

# Supplier Quality Requirements

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## **Version History**

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# 1 Glossary

BOM Bill of Materials

AQAP Allied Quality Assurance Program

RFQ Request for Quotation

PO Purchaser Order

CAD Computer Assisted Drawings
QMS Quality Management System
KPI Key Performance Indicator
ERP Enterprise Resource Planner

FAI First Article Inspection

PPAP Production Part Approval Process

TDS Technical Data Sheet MLC Military List Code

CoC Certificates of Conformance

EUC End-User Certificates

ITAR International Traffic in Arms Regulations



#### 2 Introduction

Quality is a key aspect in Milrem AS mission which is to provide innovative robotic solutions for challenging environments. To achieve this, it is vital that the parts and components used in Milrem AS products meet the highest quality standards in the market.

This document describes the general quality requirements for Milrem AS suppliers. In addition to quality, Milrem requires suppliers to ensure compliance with defense and dualuse regulations, export controls, and to support long-term product reliability in military environments

The document was prepared by Milrem AS quality management department in conjunction with the supply chain department.

#### 2.1 Purpose

The quality of the purchased and ordered parts which are produced by suppliers have a direct impact on the final products which are sold by Milrem AS to its clients.

Milrem AS expects its suppliers to take all necessary means to provide defect- free products. The means used to achieve this must be reasonable both in commercially and in terms of scheduling.

The suppliers are encouraged to provide feedback to Milrem AS about optimization potentials and suggestions for improvements in terms of manufacturing products ordered by Milrem AS.

The conditions described in this documentation shall apply to all products and services procured by Milrem AS and its subsidiaries (further referred to as "Milrem AS").



## 3 Quality Management System

The quality management system of the supplier shall be certified according to ISO 9001 standard or equivalent. It is recommended to have certification according to AQAP 2110 as well.

In addition, Milrem requires suppliers to demonstrate a structured approach to business responsibility, including compliance with applicable environmental, ethical, and occupational safety requirements. Certification to standards such as **ISO 14001 (environmental management)** and **ISO 45001 (occupational health and safety)** is recommended, or equivalent evidence of effective practices shall be provided.

The supplier shall make its quality management system accessible to Milrem AS in an appropriate form if requested.

Milrem accepts agreements with suppliers without a certified quality management system if the supplier proves that the vital processes which are in Milrem interests are documented and implemented in the company's processes.

The supplier is responsible that results of the quality tests shall be fully documented. Milrem AS is entitled to inspect the quality records where necessary to the scope of relevancy. A copy of the records shall be handed to Milrem AS upon request. The supplier shall define the retention periods for all quality records considering the legal requirements. The minimum archiving period is 10 years unless otherwise indicated. All records shall be made available to Milrem AS or its legal successor in case of liquidation of the supplier.

#### 3.1 Supplier's Quality Responsibilities

The supplier is responsible for the product quality and the fulfilment of specified requirements to the extent which is contractually specified. The responsibility lies on the supplier if subcontracting is used to provided products or services to Milrem AS. The supplier shall be responsible for passing on Milrem AS quality requirements to its sub-contractors within the scope of relevance to assure the quality requirements are fulfilled.

The supplier is responsible to the fulfilment of all applicable legal requirements, including but not limited all applicable export control and arms trade regulations, and provide necessary documentation (e.g. EUCs, licenses) upon request.

The supplier must take measures to prevent any defects of the quality of the deliveries either through the transport or through environmental impacts. Means of transportation and packaging must be selected so that they guarantee the protection of the deliveries and/ or personnel. Milrem AS reserves the right to agree the means of packaging and transportation with the supplier. Products with a damageable (e.g. painted, varnished) or valuable surfaces (e.g. galvanized, chromicized, gold plated) must be delivered in special or individual containers.

If the transport is subject to certain restrictions e.g. air transport in the case of pressurized components or certain types of batteries, then it must be clearly marked on the packaging.



# 4 Milrem AS Documents and Requirements

The supplier shall check all the necessary documents such as drawings, CAD files and specifications for completeness, upon receiving the RFQ or PO. Milrem AS shall be notified as soon as any shortcomings or inconsistencies are evident. Milrem will provide any missing documents promptly after clarifying the circumstances. In case of discrepancy between standards and the requirements described in Milrem documentation, the strictest requirement shall be taken as a basis and Milrem must be notified of the discrepancy.

Drawing files in .pdf format shall be the official documents which will be referred to in case there are differences between 3D files and the drawings themselves. In case of a dispute between the supplier and Milrem AS the drawings shall be the official source of purchase order requirements.

