|  |  |  |  |
| --- | --- | --- | --- |
| DOCUMENT N. |  | ISSUE |  |

|  |  |
| --- | --- |
| DATE |  |

|  |  |
| --- | --- |
| TITLE | ***Quality Plan***  ***TEMPLATE*** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***COMPILED*** | | | | | | | |
|  |  |  | date |  | date |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| ***APPROVED BY (Head of Technical department)*** | | | | | | | |
|  | date |  | date |  | date |  | date |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | date |  | date |  | date |  | date |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| ***APPROVED BY (Head of Quality Assurance Department)*** | | | | | | | |
|  | date |  | date |  | date |  | date |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| ***APPROVED BY (Accountable Manager)*** | | | | | | | |
|  |  |  | | date | |  |  |
|  |  |  | | | |  |  |
|  |  |  | | | |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | date |  |  |
|  |  |  | |  |  |
|  |  |  | |  |  |

**REVISION HISTORY**

|  |  |  |
| --- | --- | --- |
| **ISSUE** | **CHANGE DESCRIPTION** | **ISSUE DATE** |
|  |  |  |
| **N. PAG.**  **\_\_\_\_\_\_\_\_** |

**TABLE OF CONTENTS**

|  |
| --- |
| [1 Scope and management 5](#_Toc58854995)  [1.1 Indication of contractor 5](#_Toc58854996)  [1.2 Applicability 5](#_Toc58854997)  [1.3 QP Approval and Update 5](#_Toc58854998)  [2 List of acronyms and definitions 6](#_Toc58854999)  [3 Applicable documents 9](#_Toc58855000)  [3.1 Contractual documents 9](#_Toc58855001)  [3.2 Applicable Regulation 10](#_Toc58855002)  [3.3 Leonardo Helicopters documents 10](#_Toc58855003)  [3.4 List of *[Supplier Name]* applicable documentation define on this QP. 11](#_Toc58855004)  [3.5 Specific Applicable LH Program documents 11](#_Toc58855005)  [3.6 *[Supplier Name]* Approval 11](#_Toc58855006)  [3.7 Exclusion for Design activities in charge of LH 12](#_Toc58855007)  [3.8 List of Sub-tier QP involved in the activities 12](#_Toc58855008)  [4 Organizational roles and responsibilities, and personnel competence 13](#_Toc58855009)  [4.1 Personnel definition 13](#_Toc58855010)  [4.2 Education and Training 13](#_Toc58855011)  [4.3 Personnel capability 13](#_Toc58855012)  [5 Planning 15](#_Toc58855013)  [6 Focal Point 16](#_Toc58855014)  [6.1 *[Supplier Name]* Focal Point. 16](#_Toc58855015)  [6.2 Leonardo Helicopters Focal Point. 16](#_Toc58855016)  [7 Documents Quality requirements 17](#_Toc58855017)  [7.1 Issue 17](#_Toc58855018)  [7.2 Record Keeping 17](#_Toc58855019)  [8 DO-PO Arrangement 18](#_Toc58855020)  [8.1 Document Exchange 18](#_Toc58855021)  [8.2 Parts in Capability List 18](#_Toc58855022)  [8.3 DOCUMENTED INFORMATION AT EVERY STAGE OF TECHNICAL DATA APPROVAL 18](#_Toc58855023)  [8.4 Changes affecting the Arrangement/Agreement 19](#_Toc58855024)  [9 Configuration Management 19](#_Toc58855025)  [9.1 Change Classification and Leonardo Helicopters involvement. 19](#_Toc58855026)  [9.1.1 Management of Design Changes before Qualification 19](#_Toc58855027)  [9.1.2 Management of Design Changes after Qualification 19](#_Toc58855028)  [9.1.3 Change Approval 20](#_Toc58855029)  [10 Design and development 21](#_Toc58855030)  [10.1 Design control 21](#_Toc58855031)  [10.2 Basic data and requirements of Design 21](#_Toc58855032)  [10.3 Software Quality Assurance 21](#_Toc58855033)  [10.4 System Equipment List 21](#_Toc58855034)  [10.5 Preliminary Design Data Set (DDS) 22](#_Toc58855035)  [10.6 Critical Part 22](#_Toc58855036)  [10.7 Forging and Casting Design Requirements 23](#_Toc58855037)  [10.8 Special Processes 23](#_Toc58855038)  [10.9 Design Review 23](#_Toc58855039)  [10.10 Design Verification and Validation 24](#_Toc58855040)  [11 Activities and documentation for qualification of parts 25](#_Toc58855041)  [11.1 Functional Qualification 25](#_Toc58855042)  [11.2 Manufacturing Qualification 26](#_Toc58855043)  [11.3 Specific LH Program requirements 27](#_Toc58855044)  [12 Inspection and Testing 28](#_Toc58855045)  [13 Components designed by sub-TIERS 29](#_Toc58855046)  [14 PRODUCT identification and traceability 30](#_Toc58855047)  [15 [Supplier Name] DDS Approval 31](#_Toc58855048)  [16 Control of non conforming product 33](#_Toc58855049)  [17 Delivery Documentation 34](#_Toc58855050)  [18 Maintenance Manual 35](#_Toc58855051)  [19 Continued Airworthiness 36](#_Toc58855052)  [20 Corrective and preventive actions 37](#_Toc58855053)  [21 Quality Audits 38](#_Toc58855054)  [22 Design process analysis and improvement 39](#_Toc58855055)  [23 Right of Access 40](#_Toc58855056)  [24 Special processes 41](#_Toc58855057)  [25 CONTROL OF COUNTERFEIT ARTICLES 42](#_Toc58855058)  [26 PURCHASING PROCESS 43](#_Toc58855059)  [27 PRODUCTION 44](#_Toc58855060)  [28 POST-DELIVERY SUPPORT 45](#_Toc58855061)  [29 MANAGEMENT COMMITMENT IN REVIEWING AND MONITORING MEASUREMENT AND KPI 46](#_Toc58855062)  [ANNEX A 47](#_Toc58855063)  [Focal points in accordance with Chapter 6 47](#_Toc58855064)  [[Supplier Name] Focal Points. 48](#_Toc58855065)  [Leonardo Helicopters Focal Points. 49](#_Toc58855066)  [ANNEX B 1](#_Toc58855067)  [COMPLIANCE CHECKLIST to the QRS-108 requirements 1](#_Toc58855068)  [ANNEX C 1](#_Toc58855069)  [APPLICABILITY in accordance with Chapter 1.2 1](#_Toc58855070)  [(including the updated list of SADD) 1](#_Toc58855071) |
| Scope and management |
| This Quality Plan is issued by *[Supplier Name]* in order to:   * Ensure adequate Quality Assurance System implementation, during the development and production phase of the item of the contract, according to requirements of the applicable documentation. * Ensure that these rules and procedures are correctly implemented, also with its sub-suppliers   Contents of this QP are applicable to all activities performed by the *[Supplier Name]* for the development, design, manufacture and qualification of a part or a system which requirements are described by the Leonardo Helicopters Specification see in § 3.3  Each evolution of this document shall be sent to Leonardo Helicopters for approval. |
| Indication of contractor |
| *[Supplier Name and Plant address]* |
| Applicability |
| This Quality Plan is applicable for development design, qualification and production of the System(s) and Part Numbers listed in “Annex C” of this plan.  *[List in Annex C all the P/Ns covered on this Quality Plan: LH P/N, Supplier P/N, Description, Procurement Spec/SCD, Sub-tier P/Ns if any. Remark: any Software and Complex Electronic Hardware installed on Articles shall be clearly declared and identified]* |
| QP Approval and Update |
| *[Supplier Name]* takes the responsibility to keep the Quality Plan updated and to provide Leonardo Helicopters SQA point of contact the QP updated for review.  The QP will clearly highlight the modifications from the already approved one.  *[Describe how the Supplier intends to manage the changes to QP and how to submit to LH approval]* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| List of acronyms and definitions | | | | |
| **AR** | | **Analysis Report CDR (Critical Design Review)**  Activity to be performed in **order** to check the design status at the end of detailed design, before the start of validation activities. | | |
| **ATP** | | **Acceptance Test Procedure**  Document describing the procedure to be performed, for each item (S/N) produced, to verify, before delivering, that the item has the required functional characteristics and is not affected by any malfunction. | | |
| **ATR** | | **Acceptance Test Record**  List of results of all ATP tests/verification executed in order to check an item (S/N).It is part of delivery documentation. | | |
| **CDR** | | **Critical Design Review**  Activity to be performed in order to check the design status at the end of detailed design, before the start of validation activities | | |
| **CoC** | | **Certificate of Conformity**  Document issued in order to declare the conformity of a delivered item to its drawing/applicable specification, or the partial conformity when referring to a Concession or Production Permit. | | |
| **COMO** | | **Coordination Memo**  Form used in order to exchange information between the Supplier and Leonardo Helicopters. | | |
| **CMP** | | **Configuration Management Plan** | | |
| **CPE** | | **Chief Project Engineer** | | |
| **CVE** | | **Compliance Verification Engineer** | | |
| **DDP** | | **Declaration of Design and Performance**  A DDP is the commitment of a manufacturer to deliver a product complying with the defined dimensions and performances, based on qualification tests carried out by the major user or by the manufacturer himself. This document summarise the test/verification results performed and declares the qualification status of the P/N. It can be issued before the end of all qualification activities (PDDP or Preliminary DDP). | | |
| **DDS** | | **Design Data Set**  It is the collection of the drawings, specifications and technical information in general provided by the Design Organization (DO) to a Production Organization (PO), sufficient for the development of production data assuring the continued manufacturability of parts in conformity with the project data. | | |
| **DO** | | **Design Organisation**  It is composed by all departments directly involved and/or responsible of activities that starting from a technical requirements have the purpose to give compliance of the product, designed starting from QRS and QRS-XXX Leonardo Helicopters procedures. | | |
| **EFA** | | **Experimental Flight Approval**  Minimum subset of qualification tests/verification to be performed in order to give a limited flight clearance to a P/N. | | |
