



# Supplier Requirements

## Table of Contents

1	Introduction and Common Requirements .....	4
1.1	Business Vision and Strategy.....	4
1.2	Customer Satisfaction Program .....	4
1.3	Personnel Competence and Training .....	5
1.4	Continuous Improvement .....	5
1.5	Facilities and Utilities.....	5
1.6	Ethical Considerations.....	5
2	Quality Requirements .....	6
2.1	Quality Management System .....	6
2.2	Quality policy.....	6
2.3	Quality Records.....	6
2.4	Quality Plan.....	6
2.5	Corrective and Preventive Actions .....	6
2.6	Metrics.....	6
3	Risk Management Requirements .....	7
3.1	Risk Management System .....	7
3.2	Emergency Procedure(s) .....	7
3.3	Occupational Safety .....	7
3.4	Security Procedure(s).....	7
3.5	Access Control .....	7
3.6	Confidentiality Agreement .....	7
3.7	Document and Data Safety .....	7
3.8	Information and Communication Infrastructure and Security.....	7
3.9	Product Liability.....	8
3.10	Business Continuity Plan.....	8
4	Environmental requirements.....	9
4.1	Environmental Policy.....	9
4.2	Environmental Management System.....	9
4.3	Legal Compliance.....	9
4.4	Competence, training and awareness .....	9
4.5	Emergency preparedness and response.....	9
5	Contractual requirements .....	10
5.1	Review System .....	10
5.2	Business Contacts.....	10
5.3	Intellectual Property Rights (IPR) .....	10
5.3.1	3rd Party Intellectual Property Rights (IPR).....	10
5.3.2	Reverse engineering .....	10
6	Design Requirements .....	11
6.1	Configuration Management.....	11
6.2	Change Management.....	11
6.3	Design deliverables.....	11
6.4	Design for Environment.....	11
6.5	Development Tools and Software .....	12

---

6.6	Design Reviews .....	12
7	Process requirements.....	13
7.1	Process Flow.....	13
7.2	Project Planning and Management .....	13
7.3	Process and Material Quality Assurance.....	13
7.4	Work Instructions.....	13
7.5	Tool Management and Control.....	13
7.6	Failure Analysis .....	13
8	Supply requirements.....	14
8.1	Forecasting Process.....	14
8.2	Supply Process .....	14
8.3	Demand /Supply Chain Performance and Improvement Plans .....	14
8.4	Supplier and Subcontractor Selection .....	14
8.5	Supplier and Subcontractor Control .....	14
8.6	Supply Document Management .....	14
8.7	Ginolix Supplied Product Control .....	14
9	Material Control requirements .....	15
9.1	Incoming Material Verification .....	15
9.2	Material Release for Production .....	15
9.3	Material Handling and Storage.....	15
9.4	Inventory Control.....	15
9.5	Shelf-Life Control .....	15
10	Verification and validation requirements.....	16
10.1	Inspection and Test Flow .....	16
10.2	Releases for Delivery .....	16
10.3	Inspection and Test Equipment.....	16
10.4	Inspection and Test Records.....	16
10.5	Control of Non-Conforming Products .....	16
10.6	Product Identification and Traceability.....	16
10.7	Product Handling, Storage, Packing, Packaging and Delivery.....	16

## 1 Introduction and Common Requirements

Ginolis Supplier Requirements are defined in the following sections each of which contains a number of detailed requirement elements. This document gives guidelines to suppliers and specified requirements outside of document are separately agreed. The Supplier shall be able to provide evidence of conformity to all requirement elements upon request without delay.

The term Supplier is used in this document as a general term meaning all kind of external organizations providing products, services etc. to Ginolis.

Ginolis is committed to a culture of openness, integrity, accountability and to conduct safe, fair, environmentally responsible, and ethical operations. Supplier is expected to perform their tasks as required and conduct themselves in a professional manner consistent with Ginolis policies and guidelines. Honesty, transparency, and openness are important issues in co-operation with Ginolis. Ginolis shall be aware of all Suppliers subcontractors and partners. The requirements apply to supply chain as whole. Transparency is essential and Ginolis must understand the whole supply chain to identify and address the risks and opportunities. Ginolis avoids any conflicts of interest.

