

<b>PROCÉDURE</b>		<b>AIR LIQUIDE Advanced Technologies</b>
Quality requirements applicable to external suppliers		
Référence : S1-SUP-P04	Révision n°3	

## Circuit de validation (optionnel)

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## Table de révisions

Révision N°	Date	Rédacteur (Prénom Nom)	Description
1	27/07/2016	Yves IEDRA	M1-04-P01
2	19/07/2018	Yann MARQUER	M1-04-P01
3	13/02/2023	Nicolas CALLEJA	S1-SUP-P04 Change of process and procedure reference and modifications linked to CryoProc'Workshops

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## 1. Object

This document defines Air Liquide Advanced Technologies (hereinafter, “AL-aT”) minimum quality requirements which apply to any third party as supplier (hereinafter, the “SUPPLIER”) of goods and/or services including associated documentation (hereinafter, the “SUPPLIES”).

The SUPPLIER shall be responsible for ensuring that all quality assurance activities necessary to validate the SUPPLIES compliance with the CONTRACT (as defined in the AL-aT’s General Purchasing Conditions or specific purchases contract or framework agreement enforceable between the SUPPLIER and AL-aT) are met. The present document and any other AL-aT requirements specified in the CONTRACT shall be communicated and applicable to any SUPPLIER subcontractor engaged in the performance of the CONTRACT.

## 2. Perimeter

This document applies to any SUPPLIES to be provided by a SUPPLIER under a CONTRACT placed by AL-aT.

## 3. Scope

Additional requirements or deviations to the present requirements may be specified by AL-aT in other CONTRACT applicable documentation.

If it is impossible to comply with part or all of the requirements stated in this document, or if any inconsistency is believed to exist between this document and any document part of the CONTRACT, the SUPPLIER must inform and request clarification in writing to AL-aT prior to accept the CONTRACT.

In case of conflict, discrepancy, ambiguity or contradiction between this document herein about and any other contractual documents enforceable between the SUPPLIER and AL-aT in relation to the SUPPLIES, the relevant “order of precedence” provisions set out in the CONTRACT shall apply.

## 4. Retention of records

NA

## 5. Roles and Responsibilities

NA

## 6. Abbreviations

Abbreviation	Full Term
BU	Business Unit
NC	Non conformance
PV	Report
BL	Delivery note

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ATR	Acceptance Test Report
CDR	Critical Design Review
FAI / FAIR	First Article Inspection / First Article Inspection Report
FDS	Safety Data Sheet
HSE	Health, Safety, Environment
ITP	Inspection and Test Plan
LOFC	List of manufacturing and inspection operations
PDR	Preliminary Design Review
PVRI	Individual Acceptance Report
RCI	Individual inspection Register
KOM	Kick Of Meeting
PIM	Pre Inspection Meeting
MRR/PRR	Manufacturing/Production Readiness Review

## 7. References et related Documents

Reference	Title
ISO 9001	Quality management system standard
EN 9100	Quality Management Systems - Requirements for Aviation, Space and Defence Organizations
M1-04-P02	CGA
M1-05-P21( new ref : M5-HSE-P01)	HSE specifications for external companies working at AL-aT sites (in french)
NF EN 10204	Metal products control standard
NF ISO 2859	Sampling procedures for inspection by attributes

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## 8. Content

### 8.1 AL-aT Contacts

AL-aT purchaser is the primary interface with the SUPPLIER and shall orientate the latter to the persons in charge, in accordance with the areas specified below.

CONTACTS	INTERFACE FOR
Purchaser referenced in the CONTRACT	Administrative information Tenders, negotiations Purchase orders, Contracts Documents mentioned in the purchase order Commercial disputes Acknowledgement of receipt Progress chasing
Accounts Payable Department	Invoicing
Quality coordinator	Monitoring of the completion of the purchase order (Launch meetings, Inspection plan, Acceptance reports, FAI, etc.) Compliance monitoring Derogation monitoring Audits (supplier qualification, process, product evaluation)
Document Controller	Document management Rules of documentation submission
Warehouse	Product, service delivery Receipt of the Deliverable
Technical Coordinator / Project Manager / Project Engineer	Technical validation

A communication matrix shall be requested by AL-aT to the SUPPLIER, prior to the start of the first design phases.

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## 8.2 Access rules

### 8.2.1 Rules to access AL-aT sites

Safety requirements apply on the AL-aT sites, in compliance with HSE specifications for external companies working at AL-aT sites (M1-05-P21). More, the SUPPLIER shall comply with access rules and regulations applicable on sites (construction site, AL-aT customer site, AL-aT subcontractor site) where the SUPPLIER works under the CONTRACT.

To access the AL-aT sites, the SUPPLIER must comply with the following rules:

Personnel concerned	Documents to be provided to the security post	Preliminary information to be provided in advance to the AL-aT contact
French visitor	Identity document*	Advise date of visit, name and nationality 48 hours prior to the visit
Foreign visitor	Identity document*	Advise date of visit, name and nationality 48 hours before visit and submit the foreign access authorisation request prior to the visit.
French contractor	Identity document*	Advise the date of arrival on site 48 hours beforehand
Foreign contractor	Identity document*	Advise date of visit, name and nationality 48 hours before visit and submit the foreign access authorisation request prior to arrival.
Delivery/transport company	Identity document*	Submit the delivery or collection note

\* Send a current identity card or passport; a driving license is not proof of nationality.

