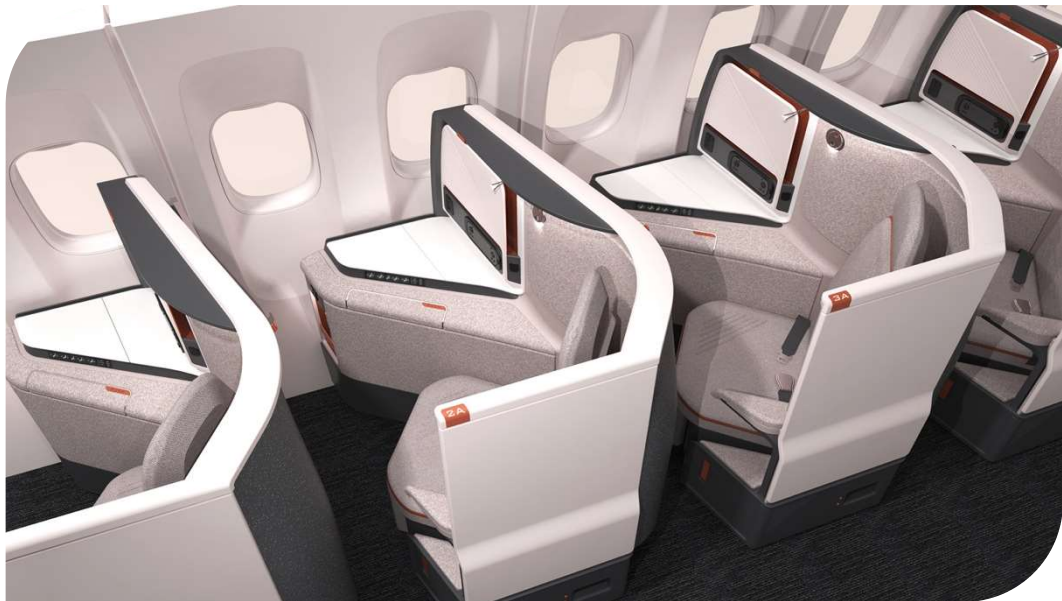


# Unum Supplier Manual

Management Systems Requirements for Suppliers to us

## DCY.02.03.ME



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### Supplier Acknowledgement

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## 1 Introduction

This Supplier Manual has been created to help existing and potential suppliers understand our expectations and to develop our supply chain.

We aspire to become the most trusted aircraft seating supplier in the world – passenger focussed and sustainable. We recognise that an effective and agile supply chain is one of the critical factors enabling achieving this aspiration and meeting and exceeding our customers' needs and requirements.

At Unum we live by the following values:

<b>Open.</b>	We are honest with ourselves and our customers, and transparent about our business model and pricing.
<b>Collaborative.</b>	We are one with our clients and suppliers, sharing goals and values to form a partnership that last.
<b>Smart.</b>	We are wise and insightful, always listening and learning to deliver intelligent and considered solutions.
<b>Curious.</b>	We are naturally inquisitive and actively seek out what we don't know to challenge the status quo.
<b>Thoughtful.</b>	We are responsible and take action to lessen the impact our business has on the world around us.

At Unum, we believe in reliability and responsibility. **Reliably Comfortable. Responsibly Made.** We are driven by the following service standards and want our supply chain to do likewise.

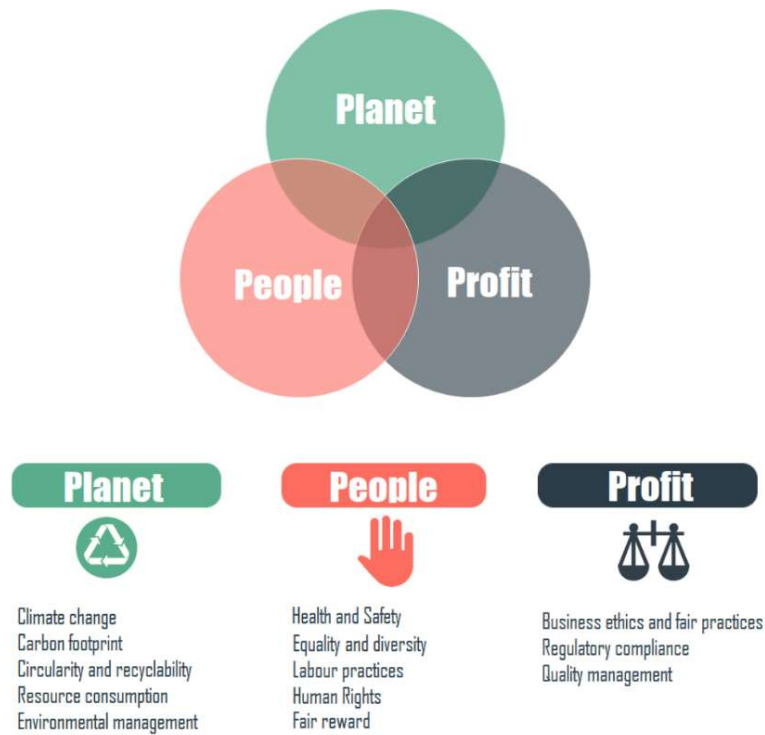
- In for the long haul
- On-time every time
- Transparent and process driven
- Comfort first
- Sustainability built-in

We want to work directly with partners who share our belief in quality, integrity and sustainable design. We aim to create a mutually beneficial relationship with our supply chain and secure partnership through long-term agreements. We intend to eliminate unnecessary complexity in favour of simplicity and source products in a sustainable way. This is applied to both our seats and the way we do business.

## 2 Supplier Code of Conduct

We want to ensure our supply chain supports not only product performance and cost requirements, but also our corporate sustainability and responsibility ambitions. Sustainability and responsibility are an integral part of our business strategy.

We expect you to behave ethically and treat employees, subcontractors, customers and other stakeholders fairly and with respect. Sustainability involves a holistic approach to all activities of our business and operations named **3xP** for **Planet, People and Profit**. We expect you to meet these commitments and ensure that their employees, partners and subcontractors do the same.



## 2.1 Core subject 1 – Planet

### 2.1.1 Environmental responsibility

You shall **comply with all relevant laws and regulations** and take responsibility for the environmental impact of its activities. You shall act to improve its performance and the performance of others within its sphere of influence by seeking ways to ensure operations have a **minimum possible adverse impact on the natural environment** and to use natural resources (e.g. water, sources of energy, raw materials) economically and sustainably. You shall demonstrate a commitment to **environmental protection** by systematically addressing environmental issues, integrating with business processes and understanding the impact of decisions at all stages of the product lifecycle. You shall seek to improve environmental performance by **preventing pollution**, including emissions to air, discharges to water, waste management, use and disposal of toxic and hazardous chemicals or other identifiable forms of pollution such as noise, odour, visual impressions, light pollution, vibration, electromagnetic emissions, radiation, infectious agents (for example, viral or bacterial).

### 2.1.2 Carbon footprint

Every organization is responsible for **climate change** and **greenhouse gas emissions** (either directly or indirectly). You should develop a methodology to provide accurate and consistent carbon emissions data and calculate **carbon footprint** that includes all greenhouse gas emissions re-calculated to Carbon Dioxide Equivalent. You should establish a baseline and develop and implement plans to reduce their carbon footprint and choose the lowest carbon alternatives whenever possible.

### 2.1.3 Sustainable procurement

You shall assist us in the **reduction of supply chain impacts** on the environment by addressing environmental issues during procurement activities. While making purchasing decisions, you shall take into account the environmental performance of products or services over their entire life cycles and evaluate environmental performance of suppliers.

## 2.2 Core subject 2 – People

### 2.2.1 Human Rights

You shall comply with all applicable human rights and employment laws. This includes complying with the **Modern Slavery Act 2015** and flowing down applicable requirements to sub-tiers to ensure that slavery and human trafficking is not taking place in any part of the supply chain. You shall inform us and applicable government officials, of any credible information received from any source alleging an employee, subcontractor, subcontractor

employee, or agent has engaged in conduct that violates the Modern Slavery Act, along with the actions taken against the said employee, subcontractor, subcontractor employee or agent. You shall **eliminate all forms of discrimination** (direct and indirect), including discrimination against race, colour, sex, sexual orientation, gender reassignment, religion or belief, age, physical disability, political affiliation, or other characteristics. You shall employ employees on a voluntary **basis** and shall not use any prison, slave, bonded, forced or indentured labour, or engage in any other forms of compulsory labour, or any other forms of slavery or human trafficking. You shall not employ workers under the **minimum legal age**, and shall conform to the provisions of the relevant International Labour Organization (ILO). You shall maintain documentation of each individual's date of birth or have means of confirming the individual's age. You shall establish an effective grievance **mechanism** for those who believe their human rights have been abused, so that employees can openly communicate issues without fear of reprisal, intimidation or harassment.

#### 2.2.2 Labour practices

You shall ensure that **conditions of work** comply with national laws and regulations and are consistent with applicable international labour standards. Conditions of work include wages and other forms of compensation, working time, rest periods, holidays, disciplinary and dismissal practices, maternity protection and welfare matters such as safe drinking water, sanitation, canteens and access to medical services. Terms and conditions of employment shall comply with **equality and non-discrimination** standards based on the individual's qualifications, performance, skills, and experience. You shall establish a **non-harassment** workplace free from inhumane treatment, sexual abuse, mental, physical or verbal abuse and any other forms of harassment or victimisation. You shall comply with **health and safety** at work regulations and maintain physical, mental and social well-being of workers, protect workers from risks to health and adopt the occupational environment to the physiological and psychological needs of workers. You shall provide accident **insurance** to all workers, covering medical treatment for work related accidents and compensation for work related accidents resulting in permanent disability. You shall ensure adequate **development and training** in the workplace and opportunities for career advancement, on an equal and non-discriminatory basis.

### 2.3 Core subject 3 – Profit

#### 2.3.1 Fair operating practices

You shall operate in accordance with ethical standards. You shall adhere to **anti-bribery and anti-corruption** laws. You shall record all business transactions accurately, prudently and transparently, in compliance with applicable accounting standards. You shall operate in accordance with **fair competition** standards, **avoid conflicts of interest** and implement **counterfeit part prevention** measures. You establishes procedures or other safeguards to prevent engaging in or being complicit in any anti-competitive behaviours, promote employee awareness of the importance of compliance with competition legislation and support anti-trust and anti-dumping practices.

#### 2.3.2 Respect to property rights

You shall respect property rights, including **physical property** and **intellectual property**. You shall safeguard proprietary information such copyrights or patents. **Confidential information** shall be treated with special care, protected and safeguarded in accordance with NDA. **Personal data** shall be handled in line with the relevant legal standards, including GDPR.

#### 2.3.3 Fair marketing

You shall conduct **responsible marketing** and provide information about products and services in a manner that can be understood by consumers to make informed decisions and to compare the characteristics of different products and services. You shall not engage in any practice that is deceptive, misleading, fraudulent or unfair, unclear or ambiguous. Any sustainability and green claims shall be evidenced by supporting factual information.

#### 2.3.4 Conflict Minerals

You shall ensure that products do not contain metals derived from minerals or their derivatives originated from conflict regions that directly or indirectly finance or benefit armed groups (ref. OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas).

## 3 Disclaimer

Adherence to this Supplier Manual is required by all our suppliers and applicable requirements shall be flowed down to its sub-tier suppliers. Acceptance of Purchase Order constitutes acceptance and commitment to comply with this Manual's content.

This Manual is provided as a supplement to, and does not replace or alter, any purchasing agreements, general purchasing conditions or requirements included in applicable engineering drawings, specifications and other contractual documents. This Manual is supplementary to the Supplier Agreement and the General Terms and Conditions of Purchase, as applicable. Where this Manual contains requirements or expectation they shall be deemed to be a binding condition on you as though they were contained within the Supplier Agreement or General Terms and Conditions of Purchase, as applicable. Where you fail to meet the requirements of this Manual it shall be deemed to be a breach of the Supplier Agreement or General Terms and Conditions of Purchase, as applicable.