For a Supplier to pass Ginolis Supplier Assessment, the requirements given in each applicable element shall be fulfilled, in which case an “accepted” result is given; otherwise, the result is “not accepted”. Some of these requirements may not be applicable to all suppliers and/or product areas may therefore be left out from the scope of the assessment. In the case of “not accepted” result, the Supplier must provide, within 30 calendar days, a Supplier Corrective Action Report (SCAR). Sometimes a SCAR may be sufficient proof of the implementation of the actions; otherwise, a partial on-site corrective action verification assessment may be required. Ginolis will inform the Supplier in writing about any assessment result changes.

After an acceptable result in Supplier Assessment, Ginolis expects the Supplier to inform about significant changes in any Requirement Section area.

The financial analysis is a part of Ginolis Supplier Assessments; suppliers are expected to support these assessments by providing consolidated and audited financial statements when requested. Information about ownership and stakeholders must also be presented clearly.

### 1.1 Business Vision and Strategy

The Supplier shall have clear business vision and strategy with regard to further development of the company, understanding its current status and vision as to where it would like to be in the future. Company policies and objectives / targets shall be existing and communicated throughout the organization.

### 1.2 Customer Satisfaction Program

The Supplier shall have an active customer satisfaction program based on delivery performance, customer surveys and interviews, etc. Customer feedback and identified corrective actions shall be processed, analysed and resolved as an important driving force for continuous improvement. The Supplier shall also be able to provide evidence of implementation.

## **1.3 Personnel Competence and Training**

The Supplier shall ensure that employees have the required education, training and competence for their position and tasks. As well as that records of competence and training plans are up to date.

## **1.4 Continuous Improvement**

The Supplier shall have on-going performance improvement programs based on key performance indicators, quality objectives, customer satisfaction program etc. Actions related to improvement shall be followed up and records up to date.

## **1.5 Facilities and Utilities**

The Supplier's incoming, design, manufacturing, testing, packing, shipping and storage facilities shall be capable of handling production qualities and quantities required by Ginolis. The Supplier's facilities, areas and tools shall be clean and orderly and covered by regular housekeeping.

## **1.6 Ethical Considerations**

The Supplier shall be committed to ethical conduct, full compliance to applicable national and international laws and respect for human rights in the spirit of internationally recognised ethical standards.

## 2 Quality Requirements

### 2.1 Quality Management System

The Supplier shall have an up-to-date, documented Quality Management System to ensure effective planning, management and control of quality. The Quality Management System shall be communicated, understood and implemented at all levels within the organisation and responsibilities clearly defined. This Quality Management System shall satisfy the requirements of the ISO 9000 or other internationally recognised standard of the business area. A description of the Supplier's Quality Management System documents and their hierarchy shall be available to illustrate the structure of the system. The Supplier shall have a document control procedure to create, file, check, approve, release, distribute and delete documents and data throughout the organisation.

### 2.2 Quality policy

Supplier shall make the commitment to familiarize with objectives of Ginolis and offer a products and service that supports Ginolis operations in the best possible way. The Supplier shall also be committed to promoting best practices and preventing any form of defects or waste. The Supplier is obliged to react and report on any shortcomings whenever they are noticed. Ginolis has the right to expect quality at every stage of operations.

### 2.3 Quality Records

The Supplier shall define internal and external Quality Records and define responsibilities to collect, store, maintain and dispose of such records. These records shall cover both Quality Management System elements such as reviews, audits, meetings, etc., as well as material and product related data. Quality Records shall be available to Ginolis upon request.

### 2.4 Quality Plan

The Supplier shall perform product or project specific quality assurance activities in accordance with documented procedures. Quality plans as related for Ginolis specific deliverables, components and R&D projects are subject to Ginolis approval.