#### DELIVERY TIMES:

Specified in AL-aT CGA

### 8.2.2 Rules to access the SUPPLIER site

The SUPPLIER must permit access :

- to AL-aT representatives, AL-aT customers and regulatory authorities,
- to premises on the SUPPLIER site and its entire supply chain (level N-x subcontractors),
- and to all relevant records.

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## 8.3 External Supplier categories definition

Category 1 : Design and/or manufacture of a product, system or one of its sub-assemblies

Supplier taking responsibility for the whole of a product design and/or realization process, starting from a specification or definition, diagram or functional analysis, detail and/or PID (Process Instrumentation Diagram) drawings, an electrical diagram supplied by AL-aT. The supplier may be required to complete all or part of the design phase.

Example of business skill implemented: pressure vessel, piping, integration, assembly, electricity, automation, instrumentation, etc.

Category 2 : Intellectual engineering and other services

Supplier who provides to AL-aT skills which are not available internally. This category also includes the completion of research within the structure of the Supplier itself.

Example of business competence implemented : engineering, structure calculation, etc.

This category includes all services which can have a direct impact on the quality & reliability of products delivered by AL-aT (e.g. = Tools' calibration, maintenance of production means, cleaning of cleanrooms, Products' transportation, subcontracted work on AL-aT Equipments and assets,...)

Category 3 : Manufacture of products on drawings

Supplier producing products based on manufacturing drawings, the design having been produced by AL-aT.

Example of business competence implemented : mechanics, precision machining, control, assembly.

Category 4 : Manufacture, sale of catalogue equipment

Supplier of standard products manufactured by the Supplier and offered to sell from its catalog ("off-the-shelf").

Category 5 : Distributor : Purchase/resale of products without transformation

Supplier/reseller responsible for the purchase, storage and sale of products without processing them (e.g distributors, brokers).



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## 8.4 Quality requirements : Inspections & Milestones

### 8.4.1 Quality requirements

Quality requirements are specified either :

- In AL-aT article description for standard equipment (off-the-shelf (COTS), with supplier references etc),
- In quality specification attached to the technical specification part of the CONTRACT.

When attached to the specifications Quality requirements are :

- Description of inspection and test on equipment and on manufacturing,
- Milestones between SUPPLIER and AL-aT.

### 8.4.2 Milestones for SUPPLIER and AL-aT

The following reviews and milestones, if applicable in quality requirements, should be planned when the CONTRACT is accepted by both AL-aT and the SUPPLIER.

<b>Kick Off Meeting (KOM)</b>	
Date	1 or 2 weeks after the CONTRACT effective date
Objectives	Ensure mutual understanding on the following points : <ul style="list-style-type: none"> <li>- CONTRACT scope (including quality documents)</li> <li>- Technicals specifications (including Raw material traceability)</li> <li>- Technical documentation applicable</li> <li>- Standards and inspections</li> <li>- Planning</li> <li>- Documentation management (rules of submission, numbering, expediting etc.)</li> </ul>

<b>Pre-Inspection Meeting (PIM)</b>	
Date	Between the KOM and the MRR
Objectives	- Inspection and test plan final review and approval

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<b>Manufacturing Readiness Review (MRR)</b>	
Date	Before SUPPLIER manufacturing launch
Objectives	<p>Ensure readiness of the following points before manufacturing</p> <p>1/ Approval of documentation :</p> <ul style="list-style-type: none"> <li>- Inspection and test plan</li> <li>- Drawing and technical notes</li> <li>- Manufacturing process and procedures</li> <li>- Raw material traceability</li> </ul> <p>2/ Organisation of required final documentation according to specification</p> <p>3/ All technical documentation is available at the same level of revision from AL-aT and Supplier.</p> <p>4/ Qualification of personnel and means of manufacturing and testing.</p>

<b>First Article Inspection (FAI)</b>	
Date	Before delivery of the first serial production parts
Objectives	<p>The objective of the FAI is to verify that the production processes, production documentation, and tooling have the capability to produce products that meet established requirements.</p> <p>FAI shall be repeated when changes occur that invalidate the original results (e.g., design characteristics changes, production process changes, tooling changes) or when the production has been stopped for at least two years.</p>

<b>Factory Acceptance Test (FAT)</b>	
Date	Before delivery of the equipment
Objectives	The objective of the FAT is to verify the conformity of the equipment, its documentation, and conformity tests.

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## 8.4.3 Minimum inspection requirements for SUPPLIES delivered to AL-aT

### 8.4.3.1 Sampling requirements for batches delivered

A batch is considered as a quantity of parts produced with the same definition (design and process), manufactured and delivered at one time. Sampling rules, if applicable, are indicated in the specification(s) attached to the CONTRACT. If no sampling rule is given, the sampling must comply with the NF ISO 2859 standards.