The supplier is obligated to obtain required documents which are publicly available and necessary for the fulfilment of the contract such as ISO or other national standards. The supplier shall always refer to the latest published version or addendum of the standards unless it is separately noted by Milrem AS. The supplier shall maintain a system which ensures that the latest version is always available.

Specific assembly instructions or datasheets for purchasing parts in the bill of materials (BOM) must be obtained by the supplier if they are available by the manufacturers or distributors.



### **5 Configuration Management**

Necessary procedures to comply with the requirements specified by Milrem AS regarding configuration management must be taken by the supplier if contractually required to do so.

If no specific requirements are stated by Milrem AS the supplier can use its own system. The procedure must meet the minimum requirements of ISO 9001, preferably AQAP 2110 or equivalent quality systems.

Any deviations in the point of application of technical amendments shall be reported by the supplier to the Milrem AS's supply chain immediately and, where relevant, agreed with Milrem AS.

If an item has received a new revision between batches, then content of new revision must be revised by supplier and additional changes and control, if necessary, must be implemented. If an item has received a new version between batches, then the process of manufacturing and control must be repeated from the beginning.

The supplier shall notify Milrem in advance of any intended change in product design, materials, manufacturing processes, or production location that can affect form, fit, function, reliability, or compliance. Such changes must not be implemented without Milrem's written approval. Communication shall be directed to the designated Milrem Supply Chain representative.



# 6 Inspection Process and Measurement Techniques

The supplier shall develop test specifications, inspections plans and/ or inspection instructions including data about the inspection criteria, tolerances and scopes of tests/ inspections depending on the requirements imposed on the product or process being provided by Milrem AS and based on its own analysis.

The tests/ inspections must be planned and implemented with the utmost care so that ball identifiable defects are brought to light. Acceptance criteria must be clearly set. Particular importance shall be attributed to the testing/ inspection of products that are critical and relevant to provided product or process safety. Milrem keeps the right to request for procedures and other corresponding documents, if needed.

Where agreed along Purchase Order between Milrem and the supplier, the supplier shall prepare and conduct a First Article Inspection (FAI) in accordance with the agreed requirements. For safety-critical or strategic components, Milrem can additionally require Production Part Approval Process (PPAP) or an equivalent approval method prior to series deliveries. The supplier shall ensure readiness for such activities and no series production deliveries shall be made until the agreed FAI or PPAP are successfully completed and approved by Milrem.

All the testing results shall be documented. The supplier is allowed to use its own report forms, if it includes all the necessary information required by Milrem AS.

All measuring equipment used must demonstrate valid calibration according to ISO 10012. The calibration interval shall be determined individually based on usage but must not be longer than 12 months prior to the inspection date, unless otherwise agreed. The supplier shall be capable of ensuring the suitability of the testing equipment which is used for their inspection and/ or measurement procedures. The fulfilment of calibration requirements must be demonstrated by means of appropriate measures to Milrem AS upon request.

When an item of measuring equipment fails calibration, contractor shall inform Milrem about the impact of the failure regarding previous measuring results and whether this affects delivered products or their verification, validation and acceptance results. Milrem can request that measurements shall be repeated on affected batches with calibrated equipment.



### 7 Prototypes and Preliminary Samples

Prototypes or preliminary samples shall be identified by Milrem AS purchasing orders. These are components which are not yet produced under series conditions or similar. Prototypes and preliminary samples shall be a subject to a 100% inspection or testing of all relevant features. The scope of testing must be agreed with Milrem AS.

Inspection of prototypes and preliminary samples must be documented. Inspection records must be archived until the end of warranty time.

The test/ inspection results shall be documented and provided with the products/ components upon request from Milrem AS. The use of specified material shall explicitly be confirmed.



#### 8 Nonconformities

#### **8.1 Control of Nonconforming Products**

If the supplier identifies defective products at its premises, then such products must be handled according to ISO 9001 requirements regarding defect management. Such system and appropriate processes must be documented as a part of the suppliers QMS. Milrem AS requires that appropriate measures will be taken to ensure that the further use of unusable products is eliminated. Defective products must be prominently and permanently marked and handled in a systematic way. These measures can even involve physical destruction. Corresponding evidence of scrappage shall be presented to Milrem upon request.

