

CODE: **PQA013-L-IT-D en rev. 02**
DATE: **28/06/2022**
DOCUMENT TYPE: **POLICY**
APPLICABILITY: **Defence Systems Business Unit**

Quality Requirements for the Supply of Technical Publications, Services and Support

SUMMARY:

This document describes the specific quality requirements for the supply of Services and Support to the Defence Systems Business Unit of Leonardo S.p.a.

The general quality requirements for supplies to Leonardo-SDI are defined in the PQA004-L-IT-D procedure.

The content of this document is the property of Leonardo S.p.A. It is forbidden to reproduce, disclose or use it, even partially, without the express written authorization of Leonardo S.p.A.

The document is available on the Defence Systems Business Unit Intranet. Copies, both in electronic and paper format, shall be checked, before use, against the current version available on the Intranet.

Author[s]	Responsibility/Unit	Name/Signature
	Product Quality Assurance	C. Pagni <i>Signed</i>
	Owner[s]	
	Process Owner - Product Quality Assurance	G. Sannino <i>Signed</i>
	Authority	
	Process Authority - Product Quality Assurance	M. Romagnoli <i>Signed</i>

For conformance to original Italian edition



M. Romagnoli
 Process Authority - Product Quality Assurance

Date: 2022/07/27

AMENDMENT RECORD

Rev.	Date	BMSCP	Description	Authors
00	15/03/2018	-	First issue	C. Pagni
01	22/10/2018	059	Para. 1.1: - Updated ref. to UNI EN 9100:2018; Para. 2.1: - Removed notes for applicable versions of AQAP-2110, EN-9100, ISO-9001	C. Pagni
02	28/06/2022	703	Modified document code according to the new BMS standard; <u>Whole document</u> (changes not traced): Use of new template QUA049-T-IT-D rev. 03 - Replaced "Division" with "Business Unit" - Updated references to new BMS codes (e.g., PQA004-L → PQA004-L-IT-D) - All bulleted lists have been numbered - Replaced "Classification Index (CI)" with "RQF Codes"; Para.. 1.1: Removed refs. to AQAP 2210, AER-Q-2110; added references to: AQAP-2110, AQAP-2310, AER(EP).P-145; Para. 1.3: Modified title; introduced definition of "RQF Code" and related clauses - Introduced RQF codes in Table 1; Para. 2.1: Removed ref. to AER-Q-140; added AQAP-2310, AER(EP).P-145; updated UNI EN 9100, UNI EN ISO 10012, UNI EN ISO 19011; Para.. 5.1.4: Recalled the requirements of PQA004-L-IT-D for supplier non-conformity management. Para. 5.4: Added clauses for review of requirements, submission of planning, management of acceptance testing.	C. Pagni

TABLE OF CONTENTS

1	INTRODUCTION	4
1.1	PURPOSE	4
1.2	APPLICABILITY.....	4
1.3	RQF CODE	4
2	REFERENCES	6
2.1	DOCUMENTS.....	6
3	DEFINITIONS AND ACRONYMS	7
3.1	DEFINITIONS.....	7
3.2	ACRONYMS.....	7
4	GENERAL REQUIREMENTS	8
5	SPECIFIC REQUIREMENTS	9
5.1	PROVISION OF FIXED-PRICE WORK EXECUTION (RQF = G1).....	9
5.1.1	<i>General.....</i>	9
5.1.2	<i>Supplier organization and personnel</i>	9
5.1.3	<i>Performance of the assigned activities</i>	9
5.1.4	<i>Leonardo-SDI control of the provision.....</i>	10
5.2	PROVISION OF TECHNICAL ASSISTANCE SERVICE (RQF = G2).....	11
5.2.1	<i>General.....</i>	11
5.2.2	<i>Documents provided by Leonardo-SDI.....</i>	11
5.2.3	<i>Documents produced or processed by the supplier</i>	11
5.2.4	<i>Supplier's personnel organization and resources.....</i>	12
5.2.5	<i>Materials assigned for processing and spare parts</i>	13
5.2.6	<i>Commissioning activities.....</i>	13
5.2.7	<i>Warranty Assistance</i>	14
5.2.8	<i>Management of nonconforming or faulty products</i>	14
5.2.9	<i>Implementing changes and on site operations</i>	14
5.2.10	<i>Leonardo-SDI checks on the tasks</i>	15
5.2.11	<i>Operating Tools</i>	16
5.3	PROVISION OF ENGINEERING DESIGN & CONSULTANCY SERVICE (RQF = G3)	17
5.4	PROVISION OF OPERATION AND MAINTENANCE MANUALS (RQF = G4)	18
5.5	PROVISION OF SUPPORT DOCUMENTS FOR TRAINING COURSE (RQF = G5).....	19