### 8.4.3.2 Dimensional check requirement (to dimensions on drawings)

The level of dimensional inspection is specific and defined for each dimension on SUPPLY drawings. There are three different levels. Inspection levels are stated on drawings.

- Dimensional check requirement level 1 :

No distinctive notation on the dimension.

No inspection report is required for this level. However, the dimensions must be checked by the SUPPLIER. If the dimensions are out of tolerance and cannot be corrected, an anomaly sheet is opened. This anomaly sheet shall be sent by the SUPPLIER to AL-aT for information and/or approval.

- Dimensional check requirement level 2 :

The dimension is followed by an encircled mark containing the following:

- A sequence number identifying the dimension
- The letters NR, indicating "not reported"

For this level, inspection is done by the SUPPLIER inspection department. Non-conformities will result in the issue of an anomaly sheet. This anomaly sheet shall be sent by the SUPPLIER to AL-aT for information and/or approval.

Unless specified otherwise, statistical inspection applies to this level.

- Dimensional check requirement level 3 :

The dimension is followed by a sequential number identifying the dimension and allowing it to be identified on the inspection report.

For this level, inspection is done by the SUPPLIER inspection department. The results for dimensions with this type of bubble (encircled rate) are entered in an inspection report. Non-conformities will result in the issue of an anomaly sheet. This anomaly sheet shall be sent by the SUPPLIER to AL-aT for information and/or approval.

Unless specified otherwise, statistical inspection applies to this level. The file related to the article specifies, if necessary, the statistical sampling rules.

## 8.5 Service SUPPLIER obligations

### 8.5.1 Contractual obligations

Without prejudice to CONTRACT provisions, the SUPPLIER must deliver SUPPLIES and documentation in compliance with the requirements on the CONTRACT within the agreed CONTRACTUAL DEADLINES.

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The SUPPLIER undertakes to inform AL-aT purchaser as soon as he/she is aware :

- of the obsolescence or modification of SUPPLIES ordered,
- of any events or anomalies which might affect the contractual aspects negotiated (CONTRACTUAL DEADLINES, compliance of the CONTRACT, product quality and quality requirements set out in this document).

The SUPPLIER is not permitted to deliver counterfeit parts, the SUPPLIER must have a risk management policy for its own subcontractors to prevent use of counterfeit parts.

No modification (concerning the product, process or procurement, etc.) may be made to the SUPPLIES by the SUPPLIER without prior written agreement from AL-aT.

When a PURCHASE ORDER is part of the CONTRACT, any modification of the content of such CONTRACT requires a modification to the PURCHASE ORDER, canceling and replacing the previous PURCHASE ORDER.

Any deviation by the SUPPLIER from this procedure, standards or any of the requirements specified in the CONTRACT, will be corrected by the SUPPLIER at its own expense.

Failure by the SUPPLIER to meet its obligations may lead to the ordered work being stopped and a suspension of commercial relations, if an action plan is not put in place on a time scale compatible with AL-aT's activities.

## **8.5.2 Obligations relating to standards and regulations**

The SUPPLIER must comply with the requirements imposed by the application of a building code (ASME, CODAP, etc.) and the applicable regulations at all stages of the process (such as sizing, procurement, special inspection or acceptance processes).

The SUPPLIER must be able to demonstrate at any moment that it has complied with the current standards, regulations and codes applicable to the sectors concerned (aerospace and defense, gases and cryogenics, new energies).

## **8.5.3 Performance guarantee**

The performance of the SUPPLY purchased must meet the requirements described in the CONTRACT and the associated specifications.

### **8.5.3.1 Requirements in terms of documentation**

The documents required are specified in the CONTRACT.

Examples of documentation required, if indicated on the CONTRACT (including specifications), are as follows:

- certificate of raw material compliance (NF EN 10204)
- inspection plans, records of parts inspected (dimensional inspection, dye penetration testing, leak tightness, etc.)
- dimensional inspection report on NR bubble dimensions on the drawing, in accordance with current sampling procedure
- user notices, maintenance notices
- CE declaration
- setting and/or calibration certificates
- ....

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These documents must accompany the SUPPLY, be completely acceptable for use and identifiable as applying to the CONTRACT and the AL-aT article reference (article and/or TAG).

These documents must be provided in the language indicated in the CONTRACT, at the latest, at delivery of the SUPPLY.

### **8.5.3.2 Notifications**

If required by AL-aT, SUPPLIER must obtain AL-aT authorisation prior to delivering any SUPPLY to the place specified in the CONTRACT.

## **8.6 Requirements according to the SUPPLIER category (section 8.3)**

This table summarizes all requirements applicable under AL-aT CONTRACT, depending on the supplier category as defined in section 8.3 above. AL-aT shall be entitled to use the following table in order to proceed with SUPPLIER evaluation.