In case of finding nonconformities, the number of components which are subjected to the control, must be increased as follows: 10%, 25%, 50%, 100%. If defects are found in every component of the batch, the supplier is obliged to stop the production of the following batches and inform Milrem about the issue. Milrem keeps the right to decide, can the production be continued or escalate the issue under further investigation. The supplier is not allowed to continue the activities before getting a confirmation from Milrem.

#### 8.2 Corrective and Preventative Actions

Each claim which is submitted by Milrem AS shall be investigated by the supplier. This is to ensure that the root cause of the nonconformity is identified, and appropriate measures can be taken to ensure that the nonconformity will not occur again.

The supplier shall provide an initial response to Milrem within 6 working days of claim notification, confirming containment actions and risk evaluation. A full 8D report, including root cause analysis and corrective actions, shall be submitted within 14 calendar days unless otherwise agreed.

In case the supplier rejects the claim, which was sent by Milrem AS a reasonable explanation must be provided in a written form. If the supplier fails to do so the claim is agreed as accepted and Milrem AS has a right to invoice the supplier for all costs related to the repair, rework, or replacement of the Nonconforming Product.

Milrem reserves the right to recover all direct costs resulting from supplier nonconformities. including administrative handling, additional inspections, rework, replacement, delays, and line-stops caused by the defective product.

The supplier must immediately inform Milrem AS if it is unable to exclude with certainty that defective parts have reached Milrem AS.



### 9 Traceability and Marking

The products shall be clearly marked by the supplier so that they can be matched with the delivery documents. The labelling shall be positioned on the outer packaging or on the product so that they can be clearly seen while receiving the shipment (for example, product tags or adhesive labels). The deliveries must be provided with the following information:

- » Purchase order number
- » Part / assembly number
- » Part/ assembly revision index
- » Part/ assembly name
- » Delivery quantity
- » HS code
- Technical data sheet (TDS).

Prototypes and preliminary samples must be clearly marked on packaging and in the accompanying documents.

Optional information provided with the shipment:

- » Serial or batch number
- » Specific storage conditions if required
- » Expiry date or shelf life
- » Statutory markings
- » Material certificates
- Military List code (ML).

Marking requirements also apply for the standard and catalogue parts (purchase parts) which are provided with a shipment. The minimum provided information must be the standard description and identification according to the manufacturer of purchase parts.

ISO/ IEC 15417 Code 128 barcode standard is accepted for part identification method. Labelling must not damage the commercial look of the delivered products.

Additional requirements for the delivery documents which are marked either on Milrem AS drawings or purchase orders must also be provided by the supplier. For products which require verification the delivery will not be marked as arrived and accepted until the requested documents are received by Milrem AS.

For safety-critical parts, electronic components, and items subject to regulatory requirements, the supplier shall ensure full traceability back to raw material lots, special processes, and subcontractors. Certificates of Conformance (CoC) must be provided where specified in the purchase order or drawing. Suppliers delivering electronic or softwarecontaining products shall also ensure version control, firmware/software identification, and measures to prevent counterfeit or compromised components.

All traceability and marking records shall be handed over to Milrem together with the delivery, ensuring Milrem retains full control to use and provide them to regulatory authorities as required.



#### 10 Communication

Questions, inquiries, arrangements and other issues shall be forwarded to Milrem AS Supply Chain representatives by the supplier in written form. The Supply Chain will coordinate internally with Quality, Engineering, or other relevant departments as needed. Other means of communication is accepted for minor problems and notifications. This involves phone calls and instant messaging services.

The supplier shall use English while communicating with Milrem AS. This includes documents and records which will be sent to Milrem. Estonian can be used when it is understood by both parties.

All official communication must go through the designated Milrem Supply Chain contact person, unless explicitly redirected by Milrem. Technical issues can be discussed with Milrem's engineering or quality functions, but only under the coordination of the Supply Chain representative.

Claims (nonconformity reports) raised by Milrem will be handled and coordinated by Milrem Production Quality personnel, who will act as the main counterpart for suppliers in such cases.



#### 11 Supplier Rating

Milrem AS shall rate its suppliers according to 4 key performance indicators (KPI's). This rating is communicated with the suppliers on quarterly basis. The baseline for the rating is composed according to the self-assessment which is a part of the "Supplier Registration Form" filled by every Milrem AS new supplier for series production parts. After that the baseline score will be changed according to supplier audits, if the need arises.

There are 3 levels for acceptable supplier evaluation. The level is calculated according to the results of the individual KPI's. Supplier evaluation levels and KPI calculations are described in Table 1. Suppliers must maintain at least Level 2 performance to remain approved. Falling below Level 2 triggers corrective actions and can lead to disqualification if no improvement is shown.

