

SO.LA.IS**SUPPLIER MANUAL**

REVISIONS (highlighted to one side in laterally positioned bar)			
date	no.	description	Notes
31.08.18	00	Issuance no. 1	
31.08.19	01	Total revision of document	

QA issuance – Cristina Zara

Head Office approval – Michele Zara

TABLE OF CONTENTS:

1. INTRODUCTION
 - 1.1. Quality Principles and Policy
 - 1.2. Scope and field of application
 - 1.3. General Purchasing Conditions

2. QUALIFICATION AND ASSESSMENT OF VENDORS
 - 2.1. Selection of vendors
 - 2.2. Periodic assessment
 - 2.3. Vendor development
 - 2.4. Auditing vendors
 - 2.5. Analysis of context and of stakeholders
 - 2.6. Storage of documents

3. QUALITY
 - 3.1. Vendor quality requirements
 - 3.2. Requisites and special characteristics
 - 3.3. Feasibility
 - 3.4. Control plan
 - 3.5. FMEA
 - 3.6. Samples and approval
 - 3.7. Vendors' tasks
 - 3.8. Requalification
 - 3.9. Identification and traceability
 - 3.10. Non-conformity and corrective actions
 - 3.11. Additional requisites of customer
 - 3.12. Maintenance
 - 3.13. Error proofing
 - 3.14. Continual improvement
 - 3.15. 5S

4. HEALTH, SAFETY, ENVIRONMENT AND ETHICS
 - 4.1. Labour and human rights practices
 - 4.2. Safety and technical data sheets
 - 4.3. REACH – ROHS – CONFLICT MINERALS – DCB – ABESTOS
 - 4.4. Hazardous substances
 - 4.5. Environmental impact concerns
- 4.6. Fair trade practices, sustainable purchasing, human rights, society
5. INFORMATION MANAGEMENT and NON-DISCLOSURE RULE
6. REFERENCES

1. INTRODUCTION

SOLAIS has drawn up quality management policies and has established methods to meet all the requirements and expectations of its customers regarding quality, cost reduction and punctuality, while duly taking into account safety, environmental and ethical concerns. In full awareness of the important role played by vendors in attaining these ends, by means of its Vendors' Manual, SOLAIS intends to set forth the basic requisites that it asserts and applies in order to control and maintain quality of services and of goods supplied. In regard to all aspects not expressly considered herein, reference is to be made to the SOLAIS's General Purchasing Conditions.

The aim is to collaborate with all Vendors to ensure that the requisites are fully understood, while ensuring rapid, timely communication and enhancing working relations and thus fostering continuous improvement and openings for provision of optimal solutions to all problems.

1.1. Quality Principles and Policy

SOLAIS sets forth the fundamental aspects that guarantee the global quality objectives of its activities, in full awareness of the concerns of safety, the environment, sustainability and disclosure issues. Further details are provided (see the policy also on the SOLAIS web site => www.solais.it):

Customer satisfaction,

enabled by considering the end user of our products as our customers, in full awareness of the Customer/Vendor nature of dealings conducted among all Company areas. The aim is to meet the explicit and implicit needs of our customers while monitoring the marketplace on an ongoing basis.

Continuous improvement,

is an ability to conduct self-testing through constant control of activities and prompt implementation of any required corrective actions, accompanied by staff involvement and constant in-field training activities. This approach, which regards all corporate fields, is controlled also by means of the performance indices implemented within the various ambits of corporate activity (quality, environment, safety etc.)

Monitoring of environmental impact, safety and ethics, and improvement actions,

adopted while assessing the relationship between corporate processes and the environmental characteristics of the surroundings, while seeking to reduce and/or eliminate harmful consequences or seek positive outcomes. The company is also committed to seeking out solutions for any environmental problems linked to use of its products. Hence, its commitment to research, optimizing production cycles, in-depth assessment of new technologies and correct waste disposal;

while monitoring not only the impacts of all corporate processes (including prospective corporate processes) but also safety, and while abiding by all health and safety provisions. On an ongoing basis, SOLAIS implements a system for efficaciously detecting and preventing criminal activities, also entailing training and information activities in all corporate areas;

with commitment to ethics and fair trade practices, applied both internally and in relations with the company's supply chain

In view of the impact of vendors on corporate activities, SOLAIS requires that these principles be applicable also to its vendors. SOLAIS requires of its vendors that they develop quality management systems aligned with the IATF 16949 standard (latest version) or at least with the UNI EN ISO 9001 standard (latest version).