1	2	3	4	5	<p style="text-align: center;"><b>8.6.1 SUPPLIER organization to respond to the CONTRACT</b></p> <p>The SUPPLIER must define a single contact person for each AL-aT CONTRACT.</p> <p>The SUPPLIER must notify AL-aT and obtain its prior approval for any major change to the organization affecting the SUPPLIES associated with the CONTRACT.</p> <p>The SUPPLIER must advise the list of subcontracted work and the name of its subcontractors.</p> <p>Upon request, the SUPPLIER must be able to provide a copy of its organizational chart defining who is responsible for which tasks.</p> <p>The SUPPLIER must on request be able to provide a copy of one or more 'Quality Manual' type documents, approved by its senior management, describing the organization and resources in place, with a view to ensuring that the SUPPLY meets the stated requirements.</p>
1	2	-	-	-	<p style="text-align: center;"><b>8.6.2 Design management</b></p>

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1	2	-	-	-	<p style="text-align: center;"><b><u>8.6.2.1 Design management</u></b></p> <p>The SUPPLIER design shall be performed in compliance with applicable standards, regulations, and specifications provided by AL-aT. When specific procedures should be applied, they will be mentioned in the CONTRACT.</p> <p>A communication matrix shall be requested by AL-aT to the SUPPLIER, prior to the start of the first design phases.</p> <p>As part of the CONTRACT, the SUPPLIER responsible for the design shall carry out the following tasks :</p> <ul style="list-style-type: none"> <li>- determine the basic requirements for design (functional requirements, performance, legal and regulatory requirements, standards and standard practices, the consequences of obsolescence)</li> <li>- determine the expected results (reviews, design documents, verification activities, validation activities)</li> <li>- identify and list the tasks to be performed, state the person responsible for the tasks and the time scales involved, and also which tasks are subcontracted and to which subcontractors</li> <li>- identify the authorities and delegation rules if necessary</li> <li>- identify critical points</li> <li>- establish a general schedule for the design tasks and set milestones</li> </ul> <p>The design work to be done must be based on the SUPPLY functional and safety requirements.</p> <p>The design activity must take the following into account :</p> <ul style="list-style-type: none"> <li>- the ability to produce, inspect and test the SUPPLY</li> <li>- the ability to maintain the SUPPLY</li> <li>- obsolescences</li> </ul> <p>The SUPPLIER must plan the necessary design reviews, both internal and with AL-aT, those with AL-aT including at least :</p> <ul style="list-style-type: none"> <li>- the design launch review</li> <li>- the preliminary definition review (PDR)</li> <li>- the final definition review (FDR) or critical definition review (CDR)</li> </ul> <p>All minutes of design reviews must be available, and communicated to AL-aT upon request.</p> <p><i>Specific aerospace and defense and requirements: "Special requirements" : upon request, the SUPPLIER must state where there is a high risk of certain requirements not being met and the measures being taken to limit that risk.</i></p> <p>Design outputs must be defined by AL-aT in the frame of the CONTRACT.</p> <p>If specific templates are needed, AL-aT will be responsible to share them with the SUPPLIER.</p>
1	2	-	-	-	<p style="text-align: center;"><b><u>8.6.2.2 Definition file</u></b></p> <p>If not mentioned otherwise in technical requirements, The SUPPLIER must establish a definition file containing the approved drawings, part list, user and maintenance manuals, replacement parts lists, the quality file (certificates, records, etc.) and the design specifications (where necessary).</p>

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1	2	-	-	-	<p style="text-align: center;"><b><u>8.6.2.3 Justification file</u></b></p> <p>The SUPPLIER producing the design must compile a definition justification file. It creates an overview of and gives access to design and test process documents, justifying the choices and sizing used in defining the SUPPLY, in order to meet AL-aT requirements.</p> <p><i>Specific aerospace and defense requirements :</i></p> <p><i>Where testing is required, the SUPPLIER must :</i></p> <ul style="list-style-type: none"> <li>- State the conditions for carrying it out : identify the SUPPLIES to be tested, the necessary resources, test conditions, parameters to be recorded, acceptance criteria, procedures and the SUPPLY configuration to be tested.</li> <li>- During testing, check the SUPPLY configuration and that acceptance criteria are met</li> </ul>
1	2	3	4	5	<b>8.6.3 Management of changes</b>
1	2	-	-	-	<p style="text-align: center;"><b><u>8.6.3.1 Management of product changes - design owned by the SUPPLIER</u></b></p> <p>In the case the SUPPLIER is the design owner, it shall manage design changes.</p> <p>Any change in the definition file is subject to prior acceptance by AL-aT according to the CONTRACT.</p> <p>Note: Change management process shall track any change in the Specification that has been requested either by the SUPPLIER or AL-aT, and accepted by AL-aT.</p>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.3.2 Management of product changes - design owned by AL-aT</u></b></p> <p>No change of a design owned by AL-aT can be performed without a written validation or specific demand from AL-aT.</p>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.3.3 Management of process changes</u></b></p> <p>Any change of the manufacturing process needs to be recorded and traced by the SUPPLIER, including an impact assessment for the SUPPLY prior to the change.</p> <p>If an impact is confirmed, an approval from AL-aT must be requested by the SUPPLIER.</p>
1	-	3	4	5	<b>8.6.4 SUPPLY traceability</b>
1	-	3	4	5	<p>The SUPPLIER must implement a traceability process which allows, for each product delivered to AL-aT, the record of following informations :</p> <ul style="list-style-type: none"> <li>▪ Applied definition file,</li> <li>▪ Applied manufacture and applicable testing file,</li> <li>▪ If applicable, traceability of subcontracting activities (i.e. material lot number, supplier identification...)</li> <li>▪ Production records (assembly, control, operators),</li> <li>▪ any non-compliance observed,</li> <li>▪ test record documents.</li> </ul> <p>There may be a traceability requirement for each unit; in that case, it will be stipulated in the CONTRACT or in the SUPPLY specifications.</p> <p>Records relating to quality, demonstrating compliance with AL-aT requirements (e.g. certificate of compliance, test report, etc.) must be identified and retained.</p>