The rating is communicated with the suppliers quarterly by Milrem AS quality or purchase department.

Table 1. Supplier Evaluation Levels and KPI Calculations

Level	On Time Delivery	Quality Performance
1	>95%	>98%
2	>90%	>95%
3	<90%	<95%

Suppliers consistently at Level 3 shall be subject to corrective action plans, increased monitoring, and can be moved to "Disqualified" status.

#### 11.1 Key Performance Indicators

#### 11.1.1 **Delivery Performance**

Milrem AS will monitor the delivery performance of every supplier. Delivery performance is the ratio between all procurements and the number of procurements which are supplied in promised timeframe. This KPI is automatically adjusted by Milrem AS ERP system according to the initial or updated delivery times which are communicated with the supply chain department. Suppliers are expected to achieve ≥95% delivery reliability.

#### 11.1.2 **Quality Performance**

Delivery performance is the ratio between conforming and nonconforming products delivered by the supplier. This ratio does not depend on the delivery reliability. The ratio shall be communicated with the supplier quarterly in conjunction with the overall supplier rating. Delivery performance is adjusted and calculated by Milrem AS ERP system based on the rejected quantity per purchase order. Suppliers are expected to achieve ≥98% quality performance.



#### **Additional Evaluation** 11.1.3

Depending on business criticality, Milrem can also monitor Relationship and Responsiveness, Contractual Compliance, Technical Capability and Flexibility, Financial Risk, Financial Liquidity and Financial Dependency Risk.

#### 11.1.4 **Supplier Audits**

The right to audit the supplier's premises is granted to Milrem AS and its customers if Milrem AS has notified the supplier prior to the event. Milrem AS shall inform the supplier at least 14 working days prior.

Milrem AS and its customers reserve the right to carry out audits at the supplier's facilities. The audits are held to satisfy the contractual requirements set by Milrem AS and its customers. The audits can be held at either system, process or product levels.

Furthermore, Milrem AS reserves the right, given appropriate cause, to audit the supplier's sub- contractors. This shall happen by arrangement with the supplier.

The supplier shall grant Milrem AS and its representatives or customers access to its and/ or its sub- contractor's facilities, as well as access to all documents to the extent these are relevant to the subject matter of the contract.

Nonconformities which are identified during the audits shall be handled within the agreed timeframe and the actions taken shall be automatically reported to Milrem AS.

Corrective actions and their effectiveness shall be verified by Milrem. Repeated or severe audit findings can result in the supplier being downgraded in the Supplier Rating system, and persistent failure to improve can lead to suspension or disqualification.

Suppliers are expected to demonstrate continuous improvement following audits and provide a documented improvement plan when required.



#### 12 Additional Requirements

In addition to the requirements defined in the previous sections, suppliers working with Milrem AS shall comply with the following principles:

#### 12.1 Cybersecurity

Suppliers delivering electronic components, software, or systems shall implement and maintain a minimum level of cybersecurity practices to ensure protection against unauthorized access, data breaches, and malicious activities. Compliance with recognized standards such as ISO/IEC 27001 or NIST Cybersecurity Framework is recommended. Suppliers shall ensure that subcontractors involved in defense-related deliveries follow the same practices.

#### 12.2 Business Continuity

Suppliers shall maintain documented risk management and business continuity plans that address potential disruptions (for example, supply chain interruptions, natural disasters, cyber incidents). These plans must ensure timely recovery of operations and the ability to continue supplying Milrem without significant delays. Upon request, suppliers shall provide evidence of business continuity measures.

#### 12.3 Export Control and Regulatory Compliance

Suppliers are responsible for ensuring full compliance with all applicable export control laws, dual-use regulations, International Traffic in Arms Regulations (ITAR), and defense trade regulations. Necessary documentation such as End-User Certificates (EUCs), licenses, and permits must be maintained and provided to Milrem upon request. Suppliers shall notify Milrem immediately of any restrictions or limitations that can affect delivery capability.

#### 12.4 Sustainability and Responsibility

Milrem requires suppliers to demonstrate compliance with applicable laws and responsible business practices. This includes adherence to labor laws, environmental regulations, and ethical standards. Certification according to ISO 14001 (environmental management) or equivalent is recommended. Suppliers are expected to minimize negative environmental and social impacts of their operations and ensure that their supply chains are free from conflict minerals, forced labor, or other unethical practices.