In this Manual, the following verbal forms are used:

- *shall* - indicates a requirement
- *should* - indicates a recommendation
- *may* - indicates a permission
- *can* - indicates a possibility or a capability

#### 4 Abbreviations

- APQP – Advance Production Quality Planning
- CIs & KCs – Critical Items and Key Characteristics
- CLP – Classification and Labelling of Chemicals
- CofC – Certificate of Conformity
- COSHH – Control of Hazardous Materials and Substances
- EC – Engineering Change
- EMS – Environmental Management System
- ESD – Electrostatic Discharge
- FAI – First Article Inspection
- FAIR – First Article Inspection Report
- FMEA – Failure Mode and Effects Analysis (DFMEA – Design, PFMEA – Process)
- FOD – Foreign Objects Debris
- GDPR – General Data Protection Regulation
- GHG – Greenhouse Gases
- IAQG – International Aerospace Quality Group
- MRP – Material Requirements Planning System
- MSA – Measurement System Analysis
- NADCAP – National Aerospace and Defence Contractors Accreditation Program
- NCR – Non-Conforming Report
- NDA – Non-disclosure Agreement
- NPI – New Product Introduction
- OHS – Occupational health and safety management system
- PO – Purchase Order
- PPAP – Production Part Approval Process
- REACH – Registration, Evaluation, Authorisation and restriction of Chemicals
- SCMH – Supply Chain Management Handbook ( )
- SDS – Safety Data Sheet
- SPC – Statistical Process Control
- SVHCs – Substances of Very High Concern
- QMS – Quality Management System

#### 5 Supplier approval major steps



## 6 Supplier Requirements

### 6.1 Commercial Requirements

Commercial requirements are included in the Supplier Agreement or General Terms and Conditions of Purchase, as applicable.

### 6.2 Management System Requirements

- QMS – a Quality Management System shall be developed, documented, implemented, certified and maintained according to **AS 9100** (or **ISO 9001** as a minimum). Calibration suppliers and testing houses shall have a quality system that conforms to **ISO/IEC 17025** or equivalent.
- EMS – an Environmental Management System should be implemented according to **ISO 14001** or **EMAS**.
- OHS – an Occupational Health and Safety Management System should be implemented according to **ISO 45001**.

Conformity to the above standards shall be independently assessed by an accredited certification body.

You shall work only within the scope of approval and inform us promptly of any changes to approvals including lapse or withdrawal.

### 6.3 Performance Requirements

Your performance will be measured against on-time and on-quality delivery metrics.

- On-time every time: we require you to provide goods and services on-time in full according to the original acknowledge date indicated in PO. Unauthorised early deliveries, late deliveries, partial deliveries or over shipments are unacceptable.
- Consistent quality: Good quality products are required from suppliers to us. Any deviation will result in rejection and return of the product to you with subsequent charges.

We will launch a corrective action procedues “CA/PA” according to our **AGI.04.00.PR** procedure to establish route cause for failures and solve problems in case of repeatable occurrences of missed on-time delivery, poor product quality or in-service issues reported by our customers.

### 6.4 Major industrial change Requirements

You shall promptly notify us of major changes such as:

- name of the organisation,
- ownership,
- location of manufacture or major re-layout,
- approval status,
- major processes,
- major suppliers or sub-contractors,
- major ERP system,
- key personnel,
- raw materials,
- significant changes to production capacity,
- other changes affecting you scope of approval.

We reserve the right to requalify any parts following any of the changes above. At our request you shall provide samples of product produced with the proposed change to test in our manufacturing process.

## 7 Requirements – 12 Pillars

Our suppliers selection and approval process is based on 12 pillars. Requirements have been developed based on IAQG SCMH - Supplier Selection and Capability Assessment Maturity Model.





Requirements are being checked during you approval process, using 2 steps approach:

- Supplier Questionnaires: Self-assessment (DCY.02.05.WF) and Sustainability (DCY.02.06.WF)
- Unum assessment through Supplier Audit, as applicable (AGI.03.03.WF)

The maturity of supplier in each pillar is being assessed in 4 areas:

- Process
- People and organisation
- Tools and data
- Performance metrics

Each area is being assessed in 5 level scale:

- Level 1 - Undefined and not capable
- Level 2 - Defined and applied, but not 100% effective or not applied everywhere in the company
- Level 3 - Defined, applied and effective: repeated satisfactory performance capable
- Level 4 - Predictable: performance of proactive improvements towards planned targets, but not systematically on all processes /areas /products
- Level 5 - Optimised: best in class, continual improvement fully deployed, involving all stakeholders as part of company culture

Matrices describing requirements for each level are attached to this Supplier Manual (Appendix 1).

Data provided by you on the Supplier Questionnaire will be cross-verified during our audit of you. You shall ensure objective evidence exist to support the selected maturity level.

### 7.1 Pillar 1 - Sales, master scheduling and sequencing (planning-related process)

You shall implement an effective planning process enabling balancing and forecasting medium and long-term customer demand with operational and financial capabilities by optimising the sequence of operations, schedule and resources. You shall conduct a regular joint reviews of sales and master schedules between all relevant functions with feedback loop from operations to sales, periodic mediulong-termg term planning revisions based on an updated forecast of customer demand and business constraints (e.g. longest lead time).

### 7.2 Pillar 2 - Contract requirements flow down (customer related process)

You shall implement an effective process enabling managing, review and flow down of contractual requirements from the customers, through all functions internally and to sub-tier suppliers.

### 7.3 Pillar 3 - Design and development related process

You shall implement an effective process for New Product Introduction (NPI) activities impacting supply chain performances including product and process essential characteristics management, changes and obsolescence management.

#### 7.3.1 New product introduction (NPI)

It is recommended that the NPI process is based on APQP approach in accordance to [AS 9145](#).

#### 7.3.2 Critical Items and Key Characteristics (CIs & KCs)

CIs including KCs shall be identified and managed in line with [AS 9103](#). You shall ensure that this data is effectively flowed down to the supply chain.

#### 7.3.3 Product safety

You shall plan, implement, and control processes needed to assure product safety, which may include, but is not limited to: the assessment of hazards and mitigation of associated risks, the management of safety CIs, the analysis and reporting of occurred events affecting safety, communication of these events and training of personnel.

#### 7.3.4 Obsolescence management

You shall ensure that obsolescence is systematically and proactively managed based on structured risk analysis process, including:

- technical obsolescence (when a new product or technology supersedes the old, and it becomes preferred to utilise the new technology in place of the old),
- functional obsolescence (when items or products do not function in the manner they did when they were created e.g. due to natural wear). Products which naturally wear out or break down may become obsolete if replacement parts are no longer available, or when the cost of repairs or replacement parts is higher than the cost of a new item.
- knowledge obsolescence (loss of personnel expertise, relevant knowledge and skills). The knowledge obsolescence may be prevented by competence management: monitoring of skills, frequent and repetitive trainings, succession planning, qualification matrix.

#### 7.3.5 Engineering changes, concessions and production permits

Any ECs, concessions or production permits we issue are managed according to our relevant procedure to ensure that you are provided with the latest revision of drawings and documentation.

Products shall be inspected in line with a concession or production permit details, including validity period. A concession or production permit number shall be quoted on delivery documentation, including CofC and FAIR.

You are responsible for the timely and effective flow down of any ECs, concessions, production permits or any variations to POs internally and to any sub-tier suppliers.

### 7.4 Pillar 4 - Supplier sourcing selection and approval (purchasing process)

You shall implement an effective purchasing process, including supplier selection and approvals, supplier monitoring and mapping the supply chain responsibilities in line with your Make or Buy strategy.

#### 7.4.1 Control of sub-tier suppliers

You are the recipient of the PO and are responsible for meeting all requirements, including work performed by the sub-tier suppliers.

You shall flow-down to your sub-tiers, all relevant quality requirements imposed by this Manual and other contractual documents, including all applicable technical requirements, drawings, specifications, PO requirements and regulatory requirements.

Where you use sub-contractors, you shall seek our consent first. We reserves the right to specify or approve sub-tier suppliers. This includes but is not limited to processes (e.g. special process), raw materials, testing services, distributors, and other subcontractors. Notwithstanding our consent, you are responsible for assessing the sub-contractor's competence and for ensuring continued adherence to quality standards and relevant specifications. You shall apply appropriate controls to their sub-tiers and determine the verification activities, to ensure that

requirements are met. This includes but is not limited to inspection of purchased parts upon receipt, inspection and audit at the sub-tier premises and review of the required documentation.

#### 7.4.2 Counterfeit parts

You shall prevent the purchase of counterfeit parts and parts from unapproved sources, prevent the delivery of counterfeit parts and control parts identified as counterfeit or suspected to be counterfeit. You shall notify us of any suspected components used in our design immediately upon discovery, irrespective of whether suspected parts are to be delivered to us or not.

All occurrences shall be investigated, documented and reported as appropriate, to us, your supply chain, government reporting organizations (e.g. GIDEP, CAA, EASA), industry supported reporting programs (e.g. ERAI), and criminal investigative or law enforcement authorities.

Confirmed counterfeit parts shall not be reintroduced into the supply chain, restocked nor returned to the manufacturer in a stock rotation.

Further guidance on counterfeit parts prevention can be found in [SAE 5553](#).

#### 7.4.3 Raw materials

You shall ensure the ability to trace all products manufactured from the same batch of raw material. In case where you uses more than one lot of raw material, you shall ensure traceability of each individual product to the raw material certification or test report that represents the raw material from which each of the products was manufactured. Traceability shall be provided by identifying the raw material lot, batch or melt number from the certification or test report.

You are required to evaluate the data in the test reports and verify the correct material type prior to fabrication of product. You shall perform and document periodic validation of the accuracy of test results for raw materials, when raw material has been defined as an operational risk. The results of independent validation shall be submitted to us annually or upon request via e-mail.

Raw materials (including metallic materials e.g. forgings and castings and non-metallic materials) supplied to us shall include a copy of the material certificate or material test report from a test laboratory.

### 7.5 Pillar 5 - Planning of production realisation (material, skills, capacity planning, scheduling)

You shall plan effectively and optimise the use of resources and means to meet operations planning. You shall employ sufficient personnel to support planned workload requirements, considering Human Factors, absence for training and unforeseen circumstances. Resources constraints (staff, skills, tooling, buildings) shall be included in planning and optimised to drive long term business efficiency.

#### 7.5.1 Personnel awareness and competencies

You shall ensure that all persons, performing work affecting conformity of product, performance or effectiveness of management system, have sufficient competencies (based on appropriate education, training, or experience) to fulfil the work to the required quality level. You shall ensure that persons doing work under your control are aware of their contribution to product or service conformity, their contribution to product safety and the importance of ethical behaviour.

You shall implement a competence management system (e.g. monitoring of skills, frequent and repetitive trainings, succession planning, qualification matrix) and retain appropriate documented information as evidence of competence.

### 7.6 Pillar 6 - Order management and logistic (internal and external)

You shall implement an effective process for order management and logistics, including issuing orders, resolving unplanned events, collaborative management, optimizing material flow, stock and inventory.

#### 7.6.1 Shelf life

Each delivery of age sensitive materials, shall have the expiration date or shelf life clearly labelled on the incoming item and on the incoming paperwork. Items must be supplied with a shelf life of at least 6 months. A lot number or batch number shall be identified on the CofC. Information of any special handling or storage requirements shall be provided to us.

## 7.7 Pillar 7 - Manufacturing and inspection (production and service provision)

You shall implement effective process for manufacturing and product assembly, including inspection.