LIST OF TABLES

Table 1 - Values of the Classification Index	5
--	---

1 INTRODUCTION

1.1 Purpose

The purpose of this document is to define the specific quality requirements for the supply of Technical Publications, Services and Support to the Defence Systems Business Unit of Leonardo S.p.a. (hereafter Leonardo-SDI).

The document is complementary (not alternative) to ISO 9001 and UNI EN 9100 as applicable and AQAP-2110, AQAP-2310 and AER(EP).P-145 as applicable.

Additional more general quality requirements applicable to all supplies are defined in procedure PQA004-L-IT-D.

1.2 Applicability

This document applies to supplies of products and/or services intended for Leonardo-SDI's customers.

In particular, it applies to type G supplies, as identified in document PQA004-L-IT-D.

1.3 RQF Code

As stipulated in document PQA004-L-IT-D, for quality purpose each supply to Leonardo-SDI is classified with a code (RQF Code) consisting of a letter (Type) and a number (Classification Index) that depend on the characteristics and complexity of the product/service requested.

An RQF Code is associated with each item in Leonardo-SDI Purchase Orders and allows the identification, in this procedure, of the activities and documents required from the supplier.

RQF Code = <Type> + < Classification Index >

*For example: **RQF = G4** indicates a supply of Operation and Maintenance Manuals (Type G, Index 4).*

In cases where the RQF code is not indicated for one or more order items, the Supplier shall request the applicable RQF value from Leonardo-SDI.

The possible values and meaning of the RQF code for the supplies covered in this document are defined in the table below.

RQF	Characteristics of the supply
G1	Work Execution (on a fixed price basis) - Fixed price activities performed by the supplier at Leonardo-SDI sites
G2	Technical Assistance Service - Support activities carried out by suppliers at the operating sites of Leonardo-SDI's customers. It typically includes technical and logistics assistance to the customer for the commissioning and deployment of products supplied by Leonardo-SDI, or for the resolution of malfunctions/problems reported by the customer.
G3	Engineering Design & Consultancy service - Provision of documents produced as an outcome of technical studies required for one of the following reasons: <ul style="list-style-type: none"> - To support, justify or verify design choices made by Leonardo-SDI during the development of a product; - analysing the causes of malfunctions and/or failures found on products made by Leonardo-SDI; - other types of studies, however related to Leonardo-SDI activities and products
G4	Operation and Maintenance Manuals - Provision of technical, logistic and/or operational support documentation for systems/equipment intended for or already supplied to Leonardo-SDI customers.
G5	Support documents for training course - Provision of documentation in hard and/or electronic format to support training courses to be delivered to Leonardo-SDI's customer.

Table 1 - Values of the RQF Code

2 REFERENCES¹

2.1 Documents

Code	Title
Contractual (applicable when required by the PO or the Contract)	
AQAP 2110 Ed D	NATO Quality Assurance Requirements for Design, Development and Production
AQAP-2310 ed. B	NATO Quality management system requirements for aviation, space and defence suppliers
UNI EN 9100:2018	Quality Management Systems-Requirements for Aviation, Space and Defense Organizations.
ISO 9001:2015	Quality Management System – Requirements.
AER(EP).P-145	Requirements for Maintenance Organisations
International Reference Standards	
AQAP 2070	NATO Mutual Government Quality Assurance (GQA) Process
UNI EN ISO 10012:2004	Measurement Management Systems – Requirements for measurement processes and measuring equipment
ISO 10013:2001	Guidelines for quality management system documentation
UNI EN ISO 19011:2018	Guidelines for auditing management systems
UNI ISO 2859	Sampling Procedures for inspection by attributes
S1000D	International specification for technical publications using a common source database
STANAG 4107	Mutual Acceptance of Government Quality Assurance and usage of the Allied Quality Assurance Publications (AQAP).
STANAG 4427	Introduction of allied configuration management publications (ACMP's)
Internal Reference Documentation	
ACQ009-T-IT-D	General terms of contract
PQA004-L-IT-D	Quality requirements for supplies to the Leonardo-SDI Division

¹ Standards or publications cited without a revision date or index are to be considered in the latest available revision.