### 2.5 Corrective and Preventive Actions

The Supplier shall have a documented corrective and preventive action system with input coming from various sources such as design reviews, audits, incoming inspections, in-process monitors, product qualifications and tests, customer complaints, field failures, etc. Output shall be in the form of corrective and preventive actions, whose effectiveness the Supplier shall verify. If Ginolis detects a deviation during the quality inspection, the supplier is obliged to correct the quality deviation in its entirety at its own expense and prevent the reoccurrence. If the supplier does not meet the required quality level, Ginolis has the right to cancel the order related to the deviation without costs.

### 2.6 Metrics

The Supplier shall have appropriate metrics at relevant phases of the processes that facilitate performance management and control of the processes.

## **3 Risk Management Requirements**

### **3.1 Risk Management System**

The Supplier shall have an up-to-date documented Risk Management System to ensure effective identification, analysis, control and monitoring for both company level and project level actions. The Supplier shall also be able to provide evidence of implementation.

### **3.2 Emergency Procedure(s)**

The Supplier shall have a documented and implemented Emergency Procedure(s) including an evacuation and rescue plan.

### **3.3 Occupational Safety**

The Supplier shall take occupational safety precautions throughout the organisation for dealing with hazardous materials, noise, powered-up equipment, etc. by means of safety instructions and appropriate safety devices; protective clothing, hearing protectors, etc. The supplier shall ensure that the organization complies with all relevant safety regulations.

### **3.4 Security Procedure(s)**

The Supplier shall have a documented and implemented Security Procedure(s) covering buildings, employees, documents and data systems.

### **3.5 Access Control**

The Supplier shall have access control by means of controlled keys, key cards, code locks, etc. to areas where production/new developments are taking place or where Ginolis confidential information is stored. Personnel in these areas should wear ID-cards. 3rd party access shall be denied to the area where Ginolis material/data is visible.

### **3.6 Confidentiality Agreement**

All employees of the Supplier or 3rd party are subject to the provisions of a Non-Disclosure Agreement / Confidentiality Agreement, either separately or as a part of the work contract. Employees shall be aware of the meaning of the agreement in practice.

### **3.7 Document and Data Safety**

The Supplier shall take actions to prevent breaches of security including the integrity of documents and data systems by providing lockable document cabinets, computer user Id's and passwords, "firewalls", etc.

### **3.8 Information and Communication Infrastructure and Security**

Workstations and Servers connected to Ginolis infrastructure must comply with Ginolis Security and Network Architecture Requirements. Similar requirements may apply when Supplier is storing sensitive Ginolis material in their systems or premises. Ginolis shall have the right to assess Supplier's infrastructure, equipment, and premises to verify this compliance.

## **3.9 Product Liability**

The supplier shall have Product Liability Procedure including the recall process. The supplier shall take necessary steps to protect against future Product Liability actions. Non-hazardous and safe materials and components shall be used in products and their approval abstained from applicable authorities (e.g. CE, UL). The Supplier shall be liable for damage caused by the Products to property or injury or death to persons resulting from the negligence or breach of the duties. If a third party makes a claim against the Manufacturer in respect of Product Liability in relation to the Products, the Manufacturer shall without delay notify Ginolis immediately in writing.

## **3.10 Business Continuity Plan**

The Supplier shall have a documented Business Continuity Plan. The Plan shall establish the procedures and responsibilities to be used by the Management to guarantee business operations continuity and customer service following an interruption event.



## **4 Environmental requirements**

### **4.1 Environmental Policy**

The Supplier shall have Environmental Policy including commitment to environmental protection, prevention of pollution, compliance with environmental legislation and continual improvement. The policy shall be effectively communicated to and understood at all levels within / working for the organisation. The Supplier shall make best effort to develop, manufacture and deliver innovative products and processes with the lowest possible environmental impact.

Ginolis defines sustainability as providing solutions to its customers in a way that provides long-term economic, social, and environmental value for all stakeholders and the Supplier shall commit to that.

### **4.2 Environmental Management System**

The Supplier shall have a documented environmental management system to identify significant environmental aspects of its activities, products and services and shall ensure that these aspects are taken into account in establishing, implementing and maintaining its environmental management system. This environmental management system shall satisfy the requirements of ISO 14 001 or other internationally recognised standard.

