturer: precisions on definitions are added for Material Suppliers (Raw & Consumable), Software suppliers, Commercial part suppliers §3.4 Manufacturing Date: clarifications are given in order to harmonize & have the same date on accompanying documents §3.6 Procured Items: adding definitions for material, software, Commercial parts (missions Equipment, industry parts, industrial goods) §4.1 General requirements Adding AQAP2310 requirement & ISO TR 14062 "Environmental management" requirement Specific requirement for Counterfeit parts prevention (§7.4) and FOD prevention (§7.5.5) & updating of requirements for improving First Article Inspection process (§7.5.1); Human factor are proposed to be included in Preventive actions (§8.5.3): Formalization of requests from Regulation on FOD, Suspected Unapproved Parts & Human Factors with engagement to follow IAQG SCMH methods for above monitoring More precisions are given: <ul style="list-style-type: none"> on Accompanying documents (§7.5.5.4), on Non-conforming Product (§8.3) : clarification of lead-time requirement (these requirement are less restrictive than previous issue) Some specific governmental requirement are transferred to Appendix J Minor typing corrections in other chapters Appendix A for Equipment manufacturers: Delivery of non-yet-qualified parts: the process is better defined in § 7.3.6.2 Update §7.3.7.3 Repair §7.5.2 rewriting of all definitions for new equipment Software manufacturers are considered as Equipment Manufacturers Docs Status for trace-ability & recording of delivered part not yet qualified has been cleared One again we explain how to keep inside Part21G perimeters items that should need a Rework 7.5.3.6.4 Traceability of reworks Minor precisions are added in other §. Appendix B : for "Built-to-Print" subcontractors : GENERAL PRINCIPLES: safety class (impact of EP04 06) & non-compliance with requirement process §7.4.1 Second-level supplier → less restrictive requirement §7.4.3 requirement for procurement of blanks → more precisions Minor precisions are added in other §.(§7.5.1, §7.5.5...) Appendix C : for manufacturers of engines Precisions for Intervention on Engines in Part21G - PAH/POA- perimeter (§7.5.5) Appendix E (retailers) Reminder against Unapproved Suspected Parts Appendix J : Suppliers in Governmental Programs: Minor precisions are added. Appendix L "Log Cards Form" : the Appendix has been simplified ; for government program, the Log Cards filling is defined in dedicated applicable documents (cf Appendix J) The Appendix M "Requirements to attention of Commercial Parts, Standard Parts and raw material suppliers" has been added. |

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| G (14/06/2018) | all | <p>§1 Purpose Precisions on "the Purchaser compliance to airworthiness regulation requirements & impact on Supply Chain". §2 Responsibility / Application Precisions on "Flow down and fulfilment of Purchaser requirements" Details on deviation process New chapter: §3.3.3 Design and Build Supplier Precisions on §3.5 Design versus Airworthiness regulation New chapter: §3.6.6 Constituent Assembly §4.4 :Reworking QMS certification requirement New : Independent test facilities accreditation Precisions on Design & Airworthiness Subcontracting Precisions on §6.3 Planning of changes: Industrial change additional requirement & refer to new requirement doc ER070 06-37 7.2 Competence : precisions linked to DOA requirement §7.5.3 Control of Documented Information Documentation requirements: precisions linked to DOA interfaces with the Design Supplier new requirements "Documentation management and exchange plan" - "Configuration Management" §8.1.4 Prevention of counterfeit parts: extract of standard contract reminded; simplification to avoid redundancy with EN 9100 new chapter §8.1.4 §8.3 Design and development of Products and Services Link to Industrialization requirement : use of Advanced Product Quality Planning - APQP Reminder in §8.5 Manufacturing and inspection document new requirement for Units Data Management Precisions on §8.5.2 Identification and traceability §8.5.4.1 Foreign Object Debris (FOD) prevention New: The Supplier shall comply with IAQG 9146 (benchmark Airbus), Identification/markings: new general requirement flow-downed from EP 08-03 §8.5.4.3 Accompanying documents -Certificate of Conformity –CoC: requirement merged -Post-delivery activities Work on Equipment : Is extended to Constituent Assembly – chapter moves to core part §8.5.6 Control of changes : rewording §9.2 Internal audit: precision for DOID/DO-DO Arrangement §10.2 Nonconformity and corrective action: is new: definition of Incidents - RMA process §10.3 Continual improvement : precisions on Continuous improvement process APPENDIX A: §8.3.4 Design & Development Controls & §8.3.5 Design and Development Outputs : simplification with reference to SOW §8.3.6 Design and Development Changes : rewording Definition , precision on applicable requirement Rework and Repair: §8.5.6 Post-delivery activities : minor precision on Maintenance Documentation APPENDIX B Product/supplier qualification precision §8.5 Production and service provision : precision for Critical part – for Specific requirements for machining FAI relief authorisation in some cases APPENDIX H : simplification with reference to G070 110 -APPENDIX I: new : reference to ASR & simplifications -APPENDIX J: minor corrections</p> |
| H (23/07/2019) | all | <p>Transfer Design requirements to ER070 06-04 (new) & ECPF requirement to ER020 04-01-08 Updated requirement: Req. Core-6.3-02, Req. Core-7.5-07, Req. Core-8.3-02, Req. Core-8.5-12a, Req. App. A-8.3-08, Req. App. A-8.5-19, Req. App. H 4.4-2, Req. App. H-8 -3 Requirement suppressed: Req. Core-3.6-01, Req. Core-7.2-03, Req. Core-7.5-02b, Req. Core-7.5-03a, Req. Core-7.5-06, Req. Core-8.3-03, Req. Core-9.2-03, Req. App. A 8,3 01 to Req. App. A 8,3 07, Req. App. C-8.3-1, Req. App. H 4.4-1, Req. App. H 8-1 APPENDIX B § 8.4.1 Req. App. B-8.4-2 updated according Audit report n° 21G.0070-2018-30-MAR Answer to finding n°4 Other requirement changes: Updated requirement: Req. Core-4.4-02, Req. Core-4.4-07, Req. Core-7.5-04, Req. Core-8.1-02 (new SM-001), Req. Core-8.5-13 , Req. Core-8.5-14 , Req. Core-8.5-16, Req. Core-8.5-25 (new ER070 06-36), Req. Core-10.3-1b, Req. App. A-8.5-03, Req. App. A-102-1, Req. App. B-8.4-1, Req. App. B-8.5-6, Req. App. E-8.4-1, Req. App. F-4.4-1 Requirement suppressed: Req. Core-8.5-01, Req. Core-8.5-15, Req. App. A-8.5-20, Req. App. B-8.5-1 New requirement : Storage & conditions : Req. Core-8.5-08a & Req. App. B-8.5-15a main Wording change : "Nonconformity" replaces "Quality Note (QN)" & wording improvement</p> |
| I (20/07/2021) | all | <p>Identified by bars in left margin – main modifications: Updated list of applicable documents (mostly suppressed documents) Transfer in ER70 04-06 of Quality requirements for suppliers' production activities according to the safety class of the manufactured parts & appliances Transfer in ER70 06-11 of FAI requirement Core part: Rewording requirement for improvement, harmonization & simplification (standardization of some requirement based on GIFAS/Qualifas initiative) - §10 fully updated; requirement Aviation Safety updated; Special process requirement transfer to Appendix A & B. Appendix A: contacts to use for equipment in service nonconformities Appendix B: definitions rewording (skills" ...) Update skill management; STL application; additional precision for L030 03-xxx management (Standard Fasteners...), blanks requirement simplifications & reinforcement of EI021 HS5015, update requirement for NDT (EI070 18-003 no more applicable supplier) Appendix C, D & E: minor updates (rewording) Appendix F: is added the definition of supplier main operational performance indicators Appendix G: minor updates Appendix H: Additional requirement for in-situ suppliers Appendix L: is included requirement for Standard Fasteners used in critical installations</p> |

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General core part: all kind of suppliers

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| J (01/03/2023) not distributed to suppliers | See "Description of Change » | <ul style="list-style-type: none"> <u>Main Updates:</u> text: §3.3 "EASA recognized ARC - limitations identified for CAA & FAA requirement : Req. Core-4.4-01 to include Feedback B requirement Req. Core-4.4-05/-06 POA/MPOA requirement (suppression requirement for Important parts) Req. Core-7.5-06 – Applicable documents » -update according action finding 1/22 audit 21G.0070-2022-05-SUP Req. Core-8.1-03 – Prevention of counterfeit parts -update according action Audit EN9-2022-003-CAR03 Req. Core-8.5.19b "Temporary Deviation" requirement Req. Core-10.2-03a – support email contact added Appendix K <ul style="list-style-type: none"> <u>New requirement:</u> Req. Core-4.4-07– supplier with POA/MPOA Req. Core-4.4-09- supplier capability list Req. Core-6.0-01- Risk and Opportunity Req. Core-8.5-12b- Marking- identification for prototypes <u>Suppressed requirement</u> (redundant): Req. Core-4.4-13, Req. App. A-8.3-09, Req. App. B-8.4-3 b, Req. App. B-8.4-5b & Req. App. B-10.2-3 E1077 18-005 suppressed (covered by requirement Req. App. B-8.5- 11 NDT requirement) <u>Other updates</u> (for simplification) are Identified by bars in left margin |
| K (24/03/2023) | See "Description of Change » | <p><u>New requirement:</u> Req. Core-7.5-08 backups of data and software - according audit 21G.0070-2022-08-SUP action finding 1</p> <p>Update Req. Core-7.5-07 – archiving system</p> <p>Minor typing correction in Req. Core-8.5-14 (§3.3 instead §3.2)</p> <p><u>Updates Issue J & K</u> are Identified by bars in left margin as issue J changes are distributed to suppliers through issue K</p> |
| L | General core part Appendix B, C, E H & K | <ul style="list-style-type: none"> <u>New requirement:</u> Req. Core-8.5-10b Segregation PO from MO Req. App. C-8.5- 4 Storage Conditions Req. App. C-10.2-3 Major In service Incident Req. App. H-8-8 - Req. Core-8.5-10b Segregation PO from MO <u>Main Updates:</u> <ul style="list-style-type: none"> <u>Core part:</u> Req. Core-6.3-02- Major industrial change – General Req. Core-7.5-06 – Applicable documents Req. Core-8.5-12 Identification, traceability - General Req. Core-8.5.19b "Temporary Deviation" requirement Req. Core-8.5-20 - Supplier's technical assistance at Purchaser plants Req. Core-10-2-1 Aviation Safety Risk management was updated & moved from §8.1.3 to §10.2 "Prevention of counterfeit parts" & "Foreign Object debris (FOd) prevention" moved from §8 to §10.2 <u>Appendix:</u> Helicopter Qualified Part List (HQPL)-replaces L030 03-003/004/007/011 Req. App. B-8.4-3a Special processes & specific activities Req. App. B-8.4-4a Quality requirement for procurement of Standard product Req. App. B-8.4-6 Additional requirement to Req. App. B-8.4-4 for procurement of chemicals, composites semi-products Req. App. C-8.5-3 Accompanying documents Req. App. C-8.5-5 Case of repairs of products for MRO managed under AH contracts Req. App. C-8.5-6 Intervention on Engines already delivered to Airbus Helicopters Req. App. C-10.2-2 Control of non-conforming products Req. App. E-8.4-1 Product/manufacture constraints Appendix K: eligible & approved accredited Pri-NADCAP Special Processes <ul style="list-style-type: none"> <u>Suppressed requirement:</u> Req. Core-8.5-12b - Marking- identification for prototypes <u>All Updates</u> are Identified by bars in left margin |

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General core part: all kind of suppliers

Associated Applicable Documents (*):

| Reference | Document Title | Data base |
|---------------------|--|------------|
| EI021 HS5022 series | Helicopter equipment marking | BMSD |
| ER050 06-002 | Airbus Helicopters Quality Requirements for Aeronautical Component Maintenance Service Providers | BMSD |
| ER050 19-102 | Writing of SB/LS/ITE by the Vendors Validation/Approval/Release by Airbus Helicopters | BMSD |
| ER070 04-06 | Quality control of helicopter parts by the Suppliers and Licensees according to their safety class | BMSD |
| ER070 06-04 | RASDO : Requirements Applicable to Suppliers' Design Organizations | BMSD |
| ER070 06-11 | Acceptance of the First Production Article of a Procured item | BMSD |
| ER070 06-36 | Use of third parties for the qualification and monitoring of special processes | BMSD |
| ER070 06-037 | Requirements for Airbus Helicopters Suppliers - Transfer of Work | BMSD |
| ER070 13-06 | Writing of requests for concessions by Airbus Helicopters' Suppliers | BMSD |
| ER070 16-01 | Filling of Quality Related documents by Suppliers | BMSD |
| ER150 09-003 | Delivery logistic conditions | BMSD |
| F020 026 | Storage and Condition Sheet | BMSD |
| F070 255 | Transfer Notification Form (TNF) | |
| F070 260 | Supplier Change Notification Form | BMSD |
| MBBN 240 | Kennzeichnung von Baueinheiten Zeichnungsangaben | NormMaster |

(*) At last issue - For applicability, refer the text of this document & to the contract

Specific documents applicable (*) to Appendix A

| Reference | Document Title | Data base |
|----------------|--|-----------|
| EI 16-04 | Log Card Processing | BMSD |
| ER020 04-01-06 | 3RD Level maintenance data & repair approval process for equipment suppliers | BMSD |
| ER020 04-01-07 | 3RD Level maintenance data approval process for TIGER program | BMSD |
| ER020 04-01-08 | Procedure to manage Equipment evolutions | BMSD |
| F070 040 | Temporary Deviation | BMSD |

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Specific Documents applicable (*) to Appendix B

| Reference | Document Title | Data base |
|---------------------|--|------------|
| ECS9100 | Acceptance and prolongation testing for non-metallic materials | NormMaster |
| EI 09-03 | Controlling geometric interchangeability for structural and mechanical component | BMSD |
| EI021 HS5043 | General Manufacturing Tolerances | BMSD |
| EI021 HS5049 | Selection of temporary protection against corrosion | BMSD |
| EI021 HS5015 series | "Procedure applicable to hot worked blank and casting" | BMSD |
| EI021 HS5011 | List of special processes validated at AH | BMSD |
| EI070 06-006 | Qualification of subcontractors and cooperating companies for the performance of quality operations concerning periodic inspection of interchange-ability tooling" | BMSD |
| | | |
| EI070 08-005 | Inspection and operator qualification marks and stamps | BMSD |
| EI070 09-008 | Control of special processes | BMSD |
| EI070 09-039 | Surface preparation before penetrant inspection | BMSD |
| EI070 10-003 | Situation des interventions d'inspection dans le processus de fabrication et de revision des pieces metalliques" Situation of inspection work in the manufacturing and overhaul process for sheet metal parts" | BMSD |
| EI070 10-004 | Inspection plan for manufactured composite products | BMSD |
| EI070 10-021 | Installation inspection plan for assembly of transmission assemblies dynamic components | BMSD |
| EI071 IGC-04-81-105 | Marking and presentation of prepregs | BMSD |
| ER050 06-001 | Exigences Qualité d'Airbus Helicopters vis-à-vis des sous-traitants de réparation Build to Print | BMSD |
| ER020 04-001 | Material replacement rules for secondary parts - Metallic materials | BMSD |
| ER070 06-03-04 | Quality Requirements for Electrical Assemblies & Components Suppliers | BMSD |
| ER070 06-02-06 | Exigences spécifiques pour les Fabricants de Demi-Produits, Matériaux & Ingrédients (French only) | BMSD |
| F070 005 | Delivery Report | BMSD |
| F070 018 | Request for Product non-conformity approval (Demande d'Accord) | BMSD |
| G-DEV-03-036 | Inspection plan for electrical products | MyCES |
| L-DEV-02-011 | EXTRACT FROM GRF (GLOBAL REPLACEMENT FILE) | MyCES |
| L-DEV-03-001 | List of technical check by activity | MyCES |
| L030 03-001 | Directory of subcontractors authorised by airbus helicopters to undertake special processes or specific activities | BMSD |
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| | | |
| QAE 06 02 04 | Specific quality requirement for manufacturers of screws, bolts and nuts | BMSD |

L030 03-002/-004/-007/-011 are Replaced by HQPL

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Specific documents applicable (*) to Appendix I:

| Reference | Document Title | Data base |
|-------------------------|---|-----------|
| A1501 | Airbus Supplier Requirements : Plan And Manage | Airbus |
| A1502 | Airbus Supplier Requirements : Design And Develop For Equipment And Systems Suppliers | Airbus |
| A1503 | Airbus Supplier Requirements : Make | Airbus |
| A1504 | Airbus Supplier Requirements : Buy | Airbus |
| A1505 | Airbus Supplier Requirements : Deliver | Airbus |
| A1506 | Airbus Supplier Requirements : Customer Support | Airbus |
| AP2003 | Document Retention Requirements for Airbus Suppliers | Airbus |
| AP2006 | Accepting Non-conforming Items by Concession | Airbus |
| AP2190 | General Requirements for Aerostructure & Material Suppliers | Airbus |
| AP5171 | Using Equipment Label for Equipment Data Tracing | Airbus |
| EI026 08-003 (AHD only) | Subcontractor Non Conformities – Aircraft Components | BMSD |
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Associated Applicable (*) Standards & Regulations (refer to contract or Purchasing Orders for applicability)

| Reference | Document Title | Database |
|-----------------------|--|--------------|
| AQAP-2070 | NATO Mutual Government Quality Assurance (QA) Process | ASD-STAN |
| AQAP-2110 | NATO Quality Assurance Requirements for Design, Development & Production | ASD-STAN |
| AQAP-2210 | NATO supplementary Software Quality Assurance Requirements to AQAP 2110 | ASD-STAN |
| AQAP-2310 | NATO Quality Management System Requirements for Aviation, Space and Defence Suppliers | ASD-STAN |
| AS5553 | AEROSPACE STANDARD Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition | ASD-STAN |
| AWS D17.1 | Specification for fusion welding for aerospace application | |
| CCAR 145 | China Civil Aviation Maintenance Organizations | CCAR |
| DIN EN ISO/ IEC 17000 | Conformity assessment. Vocabulary and general principles | ASD-STAN |
| EASA Part 145 | Annex to the Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of Organizations and personnel involved in these tasks | EASA website |
| EASA Part 21 | Annex I to the European Union Commission Regulation No. 748/2012 for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production Organizations | EASA website |
| DGA FRA 21 | Annex III (FRA 21 - 21.A.239 (c) paragraphs) to DGA instruction N° 16880 dated January 16th, 2009 | DGA |
| EN 4179 | Qualification & approval of personnel for non-destructive testing | ASD-STAN |
| IAQG 9100 | Quality Management Systems Requirements for Aviation, Space and Defence Organizations | ASD-STAN |
| IAQG 9102 | Quality systems, First article inspection | ASD-STAN |
| IAQG 9103 | Key characteristics | ASD-STAN |
| IAQG 9110 | Quality Management Systems, Requirements for Aviation Maintenance Organizations | ASD-STAN |
| IAQG 9120 | Quality Management Systems - Requirements for Aviation, Space and Defence Distributors | ASD-STAN |
| IAQG 9130 | Aerospace series - Quality systems - Record retention | ASD-STAN |
| IAQG 9131 | Quality Management Systems : Non-conformances documentation | ASD-STAN |
| IAQG 9134 | Supply Chain risk management guideline | ASD-STAN |
| IAQG 9136 | Root Cause Analysis and Problem Solving | ASD-STAN |
| IAQG 9137 | Quality Management Systems: Guidance for the application of AQAP 2110 within an EN 9100 Quality management System | ASD-STAN |

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| IAQG 9145 | Requirements for Advanced Product Quality Planning and Production Part Approval Process : its applicability has to be defined for each contract with Supplier, | ASD-STAN |
| IAQG 9146 | Foreign Object Damage (FOD) Prevention Program | ASD-STAN |
| FAA ORDER 8130.21G | Procedures for Completion & Use of the Authorized Release Certificate, FAA Form 8130-3, Airworthiness Approval Tag | FAA |
| FAA Part 60 | Flight Simulation Training Device Initial and Continuing Qualification and Use | FAA |
| FAA Part 145 | Federal Aviation Administration Repair Stations | FAA |
| ICAO DOC 9859 | Safety Management Manual | ICAO |
| ISO 9001 | Quality Management Systems Requirements | ASD-STAN |
| | | |
| ISO 10005 | QUALITY MANAGEMENT SYSTEMS - GUIDELINES FOR QUALITY PLANS | ASD-STAN |
| ISO 10012 | Measurement management Systems - requirements for measurement processes and measuring equipment | ASD-STAN |
| ISO 14001 | Environmental Management Systems - Requirements with Guidance for use | ASD-STAN |
| ISO IEC 17025 | General requirements for the competence of testing and calibration laboratories | ASD-STAN |
| ISO IEC 17050-1 & 2 | Conformity Assessment. Supplier's declaration of conformity | ASD-STAN |
| | | |
| ISO 31000 | Risk management — Guidelines | ASD-STAN |
| NAS 410 | NAS certification and qualification of non destructive test personnel | NormMaster |
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| SM-0001 | Implementing a Safety Management System in Design, Manufacturing and Maintenance Organizations | ASD-STAN |
| TCCA 145 | Transport Canada Civil Aviation Maintenance Organizations | TCCA |
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GRFS: General requirements for Suppliers

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1 PURPOSE

The purpose of this document is to define the general requirements to be addressed to suppliers involved in Airbus Helicopters programs supplies, participating to conformity, quality, airworthiness, safety, on-time delivery and to customer satisfaction of Airbus Helicopters' deliveries (resumed in "aeronautical suppliers").

These requirements are applicable in their entirety, following contract specificities.

They are applicable to all Services and Products allocated to a supplier for Airbus Helicopters as well as to those attributed to the supplier's contributing parties (sub-tier suppliers under their control).

In addition, Airbus Helicopters must demonstrate the compliance to the airworthiness regulation requirements of the aircraft (Part 21 and equivalent regulations) as well as for parts and appliances delivered to their customers. Airbus Helicopters "the Purchaser" must therefore ensure that all suppliers used for provisioning are capable of supplying products and services at the necessary quality and safety level. Thus, the Purchaser must ensure that the Suppliers design, produce, deliver and maintain/repair products which are in compliance with the design data, in condition for safe operation and delivered with the required documentation. Any deviation to applicable requirement has to be identified by the Supplier and shared with the Purchaser, which will decide if the deviation is accepted.

The requirements applicable to Airbus Helicopters Design Organization's suppliers are defined in ER070 06-04.

Quality requirements for suppliers' production activities according to the safety class of the manufactured parts & appliances are defined in ER070 04-06.

For Maintenance Repair and Overhaul under Airbus Helicopters contract, supplier shall apply ER050 06-002.

2 RESPONSIBILITY/APPLICATION

This document is fully applicable to the Purchaser suppliers. It may apply on their requests, to all internal use Airbus Helicopters Subsidiaries other supplies.

The Supplier is responsible for the conformity of the supplies, including the products/parts/appliances, documents and related contractual services.

The Purchaser acceptance of the delivered supplies **shall** in no way affect the liability of the Supplier for any non-apparent problem found after delivery.

Reg. Core-2-01 -Flow down and fulfilment of The Purchaser requirements

(a) The Supplier shall ensure that the Purchaser Requirements (ER070 06-01 is included) are analysed and flowed down internally and to its Sub-tier suppliers as relevant.

(b) The Supplier shall be able to provide the Purchaser with the rationale in the case some Purchaser Requirements are not flowed down internally and to its Sub-tier suppliers.

(c) The Supplier shall ensure the Purchaser Requirements are fulfilled through its documented processes, methods and tools.

(d) When application of some Purchaser' processes, methods and tools is specified, the Supplier shall:

(1) either apply these Purchaser' processes, methods and tools,

(2) or use its own processes, methods and tools provided that the Supplier is able to demonstrate, at any time, full compliance to the Purchaser Requirements.

(e) When full compliance and/or equivalence cannot be demonstrated, the Supplier shall provide all evidences and justifications to the Purchaser and get formal Purchaser approval for the deviation before delivery.

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

Req. Core-2-02 - Non compliances to Quality Requirements

Non compliances to Quality Requirements (ER070 06-01) shall be recorded in a Quality Assurance Plan (QAP) or equivalent document as mutually agreed with the Purchaser. The Quality Assurance Plan shall be conforming to ISO 10005.

Any non-compliance shall include the following information:

- (1) requirement identification,
- (2) description of deviation,
- (3) rationale for deviation,
- (4) means of compliance to which the Supplier commits, and as applicable, proposed workaround for the requirements the Supplier cannot commit to,
- (5) Supplier signature: name, date and signature,
- (6) The Purchaser agreement (Supply Chain & Quality Manager): name, date and signature.