3 DEFINITIONS AND ACRONYMS

3.1 Definitions

See document PQA004-L-IT-D.

3.2 Acronyms

Acronym	Description
AQAP	Allied Quality Assurance Publication
DUVRI	Consolidated Risk Assessment of Interference Hazards
FIFO	First In First Out (warehouse management method that means that the next article which can be picked at a given moment is the one which has been in the warehouse for the longest period of time)
ISO	International Standardization Organization
PO	Purchase Order
QP	Quality plan
RAMS	Reliability Availability Maintainability Safety
NCR	Nonconformity Report
SDI	Defence Systems
STANAG	Standardization Agreement
SW	Software
OU	Organizational Unit

4 GENERAL REQUIREMENTS

The following requirements, defined in PQA004-L-IT-D apply to all supplies covered by this document:

- General requirements for the Supplier's Quality System;
- Documentation;
- Determining and reviewing requirements;
- Subcontractors Management;
- Identification and traceability;
- Acceptance of purchased products or services;
- Control of nonconforming products;
- Product preservation;
- Right of access and support for the customer and GQAR

5 SPECIFIC REQUIREMENTS

5.1 Provision of FIXED-PRICE WORK EXECUTION (RQF = G1)

This paragraph applies to the provision of fixed-price activities carried out by suppliers at Leonardo-SDI sites.

5.1.1 General

Suppliers who are required to perform activities at Leonardo-SDI sites shall strictly comply with the requirements imposed by:

- Purchase Orders/Contracts;
- applicable legal requirements;
- applicable documentation;
- document ACQ009-T (General Conditions of Procurement);
- the Single Document for Interference Risks Evaluation (DUVRI), which shall be requested from Leonardo-SDI, if not already received as an attachment to the order/contract.

5.1.2 Supplier organization and personnel

The Supplier shall ensure the continuous presence at Leonardo-SDI of a contact person with managerial/technical competence and the authority to act as an interface with the Leonardo-SDI person responsible for the activity. The name of the person concerned, together with his or her up-to-date CV, shall be formally notified to Leonardo-SDI before the start of the activities.

The Supplier shall ensure that the work at Leonardo-SDI is carried out by trained and, if necessary, qualified personnel.

In the context of activities related to aeronautical products, the suitability of personnel shall also be attested by the Supplier's Quality Manager who, upon request, shall provide evidence that personnel are trained in and aware of the procedures to be applied. Such personnel shall also be evaluated in advance by the Leonardo-SDI Quality and the Operational Unit for which the activity is to be performed.

5.1.3 Performance of the assigned activities

The Supplier shall perform the assigned activities in compliance with the applicable working and control instructions, using equipment/tools suitable for the class, type and maintenance status and in compliance with Leonardo-SDI directives and mandatory safety standards.

The activities shall be carried out in compliance with the assigned programme. The Supplier shall promptly inform the Leonardo-SDI contact person of any difficulties or impediments that could compromise compliance.

Where required, the Supplier's personnel shall record the progress of the activities for which they are responsible, using individual stamps for each member of staff involved, a list of which shall be made available in advance to Leonardo-SDI.

5.1.4 Leonardo-SDI control of the provision

Intermediate controls

Leonardo-SDI will communicate in advance to the supplier the activities on which it intends to perform intermediate control, and the related modalities (Hold Point² / Witness Point³ / Review Point⁴).

The Supplier shall invite for such control the Leonardo-SDI Quality according to procedures and terms agreed with his interface, with at least one working days' notice.

Final Acceptance Testing

The Supplier shall submit to acceptance testing the result of its activities after conducting its own verifications.

In case of any nonconformity found during the acceptance test, Leonardo-SDI will issue the resulting "Nonconformity Report for External Supply" and the Supplier shall take action to control and correct it in accordance with the requirements of PQA004-L-IT-D.