### 7.7.1 Working environment and product handling

You shall ensure that the working conditions and environment are controlled as appropriate in respect to cleanliness, temperature, humidity, ventilation, lighting, space, noise, air pollution and protection from ESD. A policy shall be in place for preservation of product, including cleaning, Foreign Object Damage 'FOD,' handling, packaging, safety marking, storage. You should handle parts through production, packing and transportation to ensure that delivered product is free from FOD.

Parts must be protected from handling damage in all areas, material handling awareness training shall be provided to employees and handling standards documented. You shall ensure that all tooling, fixtures, jigs, test equipment and handling equipment are maintained in a state of cleanliness and repair sufficient to prevent FOD.

### 7.7.2 Special processes

You shall establish procedures for controlling special processes including:

- criteria for review and approval of processes,
- determination of conditions to maintain the approval,
- approval of facilities and equipment,
- qualification of persons,
- monitoring the processes,
- requirements for documented information to be retained.

This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered or that requires destructive testing to validate, e. g.:

- Chemical Processing e.g.: anodizing, chemical cleaning, chemical milling, conversion / phosphate coatings, paint / dry film coatings, plating, stripping, surface treatment / passivation, etching.
- Coatings, painting and corrosion protecting e.g.: thermal spray, diffusion coatings, vapor deposition, stripping of coatings, heat treating of coated parts, dry film lubrication of coated parts, plating of coated parts.
- Composites e.g.: compression moulding, core processing, liquid resin processing, metal bonding, adhesive bonding, resin film infusion.
- Elastomer Seals
- Heat Treating e.g.: normalizing, annealing, hardening and tempering, aging, carburizing, nitriding, stress relieving, brazing, hot forming.
- Materials Testing laboratories
- Non-Destructive Testing e.g.: liquid penetrant testing, magnetic particle testing, ultrasonic testing, radiographic testing, eddy current testing, digital radiographic testing.
- Sealants e.g.: adhesion promoters' coatings and coating process peel panels, shear specimens, tensile bars, polyurethanes silicones.
- Electronics e.g.: wire crimping
- Welding e.g.: torch / induction brazing, flash welding, electron beam welding, resistance welding, fusion welding, laser welding, ultrasonic welding, friction welding, percussion stud welding.
- Conventional Machining e.g.: hole-making, broaching, milling, turning, grinding, edge treatment.
- Nonconventional Machining & Surface Enhancement

We reserve the right to specify whether special processes must to be performed by a NADCAP approved supplier. For special processes that requires NADCAP accreditation, you shall retain a certificate of conformance verifying the special process was performed by a NADCAP-accredited source with each shipment.

For special processes that does not require NADCAP accreditation, process shall be conducted in accordance to the Specification or Standard quoted on the drawing.

### 7.7.3 Production means

Production means (e.g. tooling, measuring equipment) used to automate, control, monitor, or measure production processes shall be validated prior to final release for production and maintained and stored in appropriate manner. You shall control the calibration of all measuring and test equipment against measurement standards traceable to international or national measurement standards (e.g. [ISO/IEC 17025](#)).

Certificate or record of calibration shall include: equipment type, identification number, manufacturer, calibration date, due date, range of measurement, standards or instructions used, acceptance criteria / tolerance, measurement results, environmental conditions.

You shall determine if the validity of previous measurement results has been adversely affected when measuring equipment is found to be unfit for purpose and shall take appropriate action as necessary.

All production means (including tooling, measuring equipment and machines) shall be properly labelled. You shall have a process to monitor the condition of tooling, equipment and machines on a regular basis to ensure that items remain serviceable and are maintained in a state of cleanliness and free from FOD. A preventative maintenance plan shall be in place to ensure that equipment remains available.

You shall have a process for the retention of tooling to provide necessary post-delivery life support, e.g. warranty claims, spares.

A register of the measuring equipment shall include: the equipment type, unique identification, location, the calibration or verification method, frequency and acceptance criteria.

You shall maintain a list of all the assets we own that under your control.

#### 7.7.4 Non-deliverable software

You shall control non-deliverable software (e.g. CNC programs) related to the manufacturing, design, fabrication, inspection or test of deliverable articles. Change of programming or updating of software used to control the production of parts manufactured shall be controlled and included in process change notification and First Article Inspection.

#### 7.7.5 Part marking

All items shall be indelibly marked or bagged and labelled with the part number, batch number and issue number of the relevant drawing and you manufacturing batch number, unless other stated on the drawing.

All part marking, and labelling must be complete and legible. The position of part marking as shown on the relevant drawing.

#### 7.7.6 Packaging

All parts delivered to us shall be correctly packaged according to the packaging specification and with avoidance of metal-to-metal contact. When information on required packaging is not provided by the engineering drawings, packaging specifications or PO, you shall ensure appropriate packaging to prevent damage, contamination, deterioration, corrosion, loss and other risks during transportation and storage that comply with common industry practices (e.g. metal to metal avoidance).

You are responsible for the packaging of the goods in a manner that is safe and suitable for damage free transit at no additional cost to us unless otherwise specified in the PO or contract.

You shall consider the use of environmentally, economically viable and reusable packaging (returnable containers). Whenever possible, you shall obtain packaging materials from sustainable sources.

### 7.8 Pillar 8 - Supplier operational management and product validation

#### 7.8.1 First Article Inspection (FAI)

You shall use a representative item from the first production run of a new part or assembly to verify that the production processes, production documentation, and tooling are able to produce parts and assemblies that meet requirements.

Any FAI Report (FAIR) provided to us shall meet requirements of **AS 9102**. It can be completed in Unum Form **BDR.06.02.FT** or equivalent template complaint to AS 9102.

A FAIR is required for each new part produced, change of process or machinery and location of production. FAI shall be repeated when changes occur that invalidate the original results. You shall perform a full FAI or a partial FAI for affected characteristics, when any of the following occurs:

- a change in the design characteristics affecting fit, form, or function of the part

- a change in manufacturing source, process, inspection method, location of manufacture, tooling, or materials that can potentially affect fit, form, or function
- a change in numerical control program or translation to another media that can potentially affect fit, form, or function
- a natural or man-made event, which may adversely affect the manufacturing process
- an implementation of corrective action required to complete a previous FAI
- a lapse in production for two (2) years

Each First Article will be submitted with the supporting FAIR report and a C of C. A copy of FAIR must accompany the physical and be submitted to us.

Goods delivered to us missing the appropriate delivery documentation, C of C or FAIR, will be quarantined.

#### 7.8.2 Production Part Approval Process (PPAP)

Make-to-print suppliers are recommended to submit a PPAP for a new part or assembly in accordance to **AS 9145** with relevant supporting documents (e.g. design records, DFMEA, process flow diagram, PFMEA, Control Plans, MSA, initial process studies, packaging, preservation, labelling, FAI). You are responsible for the creation and maintenance of above documents, operator work instructions or SOPs and associated route cards or travellers.

#### 7.8.3 Source inspection

Your products or services may be subject to source inspection by us, representatives of our customers, applicable government or regulatory agencies. Source inspection requirements may be a result of your quality performance or other mandates. You shall provide the necessary access, equipment and resources required to effectively accomplish the source inspection, auditing, approvals, checking progress and carrying out or witnessing tests or inspection procedures to us or our nominated representatives. Such tests and inspection as we may carry out shall not in any way diminish, affect or impair your obligations. At our request, you will provide test samples for design approval, inspection, verification, or auditing.

#### 7.8.4 Outgoing product inspection

Prior to delivery of any goods to be provided under the PO, you shall inspect and test the goods for compliance with the PO and in assessing their fitness for use. You must implement sufficient controls to ensure that the product to be shipped conforms to our physical, dimensional and visual requirements.

These controls may include final inspection and dock audit (component and packaging).

Record of the appropriate inspection, to verify adherence with the PO and associated drawings must be kept and you shall provide certified copies of records of such inspection and tests free of charge.

At our request, you will provide instructions for product acceptance and information on statistical techniques (e.g. SPC) used during the process for acceptance.

#### 7.8.5 Sampling plan

YOU may use reduced-frequency (sampling) inspection plans only when historical records indicate that a reduction in inspection can be achieved without jeopardising the level of quality. You shall ensure that sampling inspection is in accordance with nationally accepted standards and based on recognized statistical principles. Sampling may not be used to justify the existence of known defectives or discrepancies in a lot.

#### 7.8.6 Product release and delivery documentation

The release of products shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved. Release documentation shall include evidence of conformity with the acceptance criteria and traceability to the person authorising the release.

The concession or production permit number must be quoted on the release documentation.

Appropriate delivery documentation required to accompany the products and services shall be present at delivery and submitted to us prior the delivery. Failure to observe this will result in product quarantine and will impact delivery metrics. Delivery documentation consist of, as applicable:

- Delivery Note stating our PO number and special processes applied to the product.
- Release certificate – CofC or Form 1 as stipulated under your approval.
- First article qualification documents – FAIR, PPAP and Material Declaration Form (MDF).

- Material certificate or material test report from a test laboratory for raw materials.
- Safety Data Sheet (SDS) for delivered chemical products (substances and mixtures).

The CofC shall include as a minimum:

Date:	Date the certificate is created
Purchase Order No:	Unum PO number
Delivery No:	A number uniquely identifying the C of C and cross referring to the relevant delivery note
Description:	Description of the part
Part No:	Part Number as set out on our Drawings and referenced on our PO
Issue:	Drawing Issue number as set out in our Drawing and referenced on our PO
Batch No or Date of Manufacturing:	Your internal manufacturing batch number or date of manufacture
Produced by:	The full name of your legal entity

and a signed statement including the name of the individual who is signing, substantially similar to:

"I certify for and on behalf of [insert name of your legal entity] that the above articles have been manufactured and inspected in accordance with our quality assurance procedures; and that the materials, processing, production, part marking, control and inspection of the above parts conform in all respects to the relevant drawings."

## 7.9 Pillar 9 - Control of nonconformities, corrective and preventive actions

### 7.9.1 Non-conforming product and rejects

You shall inform us immediately upon discovery of any failure, malfunction or defect of any raw material used in production, product, part, process or article produced and already delivered to us and any occurrences of counterfeit or suspected counterfeit parts used. A notification of escape shall be made to us, completed in writing, and addressing:

- part numbers affected
- delivery dates and batch numbers of product affected
- details of the root cause of the fault
- details of the corrective actions taken by you to rectify the fault

If we identify during the incoming inspection or at any stage of the production process, that goods or services do not comply with the PO or any other purchase requirements, we will reject the goods or services and an NCR or problem solving CA/PA report will be send to you.

You are required to arrange for the prompt collection of the rejected goods within five (5) working days of notification. Initial response with initial containment must be completed by you and returned latest within 24 hours, long-term actions must be defined and reported within seven (7) calendar days unless otherwise agreed. You are expected to implement all necessary actions to close NCR or CA/PA within thirty (30) calendar days unless otherwise agreed with Quality Department.

Any rework or repairs to rejected part must be conducted in a controlled manner with detailed written instructions. The reworked or repaired goods must be re-inspected prior delivery to us, to ensure that product conforms to the requirements.

When a supplier produces a non-conformance that they believe will be acceptable under a concession, the concession request shall be submitted to us.

### 7.9.2 Just Culture

We espouse a 'Just Culture' in the interests of the creation of safety culture and require similar approach from you. A 'Just Culture' means a culture in which staff (including front line operators, maintenance personnel and other staff) are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, wilful violations and destructive acts are not tolerated.

You shall ensure that all employees and contracted personnel are encouraged to report any cases related to failures, malfunctions, defects or other occurrences (hazards, safety concerns, errors and near misses) which cause or might cause adverse effects on the continuing airworthiness of the product, part or appliance. You shall encourage employees to report safety occurrences without fear of punishment for genuine mistakes as honest and open reporting of incidents is a vital part of maintaining safety within the aerospace industry.