3 ABBREVIATIONS, DOCUMENT STRUCTURE AND TERMS & DEFINITIONS

3.1 ABBREVIATIONS (IN THIS DOCUMENT AND FOR EXCHANGES BETWEEN THE PURCHASER & SUPPLIERS)

| | |
|------|---|
| AH | Airbus Helicopters SAS (France) |
| AHD | Airbus Helicopters Deutschland |
| AHE | Airbus Helicopters Subsidiary in España |
| AHMQ | Airbus Helicopters Queretaro |
| AHQ | Airbus Helicopters Qingdao |
| ARC | Authorized Release Certificate |
| ATP | Acceptance Test Procedure |
| ATR | Acceptance Test Report |
| AQAP | Allied Quality Assurance Publication |
| BtP | Build to Print |
| CA | Constituent Assembly |
| C/A | Contracting Agency / Contractor (Airbus Helicopters division through Strategic Procurement) |
| CAQ | Civil Aviation Qualification |
| CAIR | Constituent Assembly Inspection Report |
| CDS | Component Delivery Specification |
| CMM | Component Maintenance Manuel |
| CoC | Certificate of Conformity |
| COTS | Commercial Off The Shelves |
| CRM | Component Repair Manual |
| CVE | Compliance Verification Engineer |
| DAL | Design / Development Assurance Level (EP 04-06) |
| DDP | Declaration of Design Performance |
| DGA | Direction Générale de l'Armement (French Military Authority) |
| DGAM | Spanish Defense Airworthiness Authority |
| DMR | Drawing Modification Request |
| DO | Design Organization |
| DOA | Design Organization Approval |
| DRL | Data Requirement List |
| DVL | Data Validity List (List of Required Documents & data, referred in SOW) |
| EASA | European Union Aviation Safety Agency |
| ECPF | Equipment Change Proposal Form |
| ETS | Equipment Test Specification |
| ETSO | European Technical Standard Order |
| FAA | Federal Aviation Administration |
| FAI | First Article Inspection |

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

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| FOD | Foreign Object Damage |
| Fod | Foreign Object debris |
| GQA | Government Quality Assurance |
| GQAR | Government Quality Assurance Representative |
| H/C | Helicopter |
| HQPL | Helicopter Qualified Part List -replaces L030 03-003/004/007/011 |
| IAQG | International Aerospace Quality Group |
| IAQG 9100 | short for signifying the international AS/JISQ/KSQ/EN 9100 standards (which are equivalent) |
| ICAO | International Civil Aviation Organization |
| ICU | Identification Conditioning Unit |
| IETP | Interactive Electronic Technical Publications |
| IG | Industrial Goods |
| IPC | Illustrated Parts Catalogue |
| LMP | Laboratory Materials & Processes (Airbus Helicopters') |
| LRU | Line Replace-able Unit |
| MAOS | Maintenance Approved Organization Scheme |
| MDAS | Maintenance Data Approval Sheet |
| ML3 | Maintenance Level 3 |
| MO | Maintenance Organization |
| MOA | Maintenance Organization Approval |
| MPOA | Military Production Organization Approval |
| MRO | Maintenance Repair and Overhaul |
| NATO | North Atlantic Treaty Organization |
| NCAGE Code | NATO Commercial-And-Government-Entity Code (also designated as "NATO Code") |
| NQAA | National Quality Assurance Authority |
| NFF | No Failure Found |
| NQAR | National Quality Assurance Representative |
| OEM | Original Equipment Manufacturer |
| OIN | OASIS Identification Number |
| P/N | Part Number |
| PAH | Production Approval Holder (FAA) |
| PMA | Parts Manufacturer Approval (FAA) |
| PO | Production Organization |
| POA | Production Organization Approval |
| Pri-NADCAP | Performance Review Institute / National Aerospace & Defence Contractors Accreditation Program (SAE) |
| P/O | Purchase Order |
| QAP | Quality Assurance Plan |
| QMS | Quality Management System |
| R/O | Repair and Overhaul |
| RAR | Repair Approval Request |
| RASDO | Requirements Applicable to Suppliers' Design Organizations |
| RDAS | Repair Design Approval Sheet |
| SAR | Search And Rescue |
| SCMH | Supply Chain Management Handbook, free of access system of tools proposed at IAQG website |
| SCQM | Supply Chain Quality Manager |
| SDR | System Design Responsibility |
| SFICI | Standard Fasteners in critical installations |
| SMS | Safety Management System |
| Srfd | Supplier Request for Deviation |
| SOW | Statement Of Work |
| SP | Special Process |
| SPV | Special Process Validation |
| SQM | Supplier Quality Manager |
| SRU | Shop Replace-able Unit |
| SRI | Shop Replace-able Item |
| STC | Supplemental Type Certificate |
| Subs. | Airbus Helicopters subsidiary companies (for products under Airbus Helicopters DOA, POA or MOA) |

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

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| TAT | technical assistance teams |
| TBO | Time Between Overhaul |
| TC | Type Certificate |
| STL | Specification Technique de Livraison |
| TSO | Technical Standard Order (see ETSO) |

3.2 DOCUMENT STRUCTURE

As indicated in Chapter 4, the Purchaser requires in particular to its suppliers the full observance of the IAQG 9100 series requirements (meaning IAQG 9100/9110/9120 requirements).

This document describes the supplements to the mentioned standards IAQG 9100/9110/9120 requirements.

In this document, chapters and numbering are equivalent to IAQG 9100 structure. Only those IAQG 9100 chapters and numberings are mentioned, where additional requirements are applicable.

This document is divided into a general core part of requirements that are applicable for all kind of suppliers and refers to ER070 06-04 applicable for Airbus Helicopters Design Organization's suppliers.

Appendixes (specific kinds of suppliers) are to be considered as complements of the general core part.

Therefore all requirements mentioned in this document **shall** be considered as additional or completing ones to those of the IAQG 9100/9110/9120.

(IAQG 9100 is here a resume writing for meaning the international AS/EN/JISQ/KSQ 9100).

For Governmental Programs (TIGER- EMAR 21 & NH90– JMAAN 21), see Appendix J **as complement** to the general core part.

Note: In case of conflict between core of document and appendixes the content of appendixes prevails

In case of conflict between any part of this document and Commercial Contract the content of Contract prevails.

3.3 WORDING DEFINITIONS

The use of **SHALL**, **SHOULD**, **WILL**, **MUST** and **MAY** within this document **shall** observe the following rules:

- The word "**SHALL**" in the text denotes a mandatory requirement. Departure from such a requirement is not permissible without formal agreement.
- The word "**SHOULD**" in the text denotes a recommendation or advice on implementing such a requirement of the document. Such recommendations or advice is expected to be followed unless good reasons are stated for not doing so.
- The word "**MUST**" in the text is used for legislative or regulatory requirements (e.g. Health and Safety) and **shall** be complied with.
- The word "**WILL**" in the text denotes a provision or service or an intention in connection with a requirement of this document.
- The word "**MAY**" in the text denotes a permissible practice or action. It does not express a requirement of this document.

These means of understanding are applicable in the entirety of all modules of this document.

"The Purchaser" in this document means AH/AHD/AHE/AHMQ (see Abbreviations bellows)

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

Airbus Red: Airbus Helicopters strategic or contractual related information whose disclosure, unavailability, corruption or lack of traceability could lead to unacceptable consequences/damages and could seriously impact the success or existence of Airbus Helicopters.

Airbus Red asset distribution shall be controlled based on the need to ensure the job subcontracted and protected in safe (physical) or by encryption technology (logical).

Airbus Amber: Every Airbus Helicopters information whose disclosure, unavailability, corruption or lack of traceability could not lead to unacceptable consequences/damages and could not seriously impact the success or existence of Airbus Helicopters (e.g. not Airbus Red).

Airbus Amber asset distribution shall be controlled and limited based on the need to ensure the job subcontracted.

Items: Parts & Appliances, Engines, Propellers, ETSO, TSO, STC parts

Prototype Part: Parts manufactured with a design released for prototype by Design Organization, used or with the intention to be used for Type Certification (compliance demonstration activities and tests).

Recognized **Authorized Release Certificate (ARC)**: Form 1 or equivalent as Recognized by the applicable Aviation Authority

EASA recognized ARC are:

| Competent Authority | Competent Authority State | Authorised Release Certificate | Limitation |
|---------------------|---------------------------|---|---|
| UKCAA | United Kingdom | EASA Form 1 issued before January 1st 2021 | None |
| | | CAA Form 1 issued from the January 1st 2021 | Limited to production sites located in United Kingdom territory |
| TCCA | Canada | TCCA Form one | None |
| FAA | United States of America | FAA Form 8130-3 | For PMA parts, additional requirements in remark block |

Military recognized ARC may be specific to the related organisation approvals and programs. The required Authorised Release document is specified by contractual documents:

The by Military Aviation Authorities and Programs recognized ARCs could be: FRA Form 1 or EMAR/FR Form 1 (under DGA or DSAÉ approval), DEMAR Form 1 (under LufABw Approval), PERAM Form 1 (under DGAM Approval).

3.4 SUPPLIER CLASSIFICATION

Some suppliers may together act as “Manufacturers”, “Sub-Contractors” or “Maintenance Organizations” depending of the product or service to supply. Those suppliers will have to alternatively follow specific respective requirements in relation of the concerned actual provided task.

There may be suppliers constituted with several workshops, at different addresses: is considered as being one single supplier, one of which all the perimeter of activity is covered with a unique Quality Organization, described in a single Quality Manual. Evidence of this will be given by the frame of the EN 9100 series certification(s). However, the Purchaser needs to separately monitor all work plants of a given supplier and may be conducted to segregate them for all audits or assessments or data.

According to the related parts and associated contract, the suppliers can be:

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

- Manufacturer,
- Subcontractor (Build to Print)
- Design and Build Supplier
- Service Provider
- Distributor

3.4.1 Manufacturer:

• **Aeronautic Equipment Manufacturers (Build-to-Spec)**

Responsible for development and/or production, in accordance with an Airbus Helicopters specification or with an in-house specification, in addition possibly overhaul/repair of equipment items or sub-systems, assemblies or subassemblies, or part blanks (Design and manufacturing tasks. **May be called "Build-to-Spec" and also design subcontractor by Part 21 regulation**).

(Refer to Appendix A)

• **Manufacturer of Standards*:**

Responsible for manufacturing of parts, in accordance with standards. Standards could be according to public (e.g. LN, DIN, EN, NF, ISO...) or company specifications (e.g. ASN, ECS...).

Standard parts are: Ready to install Parts, manufactured in complete compliance with an established industry, (the Purchaser- and/or Airbus-internal standard specification), Agency, competent authority or other Government specification which includes design, manufacturing, test and acceptance criteria, and uniform identification requirements.

The specification is including all information necessary to produce and verify conformity of the part.

It **should** be published so that any party **may** manufacture the part.

(Refer to Appendix L)

• **Material Suppliers (Raw & Consumable)**

Raw material, basic substance in non-fixed dimension used to build parts & appliances. A raw material or feedstock is the basic material from which a product is manufactured or made. It requires further work to make it into a component part of the aircraft.

Consumable material is any material which is only used once, such as lubricants, cements, compounds, paints, chemicals dyes and sealants etc. They are consumed in undetermined and unmonitored quantity although they are ordered in regular mass units (e.g. liter, kilogram, coils...).

(Refer to appendix L)

• **Software suppliers**

Software suppliers **will** follow requirement specific to Equipment Manufacturers

Any specific linked to the materiality of the equipment item **will** be reported to hard container (hardware) of the Software. The requirements applicable to Airbus Helicopters design organization's airborne software suppliers are defined in ER070 06-04

• **Commercial part suppliers**

The "commercial parts" term is referring to parts that are not designed or manufactured specifically for aviation use.

(Refer to FAA Advisory Circular AC-No: 21-45).

Commercial Parts cover the following next subchapter:

- Mission Equipment
- Industry Parts
- Industrial Goods

(Refer to Appendix L)

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

Mission Equipment: For some special operations Mission-Equipment is used that originally was not necessarily intended for airborne use but might be essential or helpful for the performance of the operation. Examples: video recorder / special recording devices / disk memories / ship-transponder for off-shore SAR missions / entertainment equipment / removable firefighting equipment /etc.

An **Industry Part** is a design part originally created to be used for a non-aeronautical industry. Industry Parts are fulfilling a **dedicated function** for the Aircraft **on system level**. Examples: (automotive) brakes, fans, gas-pressurized springs, windshield wiper and pumps.

An **Industrial Good** (ready to install) is not designed or manufactured specifically for aviation use. It is ready to use – in analogy to a standard part – as component within a Bill of Material. For example, many specialized fasteners, seals & bearings were manufactured to specifications known only to the manufacturer (catalogue parts / catalogue components) but these groups of parts fall outside the criteria for standard parts since their specifications are not published. Further examples: electrical / electronic devices, small component, mechanical connecting parts, joints / gaskets, specialized fasteners

• **Manufacturer of On Ground Equipment:**

Responsible for manufacturing not airborne products in accordance with the Purchaser or an in-house specification for manufacturing not airborne products: test benches, tooling...simulators.
(Refer to Appendix G)

3.4.2 Subcontractor

Build to Print:

Design Parts (Build to Print): These Parts are initially designed by Airbus Helicopters DO (or program related DO partner companies) according to special demands (internal requirements and/or special contract demands). Afterwards they will be released (via CVE) for the use in an Aircraft.

Products and/or manufacturing parts are identified as follow:

- mechanical parts or assemblies,
- sheet metal parts or assemblies,
- composite parts or assemblies,
- electrical assemblies,
- special processes,
- performing manufacturing phases
- blank
- interiors (upholstery, furniture...)

Extended workbench subcontractor:

Is a supplier executing extended workbench activity.

Extended workbench activity:

Is the execution of manufacturing steps by a supplier (single step or a set of steps, that can include inspection steps, typically like machining, carrying out subassembly, special process ...) that are part of an internal manufacturing or overhaul/repair process sequence.

Repair and Overhaul, Maintenance Organizations:

Responsible for the overhaul/repair of parts and products already in service or delivered to final customer, in accordance with a C/A, Original Equipment Manufacturer or In House file.

Subcontractor of on Ground Devices:

Responsible, in accordance with the Purchaser' definition file, for the manufacturing and/or overhaul/repair of not airborne products: test benches, tooling...simulators.

(Refer to Appendix B)

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

3.4.3 Design and Build Supplier:

Design and Build Supplier is a Build-to-Print plus a Design Subcontracting: The Purchaser subcontracts the development to the supplier but the Purchaser is and remains owner of the Design.
The requirements for the design activity are defined in ER070 06-04.

3.4.4 Service Provider:

A **Service provider** is Responsible to provide a service, ordered by the Purchaser.

Engineering Service providers: The requirements for Engineering Service suppliers providing services to Airbus Helicopters Design Organization are defined in ER070 06-04.

In-situ Production Service providers: Suppliers executing activities (manufacturing steps or controls or logistic...) on parts or appliances at Airbus Helicopters plant; these activities are defined in the contract (Refer to Appendix H)

3.4.5 Distributor:

Responsible, for purchase, storage, splitting and sale of products without affecting product conformance, ordered by the Purchaser
(Refer to Appendix E)

3.5 SHELF LIFE START DATE/MANUFACTURING DATE/REVALIDATION:

Req. Core- 3.5 Shelf Life start date / Manufacturing date

The supplier shall identify "Manufacturing date" and communicate it to the Purchaser at minimum if limited shelf-life items or/and if periodic operation during storage

When an Item has a limited Shelf Life, the Supplier shall define the "Shelf Life start date". Unless otherwise agreed, the Shelf Life start date will be the Manufacturing date.

Note: For elastomeric materials, "Cure Date" is the term used for Shelf Life start date.

Marking on item label is defined in the item specification (drawing, Airbus Helicopters standard & material specification);

Marking on packaging is defined in the document ER150 09-003

The manufacturing date shall be identified in the "day/month/year" or "month/year" or "quarter/year" format.

REVALIDATION:

Before expiry, the Shelf Life can be restarted 'n' times by performing the Revalidation Activity as described in the SCS or on other relevant documents.

Revalidation consists of:

1. Performing the operations necessary to restore the (original) validity
2. Marking the part in a way that the renewed validity can be clearly identified when handling the part.
3. Documenting the performance of the revalidation.

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If the maximum allowed number of Revalidations has been performed the material is no more useable after expiry of last SHELF LIFE. It is possible that the duration of the SHELF LIFE after revalidation is reduced compared to the initial SHELF LIFE (less than 100%).

REVALIDATION DATE:

Revalidation date is defined as date on which the material is actually revalidated. The revalidation starts a new SHELF LIFE.

3.6 DESIGN VERSUS AIRWORTHINESS REGULATION

The Purchaser, being (M)DOA holder and most of the time TC holder, is the Organization Responsible in front of Authorities for the design of articles or for changes thereto. The Purchaser is the holder of a design approval (M)DOA granted by EASA (Part 21: EASA 21J.700) and military authorities like DGA (FRA 21 / EMAR 21), LufABw (DEMAR 21)

The requirements for the "Design Suppliers" and "Design Approval Holder" suppliers are defined in ER070 06-04.

3.7 PROCURED ITEMS BY THE PURCHASER

In complement to §3.4 definitions, the procured items by the purchasers are:

3.7.1 Standard Part:

See 3.4.1

3.7.2 Material and consumable

Both raw Material and consumable satisfy to a required specification. Such specification can be any public or industrial standard as well as described via a not-standardized industrial specification. This could lead to following differentiation:

- Materials based or according given standard (public and/or industry)
- Materials based on specification by industrial supplier (analogy to industrial goods)

3.7.3 Design Parts / Build to print

Design Parts (Build-to-Print): are designed by the Purchaser Design Organization according to specific demands.

3.7.4 (Aeronautical) Equipment / Build to specification

These Parts are specified by the Purchaser Design Organization (or program related DO partner companies) according to special demands. It could mean also to take over the given specification of COTS- equipment within the applicable design data of the Purchaser. (Refer to COTS def.).

- **COTS:** means "Commercial Off-The-Shelves". It is an equipment part from a Manufacturer of which Specification has been made by the Manufacturer itself, but which specification has been appropriated as is, by AH Design Organization.

Note: The Manufacturer is Design Organization for COTS when they are under ETSO/TSO or EASA agreed equivalent. But the Purchaser remains Responsible as Design Authority for all other COTS, like any other Equipment. AH is anyway responsible for the integration all kind of COTS.

For non-TSO/ETSO items this wording **should** be avoided for Commercial Parts & kept on only for items designed and manufactured in primary destination of Aviation usage.

3.7.5 Loadable Software / Build to specification

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This is software that is installed in an aircraft and used in operating or controlling that aircraft. The requirements for the suppliers designing software are defined in ER070 06-04 & SOW.

Req. Core-3.6-02 - Loadable Software

- In case of embedded software (OEM), it is handled directly via the linked Equipment. The equipment PN identification is an aggregate of HW/SW items.
- In case of loadable software, it has to be handled as an own part and appliance.

These articles (Software) are specified by the Purchaser Design Organization (or program related DO partner companies).

Dedicated marking shall be implemented on the software "container".

3.7.6 Constituent Assembly

This is Complex sub-assembly, with an end-to-end responsibility of the Supplier, fully tested by the Supplier and compliant to a dedicated test specification and associated control plan, whose compliance are not jeopardized by any added component nor disassembly performed after its delivery. CA will be storable.

3.7.7 Commercial Parts

General: (refer to appendix L)

Items not originally intended or designed for airborne application

A repair on this equipment is not possible/allowed. Only, a replacement by a new "spare part" is allowed. Only the equipment itself that or which is used as spare part.

3.7.8 Extended Workbench activity

See §3.4.2

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The following chapters are the Purchaser Supplement to EN 9100:

4 CONTEXT OF THE ORGANIZATION

4.4 QUALITY MANAGEMENT SYSTEM AND ITS PROCESSES

Note: In the present document, there are only those of EN 9100 § numberings and headings mentioned where the Purchaser has additional requirements to those of EN 9100

Suppliers for Ground Equipment, Industry & Commercial Parts, (incl. Mission Equipment), Standards Parts, Industry Goods are concerned by requirements explained in the core part which are compatible respectively with the appendix G and L

Reg. Core-4.4-01 -QMS certification:

- (a) The Supplier shall have and maintain a Quality Management System (QMS) compliant with IAQG (EN/AS/JISQ/KSQ) 9100 series certified by a Certification Body (CB) accredited through IAQG Industry Controlled Other Party (ICOP) scheme.
Notes:
 - (1) Depending on scope of activities, 9100 series means: 9100 (Aviation, Space and Defense Organizations), 9110 (Aviation Maintenance Organizations) and 9120 (Aviation, Space and Defense Distributors).
 - (2) Only certifications registered in Online Aerospace Supplier Information System (OASIS) are valid (refer to www.sae.org/iaqq and www.iaqq.org/oasis).
 - (3) For some specific types of Products and low-safety risk related Product or Services Suppliers, another QMS standard, e.g. ISO 9001, may be acceptable.
 - (4) For Aeronautical component maintenance service providers: see ER050 06-002 in complement of this requirement.
- (b) Supplier QMS shall take into account Part 21 requirements (and equivalent military regulation) cascaded from the Purchaser requirements
- (c) The Supplier shall provide the Purchaser on request with the copies of all its certificates/approvals obtained, with the associated scope/capability list and the name of the organization which granted them.
- (d) For IAQG 9100 series certification, the Supplier shall:
 - (1) grant access to "Airbus Helicopters OIN 6109529664 IAQG Member Company Europe" to all private data available in OASIS database containing detailed certification related information, for a minimum duration of 3 years or for the duration of the contract
 - (2) provide the Purchaser on request with any information about the content of the OASIS report and all private data available in OASIS. When the OASIS report or associated "Nonconformities" are not in English, it is the responsibility of the Supplier to translate and submit necessary information in English.
- (e) The Supplier shall inform the Purchaser in case of suspension, withdrawal or expiration of its QMS certification.
- (f) The Supplier shall notify to the Purchaser any major change to the QMS (e.g. scope change).
- (g) The Purchaser shall be entitled to inform in OASIS the Certification Body about any non-conformity to (EN/AS/JISQ/KSQ) 9100 series discovered by its representatives during a visit in Supplier premises. Such information shall also be made available to the Supplier.

Reg. Core-4.4-02 -Independent test facilities accreditation

The Supplier shall ensure its independent test facilities are accredited in accordance with ISO 17025

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Req. Core-4.4-03 -Environment, Health and Safety processes for management of legal requirements

The Supplier shall respect the principles of the Purchaser's Environment, Health and Safety requirements and the environmental policy. The Supplier shall implement an Environmental Management System (EMS) based on ISO 14001 standard.

Airworthiness Regulations Compliance:

- **Design & Airworthiness Subcontracting :**

Refer to ER070 06-04

- **Production, Maintenance & Airworthiness Subcontracting:**

Req. Core-4.4-04 – POA requirement:

Suppliers manufacturing Critical parts or DAL A & DAL B equipment or repairable equipment with need of spares components for MRO or Assemblies with inside critical part or DAL A or DAL B equipment, shall have an officially approved POA (Production Organization Approval) compliant with:

- European Aviation Safety Agency (EASA) standard i.e. Part 21 G, or
- Federal Aviation Administration (FAA) standard i.e. PMA or
- Any authority duly recognized by EASA.

This requirement is not applicable for Suppliers delivering blanks

Req. Core-4.4-05 – MPOA requirement:

Suppliers manufacturing Critical parts or DAL A or B equipment or Assemblies with critical part or DAL A or DAL B equipment, shall have, as far as national and contractual constraints allow, a Production Organization approved by relevant Authority:

- For suppliers delivering military parts: French DGA i.e. FRA 21G (or European EMAR 21G), LufABw i.e. DEMAR 21G, A1-275/2-8901, Spanish DGAM i.e. PERAM 21G

Req. Core-4.4-06 – supplier with POA/MPOA

The Supplier with POA or MPOA shall:

- provide the Purchaser on request with a copy of its Production Organisation Approval.
- immediately inform the Purchaser in case of suspension of or withdrawal of its POA or equivalent,
- inform the Purchaser in case of evolution of its POA or equivalent,

Req. Core-4.4-07 –DO/PO or MDO/MPO Arrangement

In addition to Req. Core-4.4-04 / Req. Core-4.4-05, the demonstration of the conformity to the Purchaser approved design data of delivered items, shall be done through an implemented official Arrangement between the Purchaser Design Organizations (DO) and supplier Production Organizations (PO). Supplier under FAA supervision can apply for a PMA, supported by a PMA Assist letter (License agreement only for items under FAA TC).

If a DO-PO or MDO-MPO Arrangement or PMA Assist letter is required to include all relevant P/Ns (eligible Critical parts or DAL A & DAL B equipment or repairable equipment with need of spares components for MRO), the supplier shall contact first his Purchaser focal point to launch the Arrangement.

In the case of an update request of DO-PO or MDO-MPO Arrangement, the supplier shall contact directly the Purchaser DO/PO coordinator (email: contact.do-po.coordination.ahd@airbus.com).

After receiving the update of DO-PO or MDO-MPO Arrangement, the supplier shall acknowledge the receipt.

Suppliers with a DO/PO Arrangement **will** flow-down the content of this arrangement to its lower rank suppliers where necessary, through eventual IPO PO arrangements.

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Req. Core-4.4-08- supplier capability list:

The Supplier holding a Production Organization Approval (POA) or equivalent shall:

- update his capability list after receiving an update of the (M)DO/(M)PO arrangement,
- send a copy of the PMA supplement granted by FAA,
- inform the Purchaser about the scope of its capability list and about any update versus the (M)DO/(M)PO arrangement signed between the Purchaser and the Supplier.

Req. Core-4.4-09 - MOA requirement:

All equipment manufacturers and other suppliers providing with maintenance activities to items having been in operation (out of Part 21/POA of the Purchaser),

For Civil Programs, they shall have a MOA (Maintenance Organization Approval) compliant with:

- ☐ European Aviation Safety Agency (EASA) standard i.e. PART 145, and/or
- ☐ Federal Aviation Administration (FAA) standard i.e. FAR 145, and/or
- ☐ Transports Canada Civil Aviation (TCCA) standard i.e. PART 145 and Supplemental, and/or
- ☐ General Administration of Civil Aviation of China (CAAC) standard i.e. CCAR-145, and/or
- ☐ EASA accepted equivalent

For Military Programs, they should have, as far as national and contractual constraints allow, a MOA compliant with:

- ☐ FRA 145 for French suppliers, MOD 145 for UK suppliers or equivalent when in place, EMAR 145, DEMAR 145, PERAM 145, A1-275/0-8901.

The compliance **must** be demonstrated by the means of an official approval.

In the cases of absence of required above (PART 145/ FAR 145/ FRA 145/ EMAR 145/ DEMAR 145, PERAM 145, A1-275/0-8901 ...) approval, the supplier must get a formal Purchaser acceptance for being covered with own Airbus Helicopters corresponding approvals. In such a case the supplier shall be at least IAQG 9110 certified. For Aeronautical component maintenance service providers: see ER050 06-002 in complement of this requirement.

These suppliers **may** not manufacture and/or overhaul/repair devices or sub-systems, components or sub-assemblies and/or un-machined parts under their own approval by a civil or Governmental authority as a production and maintenance organization.

These suppliers operate under the Purchaser production organization or maintenance organization approval and responsibility.

The supplier's technical documents, production plans and inspection instructions **shall** be approved by the Purchaser. The production layouts and descriptions **must** reflect the chronological order. This applies particularly to production plans supplied by the Purchaser.

The manufactured products or the tests/ services performed (with provided production plans) can only receive their final approval from the Purchaser' Certifying Staff (CS). If all features can be inspected after delivery from the Purchaser, the inspections **may** also take place at the Purchaser' site upon successful completion of the First Repair Inspection dossier.

Req. Core-4.4-10 - the Purchaser and Aviation Authorities' surveillance

In compliance with aeronautical and airworthiness regulation (e.g. EASA Part 21, Part 145, and equivalent military ones) , the Supplier shall make arrangements that enable the Purchaser, the Purchaser Customers, Aviation Authorities and its representatives or delegated parties to perform any investigations activities (audits, assessments, on-site visits...) in all sites where the Supplier performs the Purchaser related

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activities, including investigations at Sub-tier suppliers, in connection with the Supplier's obligations in the Contract and to allow proper surveillance of the Supplier by the Purchaser and Aviation Authorities.

6 PLANNING

Reg. Core-6.0-01- Risk and Opportunity

The supplier shall demonstrate a robust, Organisation-wide Risk and Opportunity (R&O) management system for all Products and Services delivered to the Purchaser.

Risks covered can be related but not limited to, contractual, financial, technical, industrial, supply chain & quality, sub-tiers Organisations, projects, catastrophic events, industrial systems & tools, IT systems, geopolitical, environment, Corporate Social Responsibility (CSR), etc.

Adherence to ISO 31000 standard is a valid answer to this R&O management system requirement.

For Supply Chain risk, the use of EN9134 'Supply Chain Risk Management Guideline' is recommended.