| **HW** | | **Hardware** | | |
| **MoC** | | **Means of Compliance**  Method to be used in order to demonstrate the compliance. | | |
| **PDR** | | **Preliminary Design Review**  Activity to be performed in order to verify the status of the design at the end of the preliminary design phase and before the start of the detailed design. | | |
| **PO** | | **Production Organisation**  It is composed by all departments that have the responsibility to purchase and produce new equipment or parts, but have not in charge design and qualification activities. | | |
| **POE** | | **Production Organisation Exposition** | | |
| **PS** | | **Procurement Specification** | | |
| **PSAC** | | **Plan for SW aspect for certification**  Document describing the activities to be performed in order to demonstrate the compliance to the RTCA DO178B. | | |
| **QP** | | **Quality Plan**  Document describing the activities to be performed in order to demonstrate the compliance to the contract requirements. | | |
| **QPl** | | **Qualification Plan**  Document describing part of activities to be performed in order to demonstrate the compliance. QPls are all analysis reports, similarity reports, etc. and Qualification Test Procedures (QTPs). For each QTP shall be provided the relevant QTR | | |
| **QPP** | | **Qualification Program Proposal or Plan**  Document resuming all activities that will be performed in order to demonstrate the compliance to technical requirements; it contains reference to Qualification Test Proposal (QTP) and remaining reports (analysis, similarity, etc.) | | |
| **QR** | | **Qualification Review**  Activity to be performed in order to check the qualification status of the design, at least before the industrialisation phase. | | |
| **QTP** | | **Qualification Test Procedure/Plan**  Test proposal issued in order to detail tests for compliance demonstration and Qualification. In order to reach the qualification of equipment can be provided one QTP, describing all tests, or more QTPs each one describing a subset of tests. | | |
| **QTR** | | **Qualification Test Report**  Test report issued in order to detail results of tests performed for compliance demonstration and Qualification. In order to reach the qualification of equipment can be provided one QTR, describing all tests, or more QTRs each one describing a subset of tests | | |
| **SAS** | | **SW Accomplishment Summary**  Document contains the compliance documentation related to the requirements defined in the PSAC | | |
| **SCDD** | | **Source Control Drawing for Design**  Drawing/Specification referred to equipment which are designed by a Supplier. It includes the requirements the Supplier has to comply with in order to design the equipment | | |
| **SCN** | | **Specification Change Notice**  It is the document issued in order to notify, transmit and record modifications to Technical Specifications | | |
| **SR** | | **Similarity Report** | | |
| **SW** | | **Software** | | |
| **SWQAP** | | **Software Quality Assurance Plan** | | |
| **VDD** | | **Version Description Document**  Document resuming all the test results performed in order to demonstrate the SW compliance to the Technical Specification requirements and declaring the conformity level. This document is to be issued during the SW developing phase and at the end of the qualification activity | | |
| Applicable documents | | | | |
| Contractual documents | | | | |
| Contract | Contract Order N° *[Insert Number of Contract Order]* | | | |
|  | Agreement Statement of Work N°*[Insert Number of Agreement Statement of Work]* | | | |
|  | QRS-01 | | Quality Requirements for Suppliers Issue \_\_ *[Insert Number of Issue the QP is compliant with]* | |
|  | QRS-100 | | Digital Manufacturing (DMFG) | |
|  | QRS-101 | | First Article Inspection | |
|  | QRS-103 | | Quality Requirements for Subcontracted Parts and GSE, Stockist of Raw Material, Distributors of Parts | |
|  | QRS-104 | | Special Processes | |
|  | QRS-105 | | Management of LH Equipment and tools | |
|  | QRS-107 | | Management of Non-Conforming Articles | |
|  | QRS-108 | | Supplier Quality Plan | |
|  | QRS-110 | | DO-PO Arrangement | |
|  | QRS-115 | | Requirement for Supplier of Design and Development Suppliers | |
|  | QRS-116 | | Software Development, Quality Requirements for Suppliers | |
|  | QRS-117 | | Complex Electronic Hardware, Quality Requirements for Suppliers | |
|  | QRS-118 | | Requirements for Laboratories and Manufacturers of Non-Airborne Equipment for LH Engineering | |
|  | QRS-122 | | Supplier Component Maintenance/Operating Manuals Management | |
|  | QRS-130 | | Flow-down of LH Requirements to Sub-Tier Suppliers | |
|  | All the Leonardo Helicopters Quality Instructions (QRS-XXX) and the forms that are recalled on these instructions with the relevant explanations are available on the Leonardo Helicopters website at the follow address:  **www.leonardocompany.com** | | | |
| Applicable Regulation | | | | |
| EASA Part 21 | | | | Rules for the airworthiness and environmental Certification |
| EASA Part 21 G | | | | Rules for the airworthiness and environmental Certification - Production Organization |
| EASA Part 21 J | | | | Rules for the airworthiness and environmental Certification - Design Organization |
| FAA Part 21 | | | | Certification Procedures For Products And Parts Subpart G – Production Certificate *[Delete if you are a European. Supplier]* |
| EASA CS 27 | | | | Certification Specification for Small Rotorcraft |
| EASA CS 29 | | | | Certification Specification for Large Rotorcraft. |
| EASA Part 145 | | | | Rules for the airworthiness and environmental Certification - Maintenance Organization |
| FAR 145 | | | | Maintenance Organization |
| EN 9100 | | | | Aerospace Series  Quality management systems – Requirements (based on ISO 9001:2000) and quality systems – Model for quality assurance in design, development production installation and servicing (based on ISO 9001:1994). |
| AQAP 2110 | | | | NATO Quality Assurance Requirements for Design, Development and Production. |
| AQAP 2210 | | | | NATO Supplementary Software Quality Assurance Requirements to AQAP 2110. |
| EMAR 145 | | | | European Military airworthiness requirements |
| EMAR Part 21 G | | | | European Military airworthiness requirement - Production Organization |
| EMAR Part 21 J | | | | European Military airworthiness requirement - Design Organization |
| Leonardo Helicopters documents | | | | |
| LH Technical Specification N°*[Insert Number of Leonardo Helicopters Technical Specification]*  LH Source Control Drawing N°*[Insert Number of Leonardo Helicopters Source Control Drawing]*  *[If the Quality Plan is issued for system or part numbers applicable for more helicopters, defined by different contracts, please removing the lines and insert the sentence “see Annex C”]* | | | | |
| List of *[Supplier Name]* applicable documentation define on this QP. | | | | |
| *[Insert Quality Manual]* | | | | |
| *[Insert Design Manual/Control]* | | | | |
| *[Insert Drafting issue and approval of the documents and drawings procedure]* | | | | |
| *[Insert Analysis Methods Validation procedure]* | | | | |
| *[Insert Design review procedure]* | | | | |
| *[Insert Definition and managing of Critical Parts procedure]* | | | | |
| *[Insert Qualification Process procedure]* | | | | |
| *[Insert HW and SW Configuration Management procedure (s)]* | | | | |
| *[Insert Record Keeping procedure]* | | | | |
| *[Insert Corrective and Preventive Action procedure]* | | | | |
| *[Insert Quality Audit procedure]* | | | | |
| *[Insert Control of Measuring Gages and Test Equipment procedure]* | | | | |
| *[Insert First Article Inspection procedure]* | | | | |
| *[Insert Special Process qualification procedure]* | | | | |
| *[Insert Non-conforming Products management procedure]* | | | | |
| *[Insert all Applicable Supplier documents define on this Quality Plan]* | | | | |
| *[Supplier Name]* shall inform Leonardo Helicopters Suppliers Quality Assurance about any significant modification to the procedures above, to evaluate possible impacts to the scope and the contents of this Quality Plan. | | | | |
| Specific Applicable LH Program documents | | | | |
| *[Insert all Applicable Specific LH Program applicable on this Quality Plan]* | | | | |
| *[Supplier Name]* Approval | | | | |
| *[Supplier Name]* Quality System fulfils EASA requirements. Certificate N°*[Insert Number of Certification EASA]* | | | | |
| *[Supplier Name]* Quality System fulfils EN/AS/JISQ9100 series requirements Certificate N° *[Insert Number of Certification EN/AS/JISQ9100]* | | | | |
| *[Supplier Name]* Quality System fulfils ISO 9001 requirements Certificate N*° [Insert Number of Certification ISO 9001]* | | | | |
| *[Supplier Name]* Design Organisation and Production Organisation operate in accordance with QRS01Leonardo Helicopters requirements see Leonardo Helicopters Statement of Approval N° LH/*[Insert Number of Certification LH SoA]* | | | | |
| *[List of the all further Supplier achieved approvals]* | | | | |
| Exclusion for Design activities in charge of LH | | | | |
| *[List any exclusion for Design activities in charge to LH, if any. Please, do not delete this paragraph; delete only the text and report the sentence “Not Applicable”]* | | | | |
| List of Sub-tier QP involved in the activities | | | | |
| *[Insert all Sub-tier QP involved applicable on this Quality Plan, if any. Please, do not delete this paragraph; delete only the text and report the sentence “Not Applicable”]* | | | | |