Inspections and audits

The Supplier shall provide Leonardo-SDI and its Customers or representatives with support in conducting any Inspection and/or audit on the Supplier's Quality System and the performance of the activities being supplied

² **Hold Point** = Verification phase to be conducted in the presence of Leonardo-SDI, after which the continuation of activities is to be authorized by Leonardo-SDI

³ **Witness Point** = Verification phase to be notified in advance to Leonardo-SDI, whose attendance is not mandatory for the continuation of activities.

⁴ **Review Point** = Verification phase for which Leonardo-SDI merely reviews the documents on which the execution and outcome of the activity were recorded.

5.2 Provision of TECHNICAL ASSISTANCE SERVICE (RQF = G2)

5.2.1 General

The paragraph applies to activities performed by suppliers at the operational sites of Leonardo-SDI customers. Usually the activities take place at shipyards or firing ranges and consist of technical assistance and/or logistic support to the customer for the commissioning and deployment of Leonardo-SDI products, maintenance activities, repairs of malfunctions, resolution of problems reported by the customer..

By way of non-exhaustive example, the following activities fall into this category:

- a) commissioning of gun carriages/mounts, launchers or equipment;
- b) verification of the progress of activities;
- c) performance of corrective maintenance;
- d) introduction of agreed changes or missing parts;
- e) compilation of fault reports and worksheets with regard to on-site work;
- f) management of nonconformities in direct contact with Leonardo-SDI representatives for their resolution;
- g) reporting of significant malfunctions and problems.

Activities may be carried out under the direct responsibility of Leonardo-SDI or the supplier itself, according to the contractual requirements.

5.2.2 Documents provided by Leonardo-SDI

The supplier required to operate off-site will normally receive the following documentation for which he is responsible for the proper use and management of the revision status:

- a) test plan and test procedures for commissioning;
- b) change notices;
- c) drawings and functional diagrams required for the introduction of changes;
- d) operation and maintenance manuals and spare parts catalogues;
- e) missing parts list;
- f) spare parts list;
- g) job development program for activities under the Supplier's responsibility;
- h) forms on which to record the activities carried out;
- i) Single Document for Interference Risks Evaluation (DUVRI), where applicable.

It is the Supplier's responsibility to promptly report any inconsistencies or omissions in the above documents.

5.2.3 Documents produced or processed by the supplier

This paragraph applies only in the case of activities for which the supplier has complete responsibility (i.e. it does not apply if the activities are coordinated by Leonardo-SDI personnel present at the operational site).

Quality plan

The Supplier shall produce and submit to Leonardo-SDI for approval a Quality Plan (PQ) relating to the activities it is required to perform. The PQ shall be prepared in accordance with the guidelines contained in PQA004-L-IT-D and shall address the following aspects related to the supply:

- a) organization of the worksite structure, with named allocation of committed personnel;
- b) name of the person responsible of the activities, with his/her up-to-date CV;
- c) mode of implementation of the assigned activities;
- d) mode of transmission to Leonardo-SDI of the documentation related to the activities;
- e) procedures for managing the spare parts warehouse;
- f) management of relations with Leonardo-SDI and his customer;
- g) operational tools used to carry out the activities.

The QP shall be updated by the Supplier in case of:

- h) changes to the worksite structure;
- i) organizational changes;
- j) Leonardo-SDI comments made during the assessment.

Scheduling of the activities

For the commissioning of Leonardo-SDI products, the Supplier shall make available, 30 calendar days before the start of the tests, a general execution schedule developed in GANTT form, indicating:

- k) the sequence of tests;
- l) the number and competence of personnel involved.

In case of delays caused by the Supplier in performing the activities, the Supplier shall submit, in the revised schedule, the actions proposed to recover the delay .

Any documents sent by Leonardo-SDI unofficially and not referred to in the contract documents shall be considered by the Supplier only as application examples. The Supplier shall not use them to perform contractual activities and shall not recall them in its own documents.

5.2.4 Supplier's personnel organization and resources

This paragraph applies only in the case of activities for which the supplier has complete responsibility (i.e. it does not apply if the activities are coordinated by Leonardo-SDI personnel present at the operational site).