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					All the documents required to be submitted as per the CONTRACT must be identified by the SUPPLIER with the AL-aT CONTRACT number and the item reference number.
1	2	3	4	5	<b>8.6.5 Control of documents and data</b>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.5.1 Control of records</u></b></p> <p>For SUPPLIERS in the aerospace and defense sectors, a procedure must define the method used to ensure that records issued or retained are managed (test reports, inspection reports, certificates of compliance, the qualification of welding procedures, qualification of welders, etc.). This procedure must notably state the methods of storage, identification, protection, accessibility, duration of conservation, availability for the client and deletion of records.</p>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.5.2 Approval of documents &amp; data</u></b></p> <p>Any document part of the SUPPLY submitted by the SUPPLIER to AL-aT must be approved (signed and/or stamped) by the SUPPLIER competent authorities. Any time required by AL-aT for document review shall be considered by the SUPPLIER when submitting the documentation so as not to impact the CONTRACTUAL DEADLINES.</p>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.5.3 Modification of documents &amp; data</u></b></p> <p>If documents and data are modified by the SUPPLIER, those changes must be verified internally by the SUPPLIER before being passed on to AL-aT. Any modification to a document disclosed must have its revision changed. Any modification to a CONTRACT applicable documentation must be submitted to AL-aT for acceptance prior to implementation. Invalid and/or expired documents must be withdrawn from all disclosure or usage points.</p>
1	2	3	4	5	<p style="text-align: center;"><b><u>8.6.5.4 Configuration management (Specific aerospace and defense requirement)</u></b></p> <p><i>For external SUPPLIERS delivering SUPPLIES intended for aerospace or defense use, the management of a SUPPLY configuration is compulsory. The configuration applier describes the industrial file completed (as built). The record of the configuration of the SUPPLY produced is demonstrated by the establishment and the submission to AL-aT of :</i></p> <ul style="list-style-type: none"> <li>• <i>a sheet / configuration register.</i></li> </ul> <p><i>The complete record file for the SUPPLY configuration produced is archived by the SUPPLIER and may be consulted by AL-aT upon request. If the applied configuration is different from the applicable configuration, the SUPPLIER must notify AL-aT through an exemption request.</i></p>
1	2	3	4	-	<p style="text-align: center;"><b><u>8.6.5.5 Archiving</u></b></p> <p>The record of the whole manufacturing files must be available to AL-aT at any point in the production cycle and for a period of 10 years thereafter unless otherwise specified (<i>notably for aerospace and defense where the retention period is 30 years</i>).</p> <ul style="list-style-type: none"> <li>• In the case of paper archiving, the SUPPLIER is responsible to protect the records against fire, water or any element which can damage the documents.</li> </ul>



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- In the case of electronic archiving, the SUPPLIER is responsible to implement a secure backup system. Paperless records must remain legible all along the archiving period, especially if a dedicated software is needed to use the files.

On request, the SUPPLIER must be able to share with AL-aT the archived data within 24h.

#### **8.6.5.6 Physical configuration audit - First article inspection (FAI)**

*This chapter is applicable for external SUPPLIERS delivering SUPPLIES intended for aerospace or defense use.*

This FAI takes the form of a formal examination of the configuration of an article "produced", in order to check that it complies with its configuration documents.

This examination is conducted before the SUPPLY is presented for acceptance on a representative part from the first production. Its purpose is to check that the recommended production methods produce an article that complies with the applicable configuration (definition), the scheduling, and the CONTRACT. This examination must be repeated as soon as a change affects geometry, interfaces, or functions of the SUPPLY.

Depending on the criticality of the change, the examination may be conducted by the SUPPLIER, by AL-aT or by AL-aT and its customer.

If necessary, AL-aT can share with the SUPPLIER its FAIR template.

FAIR must include, as a minimum,

- Material and traceability certificates for all components from the bill of material of the SUPPLY
- Manufacturing orders or completed tracking sheets
- Manufacturing and inspection procedures
- Inspection reports
- If applicable, qualification records of identified special processes

#### **8.6.6 Production control**

##### **8.6.6.1 Manufacturing file**

A manufacturing file must be compiled to document the chronological history of the main realization operations, in particular those which call upon procedures, tests, trials and external inspection points.

If requested by AL-aT under the CONTRACT, this documentation must be submitted for review to AL-aT.

AL-aT then states the attendance points requiring its presence.

During manufacture, operators date and sign against the tasks carried out on a monitoring document.

The manufacturing file should be compiled in final documentation, as per the specification given in the CONTRACT.