|  |
| --- |
| Organizational roles and responsibilities, and personnel competence |
| Personnel definition |
| The *[Supplier Name]* organisation and responsibility definition is reported in the *Quality Manual N°* *[Insert Supplier Quality Manual Number and Title]*  *[Supplier Name]* has defined a dedicated structure of program management, in order to assure the appropriate control and quality of Design and Development activities.  The following paragraphs report the Manager’s names involved in this program:   * **Program Manager** Mr. *[Supplier Program Manager Name]* is responsible to manage the program in order to meet the contract. * **Technical Director** Mr. *[Supplier Head of Design Organisation Name]* is responsible of the continued airworthiness of the product: responsible to sign, directly or by delegation all the technical documentation (i.e. PS, QTP, QTR, ATP, DDPs). *[In case of delegation identify the names of people delegates (directly)]* * **Manufacturing Engineering Manager** Mr. *[Supplier Head of Design Organisation Name]* is responsible for * **Production Accountable Manager** Mr. *[Supplier Accountable Manager Name]* is responsible to produce the item in conformity with engineering data. * **Certifying Staff** Mr. *[Supplier Certifying Staff Name]* is responsible to sign the conformity documents (CoCs, EASA Forms 1 or TAG 8130), Concession and Production Permits * **Quality Manager** Mr. *[Quality Manager Name]* is responsible for the Quality and is the official communication channel with Leonardo Helicopters for what concerns Quality issues. He ensures that *[Supplier Name]* has a Quality policy and that the Quality policy is published and correctly implemented within all *[Supplier Name]* functions. He takes the ultimate responsibility for all Quality aspects, ensuring the execution and approval of this Quality Plan and FAI. * **Quality Control Manager** Mr. *[Quality Control Manager Name]* is responsible for * **Manufacturing Manager** Mr. *[Manufacturing Manager Name]* is responsible for   *[Include the organization chart]* |
| Education and Training |
| The above personnel comply with the education, training, skills and experience requirements defined in the internal procedure *[Insert the Reference, Number/s and title/s].* |
| Personnel capability |
| *[Supplier Name]* ensures that all the people involved in design activities for Leonardo Helicopters articles (*[Supplier Number of people working in technical direction department]* people) complies with the requirement of the above procedure. |

|  |
| --- |
| Planning |
| The schedule of the all activities to reach the final qualification is defined in the document *[Insert the Reference, Number/s and title/s].*  *[The supplier shall describe their capacity to address the requested scope of work. This might be done by providing the following:*   * *Project planning* * *Work breakdown structure* * *Resource breakdown structure* * *Risk Assessment]* |

|  |
| --- |
| Focal Point |
| *[Supplier Name]* Focal Point. |
| See Annex “A” for Supplier Focal Point in charged in the program.  Any exchange of information between Supplier and Leonardo Helicopters shall be coordinated through the Coordination Memo (COMO) document.  *[LH suggest to report in Annex “A” to this QP the list of Supplier personnel involved in the program which have an interface role with Leonardo Helicopters. In the event of personnel changes, this Annex would be reviewed and formally communicated to Leonardo Helicopters and the change would be treated as a minor modification, which does not require Leonardo Helicopters re-approval of the entire QP.]* |
| Leonardo Helicopters Focal Point. |
| See Annex “A” for Leonardo Helicopters Focal Point in charge in the program.  Any exchange of information between Supplier and Leonardo Helicopters shall be coordinated through the Coordination Memo (COMO) document.  *[The list with the reference of Leonardo Helicopters personnel involved in the program with roles of interface and approval will be included in the Annex “A” to the QP. This list will be kept updated by Leonardo Helicopters Supplier Chain Management]* |

|  |
| --- |
| Documents Quality requirements |
| Issue |
| Documentation will be issued, approved, changed and managed according to internal procedure See procedure *[Insert Supplier Applicable Procedure Number and Title]*  *[Description of how the documentation is issued, approved, changed and managed]* |
| Record Keeping |
| *[Supplier Name]* is responsible to receive, archive and manage all the Design Data Set (DDS) related to the product and their changes (Drawings, Procedures, Technical Specifications, Reports, Verification and Validation data, Documents...) in agreement with the Supplier procedure *[Applicable Procedure Number and Title].*  The location selected to keep the records will be equipped with suitable devices, assuring protection against accidental damage due to adverse environmental conditions, fire, loss or robbery.  The record keeping must be maintained, in compliance with the Leonardo Helicopters procedure QRS-01, for the whole service life of each unit or of the aircraft on which these units will be installed and at the disposal of Leonardo Helicopters and Civil/Military Authorities.  This requirement is applicable also toward *[Supplier Name]* Subcontractors. |

|  |
| --- |
| DO-PO Arrangement |
| As required by EASA Part 21A.133 (b) and (c), the Supplier and the Design Organization will assure that the Design Data Set transfer from Design Organization to a Production Organization is able to guarantee the continued manufacturability of parts in conformity with the design data in accordance with *[Supplier Name]* procedure *[Applicable Procedure Number and Title]*.  This agreement will be managed in accordance with the Leonardo Helicopters instruction QRS-115.  The agreement will be formalized by the signature of both *[Supplier Name]* PO responsible (Accountable Manager) and Leonardo Helicopters DO Responsible (HDO), on the form reported in the Instruction QRS-110, before the start of design activities.  This Quality Plan is the guideline for the signature of the Arrangement.  *NOTE: DO-PO ARRANGEMENT is not applicable to U.S.A. Suppliers. The Paragraph 15 of this Quality Plan defines the activities performed between Leonardo Helicopters and U.S.A. Supplier to deliver parts with the FAA TAG 8130-3.*  *[If you are an U.S.A. Supplier, please, do not delete this Chapter 8; delete only the text and report the sentence “Not Applicable for U.S.A. Supplier”]* |
| Document Exchange |
| The contractual and qualification documents will be exchanged through Leonardo Helicopters purchasing department.  Change Requests will be exchanged between Technical Departments.  All the documents shall be properly approved by Supplier functions, before the delivery to Leonardo Helicopters.  The documents between *[Supplier Name]* and its sub-suppliers will be exchanged in accordance to the company procedure *[Insert Supplier Applicable Procedure Number and Title]* in agreement with the *[Insert The Accordance Subscribe By The Supplier And The Its Sub-supplier]*  *[Description of how the documentation is being exchanged between Supplier and LH ]* Parts in Capability List *[Description of supplier process for including parts in the Capability Lists (“Prototype” and “New”, as applicable) and the minimum documentation needed]* DOCUMENTED INFORMATION AT EVERY STAGE OF TECHNICAL DATA APPROVAL *[Description of transition from applicable technical data to approved technical data (that is after SADD issue), including the update of Capability List and issue of EASA Form 1 NEW, and, if requested by LH, the re-issue of the EASA Form 1 Prototype to NEW, whether the conditions are met]* |
| Changes affecting the Arrangement/Agreement |
| *[Description of how the Supplier manage DO-PO Arrangement changes with LH ]*  *NOTE: the Supplier shall inform LH of any changes that may affect the applicability of the DO-PO Arrangement; the Supplier shall also inform LH when the PO certification is suspended or affected by Authorities level 1 finding* |