6.3 PLANNING OF CHANGES

Reg. Core-6.3-01- Industrial change - Management

The Supplier shall have a documented process to manage industrial changes based on risk analysis and consecutive need to communicate to the Purchaser.

Reg. Core-6.3-02- Major industrial change – General

In case of Major Changes, the supplier shall inform the Purchaser, or submit the case for approval with the relevant Form according to the following triggers:

Information to the Purchaser (no AIRBUS Helicopters approval required): decision made by approved supplier, according to his internal "management of changes" process including risk analysis, reporting and traceability of change. The supplier shall fill in the Change Notification Form (CNF) F070 260 or agreed equivalent form to inform the Purchaser for following cases:

- Change of Company Organization (ownership/partnership...), top level organization and personnel at key position
- Procedures: significant change to the principles and procedures related to Design Management (including sub-contracting and associated surveillance) and Airworthiness organization
- Substantial reduction in number and/or of experienced staff. Loss of unique qualified position
- Change of Enterprise Resource Planning (ERP) system

Submission of a risk assessment, and Purchaser approval prior change implementation. When mutually agreed, the Supplier shall obtain an acknowledgement of receipt or written agreement from the Purchaser using the Purchaser's relevant Form (F070 255 for Transfer of Work, F070 260 for other Major changes) before implementing any important industrial change:

- Transfer of Work plant A to plant B or to sub-tier: the supplier shall submit the Transfer Notification Form F070 255 (or agreed equivalent form); the supplier shall create and maintain a detailed Transfer of Work (ToW) Project plan according to ER070 06-37

For following changes, the supplier shall submit the Change Notification Form F070 260 (or agreed equivalent form):

- Production line re-organization: New or extension of building at the same location (production surface area, capacity increase).
- Process and means change of key operations (including procedures for ensuring product conformity and compliance to Airbus Helicopters, main tools...).
- Qualified Subcontractor change (key operations), or key sub-element sourcing.

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Note: e) to h) cases might be already subject to ECPF F020 207, or DAEG F042 001 processes respectively for BtS Equipment or BtP Critical parts and Important blanks. In such cases, CNF could be not necessary.

The Supplier shall provide the Purchaser with the following information:

- (1) Product identification,
- (2) Change description,
- (3) Reason for change,
- (4) Point of embodiment (application rank),
- (5) Risk identification and mitigation status,
- (6) Associated schedule.

Guide and further details are provided in the mentioned forms.

7 SUPPORT

7.1.5 Monitoring and measuring resources

Req. Core-7.1-01- calibration

The Supplier **shall** meet the calibrating system requirements specified in ISO 10012 for all measurement system.

Req. Core-7.1-02- interchange-ability tools

When the Supplier uses interchange-ability tools self-made or provided by the Purchaser for controlling contractual interfaces of the components in helicopters, the supplier **shall** check the tools for wear and general condition, and recondition them if necessary, under the cover of applicable commercial agreements.

« Independent test facilities accreditation: see §4

7.2 COMPETENCE

Req. Core-7.2-01- Competence & qualification management

The Supplier shall have a system to identify, select, train and maintain competences and qualifications of its human resources for all the tasks in the scope of its contract with the Purchaser.

The Supplier shall keep available for the Purchaser all evidences of appropriated skill and of continuous trainings & tests as required in Standards & Regulations (IAQG 9100, Part/ FAR 145, EASA Part 21 and equivalent regulations) in particular human factors training.

The Supplier shall ensure that the Purchaser requirements are known by its staff as long as the Supplier is involved in contractual activity for the Purchaser

The supplier shall identify the activities (including special processes) with direct effect on the quality and conformity of the product.

These activities shall be executed only by formally qualified personnel.

The scope and the duration validity shall be defined for each qualification.

The evidence of qualification shall be recorded and archived.

Req. Core-7.2-02 – Quality Manager

The Supplier shall appoint a designated "Quality Manager" ensuring the following functions:

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(1) management of the quality aspects of the Project and of the delivered Product or Service for the lifecycle of the Contract,

(2) interface with the Purchaser regarding all quality topics.

This Quality Manager shall be referred to in the Supplier Organization Breakdown Structure (OBS) if existing, or in the Quality Assurance Plan (QAP)

7.5.3 Control of Documented Information

Documentation requirements:

Applicable documentation is up to now distributed through specific electronic messages.

A dedicated Airbus Helicopters Partner Portal for data exchanges with suppliers is implemented (contact: support.partner.ah@airbus.com). All general communications to suppliers will use Airbus Helicopters Partner Portal.

Req. Core-7.5-01 – Airbus Helicopters Partner Portal

Supplier Subscription to this Portal is strongly recommended and is mandatory for some dedicated activities.

Among others, it **will** in next future offer all suppliers a “documentation distribution tool”.

Once this tool is available, methods for exchanging upon receipt and acceptance **will** be upgraded.

Req. Core-7.5-03 – standard external documents:

The Supplier **shall** directly procure from their respective publishers any standard external documents which are requested since Airbus Helicopters has no property rights and thus the latter could not be dispatched to suppliers (i.e. standards like EN, ISO ...).

Req. Core-7.5-04- Quality Assurance Plan

If a Quality Assurance Plan is required, it should be conforming to ISO 10005 and/or to QAP Guideline provided by the Purchaser if any and shall be accepted by the Purchaser.

For Governmental & Military Programs: see Appendix J

Req. Core-7.5-05 - Documentation management and exchange plan

(a) The Supplier shall provide a documentation management plan including:

- (1) a list of the data and documentation required for the Contract completion,
- (2) the data and documentation management rules implemented by the Supplier,
- (3) the frequency and volume of data and documentation to be delivered to the Purchaser,
- (4) the means put in place to support the data delivery.

(b) The Supplier shall justify when data cannot be transferred electronically due to legal, certification, Intellectual Property (IP) rights, confidentiality, classification rules or regulations, and agree with the Purchaser the means by which the data will be transferred.

Req. Core-7.5-06 – Applicable documents

The provisions of documents distributed by the Purchaser shall apply to all Orders placed by the Purchaser.

- The **acknowledgement of receipt** of each document including updates shall be done immediately by supplier (at least within 10 working days after receiving Airbus Helicopters generic email) and sent back to Airbus Helicopters.
 - for procedural/normative documents, the supplier is allowed to acknowledge of receipt by email (without formal template) covering one or numerous documents.
 - for technical documents supplier uploaded by supplier in Design Documentation SharePoint, digital acknowledgement in the SharePoint is mandatory. Exception shall duly justified and accepted by the Purchaser.

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- Acceptance of procedural/normative documents:**

The Supplier shall communicate to the Purchaser through the template attached to the document, his acceptance of each procedural/normative document within 10 weeks after sending your acknowledgement of receipt to Airbus Helicopters generic email support.distribution-be.ah@airbus.com. Any more restrictive lead-time specified by Airbus Helicopters prevails.

Any reservation on the document(s) shall be expressed by Supplier within such 10 weeks' timeframe, through the template attached to the document.

Any deviations to the applicable document(s) shall be expressly agreed in writing by both Parties according ER070 06-01 Req. Core-2-02 "Non compliances to Quality Requirements".

If the supplier doesn't answer after 12 weeks, the document(s) will be deemed accepted and definitively applicable.

- Acceptance of technical documents linked to P/Ns (drawings, BOM...):**

Their formal acceptance by the supplier is done through the acceptance of the associated Purchase Order of these P/Ns. The acceptance status template shall be filled only if the supplier identifies in advance any reservation on the document(s).

When subcontracted activities are partially or entirely performed by Supplier's Tier-N Supplier(s) under prior the Purchaser' authorization, the Supplier shall ensure the appropriate provision of documents distributed by the Purchaser or documents from its own QMS to its Tier-N Supplier(s), when formally recognized as acceptable or equivalent to the Purchaser own, by the Purchaser.

Reg. Core-7.5-07 – archiving system

The Supplier **shall** set up an archiving system for quality-related records compliant to Standard IAQG 9130 and to Purchaser requirements included in ER070 16-01.

All records shall be made available to the Purchaser at any time, even if in the case of a commercial business termination or bankruptcy.

Reg. Core-7.5-08 backups of data and software

The Supplier shall perform regular backups of data and software, ensuring that reliability and integrity tests are performed regularly on the backups to ensure reliable data is available in case a restoration is needed, and respect the following principles:

- Store backups away from live systems,
- Physically protect storage of backups with at least the same level as the live systems,
- Regularly test restoration of backups.

8 OPERATION

8.1 OPERATIONAL PLANNING AND CONTROL

8.1.3 Product safety

See also §10.1 & 10.2

Reg. Core-8.1-02 – Safety classification (only applicable Build-to-Print & Build-to-Specification –not applicable to STC & TSO holder suppliers)

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The Supply **shall** comply with ER070 04-06 "Quality requirements for suppliers' production activities according to the safety class of the manufactured parts & appliances".

8.3 DESIGN AND DEVELOPMENT OF PRODUCTS AND SERVICES

The Supplier **shall** apply requirements for the material design according to the instructions defined in the order and/or in the design data and associated technical specifications of the products and/or the Statement of Works (SOW).

Reg. Core-8.3-02 R1—Advanced Product Quality Planning – APQP

When specified by the Purchaser, the Supplier shall deploy APQP for each Major change APQP shall be deployed according IAQG 9145, with at least the following requested elements/deliverables:

- Quality Plan Timing
- Identified in Statement of Work, in particular D FMEA and key characteristics (annex A of contract)
- P-FMEA and Process Key Characteristics
- Process Flow Chart
- Measurement System Analysis (MSA), incl. MSA plan
- Control Plan
- Production Part Approval Process and First Article Inspection
- Process Stability and Capability

Quality Plan Timing shall be built according the Purchaser milestones.

Deliverables shall be provided to the Purchaser according the Purchaser milestones, or on request.

The Supplier shall give full support to the Purchaser for deliverables maturity assessment.

The Supplier shall proactively report the progress of their activities/deliverables to the Purchaser especially early warning in case of potential risk.

Note: additional information are available in IAQG SCMH §7.2 (IAQG Website <https://www.sae.org>)

8.4 CONTROL OF EXTERNALLY PROVIDED PROCESSES, PRODUCTS AND SERVICES

Refer to above § 2 for flowing down to lower ranks suppliers the Purchaser requirements

Reg. Core-8.4-01 – Distributors: If the Supplier procures through a Distributor, it shall in addition flow-down to this Distributor all hereafter Appendix E requirements (focused on delivery documentation)
Dealing through Brokers shall be formally accepted by the Purchaser

8.5 PRODUCTION AND SERVICE PROVISION

Reg. Core-8.5-01 –Manufacturing and inspection Dossier (including work station documentation)

(a) The Supplier shall establish, maintain and provide a Manufacturing and Inspection Dossier that describes all means, processes and tools necessary to purchase, produce, assemble and test the Product in compliance with the Definition Dossier.

(b) The manufacturing and inspection dossier shall include as a minimum:

- (1) process flow diagram,
- (2) applicable drawings,
- (3) routings,
- (4) Bill of Materials (BoM), including consumables, as referenced in the technical specification, Definition Dossier or Standard Operating Instructions,

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- (5) Manufacturing, inspection and test procedures
- (6) measurement procedures,
- (7) stamped work orders,
- (8) Standard Operating Instructions (SOI),
- (9) list of applicable manufacturing and test tools.
- (c) The Supplier shall define:
 - (1) a detailed plan for preventive and corrective maintenance of manufacturing and inspection means/tools,

8.5.1 Control of production and service provision

Production Process Verification:

Reg. Core-8.5-02 –The supplier shall ensure the conformity of the specimen with the requirements (ATP...) and Design Data Set.

Reg. Core-8.5-03 –First article inspection

The supplier shall perform a First Article Inspection (FAI):

- in accordance with IAQG 9102 and dedicated complement specified in ER070 06-11,
- for the occurrences described in IAQG 9102.

If the supplier is requested to deliver products to the Purchaser before completion of FAI activities, the supplier shall initialize a Supplier Request for Deviation.

Reg. Core-8.5-04 – International System of Units

The Supplier shall use International System of Units for all data provided unless otherwise specified by the Purchaser.

8.5.2 Identification and traceability

Reg. Core-8.5-05 –Identification, traceability - General

(a) The Supplier shall ensure identification and traceability of Products and documentation in accordance with ER070 16-01 and with contractual Purchaser specifications.

(b) The Supplier shall ensure in particular, as applicable to the Product:

- (1) adequate industrial means for downward and upward traceability (e.g. batch, time-series):
 - (i) manufacturing operator/operation traceability,
 - (ii) operation/means traceability,
 - (iii) components and materials in relation to the delivered Product (date code, batch No., serial No.).
- (2) adequate methodology used to serialize parts ensuring uniqueness of serial number or homogeneity of batch number when this is requested by the Purchaser,
- (4) A recording system providing an on-going cross-reference between the manufactured items and the work documentation.

(c) When no specification is provided by the Purchaser to define means, methods and depth of the traceability, the Supplier shall define these elements based on the results of non-conformity and risk analysis and provide them with associated evidences.

(d) The Supplier shall ensure the traceability of any changes and non-quality events on the different elements of the Product.

Splitting of the manufacturing files:

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General core part: all kind of suppliers

- Traceability during manufacturing between the initial file and the new manufacturing files(s) shall be ensured.
- In order to maintain the traceability of the items during division/consolidation, all those items without a serial number shall come from a single batch

Note: if "Industrialization Requirements (Maturity)" requirement is **applicable** (contract Annex I), it prevails

8.5.3 Property belonging to customers or External Providers

Req. Core-8.5-06- delivery inspection:

Upon receiving the delivery, the Suppliers **shall** visually inspect the material and perform an administrative check of the accompanying documents.

8.5.4 Preservation of product

Req. Core-8.5-07 – Supplied product conformity

The Supplier is responsible for the conformity of the supplies, including the products/parts/appliances, documents and related contractual services

Req. Core-8.5-08 - Product preservation during manufacturing operations

The Supplier shall ensure all "items and material used to manufacture the Product" are controlled during the manufacturing cycle to guarantee the preservation, final integrity and quality of the manufactured Product, including as a minimum:

- Verification of shelf-life requirements,
- Appropriate packing and packaging across all the manufacturing process,
- Temporary storage conditions between reception and final manufacturing operations,
- Verification that specific manufacturing process requirements have been followed

Req. Core-8.5-09- Logistics Delivery Conditions:

The supplier shall apply the ER150 09-003 "Logistics Delivery Conditions"

Req. Core-8.5-10a- Purchaser's red blocked labels:

The Supplier shall remove Purchaser's red blocked labels on items sent when repair, rework or revalidation has been done.

Req. Core-8.5-10b Segregation PO from MO

If PO and MO activities are made in shared facilities, all of the following segregation principles shall be respected by suppliers. These principles concern all parts/files management and traceability as well as flow management. Segregation principles:

- Segregation by Production Environment in ERP (Enterprise Resource Planning),
- Segregation by Part Number and Serial Number,
- Segregation through the Industrial file associated with the parts,
- Segregation through packaging and identification at each step of production,
- Segregation of the flows and areas

Marking- identification

Req. Core-8.5-12 – Marking & identification - general requirement:

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

- The process used shall permit easy identification after the protection and assembly steps.
- Marking shall be processed in compliance with the related either applicable Design or Maintenance Data.
- Any change of marking's mode shall be submitted to design function approval.
- The markings required by the manufacturing and inspection process sheets within the scope of the production requirements (e.g. temporary marking for inter-operation traceability) may not remain on finished parts, if these markings are not imposed.
- It is strictly forbidden to assign a serial number already assigned for the same part number for all life cycle.
- The items shall be marked permanently with an inspection stamp unless otherwise instructed in the technical specification.
- After transfer of responsibility, it is strictly forbidden to remove or modify the identification (including marking) of an item.

Note: complement of marking by the Purchaser

For some specific cases where there is a need to trace the actual installation of procured parts on a given aircraft, Airbus Helicopters **may** have to complete the initial manufacturer marking by a letter or a figure. This complement of marking can never be a reason for modifying the original manufacturer's responsibility. This modified marking **may** have to be mentioned in accompanying documentation.

a) Accompanying documents

Reg. Core-8.5-13 - Accompanying documents (for Engines manufacturers applicable requirement : see Appendix C)

All supplies **shall** be delivered with the contractual documentation including:

| Document | Reference | Mandatory for every delivery | if required by the Purchase Order/ Contract | if relevant |
|---|---|------------------------------|---|-------------|
| Delivery Note | ER150 09-003 | X | | |
| Declaration or Certificate of Conformity without GQAR signatory | Req. Core-8.5-17 | X | | |
| Certificate of Conformity with GQAR signatory | AQAP-2070 & Req. Core-8.5-17 | | X | |
| Inspection Certificate type 2.2 or 3.1 or 3.2 | EN 10204 & Req. Core-8.5-17 (data all products) | | X | |
| Authorized Release Certificate (e.g. EASA Form 1) | Req. Core-8.5-14 | | X | |
| Acceptance Test Report (ATR, Measurement Protocol) | ATP see SOW | | X | |
| Log Card (Civil Program) | F16-04 | | X | |
| Log Card (Tiger) | F070 029 | | X | |
| Log Card (NH90) | (EI101) QD S000N0812E01 | | X | |
| Fire Resistance Certificate | | | X | |
| User's Guide | | | X | |

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| Requirements | ER070 | 06-01 | L |
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GRFS: General requirements for Suppliers

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General core part: all kind of suppliers

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| Concession/Temporary Deviation/ Demande D' Accord/Srfd : Approved by the Purchaser | see §10 | | | X |
| First Article Inspection Report | ER070 06-11 | | | X |
| Completed Non Conformity for return reworked | see §10 | | | X |
| Shop Report for maintenance activities | F050 06-002 | | | X |
| CAIR | | | x | |

Req. Core-8.5-14 - Products delivered included in DO/PO arrangements or under supplier's TSO/ETSO/TC/STC:

Products delivered by suppliers covered by their POA/PMA and included in the DO/PO arrangements (or PMA Assist letter for FAA), **shall** be *systematically* supplied to the Purchaser accompanied by an Authorized Release Certificate under production approval (see §3.3).

For items under the supplier's TSO/ETSO/TC/STC the product **shall** be accompanied with the Manufacturer's ARC under production approval.

In Authorized Release Certificate (ARC) block 8, manufacturing P/N shall be identified

In ARC block "remark" as alternative, the Purchaser P/N as defined in Purchase Order shall be identified

For Civil Programs:

If the ARC includes the Purchasing Order number reference in block 5, this delivery document can be accepted as Declaration or **Certificate** of Conformity (CoC) for deliveries with a single item.

For Critical parts, if ARC replaces the CoC, all specific ER070 04-06 requirements for CoC (manufacturing layout reference ...) shall be met in ARC.

For deliveries with multiple items, trace-ability records need Declaration or **Certificate** of Conformity (CoC) In addition to the ARCs.

• **Log Card:**

The supplier of aircraft equipment or parts is by contract responsible for supplying with completed Log Cards upon equipment or parts delivery whenever this is explicitly required in the contract or in the purchase order.

Req. Core-8.5-15 - Log Card -operation on product

In case of revalidation/retrofit on "new product" or overhauled /repair on "used product", the supplier **will** keep updated the Log Card accompanying the returned product according EI 16-04 "Log Card Processing"; if product scrapping, EI 16-04 has to be applied.

Req. Core-8.5-16 - Acceptance Test Report (ATR):

Mandatory for Equipment parts in destination to NH90 and Tiger programs; If ATR is not requested in Purchase Order, ATRs shall always be available at the Purchaser upon request in no more than 48 hours ATR shall include the P/N & S/N ref or batch number

Req. Core-8.5-17 - Declaration of Conformity or Certificate of Conformity:

The Supplier shall:

(a) release all its Products with a Declaration of Conformity (DoC) or with a Certificate of Conformity (CoC).

(b) ensure that the DoC or CoC:

- (1) is written in contractual language,
- (2) contains at least the following information (ISO 17050 could be used as reference):

Mandatory data for all products:

- DoC (or CoC) Number

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

- Supplier name and address
- Issue date
- Airbus Helicopters and address
- Airbus Helicopters Purchase Order Number
- List of Items with their Airbus Helicopters P/N
- Description
- Quantity and unit
- Serial number (mandatory for critical parts & Equipment) or Batch or file/ cast number
- Concession Number (if any) / Temporary Deviation (if any)
- Following statement of conformity (or equivalent wording): "We hereby declare that the delivered Product(s) comply with the applicable requirements, specifications, drawings, regulations, standards and have been successfully tested and/or verified"
- Inspection stamp or Authorized signature and name (function also Recommended) or individual, unambiguous and traceable signatory code

Specific data for specific Applicability:

additional Requirement for Critical Parts : see ER070 04-06

additional Requirement for FAI : see ER070 06-11

| REQUESTED DATA | specific Applicability : |
|---|---|
| List of components (for "KIT") | Kit |
| applicable drawing issue | sub-contracted items |
| any supplements to the drawing (DMR, ACI, STL) | sub-contracted items |
| CAIR (if any) reference | Constituent Assembly (CA) |
| processing number | electrical harnesses |
| Precisions for Equipment after "Bringing into conformity" or after a "Restoring the storage validity" - See Annex A - §8.5. Quality records (versus delivery documents) | Equipment |
| Prototype model: specific text: See Annex A - §8.3.4 - Delivery of non-yet-qualified parts | Equipment - Prototype model |
| Manufacturing Date or Revalidation date (if any) (or other date able to calculate expire and/or revalidation date) | If limited shelf-life items or/and if periodic operation during storage - as per material specification (Storage Condition Sheet for BtP/BtS) |
| PVE Number (if any) | sub-contracted items |
| PVL Number (if any) | sub-contracted items |
| DA Number - Request for Approval - Srfd n° (if any) | sub-contracted items |
| For assemblies, presence of the manufacturing file or the list of materials used (quantities by batch and/or serial number detailed by manufactured quantities) - if CAIR is not requested. (a) | sub-contracted items – Build to Print or design & build contract |
| Elastomer longevity group (or failing this, class) (a) | product with elastomer |
| The nature making up the core of the pipe(a) | pipes |
| The nature of the duct equipment(a) | duct equipment |
| The nominal pressure(a) | pressurized product |
| Blanks under qualification: specific text - See Annex B § 8.6 Release of products and services | specific to Blanks under qualification |
| supplier NCAGE Code (NATO Code) | for Governmental Programs |

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GRFS: General requirements for Suppliers

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General core part: all kind of suppliers

- (a) Depending on characteristics and specificities of parts delivered and/or depending on specific the Purchaser requirement.

If enclosed Authorized Release Certificate actually mentions the Purchaser Purchasing order in block 5, this release document can be accepted as Attestation / Declaration / Certificate of Conformity (CoC)

Req. Core-8.5-18 –GQA

For Suppliers located in Germany: Supplies conformity confirmations with GQA countersignature or PCI ("Stückprüfpflichtige Teile") on which the supplier GQAR performs "Stückprüfung" **shall** comply in its form to: AQAP-2070 conform CoC.

• **Constituent Assembly Inspection Report (CAIR):**

Req. Core-8.5-19 – CAIR: The Supplier **shall** update and validate the CAIR as necessary at Airbus Helicopters production milestones defined by the Purchaser until delivery to the final Customer, in particular when the CA is re-allocated.

• **Products under Temporary Deviation purchased by Airbus Helicopters:**

Req. Core-8.5.19b -"Temporary Deviation" requirement

It may be needed to deliver products for Airbus Helicopters tests before full demonstration of conformity to the Applicable Design Data.

The Supplier shall create SRfD /DA or request of concession (see Req. Core-10.2-03a & Core-10.2-03b) . The supplier shall mark all these products according Req. Core-8.5-12b.

For NH90 program products, the EI101 QDS000N0838E01 **shall** be followed &

For TIGER program product, the EI101 T000M0811E01 **shall** be followed.

These products could be delivered only after approval of SRfD /DA or request of concession by the Purchaser

8.5.5 **Post-delivery activities**

Req. Core-8.5-20 - Supplier's technical assistance at Purchaser plants

In case the Supplier has its technical assistance teams operating in the Purchaser plants, the following rules shall be applied until the delivery to the end customer:

- The technical assistance teams (TAT) **shall** only operate in the Purchaser plants after and through a formal request (PO or Contract or via a Nonconformity),
- Prior to interventions, Purchaser will formally define the scope in the form F070 181 or equivalent (not requirement for Engine manufacturer – see Appendix C), the condition and the location of the Supplier's intervention (i.e. at laboratory, at Final Assembly Line, on aircraft...). Any modification shall be formalized through a request update,

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

- The technical assistance teams **will** be supervised by the Purchaser requestors and geographically limited to dedicated premises.
 - Each member of the technical assistance teams **shall** get an exhaustive list of the tools & devices introduced into the Purchaser plants (laptop, tools, paper documents, spares...).
 - The technical assistance teams operating in the Purchaser plants on the equipment **shall** be qualified and authorized by their company. Moreover, in the case of operations on "Confidential Defense" classified equipment or on other restricted or confidential parts, subjects or area, the intervening staff **shall** hold the appropriate accreditations and be able to show evidence.
 - The supplier shall identify each TAT members, defining their corresponding operations period and duration. They shall carry out their operations in compliance with Purchaser Requirements & procedure for activities in situ in particular (especially for operations at work-shops and on Aircraft),
 - The technical assistance teams **shall** respect constraints identified in prevention plan,
 - The technical assistance teams **shall** respect the Purchaser FOD & "Aviation Safety" requirement for in situ activities defined in Appendix H
 - All the interventions on any equipment with civil use **shall** be realized in agreement with the requirements of the EASA PO Approval according Part 21G.
 - If the intervention is performed in a facility where new and used parts/items are treated, the requirement for in-situ suppliers **Req. App. H-8 -8** is applicable (see appendix H).
 - Any spare components possibly used for the operations **shall** be conform to the Manufacturer's definition and **shall** have passed the applicable Final inspection.
 - The technical assistance teams shall :
 - document their work performed by work order / work report
 - if any Non Conformity occurs, notify the deviation.
 - Certify the conformity by release of an ARC or a CoC as applicable by the supplier's PO / MO approval or by contract / order.
 - For all works performed by Manufacturers POA holder on delivered items to the Purchaser, the Manufacturer shall re-release the items, considering the works performed (ARC with Status NEW : Details of the original release and the alteration or rectification work are to be entered in block "remarks") and provide to the Purchaser.
- In addition, all components/parts replaced shall be accompanied by the applicable ARC depending of the Manufacturer Production Approval or contractual required delivery documentation.
- After any technical operation, the Supplier shall update the relevant other accompanying documentation (especially documents specifying the identification and the traceability of the equipment),
 - For longer than a week missions, the dedicated technical assistance teams **shall** establish a periodic report of all their technical operations. The report **shall** be sent to the Purchaser Supplier Quality Managers.

Reg. Core-8.5-21 - Work on material by the Purchaser operators under the manufacturer's delegation

The supplier **shall** formalize its work on material. This delegation **should** be done through F070-182 form "Request for Delegation» or equivalent supplier's form.