## 7.10 Pillar 10 - Customer support (control of service operations)

### 7.10.1 Spares

During the product life cycle period, you may be involved in providing spare parts to us or our customers. You shall ensure the availability of suitable resources to provide customer support for all the after sales activities and establish a process to ensure, for the defined and agreed product life cycle, the availability of spare parts. We will not accept restrictive practices or limits by suppliers selling spare parts directly to our customers. A common pricing shall be established (irrespective of whether it is a production part or spare part). Spare parts may be of the same product configuration or coming from alternative solutions which have been developed, validated and qualified.

### 7.11 Pillar 11 - Business process performance management and customer satisfaction monitoring

#### 7.11.1 Records

You shall establish a documented records control procedure, including identification, storage, protection, retrieval, retention and disposition of records.

Unless otherwise specified by us, quality records shall be retained for a minimum period of seven (7) years from the date of delivery to us.

Quality records shall be kept and maintained (and back up in the case of computer records) to be reasonably protected from fire, smoke or water damage. Quality records shall facilitate traceability of each delivery (from delivery note number, to CofC, batch number, associated inspection records, raw material certificates, supplier delivery notes).

Records retained by you must be complete, legible, identifiable to the corresponding product and readily retrievable.

You shall be capable of retrieving and delivering required records to us within five (5) working days of receipt of written notice or in exceptional cases relating to an airworthiness investigation within one (1) working day.

Upon expiry of 7-year term, you shall offer us the opportunity to collect records prior to their destruction or discarding.

### 7.12 Pillar 12 - Sustainability and responsibility related process (environmental, social, governance)

Sustainability and corporate responsibility are an important to us and is applied to both our operational model and our seats. Sustainability and responsibility, similarly to supplier Code of Conduct, consists of three core components: Planet, People and Profit.

We require our suppliers to act in accordance to the Code of Conduct and to flow down those behaviours to sub-tier levels.

#### 7.12.1 Environmental aspect of sustainability and responsibility

We want to provide the most sustainable products available today in the aircraft seating industry. We are challenging ourselves to work towards a seat that is 100% recyclable and we aim to provide the first carbon neutral cabin furniture for the airline industry.

You are recommended to establish an EMS according to **ISO 14001** or **EMAS** and to ensure that all persons, performing work under suppliers' control are aware of adequate environmental responsibilities and requirements and comply with relevant legislation.

You shall have effective procedures to control and manage of chemical products and controlled substances, including the introduction new chemical product, approval of chemical products, monitoring and maintenance of chemical products database and SDSs, monitoring changes in regulatory requirements, management of substance obsolescence.

You shall comply with REACH / REACH UK and CLP and apply special conditions for control of hazardous materials and substances (COSHH).

You providing to us chemical products (substances and mixtures) are required to deliver updated SDS in accordance with regulatory requirements.

You shall provide to us the Material Declaration Form (MDF) with information on used Substances of Very High Concern (SVHCs) listed in Candidate List and used substances listed in Annex XIV to REACH regulation (authorisation list). The Suppliers shall not deliver to us products containing substances listed in REACH annex XVII (restriction list). The MDF shall be submitted with the first delivery via e-mail.



You shall monitor environmental performance metrics of the product (e.g. material efficiency, resource usage, recyclability, packaging from sustainable sources) and business (e.g. carbon footprint, energy efficiency, renewable energy, water efficiency, wastes, emissions).

#### 7.12.2 Social aspect of sustainability and responsibility

You are recommended to establish an OHS according to **ISO 45001** and to ensure that all persons, performing work under suppliers' control are aware of adequate health and safety responsibilities and requirements and comply with relevant legislation.

#### 7.12.3 Governance aspect of sustainability and responsibility

You shall have a business continuity plan which would allow for the safeguarding, storage and recovery of engineering drawings, electronic media, and production tooling in the event of damage or loss. It is recommended that Business Continuity Management is according to **ISO 22301** standard.

Supplier shall prepare and implement contingency plans ensuring the continued flow of parts to us in the events of an emergency, such as: significant utility interruptions, interruptions in the supply chain, key equipment failure, labour shortages and field returns. Contingency plans should take into account the output of the resource analysis and include as appropriate succession plan e.g. a deputy list. It is recommended to periodically validate and test and regularly reviewed and improve contingency plans.

You are encouraged to implement Corporate Social Responsibility in accordance to **ISO 26000** standard.

## 8 Compliance monitoring

To monitor supplier's compliance with requirements included in this Manual, we will carry out due diligence and audits of our supply chain. We reserves the right to conduct announced and unannounced on-site or remote audits of supplier's facilities, operations, and records.

You shall grant a right of access for the purpose of auditing, approvals, checking progress and carrying out or witnessing tests or inspection to us and to our nominated representatives (including airworthiness authorities, certification bodies and customers). You shall obtain similar right of access to any sub-contractors or sub-tier supplier.

Upon any unsatisfactory audit results and supplier's failure to implement corrective actions, We reserve the right to suspend purchases from you until satisfactory actions are implemented, or to terminate relationship with you.

### Log of revision

Revision	Date	Change details	Author
1	03-11-2022	First release of the document	Beata Paliwoda
2	13-12-2022	Number change	Beata Paliwoda

## Appendix 1. Supplier Self-assessment Matrixes

### **Based on IAQG SCM Supplier Selection and Capability Assessment Maturity Model**

Level 1 - Undefined and not capable

Level 2 - Defined and applied, but not 100% effective or not applied everywhere in the company

Level 3 - Defined, applied and effective: repeated satisfactory performance capable

Level 4 - Predictable: performance of proactive improvements towards planned targets, but not systematically on all processes /areas /products

Level 5 - Optimised: best in class, continual improvement fully deployed, involving all stakeholders as part of company culture

1 - Sales, master scheduling and sequencing (planning related process)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	Process not defined. Short term planning only, not taking into account customer medium and long term demand. No forecast and planning based on effective orders only.	Unidirectional process, top down limited, no feedback loop from operations to sales. Actual orders and forecasts shared between functions with no systematic relevant actions. Medium term planning of load vs. capacity on random basis only and reactive mode.	Regular joint review of sales and master schedules between all relevant functions (sales, procurement, manufacturing...) with feedback loop from operations to sales to check that all constraints are satisfied and sales planning can be fulfilled. Periodicity of medium long term planning revision based on updated forecast of customer demand and business constraints (e.g. longest lead time).	3+ Integrated process between all functions including feedback loop from operations to sales. Unified planning process, continually monitored and up-dated. Supply, demand, financial requirements integrated and analysed to set priorities based on risk assessment & opportunity.	4+ Business development and strategic planning optimized with key suppliers / partners and customers involvement. Forecast models based on documented company strategy and rules and continual demand management (anticipation, event capable and results oriented).
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main functions (Sales, Planning, Product Management, Manufacturing, Purchasing, Finance & Human resources) or units as required, but no harmonized approach. Communication between various functions or units on a random basis.	Accountabilities defined across various functions (Sales, Planning, Product Management, Manufacturing, Purchasing, Finance & Human resources). Structured and regular coordination meetings between functions for effective decisions.	Skilled cross functional team working effectively (producing and validating aligned and synchronized master planning). Effective joint decision making across all functions. People leading process and/or organization changes ensure that these changes are well communicated (structured communication plan). Skills matrices exist, training plan adapted and human resources managed future needs forecast)	4+ Evidence of continual improvement culture (team permanently willing to identify gaps between planned and actual results to launch appropriate improvements, or identifying and correcting productivity factors variability). Supplier / partner and customers involvement. Skills & competencies and business targets used to optimize Resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools (e.g. spreadsheets only). No data or short term data only (sales, capacity, resources...). No or poor data sharing between functions.	Basic planning tool. Data from different sources (static), shared but not integrated between functions and/or covering medium term only.	Existence of planning tool using data from different sources shared and integrated between all relevant functions, and covering medium term.	Advanced Planning System (A.P.S), integrated between relevant functions, internally & externally. Scenario and constraints based planning (past events - ramp up/down turns, technical, commercial, resources issues, etc - with possible impact on capacity taken into account). Regularly (e.g. Weekly or daily) updated data available. Use of forecast trend models. Medium and long term resources aligned with requirements plans (People, Finance, Investment, tooling, manufacturing facilities...).	4+ Event capable A.P.S. (anticipation of production rates changes and unplanned events, focussing on company results and objectives..) collaborative with customer & key suppliers/partners systems. Continual improvement and automation (Real time data.) + on demand synchronisation + impact analysis, closed loop. Advanced statistical forecast models. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic metrics (orders vs expected sales, short and medium term planning variations, ...) available but not systematically used to drive operation. Actual performance metrics (scrap & rework rates, stock turns, machine utilization rates...) locally available, but results not shared between functions and not regularly used in planning of resources and needs.	Metrics (orders vs expected sales, capacity margins (used vs needs), medium term planning variations, ...) available to drive customer needs vs operation. Actual performance metrics (scrap & rework rates, productivity, stock turns, machine utilization rates...) shared between functions, and results regularly used in medium term planning of resources and needs. The metrics results show that the targets are achieved.	3+ Top level metrics and associated targets (Customer Demand, On-time on Quality delivery, factory utilization, days of supply...) used in long term planning of resources and needs. Medium and long term forecast performance results integrated and periodically accuracy measured and reviewed. Existence of predictive KPIs. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness reviewed and optimized to support continual improvement, (profitability, inventory optimization and delivery performance. Benchmarking activities show best in class results.

## 2 - Contract requirements flow down (customer related process)

	Level 1	Level 2	Level 3	Level 4	Level 5
Process	No process defined to capture and manage customer requirements or no clear links between contract requirements and operational management. Contract requirements are not analysed and not flowed down to internal functions and suppliers as required.	Contract requirements are reviewed on an individual function basis and cascaded in the organization (internal/external) but through disconnected processes and documents. No or partial feedback loop with customers acknowledging requirements. Contractual requirements changes (product, delivery dates, quality, etc..) are managed at random basis or for major changes only.	Contract review and requirements flow down (internally and to suppliers) is managed program by program. Compliance verified , deviations agreed and recorded locally (per function) with customers and suppliers where applicable, related risks & opportunities identified and significant risks mitigated. Clear process to manage all contractual requirement changes and ensure flow down to all concerned functions internally and externally.	Contract review and requirements flow down (internally and to suppliers) is managed on an integrated basis. Compliance demonstrated , deviations agreed, formalized (e.g. compliance matrix, quality plans ...) and accessible to all functions, involving customers and suppliers where applicable. All related risks identified, mitigated, managed. Clear process to manage all contractual requirement changes and ensure flow down and feed-back loop to all concerned functions internally and externally.	4+ Integrated process companywide to manage and flow contractual requirements down. Previous contractual process failures analysed and continual improvement action plans implemented (lessons learnt process) if required. Customer and suppliers integrated in the decision making and improvement process.
People and organisation	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only	Accountabilities defined in each main functions or units but no harmonized approach. Contract requirement flow-down activity mainly driven by sales / contract functions, and other functions (Engineering, Manufacturing, Purchasing, Logistic and Quality) involved at random basis only. Communication between various functions or units on a random basis	Accountabilities defined across various functions (Sales, Planning, Product Management, Manufacturing, Purchasing, Finance & Human resources) for coordinated decision making. Structured and regular communication between various units or functions.	Skilled cross functional team working effectively, aligned and synchronized plans across organizations for effective decisions. People leading process and/or organization changes ensure that these changes are well communicated (structured communication plan). Skills matrices exist, training plan adapted and human resources managed (future needs forecast).	4+ Evidence of continual improvement culture. Clear evidence of collaborative working with customer and suppliers. Skills & competencies and business targets used to optimize Resources allocation. Communication plan addresses customers and suppliers related information as relevant.
Tools and data	No tool or basic tool to capture and distribute contractual requirements (spreadsheets, fax, drawings, e-mails, ...). No or poor data sharing between functions.	Simple database exists, including main/top contractual documents. Some local tools exist to cascade requirements (specific to each or limited to some functions) and no link between various tools.	Single register exists, including or linking with all contractual documents. Shared tools exist to cascade requirements (specific to each or limited to some functions) or relevant links between various tools are implemented.	Integrated database and tool to manage and flow down requirements to all functions. Compliance recorded in an integrated tool (compliance matrix, quality and management plan...) and made available at point of views.	4+ Companywide management tool or project specific and shared from customer to supply chain. Data and tools analysed and optimized focussing on customer and key supplier satisfaction survey results.
Performance metrics	No measurement or reactive basic measurement.	Compliance to contract and customer requirements flowed down - internally and externally - measured (e.g. quantity, dates of flow down and acknowledgment, etc) during initial establishment phase only but no regular follow-up.	Compliance to contract and customer requirements flowed down - internally and externally - measured (e.g. quantity, dates of flow down and acknowledgment, etc) and regularly reviewed to incorporate requirements changes. Results shared as appropriate between relevant functions. The metrics results show that the targets are achieved.	Periodic tracking and measurement of the contract requirement compliance (including number, frequency and scope of contractual changes, number and nature of deviations, ... ) systematically shared with all relevant functions. Metrics efficiency and effectiveness measured and reviewed with customers and suppliers to support improvement plans. Existence of predictive KPIs. The metrics results are over the targets.	4+ On demand real time metrics with full customers and suppliers involvement to support continual improvement. Benchmarking activities show best in class results.