##### **8.6.6.2 Production planning**

The SUPPLIER must keep a work-progress schedule up-to-date, in order to meet the CONTRACTUAL DEADLINES stated on the CONTRACT.

If there is any deviation from these CONTRACTUAL DEADLINES, the SUPPLIER must inform the AL-aT purchaser.

AL-aT may request to see this schedule from time to time or to receive it periodically .

##### **8.6.6.3 Maintenance of production means**

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					Production means must be maintained in order to ensure their availability and operationality. Maintenance operations and their frequency must be recorded.
1	-	3	4	-	<p><b><u>8.6.6.4 Identification and handling of special processes</u></b></p> <p><i>This chapter is applicable for external SUPPLIERS delivering SUPPLIES intended for aerospace or defense use.</i></p> <p>The SUPPLIER must identify special processes used for the manufacturing of the SUPPLY and inform AL-aT of such processes (for SUPPLIES subject to FAI, special processes are identified in the FAIR). A process is defined as special when its result cannot be verified with a non-destructive test (i.e. surface treatment, heat treatment, welding, crimping, soldering, gluing, etc.). A special process must be conducted by qualified employees.</p>
1	-	3	4	-	<p><b><u>8.6.6.5 Qualification of processes and staff</u></b></p> <p>Especially for serial production, the SUPPLIER must demonstrate its ability to manufacture continuously SUPPLIES in compliance with the specifications. In these conditions, SUPPLIER must use stable and qualified processes and staff.</p> <p>Any change in a production process must be notified to AL-aT. If the SUPPLY is subject to FAI, this notification will be documented through a new FAIR.</p>
1	2	3	4	5	<p><b><u>8.6.6.6 Identification of the SUPPLIES and documentation</u></b></p> <p>The documents and data must be formally identified by an adequate single reference.</p> <p>The identification and permanent marking of the SUPPLIES and its associated documentation must comply with the stipulations of the CONTRACT. This identification must systematically appear on documents relating to the SUPPLY (inspection reports, certificates of compliance, non-compliance sheets, etc.) to guarantee a complete traceability.</p> <p>In case it is impossible to mark the material, it should be marked on the packaging.</p>
1	2	3	4	5	<p><b><u>8.6.7 Products and services provided by external subcontractors</u></b></p>
1	2	3	-	5	<p><b><u>8.6.7.1 Qualification of subcontractors</u></b></p> <p>The SUPPLIER is responsible to use qualified subcontractors only. A list of qualified subcontractors must be handled by the SUPPLIER.</p> <p>Qualification criterias must take into account requirements from AL-aT when applicable in the CONTRACT (i.e. counterfeit handling, FAI,...)</p> <p>In the case of a subcontractor change during the CONTRACT, the SUPPLIER must notify AL-aT.</p> <p>If the SUPPLY is subject to FAI, any subcontractor change must be documented through a new FAIR.</p>
1	2	3	-	5	<p><b><u>8.6.7.2 Subcontractors selected and qualified by AL-aT</u></b></p> <p>If the CONTRACT includes the use of specific subcontractors, AL-aT and the SUPPLIER must come to an agreement for these subcontractors' handling.</p> <p>In case of nonconforming SUPPLIES, the SUPPLIER must inform AL-aT.</p>
1	2	3	-	5	<p><b><u>8.6.7.3 Transfer of the requirements in CONTRACT from the SUPPLIER to its subcontractors</u></b></p>

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						<p>The purchase orders issued by the SUPPLIER to its subcontractors must specify the requirements mentioned in the CONTRACT (including HSE and reliability, compliance, deadlines and counterfeit prevention).</p>
1	2	3	4	5		<p><b><u>8.6.7.4 Evaluation of subcontractors</u></b></p> <p>The SUPPLIER must evaluate its subcontractors based on their ability to satisfy the requirements stated in the CONTRACT, in particular the quality of the delivered SUPPLIES, the On-Time-Delivery performance, HSE, reliability,...</p> <p>All evaluation records and necessary actions resulting from them must be kept by the SUPPLIER.(the quality of the subcontractors selected, list of subcontractors evaluated, scope, result of this performance evaluation, punctuality, etc.)</p>
1	2	3	-	-		<p><b><u>8.6.7.5 Purchasing specifications for the product purchased by the SUPPLIER</u></b></p> <p>Specifications must contain at least the description of the product (drawings, diagrams, instructions, functional criteria, etc.), of the service, inspection and testing requirements, acceptance criteria for the product or service and qualification requirements for the staff. These specifications must flow down AL-aT requirements to the subcontractor to ensure without limitation compliance of the SUPPLIES to the CONTRACT (such as for example, the mandatory use of subcontractors selected by AL-aT to facilitate process control).</p>
1	2	3	4	-		<p><b><u>8.6.7.6 Verification of the purchased product</u></b></p> <p>Verification of subcontracted product/service must be realized by qualified employees and must be documented. The supplier shall be able to provide objective proof of the product, service and the documentation compliance.</p> <p>Special attention must be given to the risk of receiving counterfeits.</p>
1	-	3	4	-		<p><b><u>8.6.8 Control of the product provided by AL-aT (such as in case of outsourcing or SUPPLIER return)</u></b></p>
1	-	3	4	-		<p><b><u>8.6.8.1 Receipt of the product provided by AL-aT</u></b></p> <p>Any product delivered by AL-aT or one of its Suppliers or one of its customers (hereinafter, the Free Issued Items) must be verified by the SUPPLIER.</p> <p>The verification includes the following checks with regard to the CONTRACT:</p> <ul style="list-style-type: none"> <li>• qualitative and quantitative checks of the Free Issued Items,</li> <li>• the presence of documentation, which shall be issued to AL-aT,</li> <li>• a visual inspection of the overall state and integrity of the Free Issued Items following transport.</li> </ul> <p>Once receipt procedures have been completed, a copy of the delivery note must be sent within two (2) calendar days to the AL-aT purchaser. Such delivery notes shall reflect, if any, any damage suffered during transportation and/or apparent defects and/or quantitative and qualitative anomaly. Failure to issue the delivery note within two (2) calendar days in compliance with the aforesaid shall be deemed conclusive evidence that the free issued items and related packaging were delivered in the correct quantities, were free from apparent defects and were free from damages suffered during transportation.</p>