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GRFS: General requirements for Suppliers

Quality Assurance General Requirements

General core part: all kind of suppliers

Reg. Core-8.5-22 - Work on materials already delivered to a customer for use on civil aircraft subject to the EASA or FAA regulations

Any maintenance or repair operations on parts already delivered to operation or to final customer shall be, by obligation, performed in compliance with the Manufacturer's maintenance organization approval (PART 145/FAR 145 or EASA agreed equivalent).

All material shall be returned to the Purchaser together with the Authorized Release Certificate (EASA Form 1 or FAA 8130-3 or EASA agreed equivalent).

9 PERFORMANCE EVALUATION

9.1 MONITORING, MEASUREMENT, ANALYSIS, AND EVALUATION

9.1.2 Customer satisfaction

Reg. Core-9.1-01- Customer satisfaction

The Supplier **shall** be able upon request to provide the Purchaser, in addition to any other data related to the Purchaser satisfaction measurement, with a detailed analysis of On-time-Delivery, technical and administrative Non-conformities including rates, detailed corrective & preventive actions and if necessary relevant specific action plan. The Supplier upon request **will** participate to any meeting requested in the purpose of improving its provision.

A SED review (Supplier Evaluation and Development) may be held to manage the technical & administrative facts, actions in progress and to agree on responsibilities in order to maintain a consolidated Rejection Rate figure.

9.2 AUDIT

Reg. Core-9.2-01- internal and external audits

On Purchaser's request, the Supplier shall make available any quality audits plan, quality audits report, major improvement action plan and major lessons learned, relating to the purchased products.

These audits cover internal audits, audit performed by Supplier on its own supply chain, external audit from third party or Authority.

10. IMPROVEMENT

10.1 GENERAL - DEFINITIONS

10.1.1 Safety Risk Management definitions

Hazard:

A condition or an object with the potential to cause or contribute to an aircraft incident or accident. (Source: ICAO Annex 19). Hazards can originate from technical, environmental, human and organizational factors.

Just & Fair Culture:

A culture where individuals are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated. (Source: based on EU No 376/2014).

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GRFS: General requirements for Suppliers

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General core part: all kind of suppliers

Risk:

The combination of predicted severity (criticality) and likelihood (probability) of the potential effect of a hazard.
(Source: NAS9927)

10.1.2 Nonconformity and corrective action definitions

Event:

Any anomaly in operating an aviation product or in performing an organization's activity. (Source: SM-0001).

Deviation to the approved Design data:

For Build-to-Spec, Build-to-Print, raw material and standard parts with:

- Unintentional deviation to drawing/design, following a manufacturing issue or mistake
- Intentional deviation due to wrong design or material shortage
- Intentional deviation to request to change of manufacturing process and control vs HS 5011 including frozen parameters of critical/important parts.
- Unintentional deviation to manufacturing process and/or control vs HS 5011 (IFMA....)

Deviation to the process (FAI not provided...): Deviation to Quality assurance requirements

Supplier nonconformities before delivery (SRfD):

Deviations under supplier responsibility before delivery for a new or a reworked product

Product Quality Escape (PQE)

Any product released by supplier that is subsequently determined or supposed to be nonconforming to contract and/or product specification requirements.

Notification of Escape (NoE):

A NoE is a document used to record the nonconformance data and documentation that shall be disclosed to the Purchaser when informing about any Product Quality Escape

Incident:

An "incident" is defined as an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

This means any unusual component, equipment, part, appliance, or system failure, malfunctioning, damage, anomaly, discrepancy having or likely to have a negative impact on the operation of the product. Any deviation of a component, equipment, or system from its certified definition discovered either outside of the normal inspection process or after the relevant phase of this process has been completed shall also be considered as an incident.

Occurrence:

Any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident.

Quality Incident Report (QIR):

Occurrence discovered during 'industrial' activities (discrepancies on purchased parts, manufacturing, assembly, ground tests).

In service Incident Report (ISIR):

Occurrence discovered in service or reported by an authorized MRO.

In service Quality Issue (ISQI):

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GRFS: General requirements for Suppliers

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Nonconformity which has occurred in service or reported by an authorized MRO.

Recurrent issues:

Such as Product or Service quality escapes, late production or deliveries, process deviations, documentation issues, late or incorrect design, etc.:

Supplier nonconformities after delivery:

Deviations under supplier responsibility after delivery, during the value stream incoming inspection, warehouse, assembly lines (including affiliates), spares and production flight test to final customer delivery, for a new or a reworked product.

10.2 SAFETY RISK MANAGEMENT

10.2.1 Safety Risk general requirement

Req. Core-10-2-1 Aviation Safety Risk management

The primary objective of Aviation Safety Risk Management is to prevent the occurrence of serious aviation incidents and accidents, which is achieved by proactively identifying, assessing, and eliminating or mitigating safety-related hazards to acceptable levels.

The supplier shall:

- 1) **Deploy “Safety Policy and Objectives”** including:
 - a) Supplier commitment for Safety including Just and Fair culture, promotion of the hazard reporting and safety culture
 - b) Supplier SMS focal point Nomination; this focal point shall be trained on SMS.
- 2) **Implement Hazard identification & Risk assessment and mitigation**, including consideration of Human & Organizational Factors

Hazards can be identified based on data from events that have occurred or in anticipation of potential events that could lead to an unacceptable level of risk (proactive manner).

For all hazards, the supplier shall send a Notification of Hazard (NoH) within 48 working hours (cf. Req. Core-10.2-08) after hazard identification to the purchaser focal point contact.supplier-notification-hazard.ah@airbus.com and to the purchaser's SCQM.

3) **Monitor and measure safety performance**

- The supplier shall evaluate his Aviation Safety performance.
 - For suppliers delivering products with Design High Safety Class (or having an activity on these products), the supplier shall report his Aviation Safety Performance to the Purchaser at least once a year.
- The SMS implementation status and Safety performance will be reviewed during meetings between AH and the SMS focal point if relevant.

4) **Implement Management of Change and Continuous improvement.**

- The supplier shall collect & analyse safety impact of substantive changes (ref. to §6.3) and consider impact on human performances
- The supplier shall continuously improve its SMS by considering the results of the safety performance measurements.

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Airbus Helicopters expects and continues to rely upon Suppliers and Supply Chain Partners full support, as well as a trustful and transparent cooperation to Safety enhancement initiatives, in order to achieve the shared objective of Rotorcraft industry to continuously improve Aviation Safety. Refer to continual improvement §10.4.

Demonstration of compliance to previous requirement with the application of international industry standard SM-0001 'Implementing a Safety Management System in Design, Manufacturing and Maintenance Organisations', is acceptable.

10.2.2 Prevention of counterfeit parts:

Req. Core-8.1-03 – Prevention of counterfeit parts

The Supplier shall not deliver counterfeit, suspected unapproved and / or stolen parts to the Purchaser. The Supplier shall procure components only from the original manufacturer or the original manufacturer's franchised distributor.

In particular for electronic components, the Supplier shall comply with the provisions of the aerospace standard AS5553 and shall be registered with the ERAI (Electronic Retailers Association International) <http://www.era.com/>. The Supplier shall inform the Purchaser of any recurrent defect(s) discovered on electronic components used in Items delivered to the Purchaser, even if such defect occurs in items delivered to other Customers.

The suppliers **shall** implement a prevention plan to avoid any Counterfeit Parts and shall have a process to manage any detected Counterfeit Parts

Parts confirmed as Counterfeit Parts shall not be scrapped until the issue is finally solved. These parts may be subject to further legal activities (i.e. law suit).

The supplier can use IAQG SCMH §3.5 as guideline. (Free access at IAQG Website <https://www.sae.org>)

10.2.3 Foreign Object debris (FOD) prevention

Req. Core-8.5-10c-Foreign object prevention - General

The Supplier shall comply with Aerospace standard IAQG 9146.

The Supplier shall have a process for foreign object prevention to guarantee FOD free Products for any delivery (to Purchaser or Purchaser's Customers...).

This process shall cover all stages of the Product's life, from design to delivery operations. It includes tooling specifications, manufacturing and assembly, testing, inspection, maintenance, order picking, labelling, handling, storage, packaging, packing, preservation, shelf-life management and shipping.

The Supplier shall have a process to document, analyze, and launch adequate corrective actions in case Foreign Object debris is detected.

Req. Core-8.5-11-Foreign object prevention during manufacturing, inspection

The Supplier shall ensure that no alien substance, debris or article resulting from manufacturing and inspection processes have been left in a Product, so that the delivered Product remains foreign object and substance free throughout all manufacturing and inspection stages.

This includes prevention of low or high temperature-related emissions and degradations originating from any components, including the material itself and its surface treatments, likely to impact the air quality on board.

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GRFS: General requirements for Suppliers

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10.3 NONCONFORMITY AND CORRECTIVE ACTION

Req. Core-10.2-01- Compliance with IAQG 9136

The supplier shall have a process compliant with IAQG 9136 (8D, 9S...) to manage and analyze significant and/or recurrent issues in order to contain them, identify their root causes and prevent their recurrence, including on similar products and services. The supplier shall implement the methodology and inform the purchaser about results in accordance with the criteria and timeframe defined by the Purchaser in **Req. Core-10.2-08**

Req. Core-10.2-02- Analysis of data

The supplier shall:

- (a) describe its processes in terms of Suppliers monitoring for quality and delivery.
- (b) provide definition and content of its Suppliers' performance metrics with associated objectives.
- (c) set up indicators for measuring the quality level and the on-time delivery of the products delivered to the purchaser.
- (d) provide upon purchaser request results of its Suppliers metrics regarding performance versus objectives and shall be able to supply the Purchaser with a periodic assessment (qualimetry) of any non-quality detected on Purchaser products by its internal inspection.

10.3.1 Supplier Nonconformities before delivery (SRfD):

Req. Core-10.2-03a- Nonconformities management - scope Built-to-Print/raw material/standard part/ Extended Workbench

When there is a nonconformity on a Built-to-Print part or on raw material or on standard part that doesn't enable the supplier to pronounce full conformity to the Applicable Design Data or Quality Assurance in the CoC, SRfD following requirement shall be applied before any delivery. It can be also used for nonconformities detected during Extended Workbench activities.

In this case, prior to delivery, to enable the eventual delivery of the product, the Supplier **shall** request to the Purchaser the approval for delivery using the F-COM-17-037 (1) to send to generic email application.SRfD-GENR21.ah@airbus.com.

Delivery shall be covered on a Purchase Order/Work Order for extended workbench.

SRfD shall include affected material number.

The supplier shall provide one SRfD per product.

In case there are more than 4 deviations per category (type design or quality assurance) the supplier shall contact Supply chain Quality (email below in table)

| Purchase Order Plant | Support Email Address | |
|----------------------|--|--|
| DON | support.NC-airbus-DON@airbus.com | |
| MAR/PLB | support.da.ah@airbus.com | |
| ALB | support.support-da-ahe.ah@airbus.com | |

Note: (1) before application (supplier not contacted by Airbus Helicopters for deployment), current process is applicable (DA F070 018 for Sub-contractors); upper table support email address shall be used to send DA

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Req. Core-10.2-03b- Nonconformities management - scope build to Spec

The supplier shall provide a request for concession F070 001 for build to Spec & shall send it to upper table support email address.

Remark for all purchased products: Nonconforming product acceptance

The Purchaser reserves the right to refuse from a Supplier any Nonconforming product and any product. Trace-ability and marking rules are explained in hereafter appendixes for each type of suppliers.

Req. Core-10.2-04- traceability

In case of doubt in the application or without any determined rules, parts under concession **will** be ad minima individually tagged as "non-conform" with mention of Concession N° and accompanying docs **will** mention of the concession.

Delivery of non-yet- Type certified or qualified products:

It **may** be needed to deliver not yet Type Certified/qualified product (e.g. Compliance demonstration to certification basis not yet done) or not yet qualified products (or Performance Declaration or Acceptance conditions or Storage conditions or First Article Inspection not yet formally approved (technically acceptable e.g. prototype equipment) or Interchange-ability demonstration postponed).

10.2.2 Supplier nonconformities after delivery:

In case of nonconformities delivered to the purchaser it is necessary to distinguish three situations:

- Nonconformities detected by the purchaser or its subcontractors (NC, QIR).
- Nonconformities detected by the supplier (NoE).
- Nonconformities detected in service by customer (ISIR, ISQI)

a) Nonconformities detected by Purchaser or its subcontractors:

Req. Core-10.2-05 - Nonconformities (NC):

(a) In case of Nonconformities detected by purchaser on already delivered product or service, Non conform product is usually sent to the Supplier.

This latter **shall** implement the necessary steps in accordance with the IAQG 9100 & IAQG 9131 and **shall** inform accordingly purchaser by returning, in due time, the Nonconformity duly filled with the corrective and preventive action descriptions within lead-time requirement.

(b) For so-called "administrative Nonconformity", the product is not usually sent back to the supplier, the latter is required to implement appropriated action like completing defective documents as promptly as possible.

Req. Core-10.2-06- Nonconformities management

a) In case a Nonconforming product (or service) is identified at purchaser site, and when requested by the Purchaser, the Supplier shall assess the Nonconformity and shall propose solutions (e.g. reject, scrap, or rework Product), and/or raise a concession in line with ER070 13-06.

(b) When the Supplier has installed a Nonconforming Product into its upper Assembly and/or has delivered a Nonconforming Product to the Purchaser, the Supplier shall help identify the location of the Nonconforming Product upon request.

Req. Core-10.2-07- Re-occurrence of Nonconformities (NC):

In case of recurring nonconformities detected by purchaser within Production Organization (including subcontractors) the purchaser should request to the supplier to disclose the Quality escape. When the

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| Requirements | ER070 | 06-01 | L |
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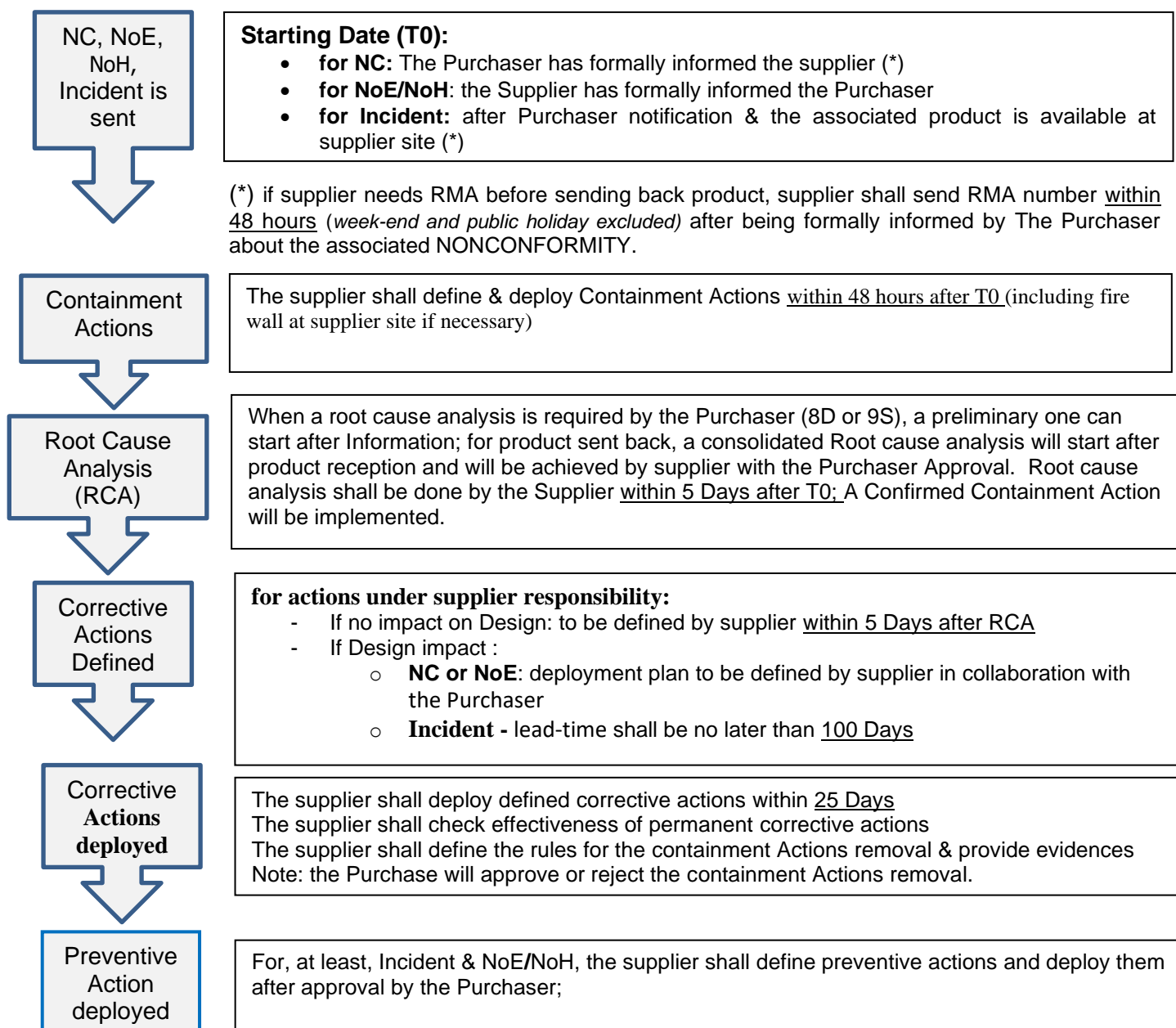
General core part: all kind of suppliers

Purchaser analysis of the NC reveals a risk that others products with a similar nonconformity could have been previously delivered to the Purchaser, the supplier shall disclose the Quality escape.

Note: When the quality escape met the incident criteria (see §10.1), a Quality Incident Report is created by the Purchaser. The supplier will be notified about the Quality incident classification by the purchaser.

Reg. Core-10.2-08 Nonconformities, NoE/NoH & Incident management & associated lead-time

The Supplier shall apply following process & lead-time described below to manage nonconformity



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General core part: all kind of suppliers

Req. Core-10.2-09 Return flow

The Purchaser will sent back the product for the nonconformity recovery.

The supplier shall rework the product and send back the conform product including the accompanying documents.

Req. Core-10.2-10- Investigations on Nonconformities or Incidents discovered after supplier's delivery

In some specific cases of Nonconformities or Incidents discovered after supplier's delivery, a formal common technical investigation conducted at the supplier's may be requested by the purchaser. Such a request will be specifically given to the supplier, it will be confirmed on the Nonconformity or for Incidents, through Purchaser formal letter; if necessary, the products will be sent back. This product will be sealed with accurate mentions. For investigations linked to Incident, the supplier shall have to make available all needed resources with no notice.

The supplier shall diligent all subsequent required containment, mitigation, corrective, preventive or design change actions inside full Purchaser agreement when the supplier will be the origin of the Nonconformity.

Req. Core-10.2-11-Constituent Assembly (CA) Nonconformity:

When the Supplier has installed a Nonconforming Product into its upper Constituent Assembly and/or has delivered a Nonconforming CA to The Purchaser, the Supplier shall rework his Product upon request.

b) Nonconformities detected by the supplier (NoE).

Suppliers are requested to setup a pro-active way of working in case of a Nonconformity exported out of their facilities to the purchaser or to the final customers.

Req. Core-10.2-12 - The Supplier shall:

(a) ensure purchaser is immediately informed in case Products have been delivered and it has been subsequently identified that they are or are suspected to be defective (Product Quality Escape) and this potentially impacts technical, quality and/or industrial aspects.

(b) support investigation with the purchaser Design Organization to identify those Product Quality Escapes that could lead to an unsafe condition (Quality incident) and provide relevant assistance immediately.

Req. Core-10.2-13 – Product Quality Escape disclosure

Supplier shall immediately disclose any product quality escape to purchaser but also to other concerned stakeholders (i.e. other customers, other purchaser's subsidiaries, Aviation Authorities, etc.) in accordance with IAQG 9131 when he finds and/or suspects any nonconformity which affects the product or service already delivered by using a "Notification of Escape" (NoE) Form F-COM-17-040 (or equivalent Form if agreed by the Purchaser).

Req. Core-10.2-14- Scope of NoE

The Supplier shall create a NoE per problem even if several different products (PN) are Nonconforming and even if several programs (HC) are impacted. This rule apply for any kind of supplies.

Req. Core-10.2-15- Lead-time to disclose NoE

For all the quality escape, the supplier shall inform purchaser within 48 hours after escape detection even with preliminary information to inform as early as possible the purchaser.

The purchaser focal point:

contact.supplier-notification-escape.ah@airbus.com

And the purchaser's SCQM.

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General core part: all kind of suppliers

Req. Core-10.2-16 - NoE update

The supplier shall update NoE in case of:

- After preliminary notification.
- On Purchaser request if mandatory data are missing or additional data needed to start NoE treatment.

Note: The Purchaser will validate & send NoE final acknowledgement of receipt to the supplier

Req. Core-10.2-17 – Tier “N” Suppliers

For Tier “n” Suppliers, qualified by the purchaser (Airbus Helicopters), the Tier “n” supplier has to disclose the NoE to the purchaser (Airbus Helicopters) as well as to its customer(s).

c) **Nonconformities detected in service by customer (ISIR, ISQI)**

Req. Core-10.2-18- Major In service Incident

(a) In case of Major in-service incident reported (customers/operators, partner companies, purchaser subsidiaries...) the purchaser send a formal letter to supplier and informs about Incident classification; in order to ensure and continuously improve the safety of our fleet and final customer satisfaction it is necessary that the supplier put in place immediate actions to identify or to help to identify the root cause of the event (such as expertise, theoretical analysis,...) and define appropriate measures to support investigations.

(b) Therefore, when analysis of the Incident reveals a risk that others products with a similar nonconformity could have been previously delivered, the supplier shall disclosed the Quality escape to purchaser.

d) Req. Core-10.2-19- Data exchanges

Specific means for corresponding data exchanges are commonly agreed and **may** vary on form. In case of non-such agreement, purchaser form **will** prevail.

(a) In the case of a request for deviation, this request has to be performed on Form F070-001, to be filled out as per the rules in ER 070-13-06.

(b) In case of Notification of quality escape, the escape has to be disclosed on Form F-COM-17-040, to be filled out as per the rules in IAQG 9131.

10.4 CONTINUAL IMPROVEMENT

Performance objectives are defined in contract Annex E & definitions of supplier main operational performance indicators are defined in ER070 06-01 Appendix F

Req. Core-10.3-01- Audit following Major incident (ISIR or QIR) or NoE related to Aviation Safety &/or Critical Parts/DAL A Equipment

For Nonconformities airworthiness related or product quality escape, the supplier shall perform an internal audit within 6 months after the problem reporting and he will share the audit report and the related findings with the purchaser on purchaser request;

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General core part: all kind of suppliers

Req. Core-10.3- 02 Continuous improvement process

The Suppliers shall fully take into account defects and delivery delays detected by the final customer.

The Suppliers shall inform The Purchaser of the result of the investigation, risk analysis, tests that have been performed as well as the corrective and preventive measures that have been taken and the expected date of completion

The Purchaser could request a SQIP (Supply Chain & Quality Improvement Program) if necessary.

The Suppliers shall routinely inform The Purchaser with regard to the progress of the preventive measures requested by The Purchaser.

The Supplier shall have a process to effectively manage continuous improvement including:

- (a) continuous improvement scope and objectives (target setting),
- (b) continuous improvement organization and structure,
- (c) identification of improvement opportunities,
- (d) follow-up of punctual and continuous improvement actions,
- (e) definition of metrics,
- (f) identification and record of lessons learnt.
- (g) On request, a report including major Aviation Safety & quality events and implemented continual improvement actions **shall** be prepared by the Supplier and submitted to The Purchaser.

Req. Core-10.3-03-Preventive actions

The evaluation of the need of action based on human factors to prevent occurrence of Nonconformities **must** be especially conducted for maintenance activity in destination to the Purchaser

The supplier **will** be able upon request to share with the Purchaser process risk analysis for a given product at destination to the Purchaser; For Supply Chain risk, the use of IAQG 9134 'Supply Chain Risk Management Guideline' is recommended.

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Appendix A: (Equipment) Manufacturers

APPENDIX A:

ADDITIONAL QUALITY REQUIREMENTS FOR (EQUIPMENT) MANUFACTURERS

(Applicable in addition to the general core part)

Terminology:

All programs except NH90

| Terms used | Details |
|----------------------------------|--|
| "Rework to full conformity" | Production environment Way to recover compliance to the design data (No deviation → no concession applicable) |
| "Rework with residual deviation" | Production environment Way to recover compliance to the certification basis (stress, etc...) Permission to use / release by a concession is requested |
| "Repair" | In-Service environment Elimination of damage and/or restoration to an airworthy condition following the initial release to service by the manufacturer of any product, part or appliance (PART 21G subpart M) |

NH90 specificities:

| Terms used | Details | Equivalent Terms determination |
|------------|--|---|
| Rework | Action on a nonconforming product to make it conform to the requirements (ISO 9000) | "Rework to full conformity" |
| Repair | Action on a nonconforming product to make it acceptable for the intended use Permission to use / release by a concession (ISO 9000) | "Rework with residual deviation" "Rework/Repair" |

Working during storage:

Working during storage consists in performing technical operations, in compliance with the Storage Condition Sheet (SCS).

Specific tagging with validity limit date on the part and its packaging **will** be replaced.

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Appendix A: (Equipment) Manufacturers

8. OPERATION

8.3 DESIGN AND DEVELOPMENT OF PRODUCTS AND SERVICES

ER070 06-04 is applicable.

8.3.6 Design and Development Changes

Equipment Change requirement are defined in ER020 04-01-08

Req. App. A-8.3-08- R1 Specific case of non- recordable amendments:

Amendments applied to a referenced Sub-Assembly are allowed, after formal approval by the Purchaser, to be only recorded at the supplier's level."

In this case, the Manufacturer **shall** ensure by its own process the traceability of the amendment concerned to the equipment S/N.

Req. App. A-8.3-10-Rework with residual deviation" and Repair:

If the repair or rework resulting in a residual nonconformity has to be applied, the Manufacturer **will** then request for a concession (ER070 13-06) from the Purchaser to cover the repair or rework with residual deviation. For Blanks manufacturers refer to HS5015.

Req. App. A-8.3-11-"In service":

In an "In service" environment, the design repair solution has to be airworthiness approved as well.

The manufacturer (build-to-spec supplier) shall request for a Repair Approval Request/Repair Design Approval Sheet (RAR/RDAS) as per the procedure ER020 04-01-06 (3rd level maintenance data and repair approval for equipment suppliers), applicable for commercialized H/Cs and NH90 or the ER020 04-01-07 (3RD Level maintenance data approval process for TIGER program) applicable for the Tiger.

Once rework/repair Design Solution has been airworthiness approved it may be introduced in the approved design dossier and associated Maintenance/repair documentation to cover potential new cases.