### 3 - Design and development related process

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined to manage NPI and product change activity. No interaction with suppliers.	NPI and product change management is primarily an engineering activity. No process or random process to identify and manage Critical items including product and process key characteristics. Unstructured feedback loop between Design office and other functions. Obsolescence defined and managed in reactive mode only.	Effective NPI process in place. Clear process to define product and process requirements from customer needs including Life Cycle, Change Management and Product Safety considerations. Obsolescence risks analysis and mitigation mainly driven by experience. Periodic reviews between design office and other function (e.g. manufacturing, purchasing, quality) to check adequacy between design and manufacturability. Critical Items including product and process key characteristics identified & managed.	3+ NPI process according to APQP AS 9145. CIs and KCs according to AS 9103. Concurrent engineering in place, involving internal relevant functions. Obsolescence systematically and proactively managed with suppliers based on structured risk analysis process. Design best practices implemented based on previous products experiences (lessons learned). Formal collaboration with regular reviews between design office and other functions (e.g. manufacturing, purchasing, quality). Key suppliers integrated early into the product design and development process as relevant.	4+ Product Design and development process regularly assessed and optimised, involving internal and external stake holders. Concurrent engineering in place, involving customer and suppliers as applicable, optimized for cost, testability, manufacturability, reliability and product performance. Key suppliers are active partners in product design and development decisions and planning.
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main function (design, sales, programme, manufacturing, purchasing, customer support, Quality) or unit but no harmonized approach. Skilled resources insufficiently allocated. NPI and change management are mainly engineering driven activities. Some links between design and other functions but no integrated approach (communication between various functions or units on a random basis).	Organization and accountabilities are defined with appropriate skilled resources. Skills matrix exist and training plan adapted. All functions involved and overall coordination is made by one dedicated function. (Engineering, Product Development Team, etc.). Structured and regular communication between various units or functions.	Integrated skilled cross functional team working effectively (sales, programme manufacturing, purchasing, customer support, Quality) to manage New Product Introduction and product change activities. Skills matrices exist, training plan adapted and human resources managed (future needs forecast). People leading process and/or organization changes ensure that these changes are well communicated (structured communication plan).	4+ Integration of customers and suppliers in cross functional teams, evidence of continual improvement culture. Skills & competencies and business targets used to optimize Resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tool or basic tools or data not directly transferable from/to customer and/or supplier. No or poor data sharing between relevant functions.	Basic design tools (e.g. CAD/CAM) exist and resulting data are compatible with manufacturing, suppliers and customer tools as required. Transfer of data is not systematic and/or reliable between relevant functions.	Basic design tools (e.g. CAD/CAM) used and resulting data are connected with manufacturing, suppliers and customer tools as required. Formal design reviews (e.g. Preliminary Design review, Critical Design Review, Production Readiness Review...) are regularly conducted. Tools and database shared by relevant functions.	3+ Tools exist to manage requirements, design, configuration, changes, obsolescence, design and development planning, task allocations and associated resources needs. Transfer of data is automated or full access between relevant functions. Use of best practices and lessons learnt data base.	4+ Improving product design and development through the use of market and service experience and data. Interactive Transfer of data, automated between relevant functions including customers and suppliers as relevant. Use of advanced design and development continual improvement tools (e.g. Design for Six Sigma). Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Engineering schedule performance measured. Some basic metrics (e.g. classification of changes, number of changes/months or year, number of request for design changes, etc.) in place.	Metrics exist at each stage to measure and record design and development performance vs target (schedule adherence, number of changes, Time to Get a Fix, design and development costs, gated review results...) and are used to launch improvement actions. The metrics results show that the targets are achieved.	3+ Metrics efficiency and effectiveness reviewed to support continual design and development process improvement, (Product performance and reliability, ...) Existence of predictive KPIs. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness optimized to support continual design and development process performance (Total cost of Acquisition known, ...). Benchmarking activities show best in class results.

#### 4 - Supplier sourcing selection and approval (purchasing process)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No Make or Buy process and/or no process to determine work allocation. Inconsistent selection of suppliers. No formal supplier approval.	Defined process including Make or Buy used to determine work allocation but process not systematically applied (e.g. major work packages only). Supplier selection and approval/disapproval process defined (scope of approval specified) but some business domains not assessed (logistic, manufacturing, Design...).	Defined process, including Make or Buy, systematically applied. General and specific requirements specified at selection process. Decision to select, approve and disapprove suppliers effectively based on inputs from all functions and previous performances and/or risk & opportunity analysis. Sub-tier Supplier selection process takes into account customer requirements. Major changes (make to buy, work transfer) noticed in advance. Effective counterfeit parts prevention in place.	Make or buy process fully implemented. Evaluation performed for all domains + risk analysis review for all new suppliers/product before selection. Common assessment and selection activities performed by cross functional teams as relevant for the purchased product/Service. Risk based action plan defined and followed in case weaknesses have been detected during selection process (e.g. Supplier Development action) and supplier is selected.	4+ Supply chain continual optimization based on Total Cost of Acquisition, lead time, delivery and Quality improvements (including lessons learnt process). Evidence of supplier selection & approval processes improvement (lessons learned from previous supplier selection). Partnerships and strategic alliances have been created with key suppliers to leverage performance improvement throughout you network.
<b>People and organization</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main functions or units but no harmonized approach. Competencies locally managed. Supplier selection mainly purchasing department driven activities. Communication between various functions or units on a random basis.	Accountabilities defined and harmonized between relevant functions (Programmes, Purchasing, Manufacturing, Design, Quality, Customer Support ...) Structured and regular communication between various units or functions. All functions involved in selection process through overall Procurement coordination. Skills and competencies identified, and training plan provided.	Skilled cross functional team working effectively (selecting, assessing approving suppliers). Effective joint decision making across all functions (aligned objectives and incentives - "Manage By Objective" process). Skills matrices exist, training plan adapted and human resources managed (future forecast). People leading process and/or organization changes ensure that these changes are well communicated (structured communication).	4+ Evidence of continual improvement. Cross functional team select and approve suppliers together with shared objectives. Coordination between main suppliers and cross functional team during selection of lower tiers supplier. Skills & competencies and business target used to optimize resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tool, no shared access to purchasing & approval data. No or poor data sharing between relevant functions.	Assessment questionnaire exist but not systematically used and/or some domains not covered. Purchasing & Approval database listing approved suppliers and products with their main selection and approval data (scopes, approval dates, reports...) Supplier requirements formalized in selection dossier.	Assessment questionnaires systematically used. Tool preventing ordering to non-approved suppliers. Data base includes requirements and all records concerning selection, approval and contracting results (e.g. audit reports, performance data, deviations justifications, compliance matrix etc.). List of supplier tiers available and regularly updated. Tools and database shared by relevant functions. Regular raw material independent validation.	Make or buy policy and supplier selection supported by risk & opportunity assessment tool. Assessment questionnaire systematically used and covering all domains using maturity concept. Tool preventing ordering from non-approved suppliers and triggering surveillance activities. Data base shared between all internal functions, includes requirements and all records concerning selection, approval and contracting results (audit reports, performance data, deviations justifications..)	4+ Data base shared with suppliers and main sub-tiers allowing all contractual documents (requirements) and data exchange, including information flow during all approval phases. Fully integrated tools and data base helping decision making, incl. total cost of acquisition, lead time, delivery and quality monitoring. Data base recording all events, deviations, lessons learnt from passed experience used to optimize supplier selection and approval. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement of Supplier selection and Supplier/approval processes efficiency, or reactive basic measurement.	Basic Metrics Measuring supplier assessment results during selection and approval process (e.g: supplier rating, etc...) but not integrated across all functions or not covering all criteria.	Metrics measuring supplier assessment results during selection and approval process (e.g: supplier rating, etc...) integrated across all functions and covering all function criteria. Approved supplier lists regularly refreshed based on assessment results. The metrics results show that the targets are achieved.	Supplier selection and approval processes efficiency and outputs measured and results shared across the organization. Approved suppliers lists periodically updated based on performance (including supplier risks) and taken into account for new selection for new programmes or new work packages. Existence of KPIs. Results over the target.	4+ Regular review and optimization of metrics to support continual improvement and target achievement. Benchmarking activities show best in class results.

### 5 - Planning of product realisation (plant, material, skills, capacity planning and scheduling)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined. Planning of activities locally oriented (disconnected to other manufacturing areas and other functions). Planning of resources, plant and investment performed on random basis and reactive mode only.	Planning locally established, based on short term forecast / orders. Top down sequential material & capacity plans but disconnected from higher level planning. Resources constraints (staff, skills, tooling, buildings...) are identified but not always taken into account.	All planning established from Master Scheduling to local area planning and shared between all functions. Policy exists for capacity contingency and bottleneck avoidance. Material planning policy integrated from master scheduling. Resources constraints (staff, skills, tooling, buildings...) are included in short & medium term planning.	Integrated planning from Master Scheduling to all relevant functions and units. Planning updates based on events, real time plan adjustment as required, predictive material management. Predictive capacity contingency and bottleneck avoidance (lean approach). Systematic medium and long term forecast and adjustment to resources constraints (capacity, staff, skills, tooling, buildings...)	4+ Scheduling integrated from the customer to yous (real time updating). Evidence of permanent lean manufacturing deployment, continual improvement (including lessons learnt process) across all business. Resources (plant, material, skills, capacity) permanently optimized to drive long term business efficiency.
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main functions or units (Planning, Product Management, Manufacturing, Human Resources...) but no harmonized approach. Communication between various functions or units on a random basis. Competencies locally managed.	Accountabilities defined and shared between relevant functions (Programmes, Purchasing, Manufacturing, Design, Quality, Customer Support ...). Structured and regular communication between manufacturing units and other organisations/functions, and between different manufacturing units. Skills and competencies identified, and training plan provided.	Skilled cross functional team working effectively (planning material, resource, building and tools). Effective joint decision making across all functions (aligned objectives and incentives). Skills matrices exist, training plan adapted and human resources managed (future needs forecast). People leading process and/or organization changes ensure that these changes are well communicated (structured communication).	4+ Evidence of continual improvement culture. Skills & competencies and business targets used to optimize Resources allocation. Organisation permanently optimized taking into account process needs and constraints. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools (e.g. spreadsheets only). No or poor data sharing between relevant functions. Facility and tools maintenance in reactive mode only.	Basic planning tool. Data from different sources (static), shared but not integrated between functions and other manufacturing area, and/or covering short term only. Facility and tools maintenance based on experience.	Enterprise Resource Planning systems used. Data from different sources integrated between functions and other manufacturing area, and covering short and medium term. Evidence of facilities and tools management in place : maintenance, cleanliness...	3+ Advanced Planning System, (automatic and with modern - state of the art functionalities), integrated and available at each point of use. Scenario and constraint based planning (Past planning difficulties and technical issues with possible impact on planning taken into account). Some evidence of facility and tool management e.g. 5S, Total Preventive Maintenance, 7 waste, physical flow diagram, Value Stream Mapping. Regularly (e.g. weekly or daily) updated data available.	4+ Event capable Advanced Planning System integrated between all functions and extended to suppliers/customers as applicable. Wide deployment of facility and tool management. Relevant data available and managed throughout the whole supply chain from strategic planning to realization (web based tools). Real time data. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic (limited) performance metrics (scrap & rework rates,...) locally issued, not regularly updated and shared, and results randomly used in short & medium term planning of resources and needs.	Standard performance metrics (scrap & rework rates, productivity, stock turns, machine utilization rates...) regularly updated and shared, and results used in short & medium term planning of resources and needs. The metrics results show that the targets are achieved.	Process efficiency and outputs measured. Top level metrics and associated targets (Customer Demand, On-time on Quality delivery, factory and machine utilization, machine breakdown rates, days of supply, ...) issued, updated and available at point of use, to establish short to long term planning of resources and needs. Forecast performance results integrated and accuracy measured and reviewed. Existence of predictive KPIs. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness reviewed and optimized to support continual improvement and targets achievement. Benchmarking activities show best in class results.