To perform the required activities, the supplier shall establish a structure consisting of:

- a) a Contact Person responsible for accomplishment of the activities;
- b) a spare parts manager;
- c) specialised maintenance technicians;

The Contact Person shall have the following duties:

- d) coordinating personnel by planning their activities;
- e) relate with the Customer's personnel who are present at the worksite;
- f) relate with Leonardo-SDI personnel;
- g) relate with other suppliers to resolve nonconformities, delivery delays, etc.

The Contact Person shall send to Leonardo-SDI, in real time, in a manner to be established in the Quality Plan, documents relating to the problems encountered on the equipment during operation, whether or not reported by the Leonardo-SDI Customer and the corrective maintenance activities carried out. The Contact Person is also required to respond to any requests for further information made by or on behalf of Leonardo-SDI personnel.

The name of the Contact Person shall be indicated in the QP, supplemented by his/her up-to-date CV.

The Supplier shall ensure the use of personnel who are appropriately trained, qualified if necessary, and in any case with the skills assessed in advance by Leonardo-SDI.

In general, personnel shall be able to:

- a) correctly interpret technical documents;
- b) independently perform the assigned activity;
- c) develop the assigned self-verification activities;
- d) point out any nonconformities on the components received or detected during accomplishment of the assigned activities;
- e) follow behavioural safety rules so as not to cause hazardous situations for themselves or for other workers in the workplace.

The Supplier shall perform the assigned activities in accordance with the legal requirements; observing the working and control instructions contained in the applicable operating and maintenance manuals; and employing equipment suitable for class, type and state of maintenance.

In particular, the supplier is not allowed to use equipment/tools that does not comply with current legal safety directives. Measuring equipment shall be periodically calibrated (according to ISO 9001, ISO-10012) and provide evidence of its valid status. In addition, the supplier shall, upon request, submit documentation attesting the metrological traceability chain.

5.2.5 *Materials assigned for processing and spare parts*

Materials assigned by Leonardo-SDI in contract work (for modifications or introduction of missing parts) or identified as spare parts, shall be preserved so as to ensure that their identification is maintained (Picking list associated with the part) and damage avoided.

The Supplier shall promptly report:

- a) any shortfall in quantity from the accompanying documents, or damage to the materials and parts received;
- b) nonconformities detected during installation or testing.

5.2.6 *Commissioning activities*

The commissioning activity is normally carried out by Leonardo-SDI personnel, who then assume full responsibility. If the Supplier performs partial activities independently, he shall compile the required documentation provided by Leonardo-SDI.

The activity starts once the installation is completed, develops through a series of test (static and dynamic), inspections and controls, and ends with the provisional delivery of the product to the customer, following the positive outcome of the verifications mentioned above.

5.2.7 Warranty Assistance

Warranty service activities are normally carried out by Leonardo-SDI personnel, who therefore assume full responsibility. If the Supplier performs partial activities autonomously, he shall compile the required documentation provided by Leonardo-SDI.

The warranty service activities that the Supplier is required to perform in the period between delivery of the product and expiry of the warranty, include for each product:

- a) repair work following breakdowns (corrective maintenance);
- b) introduction of modifications and/or variants;
- c) reporting of significant or recurring problems;
- d) management of faulty products.

In addition, the Supplier shall provide the necessary support in the search for solutions and, in adversarial discussions with the Customer and/or other Suppliers, for the correct imputation of the faults.

5.2.8 Management of nonconforming or faulty products

Warranty assistance is normally carried out by Leonardo-SDI personnel, who therefore assume full responsibility. If the Supplier performs partial activities on his own, he shall compile the required documentation provided by Leonardo-SDI.

The Supplier is responsible for:

- a) identify faulty or nonconforming products by means of a special label and store them in a special area, physically separated from the area designated for spare parts;
- b) prepare the failure report related to the said products on forms provided by Leonardo-SDI, reporting the information necessary for a correct and complete understanding of the situation detected;
- c) interface with the Leonardo-SDI units and/or the Supplier for the return of the product, taking care that this is accompanied by the nonconformity report;
- d) involve the Leonardo-SDI unit and/or the Supplier when necessary;
- e) check the status of the repaired and/or shipped product and the state of completion of the failure report;
- f) send the non-conformance documentation to the appropriate Leonardo-SDI site.

5.2.9 Implementing changes and on site operations

Implementing changes is normally carried out by Leonardo-SDI personnel, who then assume full responsibility for them.