1.2. Scope and field of application

Compliance with the Vendors' Manual is a contractual requirement.

1.3. General Purchasing Conditions

Together with the Order, the General Purchasing Conditions (GPC) underpin contractual relations with vendors. The GPC are listed in a separate document, which is to be undersigned by the vendor.

2. QUALIFICATION AND ASSESSMENT OF VENDORS

2.1. Selection of vendors

SOLAIS assesses potential vendors, taking into account the risks relating to product conformity and continuity of supply. The vendors are selected on the basis of their ability to meet vendor requisites, and primarily – as a starting base requirement – possession of UNI EN ISO 9001 certification (latest edition). The purchasing manager, together with the other functions concerned, then:

- issues a request for a detailed quotation, including – where required – a technical data sheet or specifications;
- arranges for a (second party audit) inspection if the vendor is uncertified. If an inspection cannot be arranged, a questionnaire is sent for the purposes of a preliminary assessment;
- where necessary, shall request samples of the material for testing and verification;
- qualifies the vendor if the information is exhaustive and the various assessment procedures are comprehensive;
- issues the General Purchasing Conditions and Vendors' Manual with a request for acceptance of the same;
- adds the vendor to the list of qualified vendors.

2.2. Periodic assessment

Assessments of the 'fleet' of vendors are also carried out on a yearly basis. These assessments consider:

- conformity of products delivered
- defects and/or discontinuity noted by customers, including materials returned, and yard and delivery stoppages
- PPM trend
- timeliness of deliveries (including any extra costs sustained due to delays)
- notices received from customers regarding quality and deliveries (supplementary delivery costs)
- goods returned by dealers, guarantee, goods returned from the field and complaints (where applicable)

If the vendor has not been used for 3 years running, the initial qualification expires and, in the event, requalification shall take place.

Assessment of the degree of satisfaction for services and supplied products is based on the following parameters:

- 1) quality of items supplied and PPM;
- 2) conditions of delivered goods (packaging). For the providers of services and transport, this parameter is considered within the ambit of point 1 (quality);
- 3) punctuality of delivery.

These parameter values may vary on the basis of type of product supplied or service provided. Final assessment consists in control of these parameters, weighted varyingly and according to type of product supplied or type of service provided.

The Vendor is classed according to Vendor Rating. The Purchasing Department and Quality Assurance assign classes to Vendors. If Vendors have not been found to be responsible for any instances of serious Non-conformity or other problems, they are to be confirmed as qualified Vendors.

If the Vendor is classed as unsatisfactory or most unsatisfactory:

- supplies shall be discontinued and/or more thorough controls shall be carried out;
- a plan to ensure improvement shall be drawn up and implemented, which is to be agreed upon together with SOLAIS (SOLAIS shall set forth in detail actions, tasks and time schedules);
- the results shall be monitored during the run up to later reassessment.

If the problem are not solved, SOLAIS shall interrupt supply operations and shall revoke the qualification as vendor.

Classing Vendors		
V.R.	Rating	Vendor Class
4 – 3.59	Excellent	C4
3.58 – 2.99	Satisfactory	C3
2.98 – 1.99	Adequate	C2
1.98 – 0.5	Unsatisfactory	C1
< 0.5	Most Unsatisfactory	C0

2.3 Vendor development

Where necessary, SOLAIS sets forth and implements, in collaboration with vendors, the priorities and the types and scopes of actions for development of the QMS with pertaining time schedules. The inputs include: vendor performance shortfalls

- results of second party audits
- certification status (third party)
- risk analysis

SOLAIS works toward solving existing problems and fostering ongoing improvement and development of a system based on prevention and application of error prevention techniques (e.g. FMEA, process capacities studies etc.).

2.4 Auditing Vendors

During supply procedures, SOLAIS may conduct a second party audit, by prior agreement, regarding certain fundamental aspects:

- ✓ Risk assessment (quality/environmental/economic-financial);
- ✓ Product or process audit;
- ✓ Development of quality management system (if uncertified).

SOLAIS may accordingly request that the audit take place in the presence of SOLAIS's customer.

2.5 Analysis of context and of stakeholders

SOLAIS has provided for analysis of the context, identifying all stakeholders and their needs. It monitors the results on an ongoing basis.

Vendors are urged to operate likewise, by conducting specific analyses of risks and of openings and by drawing up an emergency plan to manage risk situations.

2.6 Storage of documents

SOLAIS requires controlled management of documents. These documents are to be stored for at least 10 (ten) years, unless otherwise decided.