6 - Order management and logistic (internal & external)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined or Ordering & Logistics process definition and implementation based on experience only or performed on a random basis (No safety stock planning, no visibility into multiple locations, no shelf life cycle data considered ...)	Ordering and Logistics including shipment and transportation, locally defined and implemented without coordination across the organization. Rules defined and corrective action process in place (reactive mode only). Minimum stock levels known, shortages driven in a reactive mode and shop floor oriented. Specific delivery process to final customer established on request (when no specific customer request, just sent by standard mail/logistic provider)	Ordering & logistics process and rules including shipment and transportation, defined and implemented with evidence of coordination. Lead Time measured and controlled for main/specific products and main manufacturing steps (critical path). Inventory management in place. Back orders (Arrears) managed and information flows to internal/external customers in case of delay. Root cause analysis performed for main ordering and Logistics problems. Structured delivery process to final customer for all products.	Ordering & logistics process and rules including shipment and transportation integrated across the organization. Effective Lead Time, work in process, stock and inventory management for all products and along process chain (including key suppliers). Proactive management of potential delays (Arrears) allowing Back Orders to be tracked and mitigated at earliest stage. Proactive information to internal/ external customers in case of delay with associated mitigation plan visibility. Systematic and structured Root cause analysis and problem solving process applied to ordering and logistics issues.	4+ All principles of material management (e.g. location/ quantity/ replenishment/withdrawal controls) are applied everywhere. Results are measured, displayed and audited with variances to plan and relevant countermeasures identified (including lessons learnt process). Dynamic safety stock levels based on criticality and target service level. Vendor Managed Inventory (Consignment stock) and Just in Time (synchronous) flow in place.
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main functions or units (Planning, Purchasing/Ordering, Manufacturing, Transportation, Goods receiving Inspection ...) but no harmonized approach. Communication between various functions or units on a random basis. Competencies locally managed.	Accountabilities defined between all relevant functions (Procurement, Production, Design, Quality, Customer Support ...). Structured and regular communication between various units or functions. Skills and competencies identified, and training plan provided.	Skilled cross functional team working effectively (planning, ordering, managing deliveries, stocks and possible delays, shipping and delivering). Effective joint decision making across all functions. Suppliers and internal resources aligned when collaboration exists. Skills matrices exist, training plan adapted and human resources managed (future forecast). People leading process and/or organization changes ensure that these changes are well communicated.	4+ Evidence of continual improvement culture Skills & competencies and business targets used to optimize Resources allocation. Supplier integrated in cross functional team for main decisions and problem solving activities (e.g. concept of extended Enterprise). Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools (e.g. spreadsheets only). No or poor data sharing between relevant functions. No stock data.	Basic ordering and scheduling tool: Data from different sources (static) shared (internal & external orders and inventories) but not integrated between functions and other manufacturing area. Inventory levels set in Manufacturing Planning but limited to replenishment orders to Min/Max policy.	Effective ordering and scheduling tool. Data from different sources integrated between functions and other manufacturing area. Root cause analysis structured process applied for main ordering and Logistics problems.	Advanced ordering and scheduling system integrated and available at point of use. Scenario and constraint based planning: different ordering scenario envisaged and their effect analysed and compared, depending on different existing constraints (costs, impact on inventory, required flexibility, transportation). Real time data. Targets set and recalculated. Lean Manufacturing tools (e.g. MRP2, Value Stream Mapping, KANBAN, FIFO, Kaizen) used. Capability of Direct Delivery, Vendor Managed Inventory and transportation to point of use. Root cause analysis applied systematically for logistics problems.	4+ A full suite of data is available and managed throughout the whole supply chain from operational planning to implementation. Event capable systems, collaborative based on dynamic Planning and inventory targets. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic (limited) metrics (e.g. On time delivery, Inventory level) exist but not consistently used to drive activity.	Standard metrics (On-time delivery rate, rework and scrap rates, shortages, Internal & External Transportation and lead time, etc.) regularly used to drive activity. The metrics results show that the targets are achieved.	Process efficiency and outputs measured. Top level metrics and targets (On-time on Quality, shortages, arrears, duration delay, lead time, days of supply, inventory and stocks, etc.) established, up-dated and available at point of use (e.g. visual management , score card), used to forecast operation and manage Inventory vs. customer demand. Predictability on future orders. Existence of KPIs. Metrics results over the targets.	4+ Metrics efficiency and effectiveness reviewed and optimized to support continual improvement and targets achievement. Benchmarking activities show best in class results.



7 - Manufacturing and inspection (Production and service provision)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined or process definition and implementation based on experience only. Manufacturing and inspection activities performed on a random basis.	Manufacturing, assembly and inspection processes including technical package defined but without interface with other business processes (design office, ME, purchasing). Rules defined and corrective process in place in reactive mode. First article inspection performed only on a random basis or when required by customer.	Manufacturing, assembly and inspection process planned and carried out under controlled conditions. Measurement requirements (quality inspection) for product acceptance documented, incl. criteria for acceptance / rejection, sequence of operations, records of results, specific instructions, tools. Clear interface with other processes (design, ME, purchasing, logistic, packaging). Problem solving to prevent scraps, reworks and delays. FAI according to internal rules. CIs (incl. KCs) identified.	Integrated process and rules defined and applied across all relevant functions and down to operational level. Systematic and structured Problem solving process in place to prevent scraps, reworks and delays. FAI performed systematically in line with international standard (AS 9102). CIs (incl. KCs) identified and managed in line with international standard (AS 9103).	4+ Production and inspection management rules are continually monitored and adapted to drive continual business improvement (including lessons learnt process)
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only. Locally managed manufacturing units (no links with other units and other functions).	Accountabilities defined at production level (manufacturing, assembling, inspection), in each main functions or units but no harmonized approach. Communication between various functions on a random basis. Communication management meetings sometimes organized at shop floors level to share local difficulties, achievements, etc. Competencies locally managed.	Accountabilities defined at production level and between various manufacturing units and other functions (Planning, design, ME). Structured and regular communication between various units or functions. Structured and Regular Communication Management meetings organized with operators at shop floors level to share results and objectives of concerned manufacturing unit, assembly line or specific function and review impact with other operational units. Skills and competencies identified, and training plan provided.	Cross functional team working effectively. Manufacturing, assembly and inspections activities managed through effective decisions and performance reviews. Integrated management of all manufacturing units. Skills matrices exist, training plan adapted and human resources managed (flexibility and future needs forecast). Structured and regular Management meetings with operators at shop floors level to share results and set objectives. People leading process and/or organization changes ensure that these changes are well communicated.	4+ Evidence of continual improvement culture. Skills & competencies and business targets used to optimize resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools (e.g. spreadsheets only). No or poor data sharing between relevant functions. Production means capability is unknown. No Maintenance / Calibration plan for production (manufacturing and inspection) means. No documented ME planning.	Shop floor organized and clean. Data shared but not integrated. Production means controlled (maintained and calibrated) but no structured calibration and Maintenance Plan. Production means technical characteristics known. Special processes controlled. Traceability and Identification on products/batches when requested by customer. FAI reports recorded.	Policy in place for preservation of product : cleaning, FOD, ESD, handling, packaging, safety marking, storage. Working conditions controlled in respect to cleanliness, temperature, humidity, ventilation, lighting, space, noise, air pollution and protection from ESD. Production means (calibration, maintenance plan, storage conditions) and non-deliverable software systematically controlled. Capabilities monitored. Special processes qualified. Tools to manage Traceability and Identification on products/batches (e.g. use of data base). Data base recording FAI / CIs (incl. KCs) results and tracking corrective actions shared by relevant functions.	Evidence of implementation of methodologies such SPC, FMECA. Production means systematically controlled and validated before use, with actions traced. Unexpected events taken into account to update the calibration and Maintenance Plan. Production means capabilities performed. Special Processes Accreditation (e.g. Nadcap) when required. Advanced tools to facilitate traceability and Identification (e.g. use of Bar code, 2D marking). Advanced tool to manage, record FAI / Variation of Critical Items (incl. Key Characteristics)	4+ Use of advanced manufacturing technologies and process excellence tools. Data base shared with all functions and suppliers on site. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic (limited) performance metrics available (lead time, scrap and return rates) but not consistently used to drive activity.	Standard performance metrics available (lead time, scrap and return rates, yield, machine utilization rates, etc.) regularly used to drive activity. The metrics results show that the targets are achieved.	Process efficiency and outputs measured. Metrics and targets (lead time, scrap, rework, machines utilization rates, machine breakdown) up-dated regularly and available at point of use (Visual management). Existence of KPIs. Results over the targets.	4+ Metrics efficiency and effectiveness are reviewed and optimized to support targets achievement. On demand real time measurement. Benchmarking activities show best in class results.