|  |
| --- |
| Configuration Management |
| Each evolution of a part number a product modification follows the rules stated in the procedure*(s)* *[Insert Supplier Applicable Procedure Number and title]*.  These (This) procedure(s) of Configuration Management state(s) the rules for numbering the drawings and documents, identify the change classification and their impact on the numbering.  The classification and Leonardo Helicopters involvement to changes management will be considered at “deliverable” unit’s level. In case of changes to internal parts of an equipment the “Manufacturer” will evaluate the relevant impact on the “End item” (deliverable unit) and this will be classified and submitted to Leonardo Helicopters for approval or info accordingly. |
| Change Classification and Leonardo Helicopters involvement. |
| Management of Design Changes before Qualification |
| Until qualification is obtained, design changes will be submitted to LH for acceptance if there is an impact on fit, form or function. |
| Management of Design Changes after Qualification |
| Alteration to any of the following data, which constitutes the type design, is considered a change to Type Design:   * Drawings and their lists necessary to identify the configuration * Specifications and their lists necessary to identify the configuration * Information on materials, processes, methods of manufacture and assembly * Approved airworthiness limitation sections of instructions for continued airworthiness   Any data necessary to allow comparisons with later products for the determination of the airworthiness Changes applied to them after the achievement of the qualification shall be classified by LH as per EASA PART 21 |
| Change Approval |
| All Changes will be communicated to LH for classification and approval.  For each Changes, the *[Supplier Name]* will send to the LH Technical Area in charge to follow the design activity the following:   * Engineering change order documents, in the format identified in the Quality Plan and in the DO-PO Arrangement. * The drawings relevant to the change and all the documents proposing or testifying the demonstration of compliance to the applicable Technical Specification requirements, applicable airworthiness requirements (CS paragraphs) and environmental protection requirements. These documents may be compliance statements, description reports, analytical substantiation reports, safety analysis reports, test plans/test reports etc. Changes cannot be implemented until its approval is communicated by LHEO with signature on the SCN.   The changes in the table below are pre-classified as Very Minor Changes to the design data not requiring further demonstration of compliance. Only these specific changes do not require any LH approval before the implementation.   * Correction of drawing clerical errors *(E.g.* *Graphical errors; formal errors on quotations or references)* * Correction of Drawing Part list clerical errors *(E.g. Formal errors; incorrect or superseded recall of materials or standards)* * Translation of the data set on a different CAD system keeping technical contents * Change affects part / specification identification without change of contents (for example: evolution from MIL to SAE; MIL to NAS etc.). Except for contracted and deliverable P/Ns * Re-arrangement of drawing tree without altering technical contents (for example moving P/N from an assembly drawing to another one transposing the installation instruction and keeping the technical contents). Without impact on contracted and deliverable P/Ns   In this case *[Supplier Name]* will send through COMO (form QRS-115\_F02) to the LH Technical Area in charge to follow the design activity the following:   * Engineering change order document, in the format identified in the Quality Plan and in the DO-PO Arrangement. * Possible additional documentation to complete change description |

|  |
| --- |
| Design and development |
| Design planning is detailed in the procedure *[Insert Supplier Applicable Procedure Number and title]* |
| Design control |
| The analysis methods used to design the part have been validated in accordance with the procedure *[Insert Supplier Applicable Procedure Number and title].* |
| Basic data and requirements of Design |
| The HW and SW requirements to be complied with are identified in the Procurement Specification and in the QRS-116 and QRS-117 procedures.  Designing a System, *[Supplier Name]* will identify the related “Significant” parts and will prepare the pertinent single equipment or subsystem Specification.  Designing a System, *[Supplier Name]* starting from the requirements of Leonardo Helicopters specification, will identify the related “Significant” parts and these will be splitted in several sub-requirements, by means of single equipment or subsystem specifications.  Designing a single part, will prepare a specification and he will describe how the requirements of Leonardo Helicopters Specification are fulfilled by the single part characteristics.  The above documentation (drawings and documents) will be prepared according to the procedure/s *[Insert Supplier Applicable Procedure Number and title]*. |
| Software Quality Assurance |
| If there is an applicable software to equipment that are object of this contract, the SW Quality Plan must be applies *[Insert Supplier SW Quality Plan with Number and title]*.  If there are not an applicable software to equipment that are object of this contract, to write not Applicable at this paragraph. |
| System Equipment List |
| At the CDR a preliminary list of equipment and items will be agreed between *[Supplier Name]* and Leonardo Helicopters.  According to requirements of QRS-115, this list has been divided in the following:  List of TSO certified equipment  List of “Significant” equipment (P/N’s deliverable that need a specific activity of validation)  List of “Non-Significant” items (P/N’s that will be qualified like an assembly of a superior assembly) The first two lists are annexed to this Quality Plan *[Annex …….]*, with the relevant “Manufacturer”.  For “significant” equipment an “Equipment Specification” (or equivalent Specification Drawing), according to requirements of QRS-115, will be prepared and submitted to Leonardo Helicopters for approval. |
| Preliminary Design Data Set (DDS) |
| At the CDR, a preliminary DDS will be provided by *[Supplier Name]* to Leonardo Helicopters and keep it updated during project subsequent evolution. |
| Critical Part |
| Critical and Hazardous parts are defined and managed according to requirements of QRS-115; in addition the following *[Supplier Name]* procedure will be applied: *[Insert Supplier Applicable Procedure Number and title]*.  For each parts defined “Critical”, according to CS 29/27.602, will be guaranteed the following:   * Identification of the “Critical” part and the characteristic that make critical the item, on the technical documentation (DDS) * Traceability of the manufacturing process of each item (by means of a S/N or Batch Number) * Qualification of the manufacturing process * The work order has to highlight that the item is Critical or Hazardous * Any special process applied has to be qualified * Any NDT has to be qualified and the relevant test scheme has to be approved by a third level Inspector * Definition of “*Invariable defined process*”, freezing the manufacturing process * Traceability of the operating life, for parts with limited service life, by means of S/N and relevant Log Card management * The importance to follow the dedicated instructions shall be highlighted .in the maintenance documents. * Any change to the drawing, manufacturing and inspection method or maintenance documents has to be evaluated in terms of fatigue life of the item and must be approved by Leonardo Helicopters Technical and Quality Department before its implementation * If a part is upgraded to critical or hazardous part this must be identified with a new P/N   All these requirements are applicable also to the *[Supplier Name]* subcontractors  List of a Critical and Hazardous Part is contained in the *[Annex …….]*  *[If the design do not have Critical Parts please delete only the text and report the sentence: “The design do not contains Critical Parts.”]* |
| Forging and Casting Design Requirements |
| The Forging and casting will be design in accordance with the procedure. *[Insert Supplier Applicable Procedure Number and title]*.  The manufacturing process will to be considered as “Invariable defined process”. When the FAI has been approved every Major modification to the manufacturing process will be sent to Leonardo Helicopters for approval before its implementation. |
| Special Processes |
| Special processes that are in accordance with international procedures *(like MIL, for example)* or *[Supplier Name]* procedure *[Insert Supplier Applicable Procedure Number and title]* don’t request Leonardo Helicopters formal approval.  *[Supplier Name]* is responsible to assure the conformance of Special Processes to specifications, both in house and with its subcontractors.  The parameter of Special Processes will be monitored and the process, equipment and operators will be qualified in accordance with internal procedure and Applicable Technical Specification.  The list of special processes used in this program is reported in *[Annex ………..]*.  *[Supplier Name]* is responsible to inform Leonardo Helicopters for major modifications to the applicable Special Process Specifications.  *[If the supplier does not use special processes to make parts, please, not delete this paragraph but insert the sentence ”Not Applicable”.]* |
| Design Review |
| The *[Supplier Name]* has to perform internal Design Reviews following the applicable procedures *[Insert Supplier Applicable Procedure Number and title]*.  Formal Design Reviews will be performed with Leonardo Helicopters, according to requirements of QRS-115; the following Design Reviews will be performed:   * **PDR**; at the end of preliminary design phase. At this time the QP and SWQAP shall be approved * **CDR**; at the end of detailed design phase, at this time the drawings will be formally issued, the configuration baseline will be frozen and the manufacturing can start. From this time any modification will be managed in accordance with the chapter 8 Configuration Management. * **QR**; at the end of Qualification process, before the formal certification activities.   For Activities of design and development of components or systems that contain software will be performed in addition the following design Review:   * **SSR** with the purpose to verify the correct interpretation and implementation of Leonardo Helicopters technical specification requirements within the SW requirements contained in the SRS. * **TRR** before qualification test starting, with the purpose to verify the final expected outputs confirming integration and test positive execution * **DR** before any not yet completely qualified SW release anticipated because an internal Leonardo Helicopters activity needed it or before Leonardo Helicopters submission a new DDP revision. * **FQR/SCR\*** whenever the SW will be certified according to RTCA DO178B.   *[Please declare in this paragraphs if the design does not contain any software or complex hardware]*  Review is closed when each actions item is closed and the relevant documents approved. |
| Design Verification and Validation |
| During development phase, preliminary tests/analysis can be performed in order to verify the adopted design solutions and give a preliminary flight clearance to components. Preliminary validation documentation can be issued.  The documentation and the activities issued and performed for validation will be the same described in the following subparagraph for preliminary and final Validation and Certification.  Design validation will be performed in agreement with the *[Supplier Name]* procedure *[Insert Supplier Applicable Procedure Number and title]*.and substantiated at the end of all design and development activities, by issuing the final documentation, according to QRS-115.  Validation conclusion will be resumed by issuing final DDPs for:   * Each “Significant” equipment * All the Systems and Subsystems. |