3 QUALITY

3.1 Vendor quality requirements

SOLAIS requires vendors to develop a quality management system aligned at least with the UNI EN ISO 9001 standard (latest version). The final aim is attainment of IATF 16949 certification (latest version).

SOLAIS shall constructively engage in teamwork with its vendors to further develop vendor quality systems in order to attain the objectives set.

3.2 Requisites and special characteristics

Special characteristics are a product specification (materials, performance), or a process parameter. They are considered critical, since variations may impact safety requirements, conformity with standards or regulations, or conformity of function or of form. SOLAIS flags these characteristics with the symbol => c/c.

In regard to raw materials, the chemical composition required according to the SOLAIS specification is at all times to be considered a special characteristic.

The supplier must monitor and control these parameters and ensure that there is no deviation. Specific controls must be devised. On request, the vendor must inform SOLAIS of method of measurement. Where possible, application of statistical process control may be requested.

3.3 Feasibility

SOLAIS requires the vendor to carry out a feasibility assessment to establish whether the material requested can be used serially in conformity with requests and specified requisites.

3.4 Control plan

A control plan provides a formal description of the approved system for control of products and processes. It ensures that the set specifications and tolerances and all other key characteristics are verified, and it sets forth methods and time schedules in regard. It provides an account of the controls required at each stage of the process and of the periodic requisites (e.g. product audit) to ensure control of the results of the process.

The control plan may be extended to cover a family of products resulting from the same production process.

The control plan is closely linked to the flow chart and process FMEA. It presents 'live' data that must be reviewed and updated.

3.5 FMEA (Failure Mode and Effects Analysis)

A very important aspect of quality planning is product and/or process FMEA development. This documented activity enables us to identify and assess potential product/process failures. It also establishes their effects. It is thus possible to pinpoint actions that may eliminate potential failures or lower the probability of failures.

Process FMEA is 'live' data that must be reviewed and updated when failures occur or when the indicated controls have no effect.

3.6 Samples and approval

With approval of samples (when required), the vendor must submit the following documentation:

- ✓ PSW
- ✓ Samples (on the basis of SOLAIS's indications)
- ✓ Technical specifications of the material
- ✓ Certificate 3.1
- ✓ Flow chart

With regard to the documents indicated below – which are the corporate property of the vendor – confirmation of their presence is requested. They are to be displayed only on request or for the purposes of an audit:

- ✓ Process FMEA
- ✓ Project FMEA (if applicable)
- ✓ Control plan

Reference is made to the PPAP (AIAG) manual, level 2, submission of documentation.

For supplies to be approved, all the required activities must be fully completed, with positive outcome. Samples with incomplete documentation may be rejected, or outcome may have to await completion of activity.

3.7 Vendors' tasks

Following approval of a supply arrangement, the vendor must render operational all systems that ensure ongoing product conformity, also regarding any subcontracted items, internal processes and packaging.

3.8 Requalification

On a yearly basis, or following a specific request to this effect from SOLAIS, the vendor must requalify the product to ensure conformity with requisites. The requalification documentation is archived on the premises of the vendor and shall be submitted to SOLAIS only following a specific request to this effect. Should a non-conforming characteristic be noted during requalification, the vendor is obliged to immediately inform SOLAIS of this development, and must take adequate corrective actions.

3.9 Identification and traceability

Correct identification and traceability of the materials must be ensured. Traceability procedures shall entail precise specification of raw material production batch. Traceability records must be stored over time (unless contractually established otherwise, the records must be stored for 10 years or for 15 years for safety products). The batch number must be clearly displayed on the delivered

packaging (pallet/single bags), and is also to be included in the 3.1 certificate and documents accompanying goods delivery.

3.10 Non-conformity and corrective actions

In the event that the vendor realises that it has sent non-conforming or potentially non-conforming products, it must immediately notify SOLAIS of this development. If deviations from the required quality standard are noted, the Vendor must issue a request for derogation, to be sent to the purchasing department. This derogation must be agreed upon beforehand, with specification of quantity or time schedules. The material provided must be clearly labelled "MATERIAL SUBJECT TO DEROGATION". The vendor must work toward restoring the set quality standards.

Delay in delivery may constitute non-conformity (if the delay has not been already agreed upon with the purchasing department). Such delays may lead to a charge applied to the vendor for costs sustained (see General Purchasing Conditions).