8.4 PRODUCTION AND SERVICE PROVISION

Req. App. A-8.5-01- process audit: Depending on the criticality of the materials or further to difficulties experienced, the Purchaser **may** request a process audit to be performed by the Manufacturer. The results of the audit **shall** be made available to the Purchaser by the Manufacturer. If needed, the Manufacturer **will** also provide the Purchaser with the list of personnel authorized for the Non-Destructive Tests or welding operations. Suppliers **will** facilitate any evaluation from the Purchaser of their manufacturing process, equally regarding Regulation or Quality Requirements, than Process risks evaluations

8.5.1 Control of Production & Service Provision

First Article Inspection: see "core" §8.5.1

8.5.2 Identification and traceability

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GRFS: General Requirements for Suppliers

Quality Assurance General Requirements

Appendix A: (Equipment) Manufacturers

8.5.2.1. Basic marking for equipment

Req. App. A-8.5-02- (Except when otherwise formally specified) Manufacturers **shall** comply to HS5022 series for AH and MBBN 240 for AHD, and may bear the following inscription on equipment to allow their identification:

- the **Manufacturer's Name** (not mandatory),
- the **Manufacturer's NCAGE Code (MFR NATO Code)** (if requested – mandatory for Tiger & NH90), This above code being mandatory for most of end-users, when such a marking is not possible the supplier **will** ask for the Purchaser instructions.
- the **Manufacturer's P/N**, (for eventual amendment marking see §8.5.2.6.1 c)
- the **S/N**, or **Batch Number** (where required in specification)
- the Manufacturing date (for shelf-life items),
- the **Technical Inspection Mark**),
- for NH90 Program: Airbus Helicopters NH90 Part Number (*)
- the **Operational Soft-Ware(s) Part Number** (if any)

In case of equipment software, the P/N of the Item **shall** consider both hardware and equipment software.

In case of operational software, a specific P/N **shall** be defined in addition to the previous one.

Specific indications, if any, **shall** be written in English language.

Data available at end of the manufacturing (date or Inspection Mark) for convenience **may** be placed in an adjacent separated tagging.

For items in destination to Governmental Programs (TIGER & NH90 in particular) parts **shall** be marked in accordance with MIL-STD-130,

The Purchaser could add complementary marking on equipment if required by some Programs (**Governmental or Commercialized**) in accordance with marking above requirement.

There is no reason to impact the supplier warranty by this additional marking.

Req. App. A-8.5-02b- COTS requirement

Specific marking shall be on the equipment in accordance with AH specifications.

(*) for COTS (“off the shelves”) equipment items to attention of NH90, absence of Airbus Helicopters P/N mention is accepted.

8.5.2.2. Marking of new materials with limited validity, or operated on during storage

Req. App. A-8.5-03 R1:

Any material delivered to the Purchaser **shall** be identified with **as a minimum**:

- the **Manufacturer's Name**,
- the **Mark of Conformity**,
- the **Manufacturer's P/N**,
- the **“Shelf Life start date”**.
- the **expired date or shelf life duration** on a remove-able stick (refer to “small size materials”) to be reported on packaging

Amendment indication **will** be clearly separated from the Manufacturer's P/N. When aside: separated by “/”

Elastomer products **shall** be **moreover** identified with the **Durability Group** (or in defect the **Class**) of the elastomer.

Note: In the particular case of flexible pipes, hoses and piping, refers to EI071 IGC-04-84-105

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GRFS: General Requirements for Suppliers

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Appendix A: (Equipment) Manufacturers

For small size materials or materials where marking would prove destructive or not relevant, once validated by Airbus Helicopters Design Department this information **may** not totally be identified as described above. It **shall** then be partially or not marked on the package or on a mobile tag.

8.5.2.3 Marking on new materials with no expiry date

Req. App. A-8.5-04:

Any material delivered to the Purchaser **shall** be identified with **as a minimum**:

- the **Manufacturer's Name**,
- the **Mark of Conformity**,
- the **Manufacturer's P/N**.

The flexible pipes, Hoses and Piping **shall moreover** bear the following marking:

- the Core Material Type,
- the Nature of the Insulating Material,
- the Pipe Manufacturing Batch Number,
- the Nominal Pressure.

For small size materials or materials where marking would prove destructive, one approved by Airbus Helicopters Design Department it is accepted that this information needs not all to be identified as described above. It **shall** then be marked on the package and or a mobile tag.

8.5.2.4. Marking of material after overhaul

Req. App. A-8.5-05:

Overhauled material (0 hours after overhaul) is subject to the same rules as new material.

For material with identification plate, the Manufacturer will add to the initial plate (with initial P/N, S/N and date of manufacture) a second plate or label specifying:

- "Overhaul",
- Date of overhaul, (final inspection),
- Conformity mark.

It is accepted that the Manufacturer **may** replace the initial plate with a new one bearing, initial P/N, S/N, date of manufacture, plus the above information.

For any material without identification plate, the same information, as defined for material with identification plate, **will** be added in the same way as for new material (see above requirement in §8.5.2).

8.5.2.5 Concessions marking

Req. App. A-8.5-06:

The rules regarding marking of concessions are defined in ER070 13-06 specific documents.
. (See appendix J for Governmental Programs).

8.5.2.6. Work's Trace-ability

Req. App. A-8.5-07:

The Supplier **shall** guarantee that all work performed by his personnel can be traced and the Supplier therefore **shall** implement suitable filing methods.

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GRFS: General Requirements for Suppliers

Quality Assurance General Requirements

Appendix A: (Equipment) Manufacturers

The initial fabrication date & serialization **shall** be conserved

For in-service monitored equipment, the trace-ability record of the equipment complete lifetime is the Equipment Log Card – see EI16-04

If the original Log Card is missing but available data defines the product and its history a Log Card duplicate has to be issued for documentation of operations applied.

If the documents available cannot define the product and its history, the Log Card as well as information concerning overhaul **shall** be duplicated according EI 16-04.

For other Log Card activities: see **Req. Core-8.5-16**

8.5.2.6.1. Marking of the equipment

a) Req. App. A-8.5-08: After a "Bringing into conformity" of equipment

No special marking is applied to the equipment, excepted specific instances e.g. a "Bringing into conformity" associated to a "Restoring the storage validity" or a P/N change.

Whatever the operation for "bringing into conformity", the manufacturer **shall** send the item back with minimum 80% of remaining equipment storage validity duration. It **shall** be formalized through the appropriate marking (confer to "Restoring the storage validity" § b)

b) Req. App. A-8.5-09: After a "Restoring the storage validity" of equipment

For material with identification plate, the manufacturer shall add to the initial plate (with initial P/N, S/N and date of manufacture) a second plate with:

"Restoring the validity" or "Revalidated" (abbreviations shall be approved by the Purchaser when space is limited), Date of "Restoring the storage validity" (mm/yy), Inspection stamp. It is accepted that the manufacturer replaces the initial plate with a new one bearing initial P/N, S/N, date of manufacture and the above information. All other marking process should be validated by the Design Office. For equipment without identification plate, the information defined for equipment with identification plate (see above) shall be added according to Product Identification & Traceability Rules (§8.5.2 of appendix).

Remove-able tagging when specified with limit validity date will be replaced

c) Req. App. A-8.5-10: After a "Change" of equipment

Case of a (recordable) amendment

The following are added on the original nameplate:

- The reference of the amendment embodied (for eventual amendment marking **will** be clearly separated ad mini with "/")

- The inspection stamp.

Case of a modification

- An equipment P/N changes. The original nameplate is therefore replaced by a new plate with at least the following information marked:

- The new P/N,
- The date corresponding to the date of embodiment of the modification, (final Inspection date)
- The original manufacturing date is conserved. Date of Modification is separately mentioned
- The inspection stamp.

d) Req. App. A-8.5-11: After a "Work during storage" by supplier at AIRBUS Helicopters during storage phase

The manufacturer **shall** affix a paper tag (instead of on a plate) in an area not visible by the operator after installation in the helicopter or, if impossible, to a tag attached to the equipment.

This paper tag **shall** bear:

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Quality Assurance General Requirements

Appendix A: (Equipment) Manufacturers

- Manufacturer Name
- Checked on
- Statement of Conformity
- Limit validity date when appropriated

Caution: The same tag **shall** also be affixed to the equipment's package.

8.5.2.6.2. Marking on the packaging

After a "Bringing into conformity" of equipment

No specific marking other than the initial marking is required.

Req. App. A-8.5-12: After a "Restoring the storage validity" of equipment

The date of "Restoring the validity" **shall** be marked in a conspicuous manner on the packaging (and limit validity date when exists).

Req. App. A-8.5-13: After a "Change" of equipment

The marking on packaging is the same as before modification equipment packaging.

Req. App. A-8.5-14: After a "Work during storage" (done by supplier at AIRBUS Helicopters):

The same tag as that affixed on the equipment **shall** be bonded on the equipment packaging.

8.5.2.6.3. Quality records (versus delivery documents)

a) Req. App. A-8.5-15: After "Bringing into conformity"

- After "Bringing into conformity", in addition to "req core-8.5.13", the Supplier shall deliver: the Purchaser Nonconformity duly filled out (cause of the defect, components replaced, technical change),
- Certificate of Conformity regarding the intervention on equipment requested by the Purchase Order:

In the same condition as when necessary for first delivery, the Authorized Release Certificate **will** be enclosed: The Authorized Release Certificate issued for the equipment's first delivery **will** be duplicated (with mention "**rectification work of an item which has been found to be unserviceable prior to entry into service**" or "**maintenance under Part 21 G § 163 d privilege**" and description of operation in "remark" block)

FAA 8130-3: **will** be duplicated in application of FAA 8130-21G § 2-10 a. with same mention as above, "**rebuilt**" being an acceptable alternate wording

Should the work be conducted not at the OEM's facilities, the latter **shall** anyway control it though eventual extension of its Production (or PAH) Organization directly or under specific arrangements

Should, for item under Airbus Helicopters Design responsibility (i.e. "non-TSO/ETSO" or "non-STC") the establishing of a FAA 8130-3 in the above condition is not possible, compensation **should** be made through mention on the CoC "**Rework operation under Airbus Helicopters POA perimeter**"

In any case reworked items with Authorized Release Certificate completed as "repaired" under Part 145/FAR 145 or equiv. perimeter cannot be accepted out of a specific exceptional formal agreement.

- the Purchaser Nonconformity duly filled out (cause of the defect, components replaced, technical charge),

Traceability of reworks

All the reworks traceability information given by the Purchaser has to be recorded and restituted on:

- re-work documentation stating the conformity (CoC, Authorized Release Certificate)
- the product packaging it-self

b) Req. App. A-8.5-16: After a "Restoring the storage validity"

After a "Restoring the storage validity", in addition to "req core-8.5.13", the Supplier shall deliver :

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Quality Assurance General Requirements

Appendix A: (Equipment) Manufacturers

- Delivery note
- Rules for Authorized Release Certificate *accompanying* documents are the same as above proceeding §a) with mention: "restoration of validity conditions". (or equivalent agreed one)
- Certificate of Conformity (CoC) mentioning the intervention as requested by the Purchase Order
- Log Card (if applicable), refer to EI 16-04

Traceability of reworks:

All the traceability information given by the Purchaser has to be recorded and restituted (ex. ICU numbering used for spares distribution):

- on re-work documentation stating the conformity (CoC, Authorized Release Certificate)
- on the product packaging it-self

c) Req. App. A-8.5-17: After a change of the equipment

After a change of the equipment, in addition to "req core-8.5.13", the Supplier shall deliver all the reworks traceability information to the Purchaser; the supplier shall record and restate on:

- re-work documentation stating the conformity (CoC, Authorized Release Certificate)
- the product packaging it-self

- c.a) Case of a change classified as a recordable amendment

If the equipment requires a **Log Card**, its original one is updated by:

- recording the Number of the embodied amendment plus an inspection mark in Table 1,
- recording on the back of Table 5 the carry-over of the operating units and the work designation solely by: "Modified by Amendment No. XXX" followed by an inspection mark.

- c.b) Case of a modification

If the equipment has to have a **Log Card**:

For Commercialized H/C (neither Tiger nor NH90)

- the original Log Card updated by recording on the back of Table 5 the carry-over of the operating units and the designation "Modified - New P/N YYY" followed by an inspection mark.
- The new Log Card firmly attached to the former:
- Records the new P/N in Table 1 with the indication: "Derived from P/N XXX" (the one on the original Log Card).

For Governmental H/C (Tiger & NH90)

In such a case, when Part Number changes, the previous number **shall** be struck through with a single line ensuring it remains read-able. The new ref. number **shall** be written as close as possible to the former one (*applicable an only time, if more, one refers on above Commercialized case*):

e.g.: T463A10T0001 T463A10T0002 ~~or S533F1102104~~ S533F1102103

The details on the part number change have to be indicated in Table 6 "Type of Modification:"

For all programs:

Records on the front of Table 5, the date corresponding to the modification's date of embodiment with the initial manufacturing date and the equipment's operating units corresponding to Table 5 (back) on the original Log Card, followed by an inspection mark.

d) Req. App. A-8.5-18: After "Work during Storage"

After "Work during Storage", , in addition to "req core-8.5.13", the Supplier shall deliver:

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Appendix A: (Equipment) Manufacturers

- Rules for Authorized Release Certificate are the same as above proceeding §a) with mention: **"restoration of storage conditions"**. (or equivalent agreed one)
- Certificate of Conformity regarding the intervention on equipment requested by the Purchase Order

If the equipment gets a Log Card, its original Log Card shall be updated according EI16-04

8.5.4 Preservation

8.5.4.1. Storage, Preservation and Conditioning conditions

Req. App. A-8.5-19 R1:

All precaution against FOD and counterfeit parts **shall** be emphasized at this operation stage

a) Specific rules for "dangerous" products

Handling, storage, preservation, packaging and delivery rules for pyrotechnic materials (delivered individually or with equipment), hazardous products or radioactive material **shall** comply with the applicable national legislations (Safety data sheet, storage category according to packaging, labelling, conditioning and packaging standards etc.).

b) Case of pyrotechnic materials

Should pyrotechnic materials be delivered as components in sub-assemblies, or as accompanying components, the Manufacturer **shall** specify (in same order) on the Release Note of each assembly:

- the UN (United Nations Organization) Number
- the official designation
- the risk category, (**should** be 1.4)
- the compatibility category (**should** be S)
- the Packaging Group (if any)
- the Net Explosive Weight (NeO) in Kg
- the description of pyrotechnic materials,
- the quantity,
- the P/N,
- the ref. of approved Packaging & Authority approval (if any)
- the mode of delivery (in a sub-assembly or as accompanying component),

c) Case of the beacons of distress

The delivery and the transport of beacons **shall** be made **beacon on « off » position** (that is with neutralized internal power, either by disconnection of piles or through switches "RESET" & " OFF ").

8.5.4.3. Preservation of materials

Req. App. A-8.5-21:

On material that has to be closed off, the blank **shall** be so shaped that the part itself cannot be mounted until it has been removed. The blank **shall** be brightly colored and have a large visible collar or fins. The usage of unscrewed he-plugs or transparent or translucent blanks is prohibited.

8.5.5 Post-delivery activities

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Appendix A: (Equipment) Manufacturers

Refer to SOW when existing which **will** prevail

Req. App. A-8.5-22: Service Bulletin

Any proposal of Service Bulletin / Technical Service Letter / Technical Instruction of Execution, issued by the Manufacturer, which has an impact on its material, **shall** be passed on, for validation and / or approval before distribution in the Purchaser Customer Support Management.

Req. App. A-8.5-23: Maintenance Documentation

The Component Maintenance Manual (CMM) related to O and I levels of maintenance & Component Repair Manual (CRM) related to D level of maintenance shall be provided by the relevant Equipment Manufacturer's Department for Airbus Helicopters Design Organization for approval. Same request for Airbus Helicopters Design Organization approval shall apply for any CMM/CRM update.

The CMM/CRM technical conformity and Airworthiness conformance are the responsibility of the equipment manufacturer; it complies with the requirements of the aircraft manufacturer in terms of maintainability, testability and maintenance, structure (relevant referential standard), format (xml or other request).

The Equipment manufacturer draws up the so-called CMM and/or CRM and after their approval, gives the Purchaser the right to reproduce it and distribute it to the Purchaser network and the Purchaser' Customers. All tasks related to 3rd Maintenance level ("D" level) has to be defined and described into CRM and not CMM. The Purchaser is not authorized to distribute.

The Equipment manufacturer is responsible to distribute CRM to the final customers or any other third Party.

When drafting the CMM/CRM, the equipment manufacturer shall comply with the ATA100 standard (paper manual) or ATA 2100 (electronic manual) or ASD S1000D standard for the technical content and the layout.

For each delivery of technical publication (CMM, CMP, User Manual, pilot guide...) or technical publication updates, the Purchaser requires to get a certificate of conformity of the technical publication stating the conformity to the Contract and mentioning that the data inside the technical publication are derived from Airbus Helicopters approved design data in compliance with the applicable type certification basis (e.g. through ECPF, DDP) as per § 21A.61 of the EASA Part 21 regulation or equivalent military regulation (e.g. FRA 21...).

In case of technical publication updates including Repair data as defined by the § 21.A.435 of the EASA Part 21 regulation or equivalent military regulation, the CoC (certificate of conformity) shall also state that technical publication (initial or revisions) include data derived from repair design solutions airworthiness approved by the Purchaser (only applicable for non ETSO/TSO products).

Thus, The CoC shall mention the following sentence:

Either (in case of technical publication without Repair design solutions): "The data contained in the mentioned technical publication reference are derived from Airbus Helicopters airworthiness approved design data, in compliance with the applicable type certification basis."

Or (in case of technical publication including Repair design solutions): "The data contained in the mentioned technical publication reference are derived from Airbus Helicopters airworthiness approved design data in compliance with the applicable type certification basis and are derived from repair design solutions airworthiness approved by the Purchaser".

Req. App. A-8.5-24-Work on new equipment (Known as "First build-up"):

Refer to above § "Bringing into conformity" terminology

Those parts are Type certified not having left the Airbus Helicopters POA Part 21G / perimeter for "new".

BRINGING TO CONFORMITY/REWORK: Action on a non-conforming product to make it conform to the requirements

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Appendix A: (Equipment) Manufacturers

Rework does not result in Concession. Note: on regulation stand-point, "repair" is used only for correction of damage "in service" (PART 145...) whereas, "BRINGING TO CONFORMITY/REWORK" is used in production/manufacturing.

In consequence, all the interventions on such new materials, with ETSO TSO or relevant to EASA DO/PO arrangements (or PMA Assist Letter) **will** be realized in accordance with the approvals of production EASA Part 21 G AMC 21A.163(d) & Appendix I (or FAA PMA §2-10 FAA 8130-21G, or FRA 21G or others EASA agreed equivalent).

The above interventions **may** be for convenience conducted in another facility than that of the OEM installations, they **shall** anyway be under the OEM Production Organization (EASA Part 21G)–or the FAA PAH-direct control or through PO-PO arrangements

For items to be followed in utilization, the eventual flying hours, cycles or timing that were necessary for tests & reception flights conducted before final delivery for operations; those **will** be recorded in the Log-Card for future maintenance. The item **shall** go on to be considered as "new". (Refer to specific paragraphs for documentation and trace-ability for those operating hours which **shall** remain recorded)

For information there are, at the Purchaser, some commercial limits for those flying hours amount to attention to final customers, whatever **should** be those limits, and eventual overpassing of them: it is only a commercial concern under the Purchaser responsibility. They **will**, in no ways, be considered by the supplier for not applying the requested intervention.

For items on Military Programs, considering that several nations are modelling process for military items on similitude of civil processes, suppliers **will** follow same process as for EASA perimeter items

Extracts: **AMC 21A.163 (d) Privileges – Maintenance**

(...)

MAINTENANCE OF COMPONENTS OUTSIDE THE POA CAPABILITY

Such maintenance activity outside the capability of the Aircraft POA holder **may** still be accomplished under the production approval of the original release organization. In such circumstances the engine(s), propeller(s), parts and appliances **will** require re-release in accordance with GM 21.A.163(c) (EASA Form 1).

Records relevant to continued airworthiness or retirement lives, such as engine runs, flight hours, landings, etc., which affect part retirement of maintenance schedules **shall** be specified on any re-release

Reg. App. A-8.5-25 –Special Process:

the initial qualification of special processes is under supplier responsibility (as design owner) and aims to guarantee that the design requirements are met; for surveillance of special processes, either the supplier use PRI NADCAP as other party, or **shall** demonstrate that a surveillance plan is implemented and ensures that the special processes are properly controlled and continuously meet the design requirements. The Supplier **shall** determine additional surveillance activities required to guarantee the final conformity of the Product, justify its decisions to the Purchaser on request, and provide the Purchaser on request with copies of its Nadcap accreditations.

10. IMPROVEMENT

10.2 NONCONFORMITY AND CORRECTIVE ACTION

Reg. App. A -10.2-3- Lead time to disclose NoE Airworthiness related (only for supplier with POA)

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Appendix A: (Equipment) Manufacturers

Each product quality escape has to be evaluated on airworthiness and aviation safety aspects by the supplier and when the deviation could lead to unsafe or potential unsafe conditions the supplier shall inform the competent Aviation authorities according to PART 21G requirement 21.A.129.

Req. App. A -10.2-4 - For equipment in service, ER050 19-102 applies,

In case of nonconformance exported out of Production Organization Approval (POA), a Vendor SB need to be launched according to the ER050 19-102, to send to following email:

- support.sb-vendor.ah@airbus.com

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Appendix B: Sub-Contractors

APPENDIX B:

ADDITIONAL QUALITY REQUIREMENTS FOR BUILD-TO-PRINT AND EXTENDED WORKBENCHES

(Applicable in addition to the general core part)

Req. App. B.-01 Electrical product

For electrical Assemblies & Components, the supplier shall comply with additional requirement in ER070 06-03-04

DEFINITION, ABBREVIATION, TERMINOLOGY (proper to this appendix)

The word “supplier” in the present Appendix means build-to-print and Extended Workbenches (abbreviation: E.W). (See doc. Core § 3.3):

“build-to-print” & “Extended workbench” definition: see core part §3.4.2

Mechanical parts: means, machined with material removing from massive raw material

Work-package: means, upper assembly kit constituted with product of different technologies

1. GENERAL PRINCIPLES

Req. App. B.1-01a - sub-contracting rank limitation

The supplier **shall** check that the sub-contracting level is limited to second rank

Third rank is acceptable only for special processes and in some specific formalized cases, the Purchaser **may** accept and extend to one more level (for ex. Major tier).

Note:

The Purchaser is considered as level zero (rules are detailed in § 7.4.1).

The Purchaser supplier monitoring rules are based on the 4 main steps:

- Approval
- Qualification
- Product/Supplier qualification (Skills, Special processes, FAI)
- Supplier performance assessment (Discrepancies management, Monitoring)

Skills: They are associated to “organizational processes” of the supplier. The skill qualification has the aim of confirming the ability of the supplier to control those “organizational processes”, and mitigating associated risks (in terms of aviation safety, quality, costs & delays).

The different “skills” used for subcontractor and Extended-Workbenches are:

- Skill 1: Supply of raw materials & components
- Skill 2: Subcontracting manufacturing activities
- Skill 3: Management of key non-special process sub-tiers (not yet implemented)

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Appendix B: Sub-Contractors

- Skill 4: Management of special process sub-tiers
- Skill 5: Management of critical parts
- Skill 5A: Management of important blanks
- Skill 6: Work preparation (Manufacturing engineering)
- Skill 7: Distortion check of interchange-ability tooling

Skill 1, Supply of raw materials & components: Ability to supply raw materials and components (e.g. standard parts, industrial goods ...) from a manufacturer or a distributor, from needs management to stocking in accordance with the Purchaser requirements.

- Ability to perform incoming inspection and manage non-conformity.
- Ensuring traceability of raw materials and components, and keeping record in accordance with the Purchaser rules.
- Ability to take into account the Purchaser needs and forecasts.
- Ability to respect storage conditions & stock management.
- Ability to procure raw materials and components qualified by AH through HQPL

Skill 2, Subcontract manufacturing activities: Ability to subcontract Special Processes and specific activities executions to the Purchaser qualified subcontractors and Basic Non-Special Processes activities execution to self-authorized subcontractors.

- Ability to cascade the Purchaser requirements (technical and procedural documentation) and forecasts to suppliers.
- Ability to perform incoming inspection on subcontracted activities.
- Ability to manage logistic flows (transportation, packaging...).

Skill 4, Management of Special Process sub-tiers: Ability to assess, select, perform qualification activities & monitor Special Process subcontractors according to ER070 06-36.

- Pre-requisite: Eligibility to skill 4 according to ER070 06-36.
- Ability to assess and select robust special process subcontractors.
- Ability to define and perform qualification program according to the Purchaser requirements.
- Ability to perform special processes audit (for qualification and monitoring) according to ER070 06-36.
- Ability to prepare and submit qualification file to the Purchaser Special Process Management Team (Qualification decision taken by Airbus Helicopters).

Skill 5, Management of critical parts: Ability to manage / manufacture critical parts.

- Ability to manage manufacturing documentation related to critical parts.
- Ability to implement and maintain a training process related to critical parts with qualification of staff.
- Ability to create and manage manufacturing layout.
- Ability to manage changes concerning manufacturing parameters in frozen operations according to the Purchaser procedure.
- Ability to secure frozen parameters in workshop.

Skill 5A, Management of important blanks: Ability to manage / manufacture important blanks according to HS5015.

Skill 6, Work preparation: Ability to define production process (production working instructions) for manufacturing, inspection and storage, based on the Purchaser requirements.

- Ability to read and analyze data pack (paper and numerical), check feasibility versus means of production and process capability.
- Ability to edit working instructions.
- Ability to edit incoming and outgoing inspection instructions.
- Ability to communicate with the Purchaser on technical subjects (request for proposal, concessions, etc.).

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Skill 7, Distortion check of interchange-ability tooling: Ability to perform distortion measurements on interchange-ability tools through qualification and monitoring of operators and documentation management.

A supplier with qualification for skills 1 and 6 is named "Subcontractor"

Reminder: in usual language:

Subcontractors qualified Skills 1 & 6 are called, "Genre 6"

Suppliers qualified Skills 1 or 6 or without skills are called "Genre 8"

Req. App. B.1-01 extended workbench

For execution of extended workbenches activities, the supplier shall comply to purchaser's work orders. Extended workbench (EXW) supplier is not allowed to subcontract any work to a 2nd-tier supplier

Safety classification: see Core part of this document §8.1.3

7 SUPPORT

7.2 COMPETENCE

Req. App. B-7.2-1 Competence

Within each activity, all the personal skills and experience required to correctly perform the tasks shall be **defined**. The personnel shall be **evaluated** against this list and any possible lack of qualification corrected through **training actions**.

Personal qualification shall be granted only after formal approval by the Supplier's referent that the personnel are capable of adequately achieving the concerned tasks. This qualification **shall** take the background knowledge, the experience and the training into account.

The evidence of qualification **will** be **recorded** and **archived**.