|  |
| --- |
| Activities and documentation for qualification of parts |
| In order to comply with Leonardo Helicopters requirements these activities will be performed and the documentation will be issued according to QRS-115. |
| Functional Qualification |
| Main relevant requirements for functional qualification, can be resumed as follows:   * Testing will be performed using laboratories, test rigs, instruments, etc. Validated by *[Supplier Name]*, or by a Subcontractor that has been validate by *[Supplier Name]* for the relevant activities, and accepted by Leonardo Helicopters. * All the items used during testing will be “conform” to the relevant drawing; this conformity is demonstrated producing a FAI on the item under test or on an item of the same batch. * Algorithms and tools used for analysis will be qualified. * Any certification test before starting will be authorized by Leonardo Helicopters Compliance Verification Engineer (CVE), using Leonardo Helicopters Form.   Documentation that will be issued in order to give evidence of design/validation/qualification results, will be:   * Qualification Plan (QPls): * Analysis Reports (AR) * Similarity Reports (SR) * Qualification Test Procedures (QTP) * Qualification Test Reports (QTR) * Plan for Software Aspect of certification (PSAC)\* * Software Verification Plan (SVP)\* * Software Test Report STD\* * Software Test Result STR\* * Software Accomplishment Summary (SAS)\* * Version Description Document (VDD)\* * Declaration of Design and Performance (DDP).   Note: Preliminary DDPs will be revised in case of:   * Change of the declaration of compliance to the procurement specification status * Change of the limitations -Change of applicable ATP (this also applies to final DDP)   All these documents will be signed/approved by *[Supplier Name]* personnel defined in *[Insert Supplier Applicable Procedure Number and title]* and according to relevant procedure of *[Insert Supplier Applicable Procedure Number and title].*  The same will be applied in case of equipment designed by Subcontractors.  Leonardo Helicopters approval is required according to “*Documentation Listed on Table 3 and 4*” of QRS-115.  \* Only if the RTCA DO178b is applicable.  *[If the designed parties do not contain any software systems, please, remove the section dedicate to software PDR.]*  *[If the supplier does not perform qualification tests because the component is only a manufacturing, please, remove the section and insert the sentence “Not Applicable”.]* |
| Manufacturing Qualification |
| For manufacturing qualification a FAI activity will be performed.  First Article Inspections will be performed according to requirements of QRS-101 and *[Supplier Name]* internal procedure *[Insert Supplier Applicable Procedure Number and title]*.  Prior to perform FAI, a FAI Plan will be submitted to Leonardo Helicopters for approval using the QRS-101 (or EN/AS/JISQ 9102 equivalent) forms for those parts not inserted in the *[Supplier Name]* capability list. Once received formal approval by LH, FAI activities will start.  FAI will be submitted to Leonardo Helicopters for approval, using FAI forms previously approved as per QRS-101, for:   * Each “Significant” equipment * Each Systems and Subsystems   The following FAI steps will be performed during the development phase:   * a FAI before the first delivery of a new configuration (P/N), in order to have a control of delivered configuration and relevant manufacturing process, by annexing, as a minimum, the outline drawing, part list and ATR of the unit * a FAI for each item used for qualification/validation test, in order to be sure that the used item is conform to the relevant design documentation; alternatively, a FAI on a unit with the same P/N and a complete dimensional check of the “Qualification item”.   During development phase, preliminary FAIs can be performed and submitted to Leonardo Helicopters for approval, before the completion of the “Final” FAI.  A revision of the FAI will be performed and submitted to Leonardo Helicopters for approval, in case of:   * Additional tests/verifications have been performed, in order to move from a preliminary FAI to another Preliminary FAI or to Final FAI   For Critical/Hazardous parts in case of:   * Minor modifications to the “Technical” configuration of the “deliverable” equipment * Modification to the manufacturing process of the “deliverable” equipment   A FAI will be completely reissued in case of “*Major*” modification of the equipment.  If the article under FAI is in the capability list, the FAI Plan and FAI (and subsequent Delta FAI) will be performed internally and copy of FAIR will be sent to LH Relevant Quality Control. |
| Specific LH Program requirements |
| *[Description of how the supplier intends to manage the process and supplier procedures]* |

|  |
| --- |
| Inspection and Testing |
| For each “Significant” equipment and for the subsystems/systems an ATP will be prepared, approved by the Leonardo Helicopters and performed for each item, before the delivery.  This recurrent ATP has the purpose to verify the right functioning of the unit or system. |

|  |
| --- |
| Components designed by sub-TIERS |
| The *[Supplier Name]* can subcontract part of the design to other qualified subcontractors. In this case the responsibility of the issue of the equipment detailed Drawings, complete “Part Lists”, and all other design documentation is under the design office of the other Company (Subcontractor) responsibility.  The *[Supplier Name]* has the responsibility to transmit Leonardo Helicopters requirements to the subcontractors and to verify their implementation. Subcontractors of *[Supplier Name]* have to comply with these requirements.  Traceability of all activities performed for design, development, validation and manufacturing of delivered equipment/parts is maintained.  The Design Data Set issued by the Subcontractor will be correctly approved by the *[Supplier Name]*. The evidence of the approval will be on the minute of the PDR and CDR performed with the sub-suppliers, on the “Part List” document and on the FAI.  The list of major subcontractors and is reported in *[Annex ………]* of this Quality Plan.  *[If the supplier does not have Sub-tier suppliers, please do not delete this paragraph; delete only the text and insert the sentence “[Supplier Name] do not Subcontract Design Equipment.”]*  *[The supplier shall indicate how he is flowing down LH requirements to its suppliers. The supplier shall indicate the list of all of its suppliers (sub-tiers) involved in design and production/inspection activity. Remark: any sub-tier QPs shall be made available to LH upon request.]* |

|  |
| --- |
| PRODUCT identification and traceability |
| Product will be identified, traced and delivered according to requirements stated in:   * Applicable drawing * Applicable Leonardo Helicopters Technical Specification * Leonardo Helicopters report QRS-115   As a detail, at least, the following info will be reported on each “deliverable” unit:   * **Name, mark or symbol of the Manufacturer** as identified by the applicable design data; * **P/N** as defined by the **Designer** of the applicable design data; * **S/N of the Manufacturer** or **Batch Number** if the serialization is not required; * **Modification status**: it is the revision of the applicable detail drawing or Part List. The Modification status (or equivalent) *shall* be marked in a distinct manner from the P/N; * **P/N of the Main Supplier** in case that the Designer is different from the Main Supplier, *shall* be added also the Supplier P/N as responsible of compliance with the **LH** Technical Specification; * **LH P/N** or **program P/N** as defined by **LH** Technical Specification; * **Equipment/part description**; * **Manufacturing date**; * **Manufacturing quality stamp;** * **Identification code of applicable concession/deviation permit** (if any); |

|  |
| --- |
| [Supplier Name] DDS Approval |
| **For European (EASA) Suppliers**  Leonardo Helicopters approves the up**-t**o-date applicable D.D.S. of the *[Supplier Name]* signing the dedicated form.  The *[Supplier Name]* design organisation assures the transfer of the up-to data D.D.S, .to its Production organisation in accordance with the internal procedure *[Insert Supplier Applicable Procedure Number and title]* agreed in the DO-PO Arrangement as request on Leonardo Helicopters QRS-110*.*  *[Supplier Name]* Quality department will perform audits to assure the compliance of this requirement.  *The* *[Supplier Name]* production organisations is responsible to:   * prepare its own manufacturing data in compliance with the applicable design data department * assist Leonardo Helicopters in dealing with continuous airworthiness * assist Leonardo Helicopters in showing compliance with airworthiness requirements * perform manufacturing activity according to the procedure reported in this Quality Plan   *Leonardo* Helicopters will inform officially the *[Supplier Name]* that the applicable D.D.S. can be considered as Approved using the Statement of Approved Design Data (SADD) form signed by his Chief Project Engineer (CPE).  *Once* the DDS is approved, *[Supplier Name]* will issue an EASA form 1 according to “Approved Design Data” instead of “Applicable Design Data”.  **For U.S.A. suppliers**  Leonardo Helicopters approves the up-to-date applicable D.D.S. of the *[Supplier Name]* signing the dedicated form.  The *[Supplier Name]* design organisation assures the transfer of the up-to data D.D.S, .to its Production organisation in accordance with the internal procedure *[Insert Supplier Applicable Procedure Number and title]* agreed in the DO-PO Arrangement as request on Leonardo Helicopters QRS-110*.*  *[Supplier Name]* Quality department will perform audits to assure the compliance of this requirement.  The *[Supplier Name]* production organisations is responsible to:   * prepare its own manufacturing data in compliance with the applicable design data department * assist Leonardo Helicopters in dealing with continuous airworthiness * assist Leonardo Helicopters in showing compliance with airworthiness requirements * perform manufacturing activity according to the procedure reported in this Quality Plan   Leonardo Helicopters will inform officially the *[Supplier Name]* that the applicable D.D.S. can be considered Approved using the “COMO form” signed by Chief Project Engineer (CPE).  To satisfy the Leonardo Helicopters request of an Airworthiness Certify FAA TAG 8130 -3, U.S.A. Supplier can deliver the FAA TAG only if it has a Production Certificate. Leonardo Helicopters Procurement will inform the *[Supplier Name]* that the parts or the systems have achieved the Airworthiness state.  Leonardo Helicopters will send to supplier the “PMA Assist Letter” to allow the *[Supplier Name]* to begin the PMA certification process with FAA.  At the end of PMA certification process *[Supplier Name]* will send to Leonardo Helicopters a copy of PMA Letter or supplement.  *[If you are a European (EASA) Supplier please, delete the part dedicate to USA Supplier. If you are an USA Supplier please, delete the part dedicate to European Supplier]* |