### **4.3 Legal Compliance**

The Supplier shall be knowledgeable of environmental legislation and applicable regulations and provide evidence of compliance with such regulations.

### **4.4 Competence, training and awareness**

The Supplier shall ensure that any persons performing tasks for it or on its behalf that have the potential to cause significant environmental impacts are competent on the basis of appropriate education, training or experience, and retain associated records.

### **4.5 Emergency preparedness and response**

The Supplier shall respond to actual emergency situations and accidents and prevent or mitigate associated adverse environmental impacts.

## **5 Contractual requirements**

### **5.1 Review System**

The Supplier shall have a formal review system in place to convert Ginolis requirements into Supplier internal requirements with respect to requests for quotation, purchase agreements, purchase orders and specifications etc. The review system must ensure that Supplier conducts all requirements and that all nonconformities/unclear issues will be immediately notified to Ginolis prior any activities.

### **5.2 Business Contacts**

The Supplier shall nominate contact person(s) to handle business operations between Ginolis and the Supplier. When required, a list of nominated contacts, with their responsibilities, shall be provided.

### **5.3 Intellectual Property Rights (IPR)**

All right, title and interest in and all Intellectual Property Rights in or related to the Products (including but not limited to finished and semi-finished Products and Products being manufactured), the Contract Specifications and the Quality Requirements, and all documentation related to the Products and any Product specific manufacturing methods and techniques, and all new versions, derivatives, alterations, changes and updates of any of the foregoing, by whomever made, shall worldwide and in perpetuity vest in and be the sole and exclusive property of Ginolis, upon creation thereof without separate compensation.

#### **5.3.1 3rd Party Intellectual Property Rights (IPR)**

The Supplier shall have a 3rd Party Intellectual Property Rights (IPR) policy. In line with the policy the Supplier shall have principles and methods for ensuring that no 3rd Party Intellectual Property Rights are included in any deliverables to Ginolis without the right to do so. The Supplier shall be able to provide evidence of having the right to use and/or sublicense all software and tools needed for delivery to Ginolis. Inclusion of 3rd party IPR in software deliveries to Ginolis has to be accepted by Ginolis in writing. This requirement also covers all freely available (Open source, Freeware, Public Domain etc.) software, if it has any obligations that may prohibit its intended use.

#### **5.3.2 Reverse engineering**

The Manufacturer may not disassemble, decompile or reverse engineer the software provided by Ginolis or included in the Products. The software and its copies may be used by the Manufacturer solely to incorporate the software in the Products according to the Contract Specifications.

## 6 Design Requirements

The following clauses define the highlighted requirements for Ginolis design suppliers and partners.

### 6.1 Configuration Management

The Supplier shall have version control and configuration management systems for designs, products and product data, and version change documents shall be available as a Quality Record.

### 6.2 Change Management

The Supplier shall have appropriate practices to reliably manage and track changes in requirements and project-, product- or solution-data. These practices shall include documentation and versioning of the resulting changes in engineering and management plans and activities as appropriate to the nature of the work. The Supplier shall notify Ginolis of design changes and modifications made after the product has been approved. Change histories shall be available as a Quality Record.

### 6.3 Design deliverables

All design documentation must be done by following Ginolis documentation terminology, instructions, and methods for traceability. Methods and forms for design deliverables shall be agreed separately related the nature of work, but main ideology is that work cannot be accepted before all design related data has been received on the Ginolis server / PDM-system.

Design deliverables shall always conduct following principles:

- Final products meet or exceed customer needs and expectations for quality, performance, and functionality.
- Purposefulness is always considered, and over-design avoided.
- Final product is easy to manufacture, use, maintain and service.
- Design supports life cycle ideology.
- Final product conforms to international standards for safety.
- Design provides long-term economic and environmental value for all stakeholders.

### 6.4 Design for Environment

The Supplier shall consider environmental aspects in all phases of product development. Choices made during this phase shall reduce or eliminate negative impacts on the environment. Supplier shall always deliver the full bill of material to Ginolis with raw material content and end-of-life treatment recommendations.