When qualified, periodic (no longer than every two years) knowledge and evaluation tests **will** be implemented for the above mentioned operators and inspectors.

For critical parts: see core §7.2

Req. App. B-7.2-3 -For Distortion control of interchangeability tool

Supplier's personnel involved in specific task, using distortion control or interchangeability tool, **shall** be qualified according to Purchaser's process EI070 06-006. Suppliers involved in this task shall be qualified for skill 7.

7.5 DOCUMENTATION INFORMATION

Req. App. B-7.5-1 –Applicable documentation

The Supplier shall apply the applicable documentation identified in Purchase Order & in Contract

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L-DEV-02-011 is the Global Replacement List of replaceable standard part authorized by the Purchaser.

Remark: Any applicable STL or CDS prevails on drawings.

For suppliers not operating in the language of the ordering the Purchaser unit, in addition to a local language understandable by operators, production documents **will** be noted with sufficient additional information in English language, at minimum for the documents required to be archived according to ER070 16-01.

8 OPERATION

8.4 CONTROL OF EXTERNALLY PROVIDED PROCESSES, PRODUCTS, AND SERVICES

Req. App. B-8.4-1-flowdown to sub-Tiers

The supplier **shall** flow down and impose the requirements of this document to all its sub-Tiers.

The supplier **shall** request and obtain from his own suppliers the same evidences of document conformity as those requested by the Purchaser.

In the Purchasing orders to sub-Tiers, the supplier shall refer systematically:

- Part Number/ Material designation, Description of Task
- Main Procedure and/or the Purchaser requirements (moreover all rights of access)
- The relevant Technical applicable data (e.g. ASNA, ECS, drawing, STL/CDS, Storage Condition Sheet, material specification) with applicable issue index – note: for “international Standards” issue index is not requested.
- Documents for deliveries (CoC, FAI and Authorized Release Certificate if necessary, ATR on request...),
- Safety class

Note: For any deviation: see §2.

8.4.1 General

In this document, Tier 1 is the Purchaser direct supplier (1st rank), Tier 2 is the Purchaser_Second-rank supplier.

Req. App. B-8.4-2 Second-rank supplier (only for BtP)

On the Purchaser request, the tier 1 supplier **shall** provide with the industrial scheme (included process risk analysis, overview of used sub-tier, flow chart, key characteristic, milestones.....).

This industrial scheme **shall** be agreed by the Purchaser

A supplier is authorized to subcontract when qualified for skill2.

A supplier is authorized to purchase raw material & components when qualified for skill 1

Req. App. B-8.4-3a Special processes & specific activities (only for BtP)

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Special Processes are defined in EI021 HS5011

Tier 1 supplier shall select from L 030-03-001 the qualified "Special Process/ Tier 2 supplier" couples & the qualified "specific activities/ Tier 2 supplier" couples.

The initial qualification of contractors is under the Purchaser responsibility; it is formalized by Qualification Report issuance regarding the Process / Sub-Contractor couple.

If the supplier is involved in one of the Pri-NADCAP families of Special Processes, the supplier **shall** gain and maintain the Pri-NADCAP accreditation, identifying the Purchaser as Customer (design owner).

For material involving different activities (e.g.: work package....) if the supplier is not authorized for one of the entrusted activities, the supplier shall be qualified for skill 2 and use a Tier 2 / Tier 3 supplier listed in L030 03-001 (or especially approved by the Purchaser) for the concerned specific activities.

Information special processes delegation:

Purchaser policy is that all eligible Special Processes which get recognition from Airbus Helicopters will be conducted under PRI-NADCAP accreditation

For Special Processes under Pri-NADCAP accreditation, the Purchaser use Pri-NADCAP surveillance.

List of accepted Pri-NADCAP Special Processes (see Pri-NADCAP families in <https://fr.p-r-i.org/nadcap/>) is mentioned in appendix K.

The Purchaser, in accordance with the provisions described in ER070 06-36, can use skill 4 identified tier one suppliers in the qualification and monitoring process of special processes implemented by their lower tier suppliers.

Req. App. B-8.4-4 a Quality requirement for procurement of Standard product (only for BtP)

When qualified for skill 1, the Tier 1 supplier **shall** procure Standard products to qualified manufacturers according to the latest HQPL (Helicopter Qualified Part List), or to approved distributors as listed in a file accessible into HQPL webpage, covering:

- metallic material,
- non-metallic raw materials & chemicals,
- fasteners, assembling parts, accessories (screws, washers, clamps, SFICI...)
- for electrical component

The supplier shall not procure Standard Fasteners in critical installations (SFICI) through distributors.

When the Tier1 supplier wants to procure material from a manufacturer not listed in above mentioned reference lists, the supplier shall:

- request the authorization to procure, using the template SRfD or F070 018 (see Req. Core-10.2-03a),
- receive a formal agreement from the Purchaser before any procurement and
- take actions to check the material conformance, the compliance "material to manufacturer" & the integrity of the material (Shelf Life, Temperature, Damages, etc.).

When the Tier 1 supplier wants to procure to a distributor not in this approved distributors list (in HQPL), the supplier shall:

- select the distributor according to their internal rules & requirements under the following prerequisites:
The selected distributor shall be certified IAQG 9120 and inform the Purchaser,

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- formally conduct Surveillance of this Tier 2 distributor & inform the Purchaser

Req. App. B-8.4-4 b Standard Fasteners used in critical installations (only for BtP)

Standard fasteners in Critical Installations (SFICI) are identified in HQPL.

Supplier Tier1 shall request & archive fasteners "EN10204 type 2.2" CoC/Test Reports and "EN10204- type 3.1" Raw Material Inspection Certificates (see Annex L).

8.4.2 Type and extent of control

Req. App. B-8.4-5a Incoming inspection

The supplier has at least to:

- Analyse with evidences the certificates of conformity and check the equivalence between the specification to which the material supplier is committed and the specification on the order.
- Record its systematic analysis of the test results included in the supplier test reports with respect to the specification (for raw material, and semi-finished products).
- Check with evidences the marking in accordance with the Purchaser requirements.
 - Check Concession marking and request for approval if any.
 - Verify Manufacturer name
 - Check presence of Inspection stamp
 - Check mention of Part number & serial number (if any)
- Inspect integrity of Packaging condition

In case of non-conformities, in accordance with IAQG 9100, the supplier **shall** either segregate the batch(es) in a properly defined dispute zone than affix on the non-conform product label the indication "non-compliant", until the resolution of the issue.

A) Req. App. B-8.4-6 Additional requirement to Req. App. B-8.4-4 for procurement of chemicals, composites semi-products (only BtP)

Scope: see HS9012 (e.g, prepregs, adhesives film, bonding primers, paste adhesives, sealants, dry fabrics, honeycomb...)

Control of externally provided processes, products, and services

For any necessary storage revalidation tests the supplier shall contact Airbus Helicopters LMP.

Shelf life extension: For any request to extend the shelf life of chemicals raw materials, reduce tests must be carried out on each batch concerned and according to the standard used. This is reduced tests as well as the COC will be sent to support.materials-processes.ah@airbus.com for acceptance request according ECS9100

Incoming inspection

- Delivery Logistic Conditions
 - Check that items have been delivered & transport in good conditions (refer to material specification & ECS2040)
 - When thermo recorder is required, it has to be analyzed;

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- Packaging shall be undamaged. For cold semi-product the bag shall be sealed.
- **Marking, identification** (including shelf life aspect)
Marking of semi-product manufacturers shall be checked as per material specification and EI071 IGC-04-81-105 "Marking and presentation of pre-preg".
- **Administrative checks:**
 - To check that the pair semi-product / manufacturer has been Qualified (refer to AIRBUS HELICOPTERS qualification product list)
 - To check presence of manufacturer test report
 - To check that test result complies with material specification*
**systematic when tests required / not systematic when no tests required - to be justified by subcontractor risk analysis*
- **Technical acceptance test:**
For this activity, subcontractors which perform incoming acceptance tests shall be qualified by Test Laboratory as per HS5011.
 - Acceptance tests to be performed at incoming inspection are defined in the material specification (DO requirements). Reduced tests can be authorized in case the prerequisites are fulfilled, as per ECS9100.
 - If no tests are required, the PO (the subcontractor) will define the level of incoming inspection to be implemented according to his risk analysis results.

Storage condition

As per material specification
Control of production and service provision shall be done.

In production

- To set up visual inspection on each batch as per ER070 06 02 06 (§3.10.3 & appendix 1)

Airbus Helicopters applicable Manufacturing Instructions EI and Materials ECS

Archiving: the supplier shall archive the tests according ECS9100 (Chapter "incoming data from the supplier (Ttest)) and keep this documentation up to date according to the monitoring table and send at least once a year to the LMP side support.material-processes.ah@airbus.com.

B) Reg. App. B-8.4-7 Additional requirement to Reg. App. B-8.4-4 for procurement of metal semi-products (sheets, bars, tubes...) (only BtP)

Control of production and service provision (Incoming inspection by supplier -technical checks)

- aspect check on each batch (check for impacts, scratches, oxidation, etc.)
- supplier marking check (marking type, grade, condition, standard, batch, supplier identification) as per referred IGCs at AH (Instructions Générales de Contrôle) or others applicable document (see list of applicable document)
- dimensional check for thin metal sheets (≤ 6 mm), tubes and sections

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- mechanical tests:

The supplier **shall** define an incoming inspection plan including at least Hardness tests completed with electrical conductivity on aluminium alloys. Frequency & periodicity **will** be formally determined by the supplier.

Note 1: the supplier **shall** identify raw material bars with a diameter ≤ 16 mm by means of a color code and/or metallic labels (due to absence of marking on small diameters).

C) Req. App. B-8.4-8 Additional requirement for procurement of screw, bolt, nuts.... (only BtP)

For AH only

For material specified by AH (EC drawing & P/N) additional requirements are defined in QAE 06-02-04.

E) Req. App. B-8.4-10 Additional requirement for procurement of blanks allocated "Genre 6" (only BtP)

Airbus Helicopters is responsible for the pair blank / Supplier qualification.

The supplier **shall** procure the relevant qualified blank. Supplier cannot procure blanks which are under qualification.

- Modification of the process layout from the blank supplier : see ER070 04-06**

- Restart of delivery see ER070 06-11**

F) Req. App. B-8.4-11 Exceptional process: Blanks under qualification - Cut-up "under reservation" (square mark) only with the Purchaser authorization (only BtP)

Process authorized only when blanks are procured by the Purchaser ("Genre 8").

In the case of blanks pending qualification process, these blanks **will** be under temporary deviation; the supplier **will** not deliver its subcontractor without formal the Purchaser approval.

This process **may** allow first beginning machining blanks in the waiting of completed qualification results. This process **must** only be applied after the Purchaser authorization, for some capital reasons (timing for ex.) and once criticality analysis conducted.

The supplier of blanks **will** provide AH the blanks with a validated TD and marked with the TD number by ink and/or sticker. He had to mention on his Test report or CoC for each reference pending FAI validation:

"Caution non-qualified blank: pending AH validation- Parts under TD n° XXX"

Manufacturing launching with « Cut-up under reservation » is an industrial risk under the sub-contractor responsibility.

Corresponding delivery documentation **will** have to bear a provisory (AH: square) stamp marking put by the Purchaser; A temporary deviation is required and **will** follow the part. This mark (stamp and the TD number) **will** be transferred by the supplier at Cut-up phase and **must** be removed and replaced by its definite stamp before delivering the parts (qualification completion of the blank to be checked from the Purchaser). The TD associated **will** be cancelled in the system. This process **will** also be applied by the sub-contractor on his routine card (see flow chart hereafter).

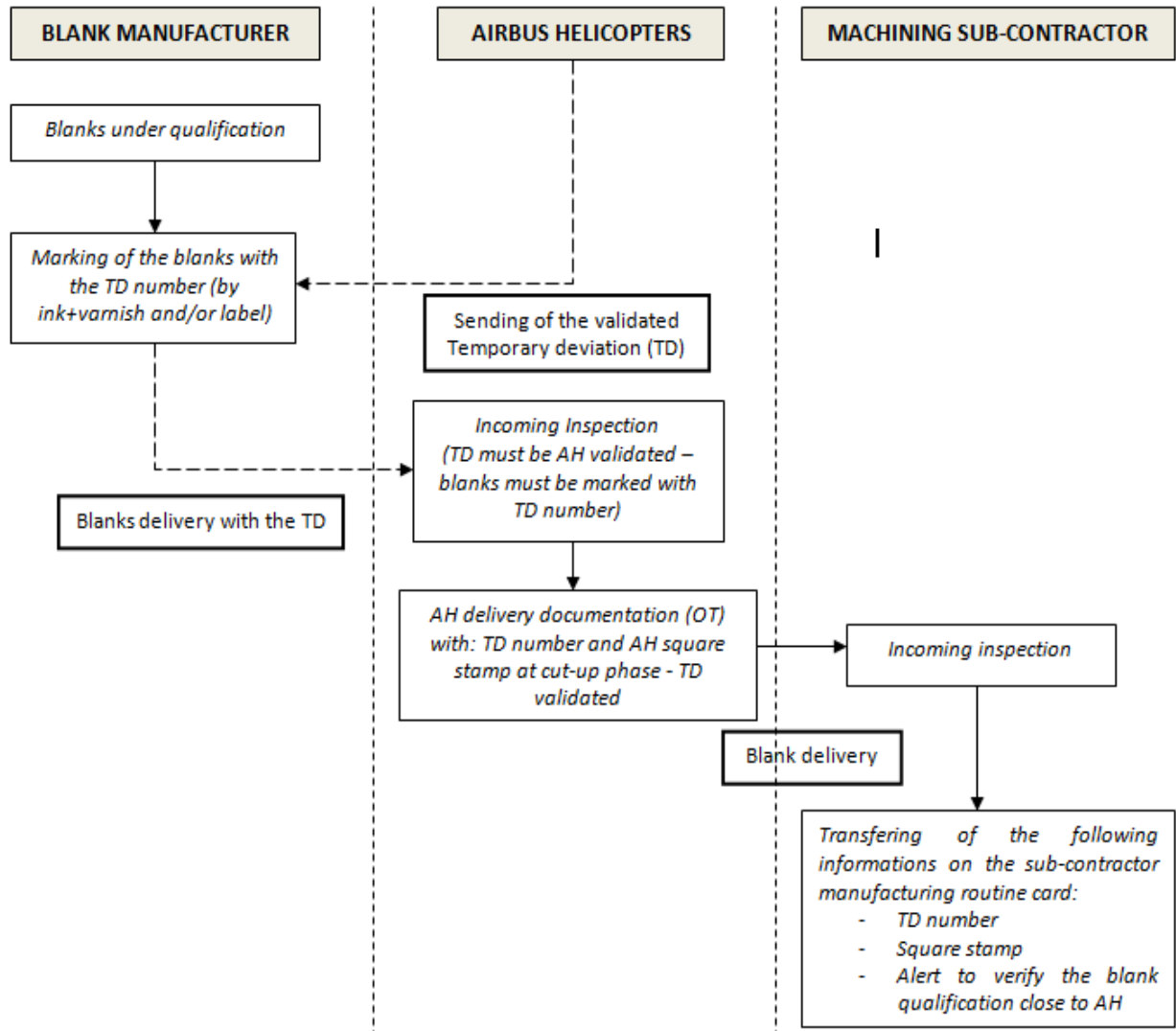
A manufacturing file with a cut-of under reservation **must** not be split

Temporary deviation flow chart

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Blank qualified: TD must be cancelled by AH

Blank not qualified: Concession on the machined part

See EI021 HS5015.

Control of production and service provision (Incoming inspection by supplier)

The supplier **must** draft up a counter-acceptance layout from the test data sheet of the blank. This layout **must** clearly explain the inspection for:

1) Delivery documents

- Test Report (mechanical characteristics, etc.),
- Dimensional Inspection Report (only rough castings for critical parts),
- X-ray inspection file (See EI021 HS5015).

2) The following information in the Supplier certificates/Supplier Report

- Blank Part Number,
- Safety Class category of the Blank,

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- Metallurgical grade + delivery condition,
- Pair basic metal/generator (raw material supplier) for forged products (frozen for critical blanks),
- Type of used Semi-product (bar, bloom, etc.) for manufacturing the blank (frozen for critical blanks),
- Serial number if applicable or batch Number according HS5022.30,
- Homogeneity check (hardness and/or Sigma test) in accordance with HS5015.20,
- Mechanical properties (Rm, Re, A%, KCU etc.) in operating conditions,
- Chemical composition of the original material,
- In case of repairs, indicate "Part repaired by welding" for cast blanks, with a chart locating the repairs. (Letter "S" on cast blanks repaired by welding)
- For Critical blank mention "Part in accordance with ER 070 04-06 manufacturing file Ref. xx (Issue yy)"

3) The following data, when existing:

- Supplier's hardness test mark.
- Casting No of batch(es)
- Grade and condition,
- Manufacturer's monogram,
- Protect corrosion according HS5049,
- Appearance of the blanks (no knock, scratch, oxidation...) particularly those areas that remain as rough on the finished part
- Conditioning description

4) The presence of semi test part of the batch for forgings and of test coupons for castings.

Remark: For forgings, if the batch has been delivered in two times, no semi test part **will** accompany the second delivery of the batch. This information has to appear on the CoC of the blank supplier "semi part test already delivered through PO n° XXX".

8.4.3 Information for external providers

Reg. App. B-8.4-13 The subcontractor **shall** get all standards and/or drawing related to the products to be procured. If neither the order nor the definition documents refer to standards, the subcontractors **shall** ask their focal point at the Purchaser for the reference of the applicable standards.

8.5 PRODUCTION AND SERVICE PROVISION

A) **Reg. App. B-8.5-2** In cases when Parts or Raw material are provided by the Purchaser

The Supplier **shall** check referring to the Transfer Sheet (delivery doc.) and/or "list of components" enclosed to the purchase orders, and/or the Delivery Note:

- material or product identification,
- grade and condition (administrative check for metal products),
- batch N°, or serial N° of parts or blanks if applicable,
- quantities and dimensions,
- packaging condition,
- material validity state (including transport conditions...),
- inspection stamp presence on the Purchaser Transfer Sheet or on the Purchaser CoC / Delivery Note (For AH/AHD: following EI070 08-005)

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In case of detected non-conformity, the Supplier **will** notify the Purchaser with indication of all trace-ability data (among others: material indication, batch or serial n°, eventual manufacturing file ref...) and **will** wait for specific directive before any proceeding.

Raw Material cut up step

The cut up task on the Purchaser manufacturing file **shall** be stamped once the raw material conformity (dimensions, grain flow direction, material appearance, marking and trace-ability) has been checked.

B) Reg. App. B-8.5-3 in case when Manufacturing or Overhaul file is provided by the Purchaser & supplier not qualified for skill 6 (work preparation)

Manufacturing/follow-up data sheet

The supplier **shall** strictly apply the Purchaser routing manufacturing file.

Any change of manufacturing file has to be forwarded and accepted by the Purchaser.

(Excepted when on Purchaser request, the parts are delivered partly finished for the concerned phases).

The manufacturing file **shall** be duly filled in, stamped and forwarded with the product delivery.

If the raw material is supplied by the Purchaser, for the material cut up the information of traceability **shall** be ensured and mentioned on the manufacturing file (see §8.5.2).

The following additional requirements for **mechanical parts** are requested:

- On the manufacturing file, the following information **shall** be included:
 - Transfer Sheet No (OT),
 - Cast No if applicable,
 - Batch Number if applicable,
 - Parts Serial Number if applicable,
 - Only one single raw material batch Number shall be used per manufacturing file.
 - If FAI requested : see ER070 06-11

Caution: For metal parts with grain flow direction specified on the drawing, the Supplier **shall** mention it on the material cut up phase, and a check for this grain flow direction **shall** be included during machining phases (see EI 070 10 003).

C) Reg. App. B-8.5-4 When Manufacturing file is provided by the Purchaser for supplier qualified for skill 6:

The manufacturing file does not need to be forwarded with the product delivery.

D) Reg. App. B-8.5-5 In case when Manufacturing file is written by the supplier

Supplier has to be skill 6 qualified to write and validate manufacturing files.

Industrial file implementation

For AH part, the supplier **shall** take into account AH requirements described into:

- EI070 10-003 "Situation of inspection work in the manufacturing and overhaul process for sheet metal parts"
- EI070 10-004 "Inspection plan for manufactured composite products"
- EI070 10-021 "Installation inspection plan for dynamic components"

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- For electrical product : L-DEV-03-001 « List of technical check by activity » & G-DEV-03-036 « Inspection plan for electrical products »

The supplier's authorized personnel to validate the processes are those:

- trained and qualified, on in-house procedure based on the Purchaser requirements and specificities (e.g. for AH: protection code, marking code, DMR, ACI, STL).

The supplier **shall** periodically get assurance that personnel know and apply the Purchaser rules for implementing manufacturing files

F) Req. App. B-8.5-7 In cases when tooling (the Purchaser property) is provided by the Purchaser

The Supplier **shall** manage and maintain a purchaser tooling list & make regular tooling inventory. The supplier is responsible for the conservation in good condition of this tooling in order to assure the conformity of the produced part (eg scheduled inspection).

G) Req. App. B-8.5-8 Specific requirements for machining

Electro-erosion or laser machining, Waterjet Cutting

Electro-erosion or laser machining processes on helicopter parts (incl. marking) in the finishing phase is prohibited; it **may** be applied for machining blanks. In this case, a representative specimen (same material & thickness) **shall** be forwarded to the Purchaser Materials Laboratory so that the minimal reservation to keep can be determined and related conditions (parameters, specific instructions...) for application can be validated.

Edge Break

Unless otherwise indicated on the drawing or the Purchaser Work Instruction(s) and no reference to the ASN 032.03, all external sharp angles/edges shall be blended to a radius of 0,2-0,3mm and the interior angles machined to a radius of 0,2-0,3mm

H) Req. App. B-8.5-9 Specific requirements for supplier using interchange-ability tools

For AH:

Tools subject to interchange-ability (the list of tools is managed by AH Tool department) are covered by the general rules defined in EI 09-03.

Two categories of tools are to be taken into account:

- Interchange-ability tools for "large assemblies" Bottom Structure (Forward / Rear), Intermediate Structure, Upper Structure (Forward, Centre and Rear), Tail Boom, Fenestron, Horizontal Stabilizer, Pylon, Upper Fin, Cabin Door, important class products (e.g. class 1), critical class products (e.g. Vital Parts).
- Interchange-ability tools for "small assemblies" (assemblies not listed above).

Interchange-ability tools can be manufactured only by suppliers formally authorized by AH for "Manufacturing interchange-ability tools and jigs" in accordance with the assembly classification (large / small). Manufacturing includes design, manufacture (or prime contractor ship), upgrade/modification, and checking tool conformity, comparing it with its definition. The authorized suppliers are listed in repertory L030 03-001.

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"General condition" inspections concerning all the tools are at the charge and under the responsibility of the supplier. This inspection **shall** be anyway carried out and demonstrated each time before tool utilization.

The wear checks concern all the interchange-ability tools and are also at the charge and under the responsibility of the supplier.

Checking Period for serial tools:

- four years if tool is only check by wear inspection
- two years if tool is check by distortion inspection. In this case, control **shall** be performed three months before distortion inspection.

Repair tools wear inspect every four years. For tools check by deformation inspection, these inspections **shall** be performed three months sooner.

These checks are to be performed on the basis of the tool drawings provided by AH Tools department, on request. These requests are to be formalized by the supplier three months before each time limit is reached.

These checks are to be materialized by:

- inspection reports (which can be the tool drawings annotated with the values found) filed by the supplier with one copy sent to AH (tools department)
- follow-up label validation for the wear checks, by the supplier.

Should the check reveal a non-conformity concerning the tool, the subcontractor **shall** send a request for approval to AH tools department in order to receive instructions concerning actions to be taken.

H1) For interchange-ability tools subject to distortion checks

These checks **shall** be performed by AH or by personnel qualified by AH for "Checking distortion of interchange-ability tools and jigs" The maximum periodicity for these checks is 2 years.

The supplier **shall** contact AH tools department at least 6 months before these validity limits checks are reached.

H2) Setting into service an interchange-ability tool:

When an interchange-ability tool is at first set into service, it is certified with a pending stamping mark keeping in mind that interchange-ability demonstrations have not yet been finalized.

However, the assemblies manufactured using these tools can be certified by the supplier provide they are delivered to AH in accordance with the Delivery Report procedure described in this document, in order to indicate: "Assembly manufactured with non-validated interchange-ability tool".

Once the interchange-ability demonstrations have been performed and are compliant, the tools are validated by AH and the assemblies resulting from these tools can be normally delivered.

H3) Relocation of interchange-ability tools anchored to the ground

At least 3 months before moving a tool, the supplier **shall** contact AH tools department in order to define the conditions and scheduling for this relocation.

No tool modification made on the basis of a drawing under the Purchaser' responsibility is possible without the prior formal approval from AH tool department.

H4) Toleranced bores

Checking toleranced bores (J6, J7, H6, H7, etc.) with plain cylindrical plug gages is not recommended (out-of-round cannot be checked); instead flat gages or plug gages with flats are to be preferred.

8.5.1.2 Validation and control of special processes

See general requirement Req. App. B-8.4-3a **Special processes & specific activities**

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Process Monitoring

At any time, the supplier **should** be able to provide evidences that the Purchaser qualification is maintained. Periodically, upon the Purchaser request, the supplier **shall** produce an inventory of all its qualifications. The supplier's quality department **shall** periodically conduct a monitoring audit program for the qualified processes.

Reg. App. B-8.5- 11 NDT requirement:

(a) All the NDT procedures (general, work instruction, specific instruction sheet...) shall be:

- written by a NDT Level 2 certified EN4179/NAS 410 in the relevant method
- technically validated by a NDT Level 3 certified EN4179/NAS 410 in the relevant method. The Supplier is technically responsible for the compliant application of the method.

If the Supplier does not have an internal Level 3, this could be subcontracted to an outside agency Level 3 certified EN4179/NAS 410.

(b) NDT Suppliers shall have an internal procedure validated by the Responsible Level 3 for the qualification, certification and management of their NDT operators according to the requirements below:

- Operators shall be certified in accordance with EN4179 or NAS410. The evidence of this certification shall correspond to one the following requirement:
 - Certification of NDT operators by the country's National Aerospace NDT Board.
 - Accreditation of the Supplier by NADCAP, in the NDT field, meaning that the NDT operator certification system complies with EN4179.
- Level 1 limited certification is not recognized by the Purchaser
- If the Supplier does not meet one of these two conditions, an audit of the certification system will be carried out by the Purchaser before qualifying the NDTs used.

The Purchaser requirement used for this audit will be the NADCAP AC7114 + AC7114/S baseline (Purchaser supplements).