### 8 - Supplier operational management and product validation

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined or process based on experience only or performed on a random basis. Supplier monitoring limited to incoming inspection. Not documented receiving inspection rules, performances far from satisfactory, no root cause analysis and problem solving.	Process in place to monitor quality and delivery, check contractual requirements fulfilled. Basic Supplier management rules in place (e.g. order acknowledgement, document updating and flow down). Basic receiving inspection rules incl. segregation of defective product, sampling rules. Occasional supplier development. FAI and Special Process qualification performed during new product validation prior to use.	Planned supplier monitoring and on site surveillance activities based on product criticality assessment, supplier, performance results (On time/On Quality), customer requirements and international standards. Supplier commitment acceptance of orders verified and managed. Management of delinquent suppliers. Verification of alignment of customer demand with supplier capacity demonstrate that supplier is permanently capable of fulfilling customer requirements. Product Improvement Plan. FAI (ref. 9102) systematically applied. CIs incl. KCs (ref. AS 9103) managed.	3+ Performance targets agreed with suppliers. Integrated risk management process incl. regular suppliers management reviews and surveillance of sub tier suppliers performance. Management of Customer demand variation/ forecast with supplier capacity. Process to manage delinquent suppliers in place incl. escalation to customer with defined criteria. Product and processes capability checked and improvement plans in place. CIs (incl. KCs) managed incl. at sub-tier level. PPAP (ref AS 9145) applied. Supplier's generated suggestions implemented. Process to trigger and conduct supplier development activities.	4+ Significant number of "self-managed suppliers" (all performances per expectation and supplier self-development in place). Supplier management rules are dynamic and adapted or improved as necessary involving you (incl. lessons). Integrated risks & opportunities based suppliers' management process involving all stakeholders. Joint customer and supplier actions to optimize supply base performance, cooperative and proactive Supplier Development with shared targets and plans.
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities defined in each main functions or units (Purchasing, Quality, Engineering, logistic, manufacturing) but no harmonized approach. Communication on a random basis. Supplier monitoring driven by procurement and product quality. Competencies locally managed.	Accountabilities defined between relevant functions (Procurement, Programmes Engineering, Production, Transports, etc.) Structured and regular communication between various units or functions. Skills and competencies identified and training plan provided.	Cross functional team managing suppliers effectively, joint decision making across all functions (aligned objectives and incentives) Skills matrices exist, training plan adapted and human resources managed (purchasers, logisticians, auditors, Incoming inspectors, Supplier Development team). People leading process and/or organization changes ensure these changes are well communicated.	4+ Clear evidence of collaborative working with suppliers to improve performances. Subject experts available to support Supplier development professionals (multidiscipline) where and when required. Skills & competencies and business targets used to optimize resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools (e.g. spreadsheets only). No or poor data sharing between relevant functions.	Basic tools and database: - issuing requirements and distributing documents to suppliers - providing basic quality and delivery data - managing orders and goods receipts - recording basic product qualification data (FAI) Basic incoming inspection instructions, incl. some sampling rules. Basic checklists during supplier surveillance reviews or on site audits.	Database shared by relevant functions: - managing Requirements / documentation update and distribution to suppliers (including supplier acknowledgment) - providing Quality and delivery data - managing purchase orders and acknowledgement, goods receipts - recording Product Qualification data (FAI (ref 9102), CIs incl. KCs (ref 9103), PPAP (ref. 9145), special processes and data such as scopes, approval dates, reports). Questionnaires systematically used when performing desktop and on site reviews. RCA used for main issues. Tools & methods enabling inspections, samplings and on site surveillance.	Integrated database between all internal functions and main data accessible by suppliers. Requirements and procurement plan update and distribution to suppliers (including acknowledgement) managed via IT system. Score card developed and shared. Supplier maturity evaluation process covering all domains. Tool exists and applied to assess risks & opportunities related to supplier processes and ensure implementation of action plans. Dynamic sampling rules and on site review frequency adaptations. Regular use of CI tools (e.g. RCA, SPC, VSM). Lean practices, tools and methods deployed throughout supplier base.	4+ Fully Integrated IT system (Internal & external collaboration Supplier/customer portal) including the management of Corrective Action and continual improvement. Data and tools analysed and optimized focussing on Customer and key supplier satisfaction survey results.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic supplier performance metrics available (rejection and scrap rate, delays or arrears).	Standard Metrics and targets regularly updated and communicated to you to trigger corrective actions. Metrics related to Product Qualification (FAI, CIs, Special processes). Metrics exist to measure level of supplier's commitment to fulfil orders. Targets achieved.	Metrics and targets (On-time on Quality, scrap, rework, rejections, leadtimes, audits, corrective actions effectiveness), regularly up-dated and available, shared with suppliers. Product related metrics recorded and maintained. Metrics content, efficiency and effectiveness reviewed to support continual improvement. Existence of KPIs. Results over the targets.	4+ Metrics efficiency and effectiveness are measured and optimized with all stake holders to support targets achievement. Metrics predicting performance in all supplier business area and covering the entire supply chain. Benchmarking activities show best in class results.

9 - Control of non-conformities, corrective and preventive actions (on time, on quality)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No process defined to collect or manage non conformities (based on experience only or performed on a random basis, reactive - Firefighting - mode or Customer request). Control of non-conforming product limited to part correction only No root cause analysis. No systematic segregation and identification of non-conforming product.	Process defined for product non conformities only (MRB in place) and implemented but not integrated across the organization. Process exists to collect non conformities in some domains. Rules defined (e.g. Identification, segregation and quarantine, customer notification) but randomly applied. Analysis of failures and launch of corrective action limited to recovery plan for product quality issues and delays, for major issues or when requested by customer.	Process and rules defined and implemented across the organization, covering product and process non conformities and delays. Process exists to collect and analyse/validate non conformities (internal and external source) in all domains. Structured Root Cause analysis (RCA) and Problem Solving process in place (including containment, preventive actions and verification of effectiveness), systematically applied for product and process quality issues and for main on time delivery issues. Human Factors considered during RCA. Customer notification process in place for occurred (delivered) issues.	Process and rules defined, implemented and integrated across the organization. Systematic and structured Root Cause analysis and problem solving process in place internally and with the concerned suppliers including containment, preventive action implementation and verification, standardised across other business units and processes, for product and process quality and On time delivery issues. Customer notification process fully defined and applied, with clear criteria established to determine which levels of non-conformities/issues needs to be reported and when. Just Culture approach observed.	4+ Evidence of continual improvement. Mature process for root cause & preventive actions & lessons learnt to prevent recurrence and sharing good practices, with collaborative approach across you network. Non-conformance management and effective root cause analysis process including containment, preventive action implementation and verification applied for all business processes (Quality, On Time Delivery, Documentation, Organization, Human Resources, etc...)
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only. Fire-fighters.	Accountabilities defined in each main function or unit but no harmonized approach. Communication between various functions or units on a random and reactive mode.	Accountabilities defined between manufacturing units and relevant functions (Planning, Engineering...) Skills and competencies identified and training plan provided. Structured and immediate communication between various units or functions in case of failure or issue.	Skilled cross functional team managing non conformities and corrective actions, with effective joint decision making process. Skills matrices exist, training plan adapted and human resources managed (future needs forecast). Experts in root cause analysis exist and support other functions as required. Highly skilled staff and performing continual improvement(e.g. 6 Sigma Black Belt). People leading process and/or organization changes ensure that these changes are well communicated (structured communication plan).	4+ Strong management commitment to continual improvement. Skills & competencies and business targets used to optimize resources allocation. 6 Sigma culture (or equivalent) widespread through the company. Supplier / partner and customers involvement. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	Manual : Spreadsheets, fax, e-mail. No problem solving tools. Inconsistent data. No data sharing between functions.	Multiple Data base recording non conformities. Limited use of basic quality tools (e.g.; Pareto, histograms, check sheets, etc...)	Root cause analysis and preventive actions tools available (e.g. 9S, Defect codes, Pareto analysis, 5 Whys, Ishikawa, FMEA, control charts, etc) and consistently used. Tools and data base shared between relevant functions. Local Score Card usage.	Integrated database, clear workflows, internal collaboration. Advanced quality tools supporting root cause analysis and process improvement management. Visual management tool, including flag system for due dates. Generic / systematic Score Card system, shared with internal and external stakeholders.	4+ Fully Integrated IT system allowing collaboration with internal and external (suppliers/customers) stake holders. On demand real time workflows. Effective use of Lean 6 Sigma or equivalent...in all business processes.
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic metrics (e.g. Number, type, recurrence of non-conformances, On Time On Quality Rates...) not consistently used to drive activity.	Standard metrics (e.g. Number, type, recurrence of non-conformances, On Time On Quality Rates, escapes, corrective action follow up, adherence to corrective action plans, audit results, etc...) regularly used to drive activity. The metrics results show that the targets are achieved.	Top level metrics and associated targets (e.g. Number, type, recurrence of non-conformance, On Time On Quality rates, corrective action closure rates, times to get a fix, effectiveness of corrective actions...) used to drive improvement actions and set future targets. Process efficiency and outputs measured. Existence of predictive KPIs. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness are measured and optimized to support targets achievement (generalized to all processes). On demand real time measurement workflows (automatic and immediate updates of metrics and associated calculated results) allowing to forecast performances. Benchmarking activities show best in class results.

10 - Customer support (control of service operations)

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	No processes to address customer support. No customer data feedback process.	Processes addressing customer support defined but not systematically applied (e.g. no consignment stock). Customer data feedback process on random basis. On site customer support organised in reactive mode. Production and Maintenance processes segregated (including tooling and documentation management).	Processes and rules defined, implemented and applied. Deliverables (spares, technical documentation, resources) clearly defined in overall processes and planning. Spares needs are regularly evaluated in short and medium planning. Customer needs and operating data feedback in place and analysed and corrective actions implemented. Process in place to ensure repair schemes are approved and controlled in accordance with design authority.	3+ Customer support, maintenance and repair processes analysed and improved to reduce Turn Around Time, Time of immobilization, and cost. Predictive spares capacity contingencies plan in place.	4+ Proactive customer support activities managed in partnership with supply base and customer teams (immediate and/or anticipated as required). Customer needs and operating data feedback in place and systematically analysed with all actors (from sub tiers to the customer).
<b>People and organisation</b>	Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.	Accountabilities locally defined and coordinated with some other functions only. Communication between various functions or units on a random basis. Skills and competencies locally managed. Off-site support team nominated in reaction mode only.	Accountabilities defined and coordinated between support organization and all other related functions. Skills and competencies identified and training plan provided. Structured and regular communication between various units or functions. Maintenance / Repair approvals as applicable (e.g. EASA PART 145, AS 9110). Dedicated off-site support teams working in controlled manner, training plans adapted to customer requirements and local regulations. Aircraft On Ground (AOG) on line support in place when required by contract.	Cross functional team working effectively, aligned and synchronized plans, activities and incentives across organizations for effective decisions and performance. Skills matrix exist and training plan adapted (internally and at end user sites). People leading process and/or organization changes ensure that these changes are well communicated. Identified team on stand-by for onsite customer support (or permanently on site / field service when contractually required) to support customers, during product integration and in operation, in particular in case of AOG).	4+ Clear evidence of collaborative working with sub tiers and customers to improve Customer support performances. Evidence of continual improvement culture. Skills & competencies and business target used to optimize Resources allocation. Communication plan addresses customers and suppliers related information as relevant.
<b>Tools and data</b>	No tools or local tools, (e.g. spreadsheets). Basic hand tools (standards mechanics tools that can be purchased everywhere). Maintenance tools not adequately calibrated. No or poor data sharing between concerned functions. No customer support plan. No customer data feedback.	Some data shared between organization and customer. Tools for maintenance and repair activities available but not dedicated. Maintenance tools (hardware, software & associated documentation), gathered only when needed (reactive mode).	All data shared between organization and customer to cover all relevant functions (e.g. Engineering, Quality, Logistic, Purchasing...) Maintenance tools (hardware, software & associated documentation), defined and available. Dedicated tools for maintenance and repair activities available calibrated and maintained. Customer support (staff and data) available during working hours through standard communication tools.	Data integrated through organization and customer covering all relevant functions. Maintenance tools ready to ship (logistic transportation means in place) or already at customer site as required. Maintenance documentation and spare data available on web site (e.g. electronic catalogue) and accurate/up to date when relevant. Dedicated customer online support available 24/7.	4+ Fully integrated communication and support infrastructure from sub-tiers to customer sites (e.g. On line real time monitoring & diagnostic as applicable). Support and Maintenance tools (hardware & software) and documentation analysed and optimized focused on customer satisfaction feedback (in particular systematic lessons learnt process in place).
<b>Performance metrics</b>	No measurement or reactive basic measurement.	Basic metrics available and used to drive support activity (e.g. number of removals, spares availability...).	Standard metrics and associated targets updated and available internally (e.g. Reliability, Direct Maintenance Costs, Responsiveness, Time to Get A Fix, Repair TAT, warranty claims, MTBF, spares on time delivery, maintenance staff availability, Time of Immobilization, Down Time etc...). Results analysed and appropriate actions defined to close gaps versus targets. Targets achieved.	3 + Metrics available internally and externally at point of use, future performance targets shared and regularly reviewed/ adapted with customers. Process efficiency and outputs measured. Existence of predictive KPIs. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness reviewed and optimized with customer to support continual improvement and targets achievement. Benchmarking activities show best in class results.

