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|---|---|
| D&D | Design And Development (Engineering) |
| DDP | Declaration of Design and Performance |
| DO | Design Organization |
| DR | Design Review |
| EFA | Experimental Flight Approval |
| EO | Engineering Order |
| TSO/ETSO | Technical Standard Order/European Technical Standard Order |
| FAI | First Article Inspection |
| FRR | Flight Readiness Review |
| HDO | Head of Design Organization |
| HW | Hardware |
| LHEO | Leonardo Helicopters Engineering Organisation |
| LHPO | Leonardo Helicopters Production Organisation |
| MoC | Means of Compliance |
| P/N | Part Number |
| PDR | Preliminary Design Review |
| PMO | Program Management Office |
| PO | Production Organization |
| QD | Qualification Document |
| QP | Quality Plan |
| QPP | Qualification Program Plan |
| QTP | Qualification Test Plan |
| QTR | Qualification Test Report |
| S/N | Serial Number |
| SADD | Statement of Approved Design Data |
| SCD | Source Control Drawing |
| SCDD | Source Control Drawing for Design |
| SCDM | Source Control Drawing for Manufacturing |
| ~~SCN~~ SCP | Specification Change Proposal ~~Note~~ |
| SoW | Statement of Work |
| STTE | Special Type Test Equipment |
| SW | Software |
| TAC | Test Article Conformity |
| TRR | Test Readiness Review |
| VCP | Vendor Change Proposal (UK MoD Programs only) |

## 4.2 Definitions

**Commercial-Off-The-Shelf (COTS) items:**

- Commercially available items intended by design to be procured and utilized without modification (e.g., common electronic components);
- Commercially available applications sold by vendors through public catalogue listings;
- Commercially available applications, defined by industry recognized specifications and standards, sold through public catalogue listings.

  Note: TSO/ETSO are not included in this category.

Unless waived by the contract, the process of control/configuration management *shall* be described in a "Configuration Management Plan" (CMP), prepared according with the instructions of QRS-115_F06.

#### 5.3.3.2 Modification to the contractual technical specification or to equipment specification

Changes to the contents of the Technical Specification (or SCD) can be originated by a request of LHEO or of the Supplier.

They can occur either during the development phase (before the CDR) or after the achievement of the baseline configuration to be used for the demonstration of compliance and the production.

If the Supplier needs to modify one or more content of the **LH** Technical Specification, it *shall* initiate the process of evaluation and after the phase of informal contacts and agreements with LHEO, all traced through the issue of Coordination Memos (COMO), it *shall* request the modification through the issuance of a SCP ~~SCN or a VCP~~[3].

The SCP ~~SCN~~ *shall* be prepared and compiled using the form QRS-115_F04. The VCP form is reported in Annex G.

The Supplier *shall* use the SCP ~~SCN (or VCP)~~ also in case of Part Number change in the configuration of the deliverable equipment/part, independently from the reason that has generated it.

The L**H** Technical Area in charge *shall* proceed with the technical evaluation of the change and the analysis of the impact of identified change on each part, system or equipment, as described in subsequent paragraphs

A change to the Technical Specification proposed or required by **LH** *shall* be anticipated by the issue of an SCP ~~SCN~~, otherwise directly managed with the review of the document.

If the modifications to the Technical Specification requirements occur before the Critical Design Review (before the achievement of the configuration baseline and the issue of the relevant preliminary Part List) and before the delivery of part, system or equipment or the start-up of any certification activity, the P/N will not change.

#### 5.3.3.3 Management of Design Changes before Qualification

Until qualification is obtained (as defined in paragraph 5.2.2.5), the Supplier *shall* submit design changes to LH for acceptance if there is an impact on fit, form or function.

[3] The VCP applies for UK MoD Programs only

### 5.3.3.4 Management of Design Changes after Qualification

The design of any part, system or equipment procured from a Supplier who is also the designer of the part, system or equipment, once certified, becomes part of the Type Design of the **LH** product.

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.

*5.3.3.4.1 Change approval*

- **<u>All Changes *shall* be communicated to LH for classification and approval.</u>**
  - For each Changes, the Supplier *shall* 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 SCP ~~SCN (or VCP)~~.**

- **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.**

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|---|
| Correction of drawing clerical errors<br><br>*E.G. → Graphical errors; formal errors on quotations or references* |

prefilled EN/AS9102 forms (ref. QRS-101 forms F01, F02, F03), to highlight the introduced changes with respect to previous qualification.

#### 5.3.3.6 Interim changes to programmed equipment

This paragraph is applicable to suppliers responsible for the development of programmed equipment.

For such equipment, during the development phase after the qualification status of EFA, a fast management and traceability of changes can be required, in particular concerning SW changes. In these cases; traceability will be ensured through the use of provisional P/N.

The supplier having this necessity *shall*:

- agree in advance with the **LH** Project Leader the use of this methodology;
- Ask to **LH** Project Leader, for each interim change that must be introduced and tested by **LH**, the number of provisional P/N (equivalent to the number of EO Development Test Trial). The identification of equipment, recording and traceability of changes on the applicable technical documentation *shall* be made as indicated in the relevant paragraphs.

#### 5.3.3.7 Data Exchange

The change request to the requirements of the Technical Specification *shall* be managed using the SCP ~~SCN~~ form.

The supplier *shall* prepare the SCN also in case of major change to the configuration of the deliverable equipment/part; independently from the event that has generated it.

The supplier *shall* prepare the internal “Change Form”, by implementing the following rules:

- For Major Change; the supplier *shall* send the SCP ~~SCN~~, the “Change Form” and all the documentation to the **LH** Technical Area in charge. The change cannot be implemented until approved by **LH** D&D, by signature on the SCN.
- For Minor Changes (that involve the CS requirements), the supplier *shall* send the “Change Form”. D&D reserves, within 30 days, to request a re-evaluation and reclassification of the change. In case of no request from **LH**, the supplier *may* proceed to the introduction of the amendment.
- For Minor Changes (clerical error etc...), the supplier *shall* send the COMO to the **LH** technical area. These changes are sent to **LH** for communication only, and the supplier can precede the introduction of the amendment after the invoice of COMO.

For all the Changes, the relevant documentation (including **LH** transmission and approval evidences) *shall* also be kept and formally recorded by the Supplier for any check and evaluation, carried out either by **LH** or by the Airworthiness Authorities.

Authority representatives, in according with the purpose and time scale defined in the program/contract.

### 5.4.2 Documentation

In addition to the documentation required in this document, which *shall* be provided to LHEO by contract, the supplier *shall* provide, on the request of LHEO or of the competent Authorities, copies of all documents deemed necessary to complete the certification process.

The supplier *may* refuse the resolution of a requested document if the same is considered confidential or exclusive property for industrial reasons. In this case the supplier *shall* allow the consultation and auditing of such documents at any time with modalities to be defined Case by case.

LHEO, the Authorities (Civil or Military) or **LH** customers (always through **LH** organisation), *may* require the supplier to produce a document equivalent to that considered "confidential", removing confidential information, if the availability of such document is necessary for closure of the certification process and/or acceptance by LHEO the customer.

## 6 Attachments, Appendices and Forms

- QRS-115_F01: Test Execution Authorization (TAF) form
- QRS-115_F02: Coordination Memo (COMO) form
- QRS-115_F03: Declaration of Design and Performance (DDP) form
- QRS-115_F04: Specification Change Proposal (SCP) ~~Notice (SCN)~~ form
- QRS-115_F05: Design Data Set (DDS) form
- QRS-115_F06: Template for CMP (Configuration Management Plan)
- ~~QRS-115_F07: Vendor Change Proposal~~