8.5.2 (Product) Identification and Trace-ability

Supplier Identification AH/AHD code

A supplier identification code is given by AH/AHD when;

- ♦ the supplier gets no individual code
- ♦ for class 1 part at AHD

Reg. App. B-8.5-12 Supplier Identification The supplier **shall** provide to the Purchaser his code identifying its company (and its sub-tiers) on its inspection stamps, and the one used for serial numbers (component individual number) if requested on drawing.

When a new supplier AH/AHD code is the same that the one used by another supplier likely to perform the same service or to manufacture an identical product, the Purchaser can ask the supplier to change his code. The supplier cannot change his code unless agreed by the Purchaser.

Reg. App. B-8.5-13 Marking

the Purchaser corresponding NCAGE Code (NATO Code) **shall** be systematically marked according the drawing -refer to "Log Cards" § for the Purchaser NCAGE Code (NATO Code) indications- accompanied with the Purchaser Part Reference & Manufacturing file reference

- Airbus Helicopters Deutschland Donauwörth NCAGE Code: C0417
- Airbus Helicopters Marignane NCAGE Code: F0210
- Airbus Helicopters Spain AHE NCAGE Code: 274BB

Items in destination to Governmental Programs (TIGER & NH90 in particular) the marking shall conform to MIL-STD-130.

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For all other programs in destination, in absence of any other requirement in drawings or contracts, EI021 HS5022 for Airbus Helicopters Marignane and subsidiaries & MBBN 240 for Airbus Helicopters Deutschland GmbH shall be followed,

Req. App. B-8.5-14 Manufacturing trace-ability

When the parts are serialized, the component individual number **shall** be preceded by the supplier's identification code registered at the Purchaser Supplier Quality department.

8.5.4 Preservation

Handling, Storage, Packaging, Preservation and Delivery

Req. App. B-8.5-15a Storage & Condition requirement

For material with limited shelf-life or material subject to periodic action during storage, the supplier shall guarantee Storage & Condition Sheet (SCS) application

Req. App. B-8.5-15 Raw Material Storage

Raw material **shall** be properly stored to prevent any mix-ups, deformation or damage (buckling, scratches, marks, corrosion, etc.) throughout the full storage period.

Raw material which belongs to the Purchaser (as customer supplier item) **shall** be clearly identified

Admittance to the store warehouses **shall** be restricted to nominated persons.

All unused material surplus (if any) **shall** be identified then stored with the original identification document (Transfer Sheet or Delivery Note / CoC).

When there are no the Purchaser specifications of shelf life, the original manufacturer requirements are applicable.

Accompanying documentation

Certificate of Conformity (in French: Declaration of Conformity) **shall** mention ad minima: see core part §8.5.4.3

Log Cards

See general requirement.

If the Subcontractor delivers product with a Log Card, Table 1 **shall** indicate the following

Manufacturer's NCAGE Code (NATO Code) (except for NH90 –requirement see Appendix J):

for AH: F 0210

for AHD: C0417

for AHE: 274BB

And the manufacturer's name (AH or AHD or AHE).

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Req. App. B-8.5-16 Delivery Report (French "PVL")

In case of a product delivery is subject to a Delivery Report, each product **shall** be identified with the following text in the language where the product is delivered;

"Warning product submitted to Delivery Report n° XXXXX"

Mention of this **shall** be indicated on the Certificate of Conformity and on the delivery note

The Delivery Report, as per Form F070 005 (for AH), **shall** be forwarded with the parts in the following cases:

- Non-finalized concessions.
- Non-finalized requests for approval.
- Missing Parts.
- Operations remaining to be performed (Product delivered unfinished at the Purchaser request).
- Any deviation on raw material or components delivered by the Purchaser.

The supplier is only authorized to deliver the concerned products once the Delivery Report is validated by the Purchaser (production & quality).

For electrical assemblies, the form to be used: see ER070 06-03-04

For product center "Rotor & Transmission", the form to be used is F070 216

An ATR is only to be provided under specific requirement and is not to be systematically enclosed.

Systematic request for Governmental Programs does not apply for here concerned subcontracted items

8.6 RELEASE OF PRODUCTS AND SERVICES

Req. App. B-8.6-1 Inspection and testing

In the case where the Inspection Plan (manufacturing files with inspection phases) is not supplied by the Purchaser,

The "Engineering" authorized supplier **shall** draw up an "Inspection Plan"

For AH: According technologies (electrical, composite, machining...) additional requirements are applicable;

- EI070 10-003 "Situation of inspection work in the manufacturing and overhaul process for metal parts"
- EI070 10-004 "Inspection plan for manufactured composite parts"
- EI070 10-021 "Installation inspection plan for dynamic components"
- For electrical product : L-DEV-03-001 « List of technical check by activity » & G-DEV-03-036 « Inspection plan for electrical products"
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Req. App. B-8.6-2 In case when manufacturing data sheet is provided by the Purchaser

The supplier **shall** strictly apply **the Purchaser** inspection plan as a minimum,

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Req. App. B-8.6-4 Inspection and test status

When the supplier certifies the parts conformity upon a final inspection, the final inspection phase **shall** be attested as well as the parts in accordance with the definition and HS 5022 for AH / MBBN240 for AHD. For AHE & Subsidiaries, refer to HS5022 or MBBN 240 as mentioned on drawings.

If the supplier uses a second-rank supplier;

- the inspection stamping **shall** be applied in the final inspection phase and on the part by the supplier's quality manager in charge of the final inspection.
- the certificate of Conformity for the product delivered to the Purchaser **shall** be certified by the first level supplier.

10. IMPROVEMENT

10.2 NONCONFORMITY AND CORRECTIVE ACTION

In addition to “core part” §10.2:

Non-conformity detected by the supplier

The Purchaser is responsible for decision on any non-conformity.

Case 1 – Req. App. B-10.2-2 Recoverable material

When the Sub-contractor considers that the part can be used as is or brought to usable and acceptable condition by rework, the supplier **shall**:

- Describe & qualify the non-conformity on an "Approval Request" form and send it to the Purchaser (See Form F070 018).
- Apply the decision stated by the Purchaser on the Approval Requests, i.e. to accept as is, to rework, to keep under concession or to scrap.

In the case a rework is asked by the Purchaser on the Request for Approval (SRfD/DA), copy of this “request for approval” **shall** be send with the parts to the Purchaser with the attestation of correct realization of the rework (“rework done + date + name + signature + stamp-mark”). The Request for Approval number & the Purchaser number of the DA shall be recorded on CoC (see **Req. Core-8.5-17**)

In the case of a request for concession (see “core part” §10.2):

- send the completed Concession to the Purchaser
- take into account of the response from the Purchaser
- mark the number of the concession (assigned by the Purchaser) onto the product if “recordable”
- record (if “recordable”) the concession on the accompanying documentation (Statement of Conformity, Delivery Report (PVL), Authorized Release Certificate, Log Card, documentation specific to the assembly on which the part is installed...etc.)

Reminder:

No product can be delivered unless the concession and/or request for approval is (are) approved by the Purchaser (excepted if a delivery report is provided, see **Req. App. B-8.5-16**)

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Non-conformity detected by the Purchaser: see “core part” §10.2

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Req. App. B-10.2-4 products for Rework

When the products have been sent back to the supplier's for Rework (Bringing into Conformity), on return the additional following documents **shall** accompany the part:

- Certificate of Conformity regarding the intervention on part requested by the Purchase Order:
As alternative of the above CoC is the duplicated Authorized Release Certificate (under §21A 163 (d) for EASA Form 1) with mention ***“rectification work of an item which has been found to be unserviceable prior to entry into service”*** and description of operation in block “remark” for ARC (as given in §3.3).
- the Purchaser Nonconformity duly filled out

10.3 CONTINUAL IMPROVEMENT

Req. App. B-10.3-1 In case of recurrent C or D Performance (for a 6 months period) by the Purchaser, the supplier **shall** establish and communicate an appropriated action plan to the Purchaser.

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Appendix C: Engines Manufacturers

APPENDIX C:

ADDITIONAL QUALITY REQUIREMENTS FOR MANUFACTURERS OF ENGINES

(Applicable in addition to the general core part)

7.5.3 Control of Documented Information

See Req. Core -7.5-04- Quality Assurance Plan

8.3 DESIGN AND DEVELOPMENT OF PRODUCTS AND SERVICES

Manufacturers of engines shall apply ER070 06-04 with different applicability defined in ER070 06-04.

8.5 PRODUCTION AND SERVICE PROVISION

8.5.3 Preservation

Req. App. C-8.5-3 Accompanying documents

All supplies **shall** be delivered with the contractual documentation see core document paragraph 8.5.4 c): In addition, the Supplier shall provide an engine log book:

The Engine Book including as a minimum:

- the modules Log Cards,
- the modifications status,
- the Equipment Log Cards,
- the compliance to bench performances,
- the resulting availability,
- the storage and follow up measures,
- the measured weight,
- the list of major concessions,
- the airworthiness directives status,
- the initial status of the daily follow up of the engine,
- Authorised Release Certificate (EASA F1...).

Each engine book is stamped by the Quality responsible of the engine Manufacturer and by the Official Services or their delegates.

- a storage follow up sheet (the humidity indicator device **shall** be external of the container, if any)

Req. App. C-8.5- 4 Storage Conditions:

The supplier shall provide to the Purchaser the Storage Conditions Sheet (F020 026) for new product & changes impacting storage conditions of delivered items.

Req. App. C-8.5-5 Case of repairs of products for MRO managed under AH contracts

Supplier shall apply ER050 06-002 |

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Appendix C: Engines Manufacturers

Req. App. C-8.5-6 Intervention on Engines already delivered to Airbus Helicopters

Requirement Req. Core-8.5-20 is applicable.

For all activities managed by Engine manufacturers' technical representatives that involves a modification in the Engine Logbook (case of replacing a component SN or PN for example), the Engine manufacturers shall release the subsequent/supplemental Authorized Release Certificate and deliver it to the Purchaser. In addition, all components/parts replaced in the engine shall be accompanied by ARC under Production Approval.

Engine Log Books:

All intervention conducted by Manufacturers' staff **will** be under the Manufacturers' responsibility. All interventions and the ARC of the replaced components are recorded in the Log Books.

Those interventions **may** be delegated to the Purchaser in absence of Manufacturers' sub-branch.

10.2 NONCONFORMITY AND CORRECTIVE ACTION

Req. App. C-10.2-1 Servicing

The technical actions undertaken by the engine manufacturer representatives at the Helicopter Manufacturer are regulated by the Logistics Agreement. The engine Manufacturer **shall** inform the helicopter Manufacturer of all Service Bulletin relative to the engines of the helicopter manufacturer's fleet and which has an influence on the airworthiness conditions of the helicopter.

Req. App. C-10.2-2 Control of non-conforming products

Non-conforming products **shall** be identified and segregated to prohibit their use or shipping pending a decision, i.e. acceptance "use as is" or with a concession, repair, touch-up or scrapping.

Engine manufacturer shall inform the Purchaser if any Major concessions and shall submit any concession with impact 3F (EI 021 04-CM002 Form Fit Function criteria definition).

Req. App. C- 10.2-3 Major In service Incident:

Engine Manufacturer shall report to the Purchaser all Major In service Incidents

10.3 CONTINUAL IMPROVEMENT

Req. App. C-10.3-1

The engine Manufacturer **shall** notify the Purchaser of any major event he detects, of the corrective actions he implements at the occasion of the Major Incidents meetings held between the engine Manufacturer and the Purchaser. All major anomalies detected by the helicopter manufacturer **shall** be reported at the engine manufacturer major incident meeting.

Furthermore, if required in the event of major failure, the helicopter Manufacturer could be prompted to perform him or have performed by any helicopter Manufacturer -approved company- an inspection before or after delivery, chargeable to the Engine Manufacture, after his preliminary technical agreement. This inspection **shall** be maintained until corrective actions have been implemented in accordance to contract.

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GRFS: General Requirements for Suppliers Quality Assurance General Requirements Appendix D: Maintenance Org.

APPENDIX D:

ADDITIONAL SPECIFIC REQUIREMENTS FOR MAINTENANCE ORGANIZATIONS

(Applicable in addition to the general core part)

Note: There are only those numberings and headings mentioned where the Purchaser has additional requirements to those of IAQG 9110

4.4 QUALITY MANAGEMENT SYSTEM AND ITS PROCESSES

Req. App. D-4.4-1

The ER050-06-002 **shall** be applied (not applicable to AHE). "Repair mechanical parts" Subcontractors shall apply ER050-06-001 Quality requirement.

The maintenance Organization **shall** implement only approved repair solutions as defined in the maintenance, repair and overhaul manuals. Alternate design solutions **shall** be approved by the equipment manufacturer and the aircraft manufacturer.

In the case the maintenance Organization **should** get no approved EASA Part 145 or FAR 145, TCCA-145 or CCAR-145 Organization, it **will** built and submit to the Purchaser a Quality Assurance Plan taking into account all requirements from EASA Part 145 & IAQG 9110. This Quality Assurance Plan **shall** be agreed between parties, it **will** cover all needed additional requirements not beard by current Organization. Among all specificities, focus **will** be made on Human Factors & Safety Management System.

10.2 NONCONFORMITY AND CORRECTIVE ACTION

Req. App. D-4.4-2 Servicing

The Supplier **shall** be able to assure the maintenance / repair of the delivered product; as such he **shall** arrange the adequate documentation of maintenance and, in case of repair (according Part 21 definition and relevant the Purchaser instruction for "maintenance data validation", transmit it to the Purchaser Design Responsible for approval).

The Supplier, according order request, **shall** perform the maintenance / repair operations according regulations requested by the order (for products with civil usage, approvals EASA Part 145 or FAR 145, or TCCA-145 or CCAR-145, awarded by the competent civil authorities.

Req. App. D-4.4-3 Maintenance of used products

Components subject to overhaul/repair orders **shall** be additionally accompanied by the following documents:

- Authorized Release Certificate according requested regulation: EASA Form 1 for EASA Part 145 approved repair organizations. FAA form 8130-3 or EASA Form 1 Dual Release for FAR 145 approved repair organizations accepted EASA Part 145, Form AAC-038 for CCAR-145...

In this case, the Authorized Release Certificate replaces the Certificate of Conformity

- Certificate of Conformity in alternative of above, or if required,
- Shop report concerning the status of conducted changes, performed works or services, applied service bulletins and airworthiness instructions, and indication of the used maintenance data including all information requested by document F050-06-002.
- Acceptance Test Report
- List of parts with TBO service life or service life restriction (if required)
- Concession if any
- Any inspection report(s)
- Log card (if required or accompanying the item), Release to Service
- First Repair Inspection Dossier in case of first repair or overhaul and if requested by the order.

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Appendix E: Distributors

APPENDIX E:

ADDITIONAL QUALITY REQUIREMENTS FOR DISTRIBUTORS

(Applicable in addition to the general core part)

This appendix specifies the quality requirements to be applied by the distributor, either as acting as first or lower rank, on its organization and on aeronautic products it provides.

8.4 CONTROL OF EXTERNALLY PROVIDED PROCESSES, PRODUCTS, AND SERVICES

Req. App. E-8.4-1 Product/manufacture constraints

Distributors shall deliver to the Purchaser and logistic service providers (contracted by the Purchaser) only couples "Standards / Manufacturer" listed in Helicopter Qualified Part List (HQPL).

Distributors are not allowed to supply Build to Print & Build to Spec items, except in case of specific notification agreed by the Purchaser.

Distributors are accountable to obtain from the manufacturers the necessary documentation needed by the Purchaser for performing the qualification (Qualification Test Report) as defined in Annex L. The related documentation may be also sent directly to the Purchaser by the manufacturer.

For catalogues parts and specific parts, the Distributor is only authorized to deliver products as specified in the contract.

If the Distributor intends to deliver a product whose manufacturer is not authorized by the Purchaser, it **shall** previously been authorized by the Purchaser.

8.5.4 Preservation

Req. App. E-8.5-1

Besides his own Statement of Conformity, the Retailer and/or Distributor (or Manufacturer acting as Retailer and/or Distributor) **shall** deliver products together with the Original Manufacturer's Certificate of Conformity referring to the specification, mentioning Batch or Serial N°, and, so applicable, the Tests and/or Analysis and/or Inspection Reports (systematic for Raw materials), Safety Security data and the eventual requests for concessions.

In the case of a batch broken down, the copy of these documents is accepted (as long as original is filed by the supplier). If asked with Purchasing Order, the original of the Authorized Release Certificate **will** be joined.

Distributors **will** formalize their process for suspected unapproved parts procurement and distribution provision. This description **will** be linked to non-conform products monitoring procedure

Unapproved and suspicious parts: Remind refer to Core part § 10.2

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GRFS: General Requirements for Suppliers

Quality Assurance General Requirements

Appendix F - QUALITY & delivery Performance definitions

APPENDIX F - QUALITY & DELIVERY PERFORMANCE DEFINITIONS

1 SUPPLIER QUALITY PERFORMANCE

This section defines the quality performance indicators

Dedicated design performance indicators to be exposed by the supplier are defined in the Requirements Applicable to Suppliers' Design Organizations ER070 06-04.

Quality performance indicators include:

- Supplier quality performance before delivery (SRfD)
- Supplier quality performance after delivery:
 - Detected by Airbus Helicopters (OTQ 1, Quality Incident)
 - Detected by supplier (NoE)
 - Detected by customer (In Service Incident)

1.1 GENERAL RULES FOR CALCULATION

- Calculated on missed parameters and use of a percentage indicator, to rate this performance, expressing the product deviations under supplier responsibility.
- Calculated monthly on a 6 months rolling period.
- Before collaboration between the supplier and Purchaser, supplier responsibility is determined according to Purchasers analysis. As long as the supplier has not demonstrated its non-responsibility, the deviation will be considered under supplier responsibility.
- After collaboration, the product deviation for which supplier responsibility is not confirmed, will be removed from the calculation.
- In case of spares direct delivery authorization, this indicator can be split in order to assess the performance of both logistic flows.
- If an administrative deviation is followed by a technical deviation of the product, two separate deviations are established and considered in the relevant calculation.
- Defective parts detected by Purchaser after delivery or final spare part customers are calculated by a rejection rate.
- If products are removed from stock on Purchaser initiative, each product with a deviation is considered as rejected.
- P/Ns under supplier request for deviation and incidents are not included in the rejection rate.
- Following an official and written supplier request (NOE), any products removed from stock (for retrofit, rework or additional inspection) and returned to the supplier shall not be considered as a rejection.
- Defective products during their development phase (models/prototypes or products under development) will not be included in the calculation.
- If product is rejected for a second time with the same non-conformity, both rejections will be considered for the rejection rate.
- Incorrect identification on the product label is considered as a technical deviation.
- The fact, that the defective product is out of warranty, is not a criteria for the supplier to disclaim his responsibility for a deviation.
- "Minor typing errors management" information on Performance:

For certain rare missing accompanying documents or minor typing errors on these documents of minor products when the correction has been conducted into a short time, The Purchaser **may** consider not

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to incriminate the given supplier in its non-quality ratio. There **may** be on the corresponding "Nonconformity" a dedicated explaining text;

1.2 SUPPLIER QUALITY PERFORMANCE BEFORE DELIVERY (SRFD)

Scope:

Deviations under supplier responsibility before delivery for a new or a reworked product

Rule:

SRFD rate = Quantity of products under approved SRFD / Quantity of delivered products

1.3 SUPPLIER QUALITY PERFORMANCE AFTER DELIVERY:

1.3.1 Detected by Purchaser (Rejection Rate (OTQ 1))

Scope:

For new products:

Deviations under supplier responsibility after delivery, during the value stream incoming inspection, warehouse, assembly lines (including affiliates), spares and production flight test to final customer delivery, for a new or a reworked product.

For repair activities on products:

Deviations under supplier responsibility for a repair product.

a) **Technical Rejection Rate (OTQ 1 Tech)**

The scope of performance measured is the intrinsic quality of the product (conformance and robustness for integration on aircraft). Functional failures, performance deviations and geometrical fit of the product are taken into account. They are recorded on non-conformities (NC), which shall be addressed to the supplier.

Rule:

Technical Rejection Rate = Quantity of defective products for technical issues/ Quantity of delivered products

b) **Administrative Rejection Rate (OTQ 1 Admin)**

The scope of performance measured is the non-conformities on documentation, packaging and marking on packaging.

Rule:

Administrative Rejection Rate = Quantity of administrative NCs / Quantity of delivered lines

1.3.2 Detected by supplier (NoE)

Scope:

Deviations under supplier responsibility detected by supplier after delivery for a new or a reworked product

Rule:

Quantity of NoE

Quantity of parts impacted under NoE

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Appendix F - QUALITY & delivery Performance definitions

1.3.3 Detected by Purchaser/in Service (Major Incident)

Scope:

Major Incidents under supplier responsibility detected by Purchaser/ in Service for a delivered product

Rule:

Major Incident = Quantity of Airworthiness “Major Incidents” under supplier’s responsibility during the SED period

Major Incidents are to be only taken into consideration once the technical synthesis report (TSR) has been distributed by major incident technical board (MITB).

1.4 SUPPLIER QUALITY PERFORMANCE EVALUATION:

For information, the Quality performance is ranked by the Purchaser from class A to D with the following rating rules.

| Class | Rating | Definition |
|-------|-----------------------|----------------------------|
| A | Excellent | Outstanding Performance |
| B | Good | Requirements met |
| C | Mandatory Improvement | Requirements not fully met |
| D | Unacceptable | Requirements not met |

2 SUPPLIER DELIVERY PERFORMANCE

2.1 OTD1:

Major KPI of the suppliers’ performances. → Measurement of their adherence to a date requested in an internal purchase order (PO).

DEFINITION:

$$OTD1 = \frac{\sum(\text{Complete scheduled lines received on time})}{\sum(\text{Scheduled lines planned})}$$



Committed date: – 7 working days ≤ ON TIME ≤ Committed date + 2 working days

MANAGEMENT RULES:

- **Incomplete delivered lines:** counted as late.

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Appendix F - QUALITY & delivery Performance definitions

- **Requested date:** output of the MRP planning system or as expressed in the PO.
- **Committed date:** (statistical date in SAP) date agreed upon after collaboration.
- **Collaboration on committed date:** allowed only before delivery (in AirSupply or in SAP).
- **Maximum committed date:** PO creation date + contractual lead time.
- **Early deliveries:** KO in general cases; OK for rework and specific spares.
- **“On time” window:** same window applies whatever the incoterm.
- **OTD1C – COLLABORATION RULES WITH SUPPLIERS**

2.2 OTD1C – COLLABORATION RULES WITH SUPPLIERS

The **collaboration** is done with the suppliers after complete delivery, to improve the Supply Chain's logistic performances. It is done in AirSupply if the supplier is connected & allows:

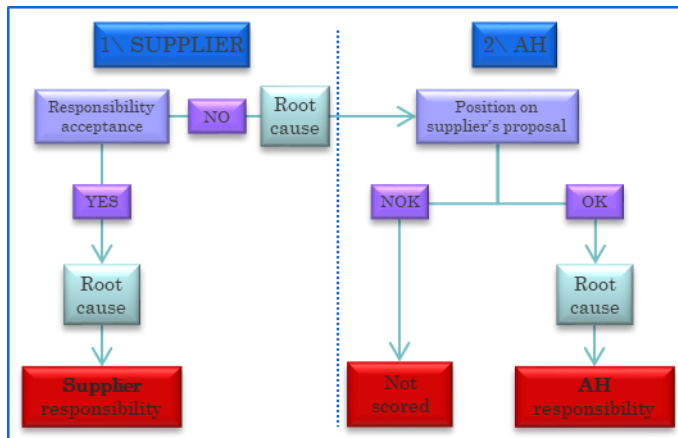
- ✓ The allocation of the missed lines' **responsibilities** between Airbus Helicopters and the suppliers;
- ✓ The analysis of the **root causes** (internal & external).

DEFINITION:

$$OTD1C = \frac{\sum (\text{Complete scheduled lines received on time}) + \sum (\text{Lines graded as "on time" after collaboration})}{\sum (\text{Scheduled lines planned}) - \sum (\text{Lines "Not scored"})}$$

COLLABORATION PROCESS

The collaboration on the **responsibilities** and **root causes** is done on the lines that are either (very) **early** or (very) **late**, as soon as they have been fully delivered (even if the delivery date is prior to the committed date).



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Appendix G: Tools & Ground Equipment

APPENDIX G:

ADDITIONAL QUALITY REQUIREMENTS FOR MANUFACTURERS OF MAINTENANCE TOOL & ON GROUND EQUIPMENT DELIVERABLE TO END – CUSTOMERS

(Applicable in addition to the general core part)

4.4 QUALITY MANAGEMENT SYSTEM AND ITS PROCESSES

This appendix specifies the quality requirements to be applied by the manufacturer for Tools & Test Means, on its organization and on products and services the manufacturer provides.

This appendix is also in complement of the applicable elements of Appendix B when tool design is directly conducted by the Purchaser and that the supplier acts as Sub-contractor

8 OPERATION

Req. App. G-8-1 Documentation

The qualification of the product **shall** also include CE Directives requirements (i.e. 2006/95/CE, 2004/108/CE, 2006/42/CE, 1997/23/CE, 1999/92/CE...) if required by the Purchaser and if it is necessary.

The Supplier **shall** provide release documentation asked in the purchase order:

- Declaration of Conformity,
- user manual if requested by the order,
- calibration certificate when applicable,
- CE certificate when applicable
- load test certificate when applicable
- ATR if requested by the order.

Req. App. G-8-2 Repair service for On-Ground Equipment:

The supplier shall be certified ISO 9001, at minimum.

Product / supplier pair must be authorized by Supplier Quality for CE tools.

The purchase order acknowledgement must be returned to the Purchaser. The supplier shall inform the Purchaser by mail of any incoherence detected between the order information, component items received, and accompanying documents.

The supplier shall:

- establish a quotation at receipt of the Purchaser repair order.
- send the quotation to the requester entity for validation:
devis.reparation@airbus.com or contact.tools-calibration.ah@airbus.com
- send a repair work sheet to AH for the repair of CE tooling, must be sent to AH for AH validation at support.support-be-gse.ah@airbus.com
- establish release documentation (CoC, Shop report, ATR...) at least in English language.
- join to the delivery, all documents required as for repair of equipment.

Req. App. G-8-3 Purchasing (only applicable to tools include CE Directives requirements):

The supplier must be certified to "Special Process" (ex: welding) identified in CE Directive file.

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GRFS: General Requirements for Suppliers

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APPENDIX H:

ADDITIONAL QUALITY REQUIREMENTS FOR SERVICES PROVIDERS

(Applicable in addition to the general core part)

4.4 QUALITY MANAGEMENT SYSTEM AND ITS PROCESSES

SCOPE

This appendix applies to Suppliers who handle services relating to aero product and/or End Users satisfaction: Supply Chain Services, Logistic, Intellectual Services, Training, Tech Assistance, IT/IS ...directly procured of through Airbus General Procurement interface.

For Design Services Providers: applicable requirement are defined in ER070 06-04.

INTERVENTION ON the Purchaser FACILITIES

When a Supplier has to work inside the Purchaser facilities, refer to applicable contract.