Non-conformity notices are provided by the quality department to the Vendor (8D). The vendor is obliged to act immediately (within 1 working day) by implementing containment actions. Subject to agreement with the purchasing department, submission of conforming material, thus replacing the items, may proceed. The vendor is required to respond by adopting the 8D methodology, submitting, within 10 working days, information on the causes of non-conformity and the corrective actions implemented. Within 60 days, verification and attestation of efficacy of the corrective actions is required, with the pertaining data. The defective material shall be stored and shall be made available to the vendor for a period of 5 working days. If the material is not withdrawn, SOLAIS will dispose of it as defective and shall charge the costs thus sustained. Any and all other costs sustained (e.g. selection, charges imposed by customer etc.) shall be brought to the attention of the vendor, who shall be charged accordingly. For each complaint issued, a 100-euro administrative procedures charge shall automatically apply.

Prior to delivery, information must be submitted on any reprocessing measures, where possible, undertaken, for SOLAIS's approval in writing. These products must be identified and handled separately from conforming products.

3.11 Additional requisites of customer

Any additional requisites of the customer shall be transmitted in writing to the vendor. The vendor is required to process the said requisites. Any observations in regard are to be submitted in writing to SOLAIS.

3.12 Maintenance

The vendor is to implement a maintenance plan in order to ensure ongoing improvement of the efficacy and efficiency of installations. Each installation and all equipment used for products for SOLAIS must be subjected to planned maintenance procedures, preferably by adopting predictive (as opposed to reactive) maintenance methodologies.

3.13 Error proofing

SOLAIS favours implementation of error proofing mechanisms to prevent production of defective materials. In order to lower the risks, vendors may adopt error proofing techniques during product and process design and development stages.

3.14 Continuous improvement

SOLAIS highlights continuous improvement as one of the main goals of its policy. Since the performance of vendors greatly impacts SOLAIS's performance, vendors are requested to adopt the same philosophy, and to implement improvement plans that specify their objectives while monitoring results vis-à-vis all ambits of corporate activity.

3.15 5S

5S methodology is a corporate organisational technique aiming to eliminate all that may be considered wasteful, this criterion regarding not only objects but also personal habits, the aim being to use only that which is truly of use.

SOLAIS encourages adoption of this five-step technique:

Step 1 - Seiri: sort

Step 2 - Seiton: set in order

Step 3 - Seiso: shine

Step 4 - Seiketsu: standardize

Step 5 - Shitsuke: self-discipline

4 HEALTH, SAFETY, ENVIRONMENT AND ETHICS

The objective of sustainable development is to meet “the needs of the present without compromising the ability of future generations to meet their own needs”. Hence, all organisations – in view of their core social function – have an important part to play in attaining this objective.

During a period of economic growth and marked progress toward globalization, new wealth opportunities are arising, alongside openings for improving quality of life. These developments, however, are offset by alarming data concerning the state of health of the environment and the poverty and hunger currently afflicting millions of people. These conflicting findings underscore the need for companies to adopt new ways of thinking and acting. They must reconsider how their products, services, operations and activities impact the Earth, peoples and economies.

SOLAIS intends to take up this challenge and commit itself to operating sustainably, while fostering transparency of relations with all its stakeholders. SOLAIS calls on all its vendors to adopt the same approach.

4.1 Labour and human rights practices

SOLAIS requires all its vendors to, on an ongoing basis, apply, assess, control and update conditions to ensure employee health and safety. Namely, by:

- applying current employee Health and Safety standards, assessing efficiently and with all due care all dangers of the workplace while undertaking efficacious actions where required;
- providing training for all personnel at all corporate levels, regarding safety, fairness and anti-discrimination issues;
- monitoring and rating safety performance and implementing targeted safety measures wherever shortcomings are noted, and monitoring of openings for improvement;
- ensuring fair and adequate working conditions for all personnel;
- fostering dialogue with the entire staff and satisfactorily managing growth within the company, not only transparently but also as a form of ongoing training;
- eliminating all discrimination and/or harassment from the workplace.

4.2 Safety and technical data sheets

Vendors must provide – together with their quotations or initial samples – updated technical and safety data sheets conforming with current regulations. Vendors are also obliged to submit any updated versions.