11- Business processes performance management and customer satisfaction monitoring

	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Process</b>	<p>No structured processes management. Decisions made from perception and/or based on experience and in reactive mode only.</p> <p>No analysis of requirements, means, objectives and results before decision making.</p> <p>No process to address changes, risks and opportunities management.</p> <p>No analysis of failures and occurrences.</p>	<p>Business management processes exist, but not integrated, regular communication between various functions. Main decisions based on facts and figures, but no systematic reviews of their impacts on other business units and functions. Management reviews performed in some areas only. Customer satisfaction not the key driver.</p> <p>Changes operated, without structured process.</p> <p>Risks and opportunities management partially applied or ineffective. Corrective / Improvement plans launched and results assessed for major cases or when requested by the customer.</p>	<p>Business management processes exist, regular communication between various units and functions. Business plans exist and outcomes known by senior management.</p> <p>Main decisions based on facts and figures, with regular reviews of their impacts on other business units and functions.</p> <p>Management reviews planned to address main business areas and objectives.</p> <p>Customer satisfaction and performances (quality, on time delivery, adherence to technical specifications, customer support, costs, etc.) are the key drivers.</p> <p>Changes, risks and opportunities management plans launched and monitored to cover main business areas and processes.</p> <p>Results of action plans are regularly assessed to confirm that the desired event is achieved, looking at possible adverse effects.</p>	<p>Integrated business management process involving all units and relevant functions. Business plans exist and deployment plans exist in each business area.</p> <p>All decisions based on facts and figures, with systematic reviews of their impacts on other business units and functions.</p> <p>Systematic management reviews between relevant functions and with customers, addressing business objectives and Customer satisfaction.</p> <p>Customer informed of planned or unplanned changes according to agreed risk levels and contractual requirements.</p> <p>Results of action plans are systematically assessed to confirm that the desired event is achieved without adverse effects.</p> <p>Changes management, risks and opportunities management, structured RCA, corrective and preventive actions and lessons learned processes applied in all areas of business.</p>	<p>4+ Business plans fully deployed and monitored in each business area with dynamic feedback based on targets and results. Continual improvement, changes, risks and opportunities management jointly developed with all stakeholders, driving overall business and customer satisfaction; lessons learnt systematically applied.</p> <p>Regular benchmark organised with other aerospace and defence companies or other industries (e.g. automotive, medical).</p> <p>Cost effective improvement action plans in place taking into account Total Cost of product / service.</p> <p>Go-No Go decision gates used during all phases, in particular for change management, with permanent focus on risk analysis.</p> <p>Coordinated management reviews with all functions and stakeholders, addressing business objectives and Customer satisfaction. Top-Down and Bottom-Up management reviews at all levels.</p>
<b>People and organisation</b>	<p>Accountabilities (organization, roles, responsibilities, and authorities), skills and competencies not defined or randomly defined based on experience only.</p> <p>Locally managed business units and functions. Authority based on individuals rather than on organisation.</p> <p>Lack of accountability for either preparing or reviewing performance data and objectives.</p>	<p>Accountabilities defined in each main functions (e.g. Sales, Engineering, Purchasing, Quality, Manufacturing, Human Resources, Logistics, Support) or units but no harmonized approach.</p> <p>Communication between various functions or units on a random basis.</p> <p>Resource levels not understood and based on experience rather than on process.</p> <p>Skills and competencies locally managed.</p> <p>Changes, risks and opportunities management concepts understood by some key players and associated responsibilities locally defined and assigned to individuals.</p>	<p>Top level management commitment of performance monitoring is evident (e.g. Personal Development Review, Management By Objectives, Annual Interviews...)</p> <p>Accountabilities defined between various business units and functions (e.g. Sales, Engineering, Purchasing, Quality, Manufacturing, Human Resources, Logistics, Support).</p> <p>Structured and regular communication between various units or functions.</p> <p>Skills and competencies identified and training plan adapted and managed for all functions.</p> <p>Changes, risks and opportunities management culture exists within all the organisation (basic knowledge about why and how changes risks and opportunities need to be proactively managed) and associated responsibilities defined and assigned at company level.</p>	<p>Top level management commitment of improvement and performance monitoring.</p> <p>Regular review of performance vs. objective at all individual levels (e.g. Personal Development Review, Management By Objectives, Annual Interviews).</p> <p>Multi-functional skilled and integrated team working effectively including customer communication, aligned and synchronized plans, activities and incentives across organizations for effective decisions and performance improvement.</p> <p>Skills matrices exist, training plan focussed for teams and individuals, managed and coordinated between all functions. Development plans exist.</p> <p>People leading process and/or organization changes ensure that these changes are well communicated.</p> <p>Experts in changes, risks and opportunities management and RCA exist and support all functions. Changes, risks and opportunities management authority clearly defined and respected.</p>	<p>4+ Demonstration of Top level management involvement on daily basis in particular in continual performance improvement activities. Evidence of applied continual improvement culture.</p> <p>Skills &amp; competencies and business target used to optimize Resources allocation.</p> <p>Clear evidence of collaborative working with stakeholders (in particular customer and suppliers) to improve performance, changes, risks and opportunities management process.</p> <p>Experts in changes, risks and opportunities management and root cause analysis exist in all functions.</p> <p>Communication plan addresses customers and suppliers as relevant.</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Tools and data</p>	<p>No tools or local tools to track events and record decisions and results (e.g. spreadsheets only, fax, e-mail). No shared access to decisions and results data. No or poor data sharing between relevant functions.</p>	<p>Limited shared access to multiple data base/spreadsheets with main decisions and results. Decisions Support, change management Tools exist but adapted to some functions only (Sales, Engineering, Sourcing...)</p>	<p>Decision Support, changes, risks and opportunities management tools (e.g. 9134 for procurement risk management) exist and adapted to all relevant functions (Sales, Engineering, sourcing...) Product Data Management (PDM) Tool exist to identify and manage all products and documentation impacted by changes. Visual management deployed. Use of customer satisfaction dashboards.</p>	<p>3+ Integrated management databases including documentation system, clear workflow, internal and external collaboration, communication with customer, overall performances and satisfaction monitoring. Integrated tools exist to track and monitor performance and actions (Enterprise Resource Planning, Value Stream Mapping, changes, risks and opportunities). Visual management widespread throughout organisation. Use of customer satisfactions scorecards.</p>	<p>4 + Fully integrated management information system including changes, risks and opportunities management tools involving all stakeholders in particular customers. Real time workflow and data base providing results and actions. Existence of regular internal and external satisfaction surveys with appropriate flow-down of results and feedback. Data and tools analysed and optimized focussing on customers and key suppliers satisfaction survey results.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Performance metrics</p>	<p>Performance not measured or no reliable data or reactive basic measurement only.</p>	<p>Basic company business performance metrics (finance, costs, warranty claims, On Time, On Quality...) available but no or partial correlation with customer satisfaction and business targets and/or used in reactive mode only.</p>	<p>Business performance metrics covering main processes of the company are implemented and associated targets are identified. Metrics are regularly updated, reviewed and available at point of use. Results of customer satisfaction drive action plans to improve the business, manage changes, risks and opportunities. The metrics results show that the targets are achieved.</p>	<p>Existence of predictive KPIs. Business performance metrics covering all processes of the company are defined, associated short and medium term targets are set in cooperation between each process owner and his/her internal/external stake holders (including suppliers and customers). Metrics and associated improvement targets are up-dated, available at point of use (e.g. visual management , Score card), and shared with key stakeholders.  Results of performance measures drive action plans to improve the business, manage changes, risks and opportunities. The metrics results are over the targets.</p>	<p>4+ Metrics efficiency and effectiveness reviewed and optimized to support continual improvement, all customer satisfaction and business targets achievement. Benchmarking activities show best in class results.</p>

## 12-Sustainability and responsibility related process (environmental, social, governance)

	Level 1	Level 2	Level 3	Level 4	Level 5
Process	Sustainability processes not defined. No evidence of environmental, social or governance assessment. No environmental and health and safety policy in place. Sustainability aspects not included in the product design process and supply chain management process.	Some sustainability elements in place without clear structure. Environmental and Health and Safety policies defined and documented. No systematic actions approaching sustainability.	Relevant sustainability aspects present across the organisation and in various processes (e.g. design, supply chain management, manufacturing). Process to monitor changes in regulatory requirements in place. Effective process to control and manage chemical products (REACH / CLP compliance), including obsolescence and provision of MDFs to customers. Compliance to all relevant employment standards, incl. Modern Slavery. Documented equality policy (non-discrimination, non-harassment, grievance). Compliance to ethical standards. IP and proprietary information safeguard, GDPR compliance.	3+ Implemented ISO 14001 or EMAS and ISO 45001. Demonstrated compliance to all regulatory requirements. Documented code of conduct or ethical policies. Integrated, implemented and promoted responsible behaviour throughout the organisation (policies and practices). Documented contingency plans at least in the events of an emergency, such as: significant utility interruptions, interruptions in the supply chain, key equipment failure, labour shortages and field returns. Sustainability and corporate responsibility processes and practices continually monitored and improved.	4+ Implemented Business Continuity Management system according to ISO 22301 and/or Corporate Social Responsibility according to ISO 26000. Evidence of active promotion of sustainability and social responsibility through the value chain.
People and organisation	Accountabilities (roles, responsibilities, and authorities), skills and competencies not defined or randomly defined. No sustainability and responsibility goals and objectives defined.	Accountabilities ref. sustainability and responsibility defined in each main functions (HR, Environmental, H&S). Communication between various functions or units on a random basis. Some sustainability and responsibility goals and objectives defined (e.g. only health and safety or environment).	Accountabilities ref. sustainability and responsibility clearly defined and documented, structured and regular coordination meetings between functions. Sustainability and responsibility goals and objectives documented in each area.	Demonstration of top level management involvement. Evidence of stakeholders engagement in activities related to sustainability and responsibility. Skilled, trained cross functional team working effectively. Structured communication plan ref. sustainability and responsibility aspects. Sustainability and responsibility objectives and goals defined and cascaded to relevant functions.	4+ Evidence of continual improvement culture. Communication plan addresses customers and suppliers related information as relevant. Clear evidence of collaborative work with suppliers. Benchmarking activities against top performers.
Tools and data	No tools to record results. Inconsistent data. Poor data sharing between relevant functions.	Local tools or multiple databases. Limited shared access to multiple data. Visual management on some issues deployed (e.g. no of accidents, wastes, basic metrics).	Visual management and use of dashboards sustainability deployed. Effective procedures to flow down sustainability requirements through the supply chain. Evident demonstration of environmental protection and pollution prevention. Methodology to gather and calculate GHG emissions.	3+ Internal Annual Sustainability Reporting in place. Life Cycle Assessment (LCA) of products conduct. Life Cycle Costs (LCC) known. Known carbon footprint of the organisation and of products. Documented targets and plans to minimise carbon footprint.	4+ Annual Sustainability Reports accessible by stakeholders and customers. Existence of regular internal and external surveys with appropriate flow-down of results and feedback. Existence of full Environmental Product Declaration (EPD).
Performance metrics	Performance metrics related to sustainability and responsibility not monitored.	Only basic metrics are available (energy consumption, water consumption, material consumption). No structured analysis and improvement plans.	Various performance metrics monitored, including environmental performance of product (e.g. material efficiency, resource usage, recyclability, packaging from sustainable sources) and business (e.g. carbon footprint, energy efficiency, renewable energy, water efficiency, wastes, emissions), gender and race equality metrics. The metrics results show that the targets are achieved.	3+ Metrics are regularly reviewed to support continual improvement. The metrics results are over the targets.	4+ Metrics efficiency and effectiveness are measured and optimized with all stake holders to support targets achievement. Benchmarking activities show best in class results