Supplier shall aim to:

- Material efficiency (minimum size, minimum variety of materials, maximized recycling/reusing/recovery),
- Energy efficiency (low power components, automatic power down etc),
- Remote management (self-diagnosis, upgradeability, configurability, controlling, dynamic memory),
- Extended product lifetime (modularity, upgradeability, downward compatibility, parameterisation, dynamic configuration, reliability), avoid over-design,
- Enable recovery and recycling (reuse of the materials from a used product, minimum number of different materials, components, easy to dismantle, material compatibility) and environmental life cycle thinking. Supplier shall always deliver the full bill of material to Ginolis with raw material content and end-of-life treatment recommendations.

## **6.5 Development Tools and Software**

The Supplier shall validate all development and design tools and software, including versions, and control them in accordance with documented procedures. All the tools, software and procedures shall be accepted by Ginolis. Acceptance data is recorded for each project, and this information shall be part of each release/delivery to Ginolis.

## **6.6 Design Reviews**

The Supplier shall conduct formal Design Reviews to systematically review the product development and data at certain milestones. Minutes of the reviews and related data, such as criteria used, and action points raised in reviews shall be available as a Quality Record. As a default Ginolis shall participate the review and make GO/NO GO decisions.

## **7 Process requirements**

### **7.1 Process Flow**

The Supplier shall have documented processes to ensure effective planning, operation, and control of the process. Any part of the process that is subcontracted or outsourced shall be indicated. The Supplier shall also have defined process metrics at appropriate stages of the process to keep the processes under control. Process Operators shall have access to the control data and instructions for action in out-of-control situations. Interfacing to Ginolis should be defined, organised, and monitored. Also, the necessary contact personnel for project management, technical execution and testing shall be identified.

### **7.2 Project Planning and Management**

The Supplier shall have project planning practices ensuring fact-based estimation of work effort, competent resourcing, and scheduling. The Supplier shall also have project monitoring and controlling practices ensuring proper management visibility to project status and progress. The Supplier shall also have a system for notifying Ginolis of potential schedule delays. The supplier shall compensate the costs caused by delays.

### **7.3 Process and Material Quality Assurance**

The Supplier's process and materials as well as their changes shall be qualified and approved according to documented quality assurance procedures, and changes communicated to Ginolis before implementation.

### **7.4 Work Instructions**

The Supplier shall provide work instructions, including criteria of workmanship, illustrations, and representative samples, available for all critical process steps at the place of operation. Work methods and documentation shall be communicated to Ginolis.

### **7.5 Tool Management and Control**

The Supplier's process equipment shall be under Preventive Maintenance (PM) in accordance with appropriate plans, instructions, and check sheets. The Supplier shall inspect, maintain, and store tools, jigs, fixtures, masks etc., where applicable, according to documented procedures in order to detect and prevent deterioration.

### **7.6 Failure Analysis**

The Supplier shall have the capability to analyse failures and defective materials and products according to documented procedures. The analysis results shall be available as a Quality Record.

## **8 Supply requirements**

### **8.1 Forecasting Process**

The Supplier shall have a forecasting process including receiving of forecast, production planning and confirmation of forecast. Subcontractors and suppliers shall be included in this process.

### **8.2 Supply Process**

The Supplier shall have a supply process, covering all phases from information triggering shipments and order placement to product delivery or replenishment. The Supplier shall also specify associated lead-times for the major steps of the whole demand/supply chain.

### **8.3 Demand /Supply Chain Performance and Improvement Plans**

The Supplier shall have documented procedures for measuring and monitoring internal and external demand/supply chain performance and have active performance improvement plans. The Supplier shall also have a system for notifying Ginolis of potential short and longer-term delivery problems, e.g. capacity shortages or delivery delays.

### **8.4 Supplier and Subcontractor Selection**

The Supplier shall select its suppliers and subcontractors according to documented procedures for identifying and evaluating potential suppliers of products as well as for selecting the suppliers. When appropriate, a second source policy shall be applied. The Supplier's own suppliers are subject to the provisions of a Non-Disclosure Agreement (NDA).