GENERAL PRINCIPLES

ISO9001 certification is mandatory at minimum, IAQG 9100 Certification is recommended.

Reg. App. H-4.4 -1 Each contract placed for services **shall** be fitted with a Quality Assurance Plan submitted to the Purchaser acceptance before contract execution.

If the Supplier's QMS does not meet:

- the minimum requirements in term of certification and agreements,
- the Purchaser operational quality and project management requirements,

The Quality Assurance Plan **shall** develop and highlight through a compliance matrix, the recovering actions and practices capable to restore a satisfactory level of service (i.e. training by the Purchaser, use of the Purchaser technical means...).

7.1.2 People

Reg. App. H-7.1 -1

Training and qualification of people is under Supplier responsibility using, methods registered in its SQM and at least fulfilling the Purchaser practices. The Purchaser could be part of the qualification process, when linked to the Purchaser agreements; so, the Supplier **shall** appropriate and apply the Purchaser rules for employees' qualification. In this case, the Supplier **may** be subject to direct audits from the Purchaser and Official Services in the scope of the Purchaser agreements.

The Supplier **shall** manage a relevant assignment of persons for contract execution, considering their skills from Expert, Senior, and Junior to New Comer. For the Project Management it is recommended to assign the leadership to an Expert or Senior level.

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GRFS: General Requirements for Suppliers Quality Assurance General Requirements

8 OPERATION

Req. App. H-8 -2 Planning of product / service realization

The Supplier **shall** manage the project by his own, involving the Purchaser on relevant steps. Those steps and payment ones **shall** be as more as possible identical.

The Supplier **shall** make available to the Purchaser his internal project management relating to the service within the scope of the contract, and to the associated records and tools (contract risk management, planning change, people qualification and skill, localisation change, major subcontractor change...).

In addition to the starting and termination reviews, the Supplier **shall** lead progress reviews with a relevant periodicity for service fulfilment all along the contract.

The management of the Improvement Plan **shall** be part of the agenda of these reviews.

Req. App. H-8 -3 Service conformance process

The service conformance process at Supplier **shall** involve on relevant steps, the Supplier Quality function that **shall** have the authority to stop or authorize service delivery and to manage conformance process for the complete life cycle (proposal, contract review, production, support and termination).

The Supplier **shall** maintain a system capable to trace and record the result and conformance of a provided service. As a minimum he can materialize the service by presenting an acknowledgement, any document/record capable to demonstrate the service is delivered up to an activity report for a period of delivered services.

This documentation, connected to payment process, **shall** include a clear statement of service conformance (1) and they **shall** be managed by Quality function at Supplier.

The Purchaser form for this documentation prevails to Supplier one.

(1) i.e. it is hereby certified that apart from the approved deviation noted in the present document, the service/product listed above and the workmanship conform in all respects to the contract requirements and applicable standards and regulations.

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GRFS: General Requirements for Suppliers Quality Assurance General Requirements

Req. App. H-8 -4 Reversibility plan

The Supplier **shall** maintain a Reversibility Plan which describes the arrangements able to insure the reversibility of data, rules and practices but also the specific arrangements which insure that the Purchaser could be, if necessary, able to provide a continuation of Services:

- In case of Supplier failure due to bankrupt, activities cessation...
- In case of services re assignment to the Purchaser or another Supplier, whatever the reason is,

In the scope of reversibility, the Supplier **shall** insure that all the data, rules and practices are usable and recordable by the Purchaser. The Supplier **shall** guarantee definition and traceability of activities belonging to the service.

Req. App. H-8 -5 Support for the Purchaser

The Supplier **shall** maintain a capability to support the Purchaser beyond the contract. To contribute to different needs which can occur beyond the contract perimeter, the Purchaser ask for partnership and flexibility at Supplier for problem solving. The Supplier can provide a support service using his resources, knowledge, expertise, tooling, data...

The Supplier can be requested to participate on reviews for improvement of existing processes, documentation and tools.

Specific requirement for in-situ suppliers or supplier technical intervention at Airbus Helicopters plant (Req. App. H-8 -6 & Req. App. H-8 -7):

Req. App. H-8 -6 Foreign Object Damage Prevention: commitment to a prevention program

According MET-022, the supplier shall be compliant with L-MET-022-003 FOD Requirements for in-situ Services Providers or suppliers" and in particular:

The in-situ service provider shall demonstrate compliance to the Purchaser internal requirements that address FOD (Foreign Object Damage) requirements (MET-022), in particular with regard to the following points:

- Training/awareness raising of all Supplier Personnel involved stakeholders: inform on FODs and in particular their causes, effects and preventive and corrective actions
- Cleaning and cleanliness: continuously collect waste generated by operations in/on the product, workstation and on the floor. Establish cleaning routines. The packaging and handling of the equipment and accessories shall be done under clean conditions and free of any contaminants.
- Tool/tooling/Hardware/consumables/Personal items:

Proper maintenance, use and storage of materials and components or equipment in FOD areas. Only bring into the FOD areas the minimum necessary for the operation. All equipment shall be transported in suitable boxes, especially hardware.

Control, care and responsibility for tools/tools and hardware: tools must be identified if the service is permanent in risk zones 2 and 3 (the identifier chosen must be different from those used by AIRBUS, nomenclature available on request). Toolboxes must be designed to prevent damage and facilitate inventory. Inventories of equipment and tools are to be made at the beginning and end of each shift and day. All consumables and administrative materials must be controlled.

For any intervention risk zones 2 and 3, the supplier shall fill in F-MET-022-001.

Any personal object that may become a FOD must be placed in a closed pocket or locker. The use of FOD bag (according MET-022) is recommended.

Immediately report any loss of tools or equipment and risk situations to the designated FOD Officer and the Quality Manager. Stop the activity and actively search for the lost object until you are sure that the object in question is not in the product or subsystem.

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Report any debris found (FOD) regardless of its origin or responsibility to the FOD Officer and AH Quality Manager

In the event of a FOD/FOD with proven internal responsibility or any other incident, the analysis results will be transmitted to AH as part of the continuous improvement of the FOD prevention plan put in place by AH. These cases will be considered as Non-conformities.

Any unforeseen intervention on site AH in an FOD risk 2 and 3 area must be recorded through an intervention sheet or burning permit. The local rules in force applicable on site in these areas must be respected.

Req. App. H-8 -7 SAFETY MANAGEMENT SYSTEM (SMS) / Commitment to a JUST CULTURE

Throughout the duration of the Contract, the Supplier shall:

1. *Nominate an SMS focal point who shall:*
 - a. *Ensure the link with Customer SMS managers.*
 - b. *Deploy an Aviation Safety network depending company size.*
 - c. *Ensure and monitor cascading of safety requirements to tiers if relevant*
 - d. *Ensure that SMS training is dispensed to all necessary Supplier staff.*
 - e. *Ensure that supplier staff informs immediately Customer SMS managers' about any identified Hazard and/or safety events, according to L-COM-16-015 Customized list of Aviation Safety criteria (Production & Maintenance) by using Customer's means (F-COM-16-005 Aviation Safety Voluntary Hazard report, ...)*
 - f. *Set-up and conduct analysis based on practical problem solving methods (five whys and eight disciplines) with Supplier staff' having any relation to the identified safety Hazard or event.*
 - g. *For identified risks impacting the customer: Collaborate with Customer's SMS managers the risk mitigation actions.*
 - h. *Ensure that safety is promoted at all levels and regular aviation safety communications are put in place.*
 - i. *Create a bi-annual report covering all requirements from 1 to 6.*
2. *Put in place a JUST CULTURE policy signed by the supplier's accountable manager.*
3. *Perform within 30 calendar days & maintain (refresh every 2 years), the initial training of 100% of Supplier employees' working on Customer site, including for new comers.*
4. *Ensure supplier training module are compliant with Customer and regulation applicable rules.*
Nota: SMS training module for STT available in the external myPulse training platform could be used if needed.
5. *Put in place document SMS process/standard to support SMS activities.*
6. *Release, to Customer compliance manager of the concerned approvals (PART 145, PART 21), a bi-annual report stating about the conformity with regards to the above requirements.*

Req. App. H-8-8 securisation of POA activities in facilities where new and used parts parts/items are treated

If PO and MO activities are made in shared facilities, all segregation principles defined in MET-245 shall be respected by subcontractors. These principles concern all parts/files management and traceability as well as flow management.

10.2 Nonconformity and corrective action

See ER070 06-04

10.3 Continual Improvement

Req. App. H-10.3 -1 The Supplier **will** contribute to service competitiveness by leading a continual improvement process for the Purchaser (PDCA process of the ISO 9001).

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The aim is to:

- Implement a shared and relevant measure of the service performance,
- Afterwards check periodically the Purchaser satisfaction,
- For piloting an Improvement Plan capable to save costs and to improve, efficiency of processes, quality of the service and customer satisfaction.

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APPENDIX I:

ADDITIONAL QUALITY REQUIREMENTS FOR SUPPLIERS IN AIRBUS* PROGRAMS

(*Airbus "airplanes/fixed wing" Applicable in addition to the general core part)

Note: There are only those numberings and headings mentioned where the Purchaser has additional requirements to those of IAQG 9100

4.4 Quality management system and its processes

Req. App. I-4.4 -1 Suppliers for Airbus parts, appliances and equipment shall apply Airbus Supplier Requirement (ASR) A1501 to A1506: it is mandatory for any **new** contracted Work Package (whether new or existing contract); For ongoing contract (before 2016) GRESS or GRAMS requirements (only in the case this document is asked in the contract) may be applicable.

All applicable documents are identified in the contractual List included in the supplier contract (dedicated annex to the contract).

Airbus Helicopters acts as the purchaser in the following items; the seller is the appropriate Supplier/subcontractor.

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Appendix J: Suppliers in military or Governmental Programs

APPENDIX J:

ADDITIONAL QUALITY REQUIREMENTS FOR SUPPLIERS IN MILITARY OR GOVERNMENTAL PROGRAMS

For Equipment parts Manufacturers this Appendix J application is required in **addition to core of the document & to Appendix A,**

For Subcontractors this appendix J is in **addition to core of the document & to Appendix B** requirements.

Specific Abbreviations

| | |
|--------|---|
| AQAP | Allied Quality Assurance Publication |
| ATE | Automated Test Equipment |
| CCB | Configuration Control Board |
| DVL | Data Validity List |
| ETS | Equipment Test Specification |
| GQA | Governmental Quality Assurance |
| GQAR | GQA Representative |
| GSE | Ground Support Equipment |
| HAC | Helicopter Anti-Char |
| HAP | Helicopter Appui Protection |
| OCCAR | Organization Conjointe de Coopération en Matière d'Armement (<i>Joint Organization for Co-operation in matter of weapons</i>) |
| OTD | OCCAR Tiger Division |
| PIR | Production Investment Review |
| SOR | Schedule of Requirement |
| SPC | Statistical Process Control |
| SRU | Shop Replaceable Unit |
| STANAG | Standard of North Atlantic Treaty Organization |
| STTE | Special-to-Type Test Equipment |
| UHT | Unterstützungshubschrauber TIGER |

4.5 Quality management system and its processes

Req. App. J-4.5 -1 Suppliers delivering parts and appliance for military or governmental program (TIGER & NH90 in particular):

Suppliers delivering items specifically dedicated to Military or Governmental Programs **must** comply in addition with the requirements of AQAP-2310 or AQAP-2110 according to Airbus Helicopters Contract with the Supplier.

All work meant to be carried out by the Supplier and all other lower level subcontractors in furtherance of the Contract can be subject to Government Quality Assurance (GQA) by the appropriate National Quality Assurance Representatives.

The Supplier **shall** make the necessary arrangement with the GQAR to allow the GQA activities.

In any case, Government Quality Assurance activities cannot be a reason to justify a delay on contractual commitment.

GQA **may** directly request for some additional GQA upstream surveillance to parts delivery, due to customers' authorities, such surveillance being attested through a specific "Certificate of Conformity" form with GQA signature.

Supplier **will** co-operate with the related authorities

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Appendix J: Suppliers in Governmental Programs

Suppliers of such items **should** have been before and contacted by authorities for full application of AQAP-2070,

This GQA actual surveillance **will** be formalized through a specific CoC form as indicated in AQAP-2070

Other forms are agreed only if fully agreed by those authorities and after formal information to AH AHD.

7.1.5 *Monitoring and measuring resources (Tools & test means)*

Req. App. J-7.1 -1 Validation of specific tools/tests means

It **shall** be carried out in accordance with "Specific tools/test means Validation procedure": (EI101) QD S000N0817E01. In addition to the tool reference, the identification plate **shall** mention: "NH90-PI/P0001-June 2000" (without indication of property).

Req. App. J-7.1 -2 Reporting

The Supplier **shall**, consequently, deliver to the Purchaser, according to DRL requirements, the list of its tools and/or test means developed, manufactured or purchased for specific NH90 purposes in the format and to the extent/content as agreed.

7.5 Documented information

Req. App. J-7.5 -1 Configuration Management Plan, Risks Management Plan

The Supplier **shall** provide for approval with a Configuration Management Plan & a Risks Management Plan as defined in the "Statement of Work (SOW)" of the Contract, they **will** be consistent with AQAP-2110 requirements.

Req. App. J-7.5 -2 Quality Assurance Plan

For Governmental Programs (like TIGER & NH90) and upon specific request the supplier is asked to write a Quality Assurance Plan according AQAP-2105 for demonstrating conformity to AQAP series

The Supplier **shall** describe in the Quality Assurance Plan the contents of Manufacturing route, the Inspection Files, the Test Plan and the control rules. This Plan **will** be submitted to the Purchaser for approval.

The Quality Assurance-plan **shall** also describe the Quality monitoring and the provisions for continuing improvement

The Suppliers Quality Assurance Plan **must** be provided upon request by the supplier to its GQAR.

Req. App. J-7.5 -3 Accompanying Documentation:

For NH90: English language is an obligation ((ref to Contract); the CoC, (except agreement from Procurement, the doc **will** be designed as "Certificate of Conformity") **will** anyway have additional information:

- The list of Items with their NH90 P/N and quantities,
- Declaration of Design and Performance status (flight cleared/qualified & N° and issue reference),

The hereunder paragraphs are proposed to be added also for item a destination to NH90.

For items in destination to TIGER program, the CoC (designed in same above conditions as "Certificate of Conformity") **must** bear the following statement: (in conformity to EI101 T000M0981E06)

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Appendix J: Suppliers in Governmental Programs

„Es wird bescheinigt, dass abgesehen von den hier aufgeführten Sonderfreigaben alle aufgeführten Lieferungen in jeder Hinsicht allen gültigen Bau- und Prüfunterlagen und dem genehmigten DDP (Nr. XXX) sowie dem diesbezüglichen Auftrag entsprechen, und dass die Lieferungen in Übereinstimmung mit den Bedingungen und Forderungen des Auftrages geprüft wurden und einwandfrei funktionieren.“

It is certified that apart from the deviations/concessions here noted the whole of the supplies detailed hereby conform in all respects to the valid design and test specifications and to the approved DDP (Nr. XXX) as well as the order relative thereto and that the supplies have been inspected and tested in accordance with the conditions and requirements of the order and function properly.

Il est certifié par la présente qu'à l'exception des déviations/dérogations mentionnées ici-même, toutes les fournitures sont conformes en tous points de vue à l'ensemble du dossier de définition et des procédures d'essais, au DDP approuvé (n° XXX) ainsi qu'à la commande correspondante, et que ces fournitures ont été contrôlées en conformité avec les conditions et exigences stipulées dans la commande et fonctionnent de façon irréprochable

Este certifica que a parte de las desviaciones/concesiones indicadas, todos los elementos suministrados son conformes en todo respecto al diseño validado y especificaciones de prueba y al DDP aprobado (n° XXX) así como el pedido correspondiente y que los elementos suministrados han sido inspeccionados y probados de acuerdo a las condiciones y requerimientos indicados en el pedido y que funcionan correctamente.”

Reg. App. J-7.5 -4- **For parts, products & services in destination of TIGER Program,**

In addition to Appendixes A & B, The following documents & requirements are applicable.

The present document already repeats all specific requests of this program, but hereunder documents remain contracted and first level applicable.

| Specific documents applicable to TIGER Programs (EI101...) | | |
|--|--|------------|
| | | |
| T000M0982E06 | Quality Plan | BMSD EI101 |
| T000M0984E05 | Concessions procedure | BMSD EI101 |
| T000M0985 E05 | « Discrepancy reporting procedure » | BMSD EI101 |
| T000M0986 E05 | Log Card procedure | BMSD EI101 |
| | | |
| T000M0987E05 | GFE Handling for Tiger | BMSD EI101 |
| | | |
| T000M0981 E06 | Quality Assurance Requirements for suppliers | BMSD EI101 |
| T000M0811 E01 | Handling of Temporary Deviations | BMSD EI101 |

Marking: tooling

Specific tooling is identified by appropriate marking (identification plate) so the helicopter type (Tiger) and part to which they are dedicated **may** be identified (by repeating the part series reference number in the tooling identification). In addition, marking is including an indication to show ownership of the customer.

Production and Service provision

Log Card procedure (EI101) T000M0986 **will** be applied (Form Template: F070 029)

Control of Non-conforming Products

Handling of Nonconformities is described in the documents:
(EI101) T000M0985 « Discrepancy reporting procedure »

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Req. App. J-7.5 -5 For parts, products & Services in destination of NH90 Programs,

The present document already repeats for commodity all specific requests of this program, but hereunder documents remain contracted and first level applicable.

| Specific documents applicable to NH90 Programs | | |
|--|---|------------|
| QD S000N0803E01 | QUALITY ASSURANCE REQUIREMENTS FOR SUPPLIERS | BMSD EI101 |
| QD S000N0822E01 | "Critical" parts management | BMSD EI101 |
| QD S000N0805E01 | Concessions procedure | BMSD EI101 |
| QD S000N0812E01 | Log Card procedure | BMSD EI101 |
| | | |
| QD S000N0816E01 | Supplier Production Investment Review | BMSD EI101 |
| QD S000N0815E01 | Supplier First Article Inspection procedure | BMSD EI101 |
| QD S000N0817E01 | Specific tools/test means validation procedure | BMSD EI101 |
| QD S000N0818E01 | Special processes validation procedure | BMSD EI101 |
| QD S000N0819E01 | Guide for writing equipment test specification | BMSD EI101 |
| QD N000N0804E01 | Classification and procedure for structural and mechanical parts | BMSD EI101 |
| QD S000N0838E01 | Temporary Deviation procedure | BMSD EI101 |
| F020 029 | Certification Document | BMSD |
| EI023 | FRACAS Information definition and sentencing criteria for attributable failures | BMSD EI101 |
| MDS000M0410E01 | during maturity phase NH90 | |
| EI101 | Classification of parts : link between NH90 specific terms and EC directive | BMSD EI101 |
| QDN000A0823E01 | | |
| F101 001 | Concession form for serial NH 90 | BMSD |
| MDS000N3484E01 | Government Furnished Equipment handling procedure | BMSD EI101 |
| MDS000N0436E01 | GFE Handling Procedure for production phase | BMSD EI101 |

Specific Definitions

Direct delivery

It is delivery from a Supplier to a Partner Company which is not the Buyer.

Inspection File

The Inspection File is the set of technical documentation which defines the procedures and the processes to be applied and the means to use to check:

- that the products are in compliance with the Definition File,
- that they are carried out in accordance with the instructions given by the Manufacturing File.

Note: The Manufacturing File and the Inspection File can be integrated into a single document.

Item

It means the Equipment and its Spares, any type of hardware, software, report, data, assistance, service and any other outcomes to be rendered by the Supplier to the Buyer within the Contract and/or Agreement.

Manufacturing File: The Manufacturing File is the set of documents which defines the procedures, the processes and the means necessary for the established production of an Item in compliance with the Definition File.

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8.3 Design and development of products and services

See ER070 06-04

8.4 Control of externally provided processes, products, and services

The Supplier **shall** inform in advance the Purchaser of any new sub-contract(s), change of subcontractor(s),

8.5 Production and Service provision

First Article Inspection & PIR

A PIR **shall** be carried out according to the document: (EI101) QD S000N0816E01.

The FAI **shall** be performed according to the document: (EI101) QD S000N0815E01.

The Supplier **shall** set up a surveillance of manufacturing process and related means through an Inspection and Test Plan that **shall** include periodic (calendar or number of Items) complete verification to verify to keep under control the constancy of the quality level during the whole production phase.

Special Processes

The Validation **shall** be carried out in accordance with the document "Special processes validation procedure": (EI101) QD S000N0818E01

Software

Production activities related to software **will** be the following, according to AQAP-2210:

- _ Safe storage of masters,
- _ Replication procedures from masters, including check of the copy conformity,
- _ Loading procedure and verification,
- _ If applicable, delivery procedure,
- _ Implementation of configuration management rules (maintenance).

Evidence and traceability

The Supplier **shall** be able to make available, on Buyer's request, for each delivered Item:

- _ Evidence of incoming inspection of all supplied Items,
- _ Identification of material,
- _ Traceability of storage conditions (when applicable),
- _ Evidence of reviews, inter-stage inspections, final inspections and tests and the identification of the inspectors involved,
- _ Evidence of release documentation for delivered Items,

_ Identification of each technical problem, non-conformity and evolution of the configuration/definition of the Items,

_ Evidence of traceability (Item against Definition Files, means...).

All these records **shall** be retained ten years from the delivery (except for "Critical Parts" see specific document) and **shall** not in any case be destroyed without prior permission of the Buyer.

Log Card

Where requested, Log Card **shall** be established in accordance with "Log Card procedure":

(EI101) QD S000N0812E01 (the applicable Form is defined in annex 2 of the "Log Card procedure").

Delivery documentation

In addition to general documentation, the Acceptance Test Report **will** be provided.

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Packaging identification

Except otherwise agreed, the packaging identification **shall** be consistent with the requirements of AECMA 2000M/STANAG 4280

9.1 Monitoring, measurement, analysis, and evaluation

GQA can never be a reason for justifying any delay on contractual commitment

10.2 Nonconformity and corrective action

The Supplier **shall** notify its local GQAR of non-conforming items received from sub-contractor that have been subject to GQA, according to the list provided by its GQAR.

In case of repetitive anomalies or failures rate leading the Supplier to be unable to replace the defective Item(s) in the conditions defined in the Contract following conservative actions **shall** be taken:

_ Functional incoming tests, under Supplier responsibility, with the relevant means **will** be implemented at the Buyer premises, or Buyer representative **may** decide to attend systematically to Supplier's acceptance tests until 10 supplies delivery without anomalies/failures,

The handling of concessions is described in the documents: (EI101) QD S000N0805E01 with associated Form F101 001.

Special Investigations

When a defective Item is the subject of a special investigation, steps **shall** be taken by the rejecting company to ensure that the unit is properly packed sealed and the outside of the container distinctly marked:

"TO BE OPENED ONLY IN THE PRESENCE OF THE BUYER'S QUALITY MANAGEMENT AND GQAR (OR WITH THEIR AUTHORISATION) "

Items supplied with "ground use only" limitations, **will** be subject to the following mandatory requirements:

- ☐ The Items **shall** be identified by a bright red band approximately 20mm wide or as wide as is practicable for the size of the Item,
- ☐ The Release Note, the CoC and The Log Card (where applicable) **shall** be clearly endorsed "NOT FOR FLIGHT",

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APPENDIX K: ELIGIBLE & APPROVED ACCREDITED PRI-NADCAP SPECIAL PROCESSES

List of Special Processes Pri-NADCAP accredited, eligible & approved by the Purchaser or AIRBUS

The Pri-NADCAP accreditation is requested on these hereafter Special Processes for being approved and monitored by the Purchaser & AIRBUS: (list valid at the date of publication)

Chemical Processing
Composites
Heat Treating
Non Destructive Testing
Material Testing laboratory (including tier two subcontracted tests)
Welding

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APPENDIX L: REQUIREMENTS FOR COMMERCIAL PARTS, STANDARD PARTS AND RAW MATERIAL SUPPLIERS

(Applicable in addition to the general core part to this part of suppliers, by exception, in this Appendix L, in case of incoherencies this Appendix L prevails)

This appendix specifies the quality requirements to be applied by Suppliers delivering:

- “Commercial parts” &
- “Standard parts” (public and company) &
- Standard fasteners in critical installations & “Raw material”

1) Standard parts (public and company)

Any supplier is relevant to selection and specific respective authorization from the Purchaser and any of its subsidiary.

All standards (public and company) used by Airbus Helicopters Design Office are listed in the HQPL. Couple standard / Manufacturer has to be qualified by Airbus Helicopters. To make it happen, the supplier shall demonstrate to the Purchaser, the technical compliance of the parts with the concerned standard.

The supplier shall verify by tests all the technical specifications defined in the standard and shall provide to the Purchaser the proof of the compliance through a QTR (Qualification Test Report).

Remark: Standard Parts or Raw Material procured by AH for Airplane Doors Business are subject of the AQPL.

In case of European Standards (EN), Airbus Helicopters recognizes ASD-CERT (Certification of Standard Aerospace Products - see www.asd-europe.org) as a third party to achieve these qualifications and periodic monitoring for standard products to meet an EN standard and standardized technical specification. In this case Airbus Helicopters verifies with ASD-CERT of the validity of the certification file. Airbus Helicopters identify additional requirement & surveillances.

2) Standard Fasteners used in critical installations

Requirements related to the manufacture for standard fasteners used in critical installations:

The manufacturer of standard fasteners used in critical installations shall provide to the Purchaser for each delivery & each batch:

- Certificate of Conformity including Test Report according EN10204 type 2.2,
- Raw Material Inspection Certificate according EN10204-3.1

3) Commercial parts

The “Commercial Parts” term is referring to parts that are neither specifically designed nor manufactured for aviation use (Refer to FAA Advisory Circular AC-No: 21-45).

Commercial Parts cover the following next subchapter:

- Mission Equipment
- Industry Parts
- Industrial Goods

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According to contract requirements, the Supplier shall comply with all environmental applicable laws and regulations and shall provide information for Compliance (The Supplier shall complete LFRS "Lead-Free RoHS Sheet" F020 199...) and update them.

All Commercial parts **will** at minimum be tagged with:

- Manufacturer identification
- Item identification reference
- Trace-ability data (Serial or batch number, manufacturing date or any relevant)

Airbus Helicopters **may** need to add some specific marking, the later **will** never be relevant for any reduction of the original source responsibility for conformity.

These **will** be reported on packaging (if requested by Contract).

3.1 Industrial goods

Industrial Goods are parts not specified according to public/or company standards (e.g. "catalogue parts").

Industrial Goods must fulfill all the requirements defined in the dedicated AH documents (technical data, characteristics and identification from manufacturer's technical data sheet, requested for the use of a part by Design Office and all other Department.

Industrial Goods shall be delivered with an ATR on request

Before any change that affects commercial Part interchangeability (Form Fit Function impact, the supplier will inform the Purchaser