In the case that the Supplier performs partial or full activities independently, he shall compile the required documentation provided by Leonardo-SDI. In that case the Supplier is responsible for implementing the modifications required by Leonardo-SDI and therefore shall:

- a) Perform the activity in accordance with the documentation received from Leonardo-SDI (Modification Orders, Technical Variation Requests, etc.) operating according to the technical documentation enclosed with it;
- b) Implement the change by using the materials received from Leonardo-SDI;
- c) After the change has been implemented, control the final result to verify proper functionality;
- d) Notify the completion of the work to Leonardo-SDI through the appropriate summary form signed by the person in charge of the activity (also countersigned by the Customer's representative if applicable).

In the event of a significant anomaly/failure (usually related to safety or operational continuity), the Supplier shall report the event to Leonardo-SDI by means of a specific Repair Work Form, in order to describe the event, when it occurred, the presumed cause and all information deemed necessary to define the situation (including photographs, representative sketches, etc.)

Corrective maintenance is aimed to ensure that the service is restored under safe and uninterrupted operational conditions. The Supplier shall ensure:

- e) the timeliness and effectiveness of the work;
- f) a proper record of the work carried out in terms of:
 - i. types of faults and failures detected at the time of work;
 - ii. parts replaced;
 - iii. allocation of charges and RAMS implications;
- g) proper management of spare parts in terms of:
 - i. observation of established stock levels;
 - ii. proper preservation;
 - iii. the correct and continuous identification of the spare part;
 - iv. the traceability of the spare part with respect to any certifications produced by the Supplier of the spare part;
 - v. FIFO management, where necessary;
 - vi. appropriate environmental and physical conditions for preserving the spare parts;
 - vii. providing evidence of the control status;
 - viii. availability of safety data sheets, where applicable;
 - ix. storage and preservation of technical and certification documentation sent by the Leonardo-SDI Supplier to accompany the spare parts.

The Supplier shall also:

- h) store spare parts separately from faulty or nonconforming products so as to avoid errors in picking from stock or shipping.
- i) Prepare and update a list of spare parts showing the quantities in stock for each type of product.
- j) inform Leonardo-SDI when stock quantities are close to the established minimum level.

5.2.10 Leonardo-SDI checks on the tasks

The Supplier shall provide Leonardo-SDI and its Customers or representatives with support during the conduct of any Inspections/audits of the efficiency and effectiveness of the Supplier's Quality System.

The Supplier shall carry out any required corrective actions in a timely manner.

5.2.11 Operating Tools

Operating Tools are the set of documents used to plan and record the progress of the commissioning and warranty service activities.

These documents shall be submitted to Leonardo-SDI for the purpose of:

- a) state the Supplier's operations and the progress of the activities in relation to the schedules;
- b) enable the collection of data for statistical purposes;
- c) document any problems encountered;
- d) provide elements for correct fault imputation.

The types of documents to be used and signed by the Supplier include

- e) form for recording and monitoring the requests for assistance;
- f) list of works to be carried out;
- g) sheets of works carried out;
- h) test report;
- i) status of changes implemented or yet to be implemented;
- j) repair work form;
- k) on field modification bulletin;
- l) activity report for failure registration and related intervention, with data collection for availability and reliability.

5.3 Provision of **ENGINEERING DESIGN & CONSULTANCY SERVICE (RQF = G3)**

This paragraph applies to documentation provided as an outcome of technical studies commissioned by Leonardo-SDI for one of the following reasons:

- a) to support, justify, or verify design choices made by Leonardo-SDI during the development phase of a product;
- b) to analyse the causes of malfunctions and/or failures found on products already manufactured by Leonardo-SDI;
- c) other similar reasons

Unless otherwise requested in the order, the documentation shall be produced in accordance with the S1000D standard and shall contain as a minimum:

- d) Identification of the elements under study (e.g. materials, items, systems), in accordance with their current configuration status;
- e) Traceability of the requirements (or needs) expressed by Leonardo-SDI as the origin and reason for the requested study;
- f) A description of the criteria and methods applied to conduct the study;
- g) A detailed description of the results obtained;
- h) The evaluation and final outcome of the study, with rationale for the decisions taken.

Each document shall be uniquely identified according to the rules provided by the supplier and at the time of delivery shall be signed by the supplier for approval.