4.3 REACH – ROHS – CONFLICT MINERALS – DCB – ABESTOS

The main Directives and Regulations, with later modifications/amendments – conformity with which Directives and Regulations is required by SOLAIS –, are as follows:

- ✓ REACH Directive 1907/2006 (Registration, Evaluation and Authorization of Chemicals) and list of SVHC (www.echa.europa.eu)
- ✓ RoHS Directive (Restriction of Hazardous Substances Directive)
- ✓ CLP Regulation 1272/2008 (Registration, Evaluation and Authorization of Chemicals)
- ✓ DecaBDE (Decabromodiphenyl ether) – EU Regulation 2017/227
- ✓ European Directive 2000/53 and annexes
- ✓ Conflict Mineral Declaration (<http://conflictminerals.aiag.org>)
- ✓ Asbestos absence

4.4 Hazardous substances

SOLAIS requires that materials supplied conform with the European Directives (including updates, amendments and additions). The Vendor is obliged to inform SOLAIS (info@solais.it) immediately if it learns that its materials supplied contain one or more substances that are indicated in Directives and/or Regulations.

The Vendor is also obliged to include information on IMDS portal substances (<https://www.mdssystem.com/imdsnt/startpage/index.jsp>)

4.5 Environmental impact concerns

SOLAIS believes that the environmental impact of organisations is of prime importance. It therefore requires its vendors to implement systems that determines their impact and also assess the effects of their activities. Assessments must take into account impacts on natural systems both living and not living (including ecosystems, land, water and air). They must include study of the impacts noted within the company and elsewhere, and on customers, end consumers and all other stakeholders.

Specifically:

- local pollution => assessment of possible soil pollution, external noise, emissions into the atmosphere, direct and indirect greenhouse gas emissions; emission of substances with adverse effects on ozone; management of hazardous waste or non-hazardous waste;
- energy consumption and/or greenhouse gas emissions;
- consumption and management of water;
- any impacts on biodiversity;
- environmental impacts of product use (also on end users);
- product safety, i.e. customer health and safety, where possible providing available information for end consumers => assessment of the stages of the life cycles of products, checks on possible impacts on end product safety; labelling and documentation regarding the product.

SOLAIS urges its vendors to foster adoption of technologies or solutions that minimize environmental impacts (e.g. technologies that limit CO2 emissions, solution that enhance energy-saving performance or recycling activities, use of reusable packaging etc.).

4.6 Fair trade practices, sustainable purchasing, human rights, society

SOLAIS requires its vendors to abide by the said principles regarding freedom, non-discrimination, freedom of association and freedom to engage in collective bargaining, child and/or forced labour, safety practices and social responsibility.

SOLAIS also requires its vendors to assess their impacts on local communities and on society; to implement anti-corruption, anti-collusion and anti-trust policies; and to counter unfair and/or unethical conduct.

Concerning the above, SOLAIS requires its vendors to abide by the indications of SOLAIS's code of conduct (available via the web site: www.solais.it).

5 INFORMATION MANAGEMENT and NON-DICLOSURE RULE

SOLAIS applies the current regulations governing information security. It is committed to safeguarding the following with particular attention:

- personal information
- corporate information
- information concerning SOLAIS customers

SOLAIS undertakes to collaborate with its vendors to successfully adopt security policies within the ambit of information management. The parties all undertake to abstain from divulging the following information: texts, drawings, specifications, projects, standards, terms of contract, plans, computer programs and any other information that they gain because of existing supply relationships, whether regarding supplies/provision as such or of another nature.

All violations shall be considered a criminal offence.

All information that the parties gain shall be considered strictly confidential, and shall not be divulged or made available to third parties without the prior permission of the counterparty in writing. The parties all ensure that all directly or indirectly involved parties are subjected to the same non-disclosure obligations.

These obligations are to remain valid for 10 (ten) years after the date of termination of the supply relationship, without prejudice to alternative explicit agreements in writing.

Concerning the non-disclosure obligations, reference is made to the specifications of the General Purchasing Conditions.

6 REFERENCES

IATF 16949:2016 => <https://www.iatfglobaloversight.org>

ISO9001:2016 => www.iso.org/standard

AIAG => www.aiag.org

SOLAIS General Purchasing Conditions => www.solais.it

ACCEPTANCE BY VENDOR

Please fill out and return to one of the following contacts:

- ✓ FAX 0039/0438/981113
- ✓ E-mail: info@solais.it

The company,

hereby acknowledges receipt of the Vendors' Quality Manual of SOLAIS.

It confirms its ACCEPTANCE and adds the following observations/considerations:

.....

.....

.....

.....

.....

.....

.....

.....

OFFICERS AND CONTACT DATA:

.....

.....

.....

date	Officer and post	Company stamp and signature