### **8.5 Supplier and Subcontractor Control**

The Supplier shall continuously monitor its suppliers' performance by key indicators. The Supplier shall have a system to make complaints and claims against its suppliers and a method for requesting corrective and preventive actions.

### **8.6 Supply Document Management**

The Supplier shall have appropriate supply documents management system ensuring that all applicable requirements and contractual obligations from Ginolis are transferred to the suppliers.

The Supplier's purchasing documents shall include all information necessary to define materials, products, or R&D work to be ordered. This information includes details such as item name, specification, revision level, quantity, delivery time, price, and transportation.

### **8.7 Ginolis Supplied Product Control**

The Supplier shall have a procedure to record and control materials, components or products supplied by Ginolis or its customer's. This information shall be clearly identified and separated from the product bill of material – list upon delivery and invoicing.

## **9 Material Control requirements**

### **9.1 Incoming Material Verification**

The Supplier shall verify incoming materials used for production for conformance to relevant specifications. Such verification consists of incoming inspection reports, certificates of conformance, certificates of analysis, etc., which shall be available as a Quality Record.

### **9.2 Material Release for Production**

The Supplier shall have an operation that releases material for production and positively identifies it by means of stickers, labels, lot number control, dispatch control, etc.

### **9.3 Material Handling and Storage**

The Supplier shall have written instructions for material handling and storage to prevent material deterioration and safety hazards, and to maintain controlled storage conditions, if applicable.

### **9.4 Inventory Control**

The Supplier's material inventories shall only contain material of "Released for Production" status and shall be clearly identifiable. All Ginolis materials must be marked by Ginolis codes and separated from the other customer materials.

### **9.5 Shelf-Life Control**

The Supplier shall define materials that have a limited shelf life and/or special storage requirements and strictly follow their expire dates. Concessions shall not be allowed.

## **10 Verification and validation requirements**

The Supplier shall verify, qualify, and validate all products delivered to Ginolis, unless specifically otherwise agreed in contract.

### **10.1 Inspection and Test Flow**

The Supplier shall perform all inspection and testing operations according to documented inspection and test flow charts with reference made to relevant documented procedures and test plans. Any part of the inspection and test that is subcontracted shall be indicated.

### **10.2 Releases for Delivery**

The Supplier shall control all product releases for delivery to Ginolis or its stakeholders in accordance with documented procedures and test plans. Acceptance criteria must always be accepted by Ginolis.

### **10.3 Inspection and Test Equipment**

The Supplier's inspection and test equipment used for verification and validation of product requirements shall be calibrated and maintained at defined intervals in accordance with appropriate plans, instructions, and check sheets. Test program versions, where applicable, shall be verified and controlled.

### **10.4 Inspection and Test Records**

The Supplier shall maintain inspection and test records as evidence that the products have been inspected and tested in accordance with applicable procedures with acceptable results. The Supplier shall review these records regularly and take corrective and preventive actions as required.

### **10.5 Control of Non-Conforming Products**

The Supplier shall have clearly documented procedures for the control, handling, and disposition of non-conforming products (scrap, use-as-is, rework). Where rework is performed the product shall be re-inspected in accordance with applicable procedures.

### **10.6 Product Identification and Traceability**

The Supplier shall have a system of manufacturing control used for the identification of products with regard to type, lot or serial number, and their status during all stages of production and test. The Supplier shall have a system for ensuring finished product traceability back to factory and materials to the source. Deliverables shall follow the Ginolis Equipment Identification guidelines.

### **10.7 Product Handling, Storage, Packing, Packaging and Delivery**

The Supplier shall have adequate handling, storage, packing, packaging, and delivery instructions to protect finished products from damage and deterioration such as ESD effects, scratches, mechanical deformation, marking losses, moisture ingress, etc. The supplier must have options for different delivery locations internationally. The default delivery address is Ginolis premises (Incoterms DDP), unless otherwise agreed beforehand in writing.

---