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More specifically, when damage occurs during the transport of a Free Issued Items supplied by AL-aT, its Suppliers or its customers, the addressee shall imperatively maintains the recourse of AL-aT by:

- leaving merchandise and packing materials in their as-received state for possible inspection
- sending a copy of all documents received to the AL-aT purchaser,
- taking, provoking or requiring all conservatory or safeguarding measures required by the situation to protect the insured property or limit the damages that they suffer,
- requiring intervention of the appraiser at appraisal of the damages,
- conserving all rights and recourse against the transport companies and/or all other responsible third parties to be able to subrogate the insurers,
- advising the insurers of the claim and of the measures taken.

#### IF THERE IS VISIBLE DAMAGE

Before taking delivery of the Free Issued Items, note specific reserves on the delivery note, mentioning the brands, numbers and weight of disputed packages, and have the delivery agent sign the reserves. Confirm these reserves by registered letter within 24 hours after delivery.

#### IN THE EVENT OF DAMAGES FOUND ONLY AFTER DELIVERY

Stop unpacking immediately and summon the appraiser. Take pictures  
Send a registered letter of reserves, within 3 calendar days after delivery, to the transport company and/or the responsible third party, informing them of the damages found.

#### IN ALL CASES:

Summon the transport company and/or other responsible third party, by registered letter if necessary, to perform an appraisal, and if they refuse to be represented, file for a legal appraisal if the damages are significant.

PUT THE TIME LIMITATION ON HOLD if the completed files are not submitted to the insurers at the latest one month before this time limitation expires.

Any failure to meet these conditions will render the SUPPLIER liable.

Any documents or files provided by AL-aT remain the property of AL-aT and must be properly looked after so that they can be returned if requested.

#### **8.6.8.2 Identification**

The SUPPLIER must clearly identify all Free Issued Items supplied by AL-aT, its Suppliers or its customers.

#### **8.6.8.3 Storage of the Free Issued Items**

The SUPPLIER must take appropriate measures to ensure the traceability, storage and preservation of Free Issued Items supplied by AL-aT, its Suppliers and customers.

It should inform the AL-aT purchaser in writing if it notices wear, deterioration or defects in Free Issued Items before using them.

#### **8.6.9 Inspections and testing**

##### **8.6.9.1 Incoming inspections**

The products or service received by the SUPPLIER from subcontractors must be checked and compared to the CONTRACT. Results of this inspection should be recorded.

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					<p>If no inspection requirement is specified by AL-aT, The SUPPLIER must apply its own incoming inspection process.</p> <p>If the delivery is composed of several units, and if the SUPPLIER apply a sampling plan, this must be documented and based on recognized standard (e.g. ISO 2859)</p> <p>Special attention must be given to the risk of counterfeits.</p>
1	-	3	4	-	<p><b><u>8.6.9.2. Inter-operation inspection</u></b></p> <p>Inspection and testing operations must be defined in an inspection plan, (e.g. an ITP, etc). The SUPPLIER ensures that all scheduled inspections are carried out.</p>
1	-	3	4	-	<p><b><u>8.6.9.3 Final inspections</u></b></p> <p>Final inspection requirements are taken from the specifications stated in the CONTRACT. The SUPPLIER must select and use calibrated and appropriate tools (in term of accuracy), It must carry out and record inspections to ensure the SUPPLY compliance with the CONTRACT. Unless otherwise stated in applicable CONTRACT documentation, for all final inspections subject to acceptance by AL-aT, the SUPPLIER must invite AL-aT to attend 10 (ten) business days prior to the acceptance inspection.</p> <p>In-factory acceptance is acknowledged by a PVRI (Acceptance report) listing the equipment accepted and reservations if any.</p> <p>A so-called blocking reservation prevents the equipment from being shipped.</p>
1	-	3	4	-	<p><b><u>8.6.9.4 Identification of inspection and testing equipment</u></b></p> <p>The SUPPLIER must identify and record the measuring apparatus used to declare that the SUPPLY complies with the requirements specified in the CONTRACT.</p>
1	-	3	4	-	<p><b><u>8.6.9.5 Verification of inspection and test equipment</u></b></p> <p>The SUPPLIER must verify from time to time, and in accordance with internal calibration procedures, the measuring apparatus used to demonstrate that the SUPPLY complies with the requirements specified in the CONTRACT.</p> <p>The SUPPLIER shall make available, upon AL-aT request, all calibration and verification certificates of measuring apparatus</p> <p>The calibrations must be carried out before the end of the validity period of the measuring equipment.</p>
1	-	3	4	-	<p><b><u>8.6.9.6 Compliance with national and international standards</u></b></p> <p>The SUPPLIER must verify, or have verified, the measuring apparatus used to declare that the SUPPLIES comply with measuring equipment based on national or international standards.</p>
1	-	3	4	5	<p><b>8.6.10 Storage, Handling, Conditioning, Preservation, Delivery</b></p>