|  |
| --- |
| Control of non conforming product |
| *[Supplier Name]* manages the non-conforming material in agreement with the requirements contained in the instruction Leonardo Helicopters QRS-107.  *[Describe how the supplier intends to manage the non-conforming articles in accordance with QRS-107 requirements, including: Quality Notifications, Concessions, and Escapes/Quality Alerts. Describe how the Supplier intends to manage and submit any Service Bulletins to LH. Describe how the supplier flows-down to Sub-tiers the management of Non-conforming articles and Escapes]* |

|  |
| --- |
| Delivery Documentation |
| For each delivery the following documentation will be associated to the equipment as defined on the purchase order and in agreement with the applicable requirements that are defined on QRS-01.  *[Describe how the supplier manages the delivery documentation in accordance QRS-01 requirements]* |

|  |
| --- |
| Maintenance Manual |
| *[Supplier Name]* will prepare and deliver to Leonardo Helicopters, the following documentation and information:   * For first and second level activities, data necessary for corrective and preventive maintenance activities; this data will be approved by the Leonardo Helicopters Engineering Department * For third level activities, the equipment Maintenance Manual, as required by QRS-115; contents of this manual are under *[Supplier Name]* responsibility   The above documentation will be referenced in the appropriate box of DDP.  *[If the supplier item does not require Maintenance manual, please not delete this paragraph; delete only the text and insert the sentence “Not Applicable”]* |

|  |
| --- |
| Continued Airworthiness |
| *[Supplier Name]* shall guarantee the “Continued Airworthiness” of the equipment managing the relative non conformities and modifications.  After delivery of an item to Leonardo Helicopters, if *[Supplier Name]* identifies any design or manufacture defects, he will inform Leonardo Helicopters within **24 hours** for all types of defects. *[Supplier Name]* will undertake the appropriate corrective actions after the LH indications.  *[Supplier Name]* will give Leonardo Helicopters all the necessary support for the resolution of the problem. |

|  |
| --- |
| Corrective and preventive actions |
| Corrective and preventive actions procedure *[Insert Supplier Applicable Procedure Number and title]* will be applied during the period of the contract. |

|  |
| --- |
| Quality Audits |
| Internal quality audit will be performed to technical department according to internal procedure *[Insert Supplier Applicable Procedure Number and title]*.  Quality Assurance Department will plan the internal quality audits. All departments will be planned to be audited once every two years verifying the conformity to the requirements of this Quality Plan.  Audit records including audit check lists, audit results and corrective actions will be kept available in case of Leonardo Helicopters request.  *[Supplier Name]* is responsible to perform audits at its sub-suppliers.  Leonardo Helicopters and Authorities can perform audits toward *[Supplier Name]* departments and subcontractors; in this case Leonardo Helicopters inform previously *[Supplier Name]* Quality Assurance Department in order to agree audit date and details. |

|  |
| --- |
| Design process analysis and improvement |
| *[Supplier Name]* will plan and implement monitoring, measurement, analysis and improvement methods particularly related to the design process, establishing suitable metrics representative for the activities performed see procedure *[Insert Supplier Applicable Procedure Number and title]* that permits to define any corrective action useful to improve the process. |

|  |
| --- |
| rIGHT OF Access |
| Leonardo Helicopters have access to *[Supplier Name]* that will permit the access to Leonardo Helicopters representatives, Leonardo Helicopters Customer, Civil and/or Military Authorities accompanied by Leonardo Helicopters personnel; furthermore, *[Supplier Name]* shall guarantee the access to Subcontractors facilities. |

|  |
| --- |
| Special processes |
| *[Supplier Name]* shall manage special processes according to procedure *[Insert Supplier Applicable Procedure Number and title]*  *[Indicate and describer the Supplier Control System and related Procedures in place for special process qualification and control]*  *[Indicate the NDT Responsible Level 3 in Annex A, once notified as per dedicated paragraph about Personnel competence, in QRS-01 main document]*  *[Include the list of Special Processes performed per National/International Specifications, Supplier Proprietary Specifications, LH Process Specification, with detail of the LH Articles where these special processes are applied]*  *[Specify the Subcontracted Special Processes and sources]* |

|  |
| --- |
| CONTROL OF COUNTERFEIT ARTICLES |
| *[Supplier Name]* shall control of counterfeit articles according to procedure *[Insert Supplier Applicable Procedure Number and title]*  *[Describe how the suppliers manages counterfeit articles prevention and procedures in place, in accordance with QRS-01]* |

|  |
| --- |
| PURCHASING PROCESS |
| *[Supplier Name]* shall manage purchasing process according to procedure *[Insert Supplier Applicable Procedure Number and title]*  *[Describe how the procurement process is managed; focus on these items:*   * *Supplier approval and control;* * *How the LH requirements are flowed-down to Sub-tiers* * *How the purchased Articles are controlled]* |

|  |
| --- |
| PRODUCTION |
| *[Describe how the Supplier manages the production processes and LH involvement including:*   * *Production documents issuance, change and approval* * *Product identification, part marking and traceability* * *Tools and instruments management* * *Management of Critical parts* * *Inspection and Testing* * *Production process control* * *First Article Inspection and LH involvement* * *Storage and packaging* * *Digital Manufacturing, where applicable* * *Implementation of FOD prevention program (see QRS-01)]* |

|  |
| --- |
| POST-DELIVERY SUPPORT |
| *[The supplier shall provide assistance to LH or its customers upon request within contractual clauses with LH, including support and assistance (investigations, etc.) for management of any non-conforming articles]* |

|  |
| --- |
| management COMMITMENT IN reviewING AND monitoring measurement and kpi |
| *[Describe how the supplier Management monitors quality objectives. The Supplier shall define internal KPI focused on customer satisfaction. The Supplier shall analyze KPI and take adequate actions for improvement]* |

|  |
| --- |
|  |
|  |
| ANNEX A |

|  |  |
| --- | --- |
| TITLE | Focal points in accordance with Chapter 6 |

|  |  |  |
| --- | --- | --- |
| [Supplier Name] Focal Points. | | |
| Dept. | Name | Contact |
| **Program Manager** |  | E-mail:  .............................  Phone: |
| **Technical Director** |  | E-mail:  .............................  Phone: |
| **Accountable Manager** |  | E-mail:  .............................  Phone: |
| **Quality Manager** |  | E-mail:  .............................  Phone: |
| **Procurement** |  | E-mail:  .............................  Phone: |
| **Designer** |  | E-mail:  .............................  Phone: |
| Current communications are exchanged through coordination memo. | | |

|  |  |  |
| --- | --- | --- |
| Leonardo Helicopters Focal Points. | | |
| **Dept.** | **Name** | **Contact** |
| **Head of Design Organization** |  | E-mail:  .............................  Phone: |
| **Chief Project Engineer** |  | E-mail:  .............................  Phone: |
| **Chief Project** |  | E-mail:  .............................  Phone: |
| **Supplier Quality Assurance** |  | E-mail:  .............................  Phone: |
| **Procurement and Supply Chain** |  | E-mail:  .............................  Phone: |
| **Quality Concession**  *notified to Leonardo Helicopters .............. plant to [Name of Supplier]* |  | E-mail:  .............................  Phone: |
| Current communications are exchanged through Coordination Memo. | | |

|  |
| --- |
|  |
|  |
| ANNEX B |

|  |  |
| --- | --- |
| TITLE | COMPLIANCE CHECKLIST to the QRS-108 requirements |

|  |  |
| --- | --- |
| SCOPE | The following checklist shall be used for verifying the correctness and completeness of your QP.  Supplier shall declare the compliance, non-compliance or non-applicability for each item of the list, by checking the relevant check-box. In case of deviation from QP template and/or reference to other supplier procedure, please identify the applicable document(s) and paragraph(s) in the 7th column.  Use the “NOTES” column for any additional information. The filling of this check-list and its delivery to LH are mandatory for QP approval. |

**Reviewer(s):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Review Stage** | **Name** | **Function** | **Date** | **Signature** |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |
| **5** |  |  |  |  |
| **6** |  |  |  |  |
| **7** |  |  |  |  |
| **8** |  |  |  |  |
| **9** |  |  |  |  |
| **10** |  |  |  |  |
| **11** |  |  |  |  |
| **12** |  |  |  |  |
| **13** |  |  |  |  |
| **14** |  |  |  |  |
| **15** |  |  |  |  |