For the supply acceptance, the requirements defined in PQA004-L-IT-D (para. "Acceptance of supply") apply.

At acceptance testing, the supplier shall demonstrate that the documentation meets the technical and quality requirements expressed in the order and applicable mandatory standards. The supplier shall also provide evidence that the documentation actually meets the requirements, implicit or explicit, for which it was produced, i.e. it is suitable for use in the context for which it is intended by contract.

5.4 Provision of OPERATION AND MAINTENANCE MANUALS (RQF = G4)

This paragraph applies to the provision of technical, logistics and/or operational support documentation for systems/equipment intended for or already supplied to Leonardo-SDI customers.

Unless otherwise requested by order, manuals shall be produced in accordance with the S1000D standard and shall contain at least information on the following topics, depending on the contractually required maintenance level:

- a. General description of the system/equipment object of the supply;
- b. Link to the Reference Configuration of the product;
- c. Link to the maintenance plan;
- d. Functional description of the system/equipment according to the use intended by contract;
- e. Preventive maintenance as scheduled in the maintenance plan;
- f. Corrective maintenance;
- g. Tuning and adjustments;
- h. Installation;
- i. Troubleshooting;
- j. General overhaul procedures;
- k. Spare parts catalogue containing figures and bills of materials for assemblies/sub-assemblies and related parts.

Each document shall be uniquely identified and signed by the supplier for approval.

The supplier shall review the technical and quality requirements communicated by Leonardo-SDI through the Purchase Order and associated documents to ensure that they are clear, complete, and agreed upon, including an indication regarding the file type to be delivered (.doc, Xml, pdf, IETP, ...).

If the supplier considers the information received in the PO to be non-exhaustive, he shall agree with Leonardo-SDI on the actions to be taken to arrive at a complete sharing of the supply requirements.

Interfaces for detailed information on the technical aspects of the supply, and in particular on the characteristics of the systems/equipment covered by the manuals, are identified within Leonardo-SDI's Logistics Engineering.

The supplier, within 30 calendar days after acceptance of the PO, and in any case before the start of activities, shall submit a Schedule of Activities (GANNT), including milestones related to deliverables.

For the supply acceptance, the requirements defined in PQA004-L-IT-D (para. "Acceptance of supply") apply.

At acceptance testing, the supplier shall demonstrate the conformity of the supply to the technical and quality requirements expressed in the order and to the applicable mandatory standards by providing evidence of the controls he has performed to verify the correctness of the documents.

The supplier shall also submit the documentation to Leonardo-SDI, for verification (completeness of documents, correctness of technical content, correct file syntax and formatting) and validation test (through practical use).

5.5 Provision of SUPPORT DOCUMENTS FOR TRAINING COURSE (RQF = G5)

This paragraph applies to the provision of documentation (in hard and/or electronic formats) intended to support training courses to be delivered to Leonardo-SDI customers.

Unless otherwise requested by order, documentation shall be produced in accordance with the S1000D standard and shall meet the following minimum requirements:

- a. be well organized, clear and consistent in content;
- b. fully meet the training needs of the course;
- c. be congruent with the time duration of the course;
- d. be in line with the level of preparation and knowledge of the personnel for whom the course is intended;
- e. Identify the system/equipment covered by the course and its elements (if necessary) so that identification is unique and traceable to the expected configuration status;
- f. the documentation provided in electronic format shall be compatible with the HW/SW environment that will be used by Leonardo-SDI and/or its customer to deliver the course.

Each document shall be uniquely identified and signed by the supplier for approval.

If the supplier considers the information received through the PO to be non-exhaustive, he shall agree with Leonardo-SDI on the necessary actions to arrive at a complete sharing of the delivery requirements. In particular, interfaces to get detailed information about the courses covered by the requested documentation (purpose, contents, duration, organization, user characteristics, etc.) are identified in the Engineering Logistics Unit of Leonardo-SDI.

For the supply acceptance, the requirements defined in PQA004-L-IT-D (para. "Acceptance of supply") apply.

At acceptance testing, the supplier shall demonstrate that the documentation meets the technical and quality requirements expressed in the order, and the applicable mandatory standards. The supplier shall also provide evidence that the documentation actually meets the requirements, implicit or explicit, for which it was produced, i.e. it is suitable for use in the context for which it is intended by contract.