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#### **8.6.10.1 Storage, handling, conditioning, preservation, delivery**

The SUPPLIER must ensure that the SUPPLY is protected during handling, storage and conditioning operations up to the delivery, according to the CONTRACT.

If not documented in the CONTRACT, the SUPPLIER remains responsible:

- To pack the SUPPLIES in an appropriate manner, to prevent any risk of impacts, scratching, marking, corrosion, etc.
- To clean the SUPPLIES before delivering in order to prevent damage, or presence of Foreign Object Damage (also called FOD in aerospace and spatial field).
- Safety :
  - Where equipment is delivered inert, pressurized or oxygen degreased:  
The delivery will be accompanied by a user manual.  
All components used for pressurization, as valve or manometer, must be protected
  - Hazardous SUPPLIES :  
Labeling specifying the hazard relating to the SUPPLY must be applied in a clearly visible position on the SUPPLY and its packing and be delivered accompanied by a data sheet.
  - Handling:  
Lifting plans must be provided when overhead cranes or lifting cranes are needed for the SUPPLY reception.

#### **8.6.10.2 Articles with expiration dates**

If applicable, the SUPPLIER must implement a monitoring of such articles. Using an expired article is strictly not allowed. the SUPPLIER must check the SUPPLIES validity date before its use or delivery.

#### **8.6.10.3 Delivery**

The SUPPLIER must deliver the SUPPLIES in accordance with the CONTRACT. Documentation is an integral part of the SUPPLIES.

The supporting documents to be provided as per the CONTRACT (inspection report, materials certificate, etc.) are to be sent with the SUPPLIES to the AL-aT stores in hard copy and/or electronic form.

Additionally, for deliveries outside AL-aT, a digital copy of the delivery note and associated documents should be sent to the AL-aT purchaser.

Regulatory certificates (e.g. CE certificate) are also attached to the SUPPLIES delivered.

For deliveries of SUPPLIES with a limited storage period, the expiry date must be clearly indicated on the delivery note.

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1	2	3	4	5	<p><b>8.6.11 Management of non-conformance</b></p> <p>The SUPPLIER must identify and record any non-conformities (discrepancies with the requirements in the CONTRACT) detected during the production of the SUPPLY.</p> <p>If treatment of the anomaly necessitates a re-working or modification affecting the SUPPLIES expected compliance, the SUPPLIER must inform AL-aT by email, fax or letter within 48 hours from the anomaly being detected.</p> <p>No action may be undertaken on the parts without prior written consent from AL-aT.</p> <p>Similarly, if the SUPPLIER plans to use the non-conforming SUPPLIES or sub-assembly as it is, it must request a written consent from AL-aT.</p> <p>The SUPPLIES may not, under any circumstances, be used and/or delivered without AL-aT prior written agreement.</p>
1	2	3	4	5	<p><b>8.6.12 Corrective actions</b></p> <p>If an audit or inspection discrepancy is found by AL-aT or by the SUPPLIER,, the SUPPLIER must perform and document following activities</p> <ul style="list-style-type: none"> <li>• To identify root causes, including those related to human factors,</li> <li>• To propose and implement a corrective action plan,</li> <li>• To flow down the the actions to external subcontractors if needed,</li> <li>• To report regularly to AL-aT on the progress of these actions.</li> </ul> <p>The time scales for carrying out actions and reporting the progress must be defined in agreement with AL-aT.</p>
1	2	3	4	5	<p><b>8.6.13 HSE (Health, Safety, Environment)</b></p> <p>The SUPPLIER must implement an HSE policy, guaranteeing at least:</p> <ul style="list-style-type: none"> <li>• Statistical monitoring of accidents to personnel which occur during work activities (number of accidents per production hour) with a view to analyzing the causes and taking risk reduction actions, to limiting their occurrence and thus making the activity safer and more reliable</li> <li>• Working conditions (cleanliness, tidiness) sufficient to meet the requirements necessary to obtain the required quality for the SUPPLIES</li> <li>• Monitoring the qualifications of personnel specific to HSE and operations indirectly linked to producing the SUPPLIES ordered (forklift truck and crane operators, etc.)</li> <li>• The traceability of training and information provided to the personnel, related to the risks concerning the unit or site or the workplace environment</li> <li>• A continuous improvement process</li> </ul>