**Subject Requirement Legenda: A = AIRWORTHINESS/SAFETY P = PROGRAM/PROCESS D = DESIGN**

**Level Requirement Legenda: 1 = MANDATORY 2 = MAJOR 3 = MINOR**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item | QRS-108 Template § | Info Required | Subj. | Lev. | Compliance at stage | | | QAP actual § | Notes |
|  | 1 | **Scope and management**  of the quality plan: |  |  | Y | N | N/A |  |  |
| 1.0 | -- | * Is this QAP based on LH Template? | P | 3 |  |  |  |  |  |
| 1.1 | 1.1 | o   *Indication of contractor* (supplier name and address) | P | 1 |  |  |  |  |  |
| 1.2 | 1.2 | o  *Applicability* (list of all the P/Ns the Quality Assurance Plan is applicable to – LH P/N, Supplier P/N, Description, Procurement Spec/SCD) | A | 1 |  |  |  |  |  |
| D |
| 1.3 | 1.3 | o  *QP approval and update management* (how to manage QAP changes and submit them it to LH) | P | 2 |  |  |  |  |  |
| 2 | 2 |       ***List of acronyms*** *and definitions* used in the Quality Assurance Plan | P | 2 |  |  |  |  |  |
|  | 3 | **Applicable Documents**: |  |  |  |  |  |  |  |
| 3.1 | 3.1 | o  *Contractual Documents* (such as Contract, SoW) | A | 1 |  |  |  |  |  |
| D |
| 3.2 | 3.2 | o   *Applicable Regulations* (EASA, FAA, TCCA, AQAP, etc.) | A | 1 |  |  |  |  |  |
| D |
| 3.3 | 3.3 | o  *LH Documents* (Technical Specification, SCD) | A | 1 |  |  |  |  |  |
| D |
| 3.4 | 3.4 | o   *List of Supplier applicable documentation* defined in the QAP (Quality Manual, Design Manual, internal procedures) | A | 1 |  |  |  |  |  |
| D |
| 3.5 | 3.5 | o   *Specific applicable LH program document* | A | 2 |  |  |  |  |  |
| D |
| 3.6 | 3.6 | o   *Supplier Approvals* held (Civil Certifications, EN series, ISO series) | P | 1 |  |  |  |  |  |
| 3.7 | 3.7 | o   *Any exclusion for design activities in charge to LH* | D | 2 |  |  |  |  |  |
| 3.8 | 3.8 | o   *List of Sub-Tiers involved in the activity and Sub-tiers QP, if any* | P | 1 |  |  |  |  |  |
| D |
| 4 | 4 | **ORGANIZATIONAL ROLES AND RESPONSIBILITIES, AND PERSONNEL COMPETENCE**: |  |  |  |  |  |  |  |
| 4.1 | 4.1 | * *Definition (indicating at least Program Manager, Technical Director, Manufacturing Engineering Manager, Production Accountable Manager, Certifying Staff, Quality Manager/Quality Control Manager/ Manufacturing Manager), summarized into Organizational Charts.* | D | 1 |  |  |  |  |  |
| P |
| 4.2 | 4.2 | * *Reference to the internal procedure related to the education, training, skills and experience for the above mentioned key personnel.* | P | 2 |  |  |  |  |  |
| 4.3 | 4.3 | * *Description of the capability of people involved into design activities for LH programs in terms of required skills and experience.* | D | 3 |  |  |  |  |  |
| P |
| 5 | 5 | **Planning**: documents reporting the schedule of all activities to reach final qualification. The supplier shall describe their capacity to address the requested scope of work. This might be done by providing the following: |  |  |  |  |  |  |  |
| 5.1 | - | o   *Project planning* | D | 2 |  |  |  |  |  |
| P |
| 5.2 | - | o   *Work breakdown structure* | D | 2 |  |  |  |  |  |
| P |
| 5.3 | - | o   *Resource breakdown structure* | D | 3 |  |  |  |  |  |
| P |
| 6 | 6 | **Focal Points:** |  |  |  |  |  |  |  |
| 6.1 | 6.1 | o  *List of supplier focal points* (Annex A can be used to indicate the list of Supplier Focal Points): | D | 1 |  |  |  |  |  |
| P |
| 6.2 | 6.2 | o  *List of Leonardo Helicopters Focal Points* (Annex A can be used to indicate the list of LH Focal Points): | D | 1 |  |  |  |  |  |
| P |
|  |
| 7 | 7 | **Documents - Quality Requirements**: |  |  |  |  |  |  |  |
| 7.1 | 7.1 | o  ***Issue*** *description of how the documentation is issued, approved, changed and managed* | P | 1 |  |  |  |  |  |
| 7.2 | 7.2 | o  ***Record Keeping*** *defining timing, location and applicability* | P | 1 |  |  |  |  |  |
| 8 | 8 | **DO-PO Arrangement**: |  |  |  |  |  |  |  |
| 8.1 | 8.1 | * ***Document Exchange****: description of how the documents are going to be exchanged between Supplier and LH.* | A | 1 |  |  |  |  |  |
| D |
| 8.2 | 8.2 | * ***Capability List:***  *description of the Supplier process for including parts in the Capability Lists (Prototype and New and the minimum documentation needed.)* | A | 1 |  |  |  |  |  |
| D |
| 8.3 | 8.3 | * ***Applicable and Approved Technical Data****: description of transition from applicable to approved technical data, including Capability List updating an issue of EASA Form 1 NEW, including re-issue from EASA Form1 Prototype.* | A | 1 |  |  |  |  |  |
| D |
| 8.4 | 8.4 | * ***Changes affecting the Arrangement  :*** *the Supplier shall inform LH when the PO certificate is suspended or affected by Lev.1 finding from Authorities.* | A | 1 |  |  |  |  |  |
| D |
|  |  |  |  |  |  |  |  |  |  |
| 9 | 9 | **Configuration Management:** |  |  |  |  |  |  |  |
| 9.1 | 9.1 | o   ***Change Classification****:* describe how the Supplier is intended to manage major and minor modifications following QRS-115 | A | 1 |  |  |  |  |  |
| D |
| 10 | 10 | **Design and Development**: |  |  |  |  |  |  |  |
| 10.1 | 10.1 | o *Design Control:* define the analysis method used to design parts | D | 2 |  |  |  |  |  |
| 10.2 | 10.2 | o Basic data and requirements of design: managing of HW and SW requirements | A | 1 |  |  |  |  |  |
| D |
| 10.3 | 10.3 | o *Software Quality Assurance:* indicate the Supplier SW quality assurance plan | A | 1 |  |  |  |  |  |
| D |
| 10.4 | 10.4 | o *System Equipment List:* list the preliminary list of equipment and items agreed at the CDR | D | 2 |  |  |  |  |  |
| P |
| 10.5 | 10.5 | o *Preliminary Design Data Set* | D | 2 |  |  |  |  |  |
| P |
| 10.6 | 10.6 | o *Critical Part* indicate how the supplier is intended to manage critical and hazardous parts | A | 1 |  |  |  |  |  |
| D |
| 10.7 | 10.7 | o *Forging and Casting Design Requirements* how the supplier is intended to manage forging and casting parts | A | 1 |  |  |  |  |  |
| D |
| 10.8 | 10.8 | o *Special Processes* how the supplier is intended to manage Special Processes | A | 1 |  |  |  |  |  |
| D |
| 10.9 | 10.9 | o *Design Review* indicate the procedure the supplier follows to perform PDR, CDR, QR, SSR, TRR, DR and FQR/SCR as applicable | D | 1 |  |  |  |  |  |
| P |
| 10. | 10. | o *Design Verification and Validation* describing how the supplier is intended to verify and validate design data | A | 2 |  |  |  |  |  |
| 10 | 10 | D |
| 11 | 11 | **Activities and Documentation for Qualification of Parts:** |  |  |  |  |  |  |  |
| 11.1 | 11.1 | o *Functional Qualification* the documentation to be issued to provide evidence of design/validation/qualification results is: QAP, AR, SR, QTP, QTR, PSAC, SVP, STD, STR, SAS, VDD, DDP | A | 1 |  |  |  |  |  |
| D |
| 11.2 | 11.2 | o *Manufacturing qualification* the documentation to be issued to provide evidence of manufacturing qualification is FAI, to be performed in accordance with QRS-101 | A | 1 |  |  |  |  |  |
| D |
| 11.3 | 11.3 | o  *Specific LH program requirements:* description of supplier process and procedures | A | 2 |  |  |  |  |  |
| D |
| 12 | 12 | **Inspection and Testing**: |  |  |  |  |  |  |  |
| *12.1* | *-* | o   *An ATP is expected to be prepared and approved by LH.* | A | *1* |  |  |  |  |  |
| D |
| 13 | 13 | **Components designed by Subcontractors**: |  |  |  |  |  |  |  |
| 13.1 | - | o   The supplier shall indicate how he is flowing down LH requirements to its suppliers. The supplier shall indicate the list of all of its suppliers involved in design activity | A | 1 |  |  |  |  |  |
| D |
| 14 | 14 | **Product identification and traceability**: |  |  |  |  |  |  |  |
| 14.1 | - | o   Products will be identified, traced and delivered according to the requirements stated in applicable Drawings, Applicable Technical Specifications, Applicable QRS-series procedures. The supplies shall report on each deliverable unit: | A | 1 |  |  |  |  |  |
| 14.2 | - | -     Name, mark or symbol of the Manufacturer | A | 1 |  |  |  |  |  |
| -     P/N as defined by the Designer |
| -        S/N of the Manufacturer or Batch Number |
|         Modification status |
| 14.3 | - | -        P/N of the Main Supplier | A | 1 |  |  |  |  |  |
| -        LH P/N or program P/N |
| -        Equipment/part description |
| -        Manufacturing date |
| -        Manufacturing quality stamp |
|         Identification code of applicable concession/deviation permit |
| 15 | 15 | **Supplier DDS Approval:** |  |  |  |  |  |  |  |
| 15.1 | - | o   Describe how DDS are submitted to LH for approval and how the Supplier gets aware of DDS approval | A | 1 |  |  |  |  |  |
| D |
| 16 | 16 | **Control on Non-conforming Product**: |  |  |  |  |  |  |  |
| 16.1 | - | o   Description of how the supplier will manage non-conforming products in accordance with QRS-107 requirements. | A | 1 |  |  |  |  |  |
| D |
| 17 | 17 | **Delivery Documentation**: |  |  |  |  |  |  |  |
| 17.1 | - | o   Description of how the Supplier will manage delivery documentation in accordance with QRS-01 requirements. | P | 1 |  |  |  |  |  |
| 18 | 18 | **Maintenance Manual**: |  |  |  |  |  |  |  |
| 18.1 | - | o   Description of how the supplier will manage the Component Maintenance Manual, in accordance with QRS-122 requirements | A | 1 |  |  |  |  |  |
| 19 | 19 | **Continued Airworthiness**: |  |  |  |  |  |  |  |
| 19.1 | - | o   the supplier shall explain how he is going to manage any defect in order to ensure to inform LH within **24 hours from the discovery of the defect** | A | 1 |  |  |  |  |  |
| 20 | 20 | **Corrective and Preventive Actions**: |  |  |  |  |  |  |  |
| 20.1 | - | o   The Supplier shall describe how preventive and corrective actions are managed. | P | 2 |  |  |  |  |  |
| 21 | 21 | **Quality Audits**: |  |  |  |  |  |  |  |
| 22.1 | - | o   Explain how the supplier shall monitor LH requirements by planning and executing internal and external surveillance audits using a risk-based criteria. | P | 2 |  |  |  |  |  |
| 22 | 22 | **Design Process analysis and improvement**: |  |  |  |  |  |  |  |
| 22.1 | - | o   The supplier shall plan and implement monitoring, measurement, analysis and improvement methods particularly related to the design process. | P | 2 |  |  |  |  |  |
| 23 | 23 | **Right of Access: [MANDATORY]** |  |  |  |  |  |  |  |
| 23.1 | - | o   “Leonardo SpA has access to Supplier that will permit the access to Leonardo SpA representatives, LH Customers, Civil and/or Military Authorities accompanied by Leonardo SpA personnel, furthermore, the supplier shall guarantee the access to Subcontractor facilities.” | P | 1 |  |  |  |  |  |
|
| 24 | 24 | **Special Processes**: |  |  |  |  |  |  |  |
| 24.1 | - | o   Describe the Supplier control system and the procedures for Special Process qualification and control (if any) | P | 1 |  |  |  |  |  |
| 24.2 | - | o   Indicate the NDT Responsible Level 3 in Annex A | P | 1 |  |  |  |  |  |
| 24.3 | - | o   Include the list of Special Processes performed per National/International Specifications, Supplier Proprietary Specifications, LH Process Specifications, with detail of the LH articles where these Special Processes are applied. | P | 1 |  |  |  |  |  |
| 24.4 | - | o   Specify subcontracted Special Processes and sources | P | 1 |  |  |  |  |  |
| 25 | 25 | **Control of counterfeit articles:** |  |  |  |  |  |  |  |
| 25.1 | - | o   Describe how the Supplier manages counterfeit article prevention. | P | 1 |  |  |  |  |  |
| 26 | 26 | **Purchasing Processes**: Describe how Supplier procurement process is managed |  |  |  |  |  |  |  |
| 26.1 | - | o   Sub tiers approval and control process | P | 2 |  |  |  |  |  |
| 26.2 | - | o   Flow-down of LH requirements | A | 2 |  |  |  |  |  |
| 26.3 | - | o   Control of purchased articles | A | 1 |  |  |  |  |  |
| 27 | 27 | **Production**: Describe how Supplier manages the production process: |  |  |  |  |  |  |  |
| 27.1 | - | o   Production documents (issue, change, approval) | P | 2 |  |  |  |  |  |
| 27.2 | - | o   Product identification, part marking and traceability | P | 1 |  |  |  |  |  |
| 27.3 | - | o   Tools and Instrument management | A | 1 |  |  |  |  |  |
| 27.4 | - | o   Management of critical parts | P | 1 |  |  |  |  |  |
| 27.5 | - | o   Inspection and testing | P | 1 |  |  |  |  |  |
| 27.6 | - | o   Production process control | P | 2 |  |  |  |  |  |
| 27.7 | - | o   First Article Inspection /LH involvement | P | 2 |  |  |  |  |  |
| 27.8 | - | o   Storage and packaging | P | 2 |  |  |  |  |  |
| 27.9 | - | o   Digital Manufacturing (if applicable) | P | 1 |  |  |  |  |  |
| 27.10 | - | o   Implementation of FOD prevention program | P | 1 |  |  |  |  |  |
| 28 | 28 | **Post-Delivery support :** |  |  |  |  |  |  |  |
| 28.1 | - | o   Describe how the Supplier provides assistance to LH or to its Customers. | P | 2 |  |  |  |  |  |
|
| 29 | 29 | **MANAGEMENT COMMITMENT IN REVIEWING AND MONITORING MEASUREMENT AND KPI** |  |  |  |  |  |  |  |
| 29.1 | - | o   Describe how the Supplier monitors quality objectives. | P | 2 |  |  |  |  |  |
|  |  | ***ANNEXES:*** |  |  |  |  |  |  |  |
| a | A | o   ***Annex A:*** | D | 2 |  |  |  |  |  |
| Focal Points – List of all Supplier – LH Focal Points. | P |
| b | B | o   ***Annex B:*** | P | 2 |  |  |  |  |  |
| Check-list to QRS-108 requirements |
| c | C | o   ***Annex C:*** | D | 2 |  |  |  |  |  |
| Capability List with all P/N covered by the QAP, including: - related PMA/E-TSO/STC, if any  - related SADD n° - info if released with EASA/EMAR Form1 NEW/PROTOTYPE or equivalent - info if released with Certificate of Conformity | P |

|  |
| --- |
|  |
|  |
| ANNEX C |

|  |  |
| --- | --- |
| TITLE | APPLICABILITY in accordance with Chapter 1.2  (including the updated list of SADD) |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Program AWXXX*** *[Insert the Helicopter Name “ex. AW109]* | | | | | | | | | | |
| **Leonardo Helicopters P/N**  **/ Supplier P/N** | **Designation / Title** | **Procurement Specification** | **Contract / Purchase Order** | **SADD number** | **Product Approval**  *[Specify what kind of approval is related with a X]* | | | **Delivery documentation**  *[Specify what kind of document is issued with a X]* | | |
| **PMA** | **(E)TSO** | **STC** | **EASA Form 1 (or equivalent)** | **EASA Form 1 Prototype (or equivalent)** | **CoC** |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Program AWXXX*** *[Insert the Helicopter Name “ex. AW139]* | | | | | | | | | | |
| **Leonardo Helicopters P/N**  **/ Supplier P/N** | **Designation / Title** | **Procurement Specification** | **Contract / Purchase Order** | **SADD number** | **Product Approval**  *[Specify what kind of approval is related with a X]* | | | **Delivery documentation**  *[Specify what kind of document is issued with a X]* | | |
| **PMA** | **(E)TSO** | **STC** | **EASA Form 1 (or equivalent)** | **EASA Form 1 Prototype (or equivalent)** | **CoC** |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Program AWXXX*** *[Insert the Helicopter Name “ex. AWxxx]* | | | | | | | | | | |
| **Leonardo Helicopters P/N**  **/ Supplier P/N** | **Designation / Title** | **Procurement Specification** | **Contract / Purchase Order** | **SADD number** | **Product Approval**  *[Specify what kind of approval is related with a X]* | | | **Delivery documentation**  *[Specify what kind of document is issued with a X]* | | |
| **PMA** | **(E)TSO** | **STC** | **EASA Form 1 (or equivalent)** | **EASA Form 1 Prototype (or equivalent)** | **CoC** |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |