Description: To provide suppliers with information for doing business with Vernet

Vernet Supplier Quality Manual

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Revision 6

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A. Vernet US Quality Policy

In the context of increasing global competition, in order to pursue our development, improve our competitiveness and thus ensure the durability of Vernet as a global company, our main points of strategy are:

- **Listening to our customer,**
- **The development of innovation,**
- **Respecting quality,**
- **Management of our costs and deadlines,**
- **The preservation of security and health of our personnel,**
- **The protection of the environment**.

Design and manufacture of water, oil, fuel and air thermostatic valves for temperature control applications

Vernet shall continue to propose a range of innovative products in constant technological evolution that also answer the current and future requirements of all its customers.

I pledge to promote the implementation of the quality, security, and environmental policy of Vernet in which the guidelines are as follows:

- **Reaching zero faults at both the quality level and environmental incident level,**
- **Satisfying quality requirements and those specified by our customers,**
- **Conforming to the obligations at the Security and Environmental Level,**
- **The management of the company set by its processes,**
- **Continuous improvement of the Quality Management System**

This policy follows the strategic objectives defined over a period of three years. All the personnel of Vernet US as well as all of our customers, suppliers and interested parties are a part of these ambitious goals.

Through management reviews I ensure, with the involvement of each member of the management team, the effectiveness of our quality management system in relation to our objectives and commit myself to take all necessary measures to promote its improvement and efficiency. Signed by Vernet management team.

B. Objective

Finished and direct purchased material make up the majority cost of Vernet finished product. Therefore, it is essential to have clearly documented requirements and interaction processes between Vernet and its direct material suppliers.

This document communicates Vernet Customer Specific Requirements and expectations to Vernet direct material suppliers.

C. Scope

This document applies to all direct material suppliers to Vernet, referred to as Vernet in this Supplier Manual.

Suppliers who are IATF 16949 certified shall refer to this manual as a supplement to their IATF 16949 certification for Vernet.

Suppliers who are ISO 9001 certified shall refer to this manual as a supplement to their ISO 9001 certification for Vernet.

Suppliers who are ISO 14001 certified shall refer to this manual as a supplement to their ISO 14001 certification for Vernet.

Suppliers who are AS9100 certified shall refer to this manual as a supplement to their AS9100 certification for Vernet.

This manual defines certain Customer-Specific Requirements for Vernet.

This manual is applicable to only the Vernet US facility.

The English language version of this document shall be the official version for purposes of third-party registration.

Sanctioned translations of this document shall:

- Be for reference only.
- Reference the English version as the official language.
- Include Vernet US in the copyright statement.

This Manual is a controlled document. It is the responsibility of Vernet Purchasing to distribute the latest revision to each supplier.

The supplier shall comply with any Customer Specific Requirements (CSRs) applied to Vernet by its customers.

It is impossible to cover every conceivable situation with a blanket statement or definition. If a situation occurs that is not covered by the Vernet Supplier Manual, the Vernet Supplier Quality Engineer is the main point of contact for getting questions answered and situations resolved. The Vernet Supplier Quality Engineer has the authority to request data above & beyond the stated requirements in the Vernet Supplier Manual if it is deemed pertinent to protect the interests of Vernet.

The supplier shall use the AIAG reference manuals for APQP, SPC, PPAP, FMEA and MSA processes.

The supplier shall appoint a ‘quality contact’, which will be the prime path for communication of these manual requirements to the supplier’s organization.

D. Vernet US Supplier Code of Conduct

Vernet values its global supply partners who share the Company's commitment to quality, value and who operate under a philosophy that focuses on integrity and "doing the right thing."

To support that philosophy, Vernet has a Code of Conduct for our employees and a Supplier Code of Conduct specifically for its supply base worldwide. The Supplier Code outlines the Company's expectation that all suppliers will comply with certain business and ethical standards and to the laws of their respective countries, all other applicable

laws, rules and regulations. The code applies to all businesses that produce goods or provide services for Vernet and any subsidiaries, joint ventures, divisions or affiliates.

Compliance with the principles of the Vernet Supplier Code of Conduct is required to do business with Vernet. Vernet requires a verification response from all suppliers before they are added to the supplier database.

E. Aerospace Supplier Terms & Conditions

By accepting Purchase Orders, the supplier agrees to all terms and conditions listed here.

(1) All applicable certificates to be sent with each shipment.

(2) Supplier shall use customer-designated or approved external suppliers when required.

(3) Supplier acknowledges Vernet's right of access to its facilities, product, and/or related quality records at any time, by Vernet, its customer, or regulatory authorities in order to verify quality of products or work. Right of access may be limited to only those records and product applicable to Vernet's products or contracts.

(4) Supplier shall prevent the use of counterfeit parts.

(5) All purchasing requirements shall be flowed down to sub-tier suppliers or subcontractors.

(6) Supplier to notify Vernet immediately of unexpected anomalies, nonconformances, changes in product and/or process, changes of suppliers, and/or changes of manufacturing facility location. Vernet reserves the right to approve such changes or incidents before work can proceed.

(7) Supplier acknowledges it shall apply suitable corrective action when presented with Vernet complaints or nonconformance reports.

(8) Records pertaining to the manufacture, inspection and test of Vernet's products shall be retained for a minimum of ten (10) years.

(9) Supplier shall ensure that persons are aware of their contribution to product or service conformity; their contribution to product safety and the importance of ethical behavior.

F. Aerospace Supplier Information

As a Vernet Aerospace supplier the following requirements shall be met:

a. The processes, products, and services to be provided including the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions):
b. The approval of:
    a. Products and services;
    b. Methods, processes, and equipment;
    c. The release of products and services;

d. Competence, including any required qualification of persons;
e. The external providers' interactions with the organization;
f. Control and monitoring of the external providers performance to be applied by the organization;
g. Verification or validation activities that the organization, or its customer, intends to perform at the external providers' premises;
h. Design and development control;
i. Special requirements, critical items, or key characteristics;
j. Test, inspection, and verification (including production process verification);
k. The use of statistical techniques for product acceptance and related instructions for acceptance by the organization;
l. The need to:
    i. Implement a quality management system;
    ii. Use customer-designated or approved external providers, including process sources (e.g., special processes);
    iii. Notify the organization of nonconforming processes, products, or services and obtain approval for their disposition;
    iv. Prevent the use of counterfeit parts;
    v. Notify the organization of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain the organization's approval;
    vi. Flow down to external providers applicable requirements including customer requirements;
    vii. Provide test specimens for design approval, inspection/verification, investigation, or auditing;
    viii. Retain documented information, including retention periods and disposition requirements;
m. The right of access by the organization, their customer, and regulatory authorities to the applicable areas of facilities and to applicable documented information, at any level of the supply chain;
n. Ensuring that persons are aware of;
    i. Their contribution to product or service conformity;
    ii. Their contribution to product safety;
    iii. The importance of ethical behavior.

G. Quality System Requirements

A quality system is an integral part of a successful quality program. It is not, however, a guarantee of quality products and processes. A quality system establishes disciplines. Only when the disciplines are in place and effectively executed will the benefits be noticed. Functioning quality systems lead to sustained improvements within an organization.

ISO 9001, IATF 16949, ISO14001, AS9100 and this document define fundamental quality system requirements for organizations contracted by Vernet, to provide production parts/components. These requirements shall be included in any scope of registration/certification to ISO 9001, IATF 16949, ISO 14001 and/or AS9100 issued by an ANAB

and/or IAQG certification body in order for the ISO 9001, IATF 16949, ISO 14001 and/or AS9100 certificate to be recognized as satisfactory by Vernet for third party registration/certification.

ISO 9001, IATF 16949, ISO 14001 and/or AS9100 requirements and the requirements of this document shall be addressed in the organization's quality system.

Unless explicitly specified, these requirements are not linked to the CSR of any other management system standard required by Vernet. A nonconformance to a CSR of one standard does not imply that a nonconformance to another CSR exists. Specifically, a supplier who is not fully certified to ISO 14001 shall not receive a nonconformance from their IATF 16949 Certification Body.

This document is not applicable to organizations supplying Tooling and Equipment to Vernet, Tooling and Equipment suppliers shall be third-party registered to ISO 9001.

Third-Party Registration

All organizations providing production parts to Vernet, shall be third-party registered to ISO 9001 through an IATF-recognized Certification Body. Certification requirements providing parts or materials to various Vernet US, divisions may vary.

QMS Certification Requirements

Entity	ISO 9001	IATF 16949	Exceptions
Vernet US	All Direct Material Suppliers	All Applicable Suppliers (2)	By Approval Only (1)

NOTE 1: Vernet will allow no exceptions for suppliers who ship products for Vernet automotive products. While Vernet would like all suppliers to be ISO 9001 registered, exceptions may be allowed for suppliers of non-automotive product. The minimum acceptable quality system registration for a new supplier to Vernet is ISO 9001 unless written approval of exception is given by the applicable Vernet Purchasing Quality Leader.

NOTE 2: All suppliers of automotive product shall progress toward IATF 16949 certification.

NOTE 3: Given that Vernet serves many different markets, Vernet may use suppliers in non-automotive applications who are not registered to ISO 9001. All suppliers must have systems in place to ensure they meet Vernet, Quality, Cost, and Delivery needs as outlined in this manual.

1. Registration Verification

Organizations shall submit proof of registration by sending a digital copy (PDF, JPG, etc.) of their current registration certification to their Supplier Quality Engineer contact. The email should identify a contact for certification issues at this site, providing contact information for the contact.

2. Notification of ISO 9001, IATF 16949, ISO 14001 and/or AS9100 Registration Status Change

Organizations shall notify Vernet of any change in the ISO 9001, IATF 16949, ISO 14001 and/or AS9100 registration status via email to their Supplier Quality Engineer contact. Such changes include, but are not limited to:

- Initial certification
- Recertification
- Transfer to certification to a new Certification Body
- Certificate withdrawal
- Certificate cancellation without replacement

H. Acronyms and Definitions

1. **EWR** – Engineering Work Request

2. **Business Continuity Planning** - (BCP) The Business Continuity Plan is a collection of guidelines and procedures that proactively outline disaster mitigation and response before, during and after the occurrence of an adverse incident, facilitating the continuity of critical functions. An adverse incident is an internal or external event or situation which may result in unacceptable interruption to the organization's operational status and/or its ability to provide customer service. The objective of the business continuity plan is to help establish & maintain a basic level of operations following a disruptive event until normal operations can be fully restored.

3. **Component Certification** – A process whereby the supplier certifies, in some cases with measurement data, that components are within specification. Requirements for Component Certification will be identified by the Vernet receiving plant

4. Vernet **Seven Step Problem Solving** - A disciplined method for problem solving which emphasizes analysis for the true root cause and verification that the corrective action is effective in eliminating the root cause. The 8D in the process are:

1) Identify the Problem

2) Determine and Rank Potential Root Causes

3) Take Short Term Action and Containment

4) Gather Data and/or Design Test

5) Conduct Tests, Analyze Data, Identify Root Cause(s), Select Solution

6) Plan and Implement Permanent Solution

7) Measure, Evaluate and Recognize the Team

5. **Classification of Characteristics (C of C)** - The process of classifying product and process characteristics for the optimum utilization of engineering, manufacturing, and supply base resources. In IATF 16949 terms these are Customer Designated Special Characteristics.

Note: Classification of Characteristics is intended to serve as a guide for the development of supplier process quality plans - not to relieve suppliers of the responsibility to produce all features to specification.

6. **EP** – Engineering Project

7. **Vernet Design Control** – The component is wholly designed, developed and specified by Vernet Suppliers are encouraged to participate in the design of these products to contribute their knowledge and expertise (e.g. process requirements, cost reduction opportunities, etc.). If a component is under Vernet design control, it is Vernet responsibility to address quality issues arising from the design.

8. **Direct Material** - Components and assemblies used in Vernet production and service processes that become part of the salable product. They are typically included as a Bill of Material item.

9. **CDA** – Customer Document Approval

11. **DQR** – Drawing Quality Review - A detailed cross-functional review of each drawing which ensures that the component is producible to the specification, drawings are accurate and complete, and suitable for PPAP (when applicable), prior to final release of the drawings.

12. **DVP&R** – Design Verification Plan and Report

13. **SCR**- Supplier change request

14. **MOM** – Method of Manufacturing

15. **PPM** - The number of parts with supplier-caused defects found within a Vernet US facility versus the number of parts received from that supplier by the Vernet US facility, reported as parts per million (PPM) on a monthly basis.

NOTE: For suppliers with multiple producing locations, each producing location will be considered separately.

16. **International Material Data System (IMDS)** - A global data repository for product content used by the automotive industry and used to gather data for various reporting requirements.
https://www.mdsystem.com/imdsnt/faces/login?language=en

17. **IQS** – A supplier portal used by some Vernet Suppliers.

18. **LPA** - Layered Process Audit (refer to AIAG CQI-8 for specific details)

19. **MQV** - Manufacturing Quality Verification – a process used by Vernet and suppliers to reduce defects sent by looking at FMEA findings and historical data, such as OEM defects, warranty, and customer touch points, and ensuring that steps have been taken to prevent these defects from reaching our customers. Steps can include, but are not limited to, design changes, process design changes, and fail-safing.

20. **MNC** – Material Non-Conformance Report (formerly NCMR in the Vernet System)

21. **OEM Defect** - Supplier caused defect that reaches a Vernet OEM Customer

22. **Pass-Thru Characteristic (PTC)** – (a.k.a. customer touch point) A part characteristic which is not controlled or functionally tested in the Vernet assembly process where any issue would first be discovered by the Vernet Customer.

23. **PCC – Production Capability Certification** – Vernet verification that supplier production capability and readiness will meet full production timing and volumes sometimes also known as run at rate. The intent is to identify manufacturing problems prior to full production that typically don't become evident until full production runs are initiated. The process is used to verify supplier capacity and the supplier's ability to meet fluctuations in demand (10-15%).

24. **ECR** – Engineering change request is the system through which Vernet typically controls changes to existing product. An ECR is the Vernet document that details the specifics of and approvals for the individual changes.

25. **Preliminary / Inspection Control Plan** – Detailed plan for increased inspection frequencies during the safe launch timeframe.

26. **Production Capability Certification (PPC Run)** – Test of capacity and quality run by the supplier with Vernet personnel present. Similar to "Run at Rate".

27. **REACH** (**R**egistration **E**valuation **A**uthorization restriction of **C**hemicals) – Requires all companies manufacturing or importing chemical substances into the EU in quantities of one ton or more per year to register these substances with European Chemical Agency.

28**. ROC-Record of Conformance** – The approval document (Warrant) for source released parts.

29. **RoHS** (**R**estriction of **H**azard **S**ubstances) – European Union directive pertaining to the manufacturing of various types of electronic and electrical equipment with using different hazardous materials.

30. **PPS** – Product Problem Solving process

31. **SCAR** – Supplier Corrective Action Request

32. **SCR – Supplier Change Request** – process suppliers are required to use to request approval of a change to a product or process. This process may also be referred to as Product Change Notification (PCN) in some business units.

33. **SIM** - **Supplier Information Management** – The supplier master data portal used by all Vernet BUs. All Vernet suppliers are required to register in SIM.

34. **SIP** – Supplier Improvement Process

35. **Six Sigma** - Statistically based improvement process used throughout Vernet. Suppliers are encouraged to participate where significant opportunities for improvements are identified.

36. **Source Release** – Process for ensuring the quality of non-PPAP approved components. Requirements include, but are not limited to: Record of Conformance, 3 Piece full dimensional layout, SPC or 100% inspection of special

characteristics, material/performance test results, and Prototype Data Report (PDR) requirements when requested. This is a batch approval process that must be completed prior to each shipment.

37. **SQE** - Supplier Quality Engineer

38. **Supplier Design Control** – The component is wholly designed and developed by the supplier to meet a Vernet specification, performance requirement, and technical profile. If a component is under the Supplier's design control, it is the supplier's responsibility to address quality, reliability, and durability issues arising from the design.

a. The supplier is responsible for completing Design Failure Mode Effects Analysis, Design Reviews, and specific product testing that demonstrates compliance to expected reliability and durability (life).
b. Supplier may be required to complete a Design Responsibility Agreement (DRA) to document the responsibility for Part Design, Graphics, Intellectual property, and right to use between Vernet US and the Supplier.

39. **Supplier Scorecard** - A Vernet US purchasing system that rates the supplier in the categories of Price/Cost, Quality, Delivery, Technology.

I. Quality Management System and its Processes (4.4) Conformance of Products and Processes

Suppliers shall ensure conformance of all products and processes, including service parts and those that are outsourced, to all applicable Vernet statutory, and regulatory requirements.

J. Actions to address risks and opportunities (6.1)

Supplier shall include in its risk analysis, at a minimum, lessons learned from product recalls, product audits, field returns and repairs, complaints, scrap, and rework.

The supplier shall retain documented information as evidence of the results of risk analysis.

1. Preventive Action

Suppliers shall determine and implement action(s) to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions shall be appropriate to the severity of the potential issues.

The supplier shall establish a process to lessen the impact of negative effects of risk including the following:

a) Determining potential nonconformities and their causes;

b) Evaluating the need for action to prevent occurrence of nonconformities;

c) Determining and implementing action needed;

d) Documented information of action taken;

e) Reviewing the effectiveness of the preventive action taken;

f) Utilizing lessons learned to prevent recurrence in similar processes.

2. Contingency Plans

When requested, Suppliers are required to submit a Business Continuity Plan (BCP)

a) Suppliers may use Vernet BCP template for assistance in creating BCP for the suppliers' company.

b) Suppliers are expected to provide BCPs for the Primary/Major Facilities that produce high risk components as identified by Vernet.

c) The BCP must be an "active" document and Suppliers are responsible for reviewing, updating BCPs at a regular frequency (at least annually), and testing contingency plans for effectiveness

d) The Supplier shall submit latest version of the BCP to Vernet upon request.

K. Planning of Changes (6.3)

Supplier shall notify Vernet of any changes within their management structure within two weeks of changes taking effect. This includes changes in ownership as well as any changes to contacts related to doing business with Vernet.

L. Resources (7.1) Measurement Systems Analysis

Current Calibration records are required for all gages/measurement equipment used to inspect Vernet product. Measurement Systems Analysis (MSA) is required for any measuring equipment used to inspect the special characteristics identified on the Vernet drawing or as defined by the Vernet Supplier Quality Engineer. The Anova method, as detailed in MSA 4th edition is the preferred method for submittal to Vernet. MSA acceptance limits shall be as follows:

% Tol Ratio (Precision to Tolerance)

P/T Ratio is less than 10% is acceptable

P/T Ratio between 10 and 30% is marginally acceptable

P/T Ratio greater than 30% is unacceptable.

% R&R (Repeatability and Reproducibility)

R&R less than 10% is acceptable

R&R between 10% and 30% is marginally acceptable

R&R greater than 30% is unacceptable

1. Calibration/Verification Records

The Supplier shall have a documented process for managing calibration/verification records. Records of the calibration/verification activity for all gauges and measuring and test equipment (including employee-owned

equipment relevant for measuring, Vernet owned equipment, or on-site supplier-owned equipment) needed to provide evidence of conformity to internal requirements, legislative and regulatory requirements, and Vernet defined requirements shall be retained.

The Supplier shall ensure that calibration/verification activities and records shall include the following details:

a) Revisions following engineering changes that impact measurement systems;

b) Any out-of-specification readings as received for calibration/verification;

c) An assessment of the risk of the intended use of the product caused by the out-of-specification condition;

d) When a piece of inspection measurement and test equipment is found to be out of calibration or defective during its planned verification or calibration or during its use, documented information on the validity of previous measurement results obtained with this piece of inspection measurement and test equipment shall be retained, including the associated standard's last calibration date and the next due date on the calibration report;

e) Notification to Vernet US if suspect product or material has been shipped;

f) Statements of conformity to specification after calibration/verification;

g) Verification that the software version used for product and process control is as specified;

h) Records of the calibration and maintenance activities for all gauging (including employee- owned equipment, Vernet owned equipment, or on-site supplier-owned equipment);

i) Production-related software verification used for product and process control (including software installed on employee-owned equipment, Vernet owned equipment, or on-site supplier-owned equipment).

2. Internal Laboratory

The Supplier's internal laboratory facility shall have a defined scope that includes its capability to perform the required inspection, test, or calibration services. This laboratory scope shall be included in the quality management system documentation. The laboratory shall specify and implement, as a minimum, requirements for:

a) Adequacy of the laboratory technical procedures;

b) Competency of the laboratory personnel;

c) Testing of the product;

d) Capability to perform these services correctly, traceable to the relevant process standard (such as ASTM, EN, etc.); when no national or international standard(s) is available, the Supplier shall define and implement a methodology to verify measurement system capability;

e) Vernet US requirements, if any;

f) Review of the related records.

NOTE: Third-party accreditation to ISO/IEC 17025 (or equivalent) may be used to demonstrate the Supplier's in-house laboratory conformity to this requirement.

3. External Laboratory

External/commercial/independent laboratory facilities used for inspection, test, or calibration services by the Supplier shall have a defined laboratory scope that includes the capability to perform the required inspection, test, or calibration, and either:

- The laboratory shall be accredited to ISO/IEC 17025 or national equivalent and include the relevant inspection, test, or calibration service in the scope of the accreditation (certificate); the certificate of calibration or test report shall include the mark of a national accreditation body; or
- There shall be evidence that the external laboratory is acceptable to the customer.

NOTE: Such evidence may be demonstrated by customer assessment, for example, or by Vernet approved second-party assessment that the laboratory meets the intent of ISO/IEC 17025 or national equivalent. The second-party assessment may be performed by the organization assessing the laboratory using a Vernet US-approved method of assessment.

Calibration services may be performed by the equipment manufacturer when a qualified laboratory is not available for a given piece of equipment. In such cases, the organization shall ensure that the requirements listed in sub-section Internal Laboratory have been met.

Use of calibration services, other than by qualified (or Vernet accepted) laboratories, may be subject to government regulatory confirmation, if required.

M. Competence (7.2)

1. Competence - On-the-Job Training (OJT)

Each location shall have a sufficient number of trained individuals such that computer applications necessary for direct support of Vernet manufacturing can be accessed during scheduled Vernet operating times, and other applications can be regularly accessed during normal business hours. The specific computer applications required will vary with the scope of an organization site's operations. For manufacturing sites, the required quality applications include, but are not limited to:

- SCAR worksheet
- (APQP, PPAP, SCR & SR)
- (APQP, PPAP, SCR, SR, MNC, & SCAR)

NOTE: Vernet SQEs have Supplier Training available to suppliers as needed. Contact your SQE for more information.

N. Documented Information (7.5)

1. Record retention

The supplier shall maintain PPAP records for the life of the product plus one year. Supplier inspection and test records shall be maintained for three years minimum or as directed by your SQE.

O. Customer Communication (8.2.1)

The supplier shall provide Vernet with an update contact list with both primary point of contact and secondary identified.

This list needs to be updated and provided to Vernet at a minimum of twice yearly or when any point of contact has changed.

P. Review of the Requirements for Products and Services (8.2.3)

Vernet US New Product Introduction Process, contains some Vernet specific requirements not explicitly define in APQP. Suppliers shall complete these specific requirements are part of APQP.

A. Customer-designated special characteristics

Special characteristics are to be documented in the "Initial Process Study" of PPAP.

In addition to the Critical and Major drawing characteristics, the Vernet SQE may specify other characteristics as Key characteristics for process control purposes. The process capability of any Key characteristics is to be documented the "Initial Process Study" of PPAP.

Characteristic	Symbol	Interpretation
	CRITICAL ● MAJOR ◐ LINE ABOVE SYMBOL ● LOWER LIMITS LINE BELOW SYMBOL ● UPPER LIMITS	

Critical - Vernet requires a Performance Index, PP>Ppk>1.67 as acceptance criteria for initial studies at the time of PPAP

- On-going SPC analyses demonstrating CP>Cpk>1.33 minimum over time.
- Control plan documentation to ensure SPC results are monitored and maintained.

Major - Vernet requires a Performance Index, PP>PPk>1.67 as acceptance criteria for initial studies at the time of PPAP

- On-going SPC analyses demonstrating CP>Cpk>1.33 minimum over time.
- Control plan documentation to ensure SPC results are monitored and maintained.

Significant Minor - Initial study per PPAP request (minimum of 30 pieces recommended) demonstrating conformance to specification and Ppk of 1.0 minimum.

- For attribute data, the entire PPAP capability run (typically 300 pieces) must conform to specification.
- Control plan item to demonstrate conformance to specification over time.

NOTE: On-going SPC is not required for a significant minor; however, a sufficient control plan check should be in place to demonstrate conformance to specification over time (e.g. go/no go checks).

Minor - None

- Conform to Specification per standard PPAP requirements (typically 3 piece layout).
- If an initial capability study is requested by the SQE, a Ppk of 1.0 or greater must be demonstrated.

Key - The decision for requiring SPC/capability data is to be determined by the cross-functional team and if needed, will be classified as Key (Major) or Key (Minor).

- Control plan item to demonstrate conformance to specification over time.

NOTE: On-going SPC is not required for a key; however, a sufficient control plan check should be in place to demonstrate conformance to specification over time (e.g. go/no go checks).

PTC (Pass-through Characteristic) - Control plan item that requires additional controls such as testing, in process checks, SPC, etc. to ensure the defect will not reach the customer. The Vernet SQE reserves the right to add additional features, not specified as PTCs on the drawings, to be identified as such in a control plan.

While statistical studies are specified on special characteristics, this does not mean that the other characteristics on Vernet Engineering drawings may be ignored. All characteristics must meet specification and it is in the supplier's best interest to understand their capability on ALL features. All Significant Minor (A.K.A. Six Sigma characteristic) are to be studied using a minimum 30 piece sample and must demonstrate a capability or performance index of 1.0. Six Sigma Characteristics must also have a control plan item assigned to demonstrate conformance to specification over time.

Q. Design and Development of Products and Services (8.3)

Each supplier participating in a New Product Introduction EP project must be able to provide evidence of meeting the Vernet APQP checklist requirements for their component. APQP is applicable to components, the revision of existing product designs, and to source changes (moving a component from one supplier to another). Some APQP elements need not be re-developed in every case. If the supplier and the Vernet SQE determine that an APQP element is not affected by the change, no action is required other than documenting the consideration. If an element is affected by the change, prior work is updated accordingly.

The Vernet Purchasing group will engage a supplier for APQP activity with required task completion dates at the appropriate time in the Product/Process development cycle.

Vernet requires suppliers with projects deemed as high risk to participate in the Vernet Safe Launch process. This may apply to new components, changes from one supplier to another, and for some component design or process changes. Suppliers expected to complete this activity will be notified by their Vernet SQE. Safe Launch includes but is not limited to:

> **Production Capability Certification** (PCC Run) – test of capacity and quality run by the supplier with Vernet personnel present. Similar to "run at rate".
>
> **Source Release** – a process for ensuring non-PPAP approved parts meet quality requirements
>
> **Safe Launch Control Plan** – detailed plan for increased inspection frequencies during the safe launch timeframe.

APQP, PPAP, and Source Release documentation. Documentation submission requirements will be defined by the Vernet SQE and may vary by business unit.

Vernet has developed a formal APQP review process. This review process brings the supplier's management; Vernet plant management, engineering, purchasing, and others together at different stages of the APQP process to review status of APQP activities associated with a specific component. Vernet suppliers shall participate in Vernet formal APQP process as requested by their Vernet SQE contact.

The requirement of APQP is crucial to the development of new products and processes, the revision of existing products and processes, and moving components from one supplier to another. Its single most important tenet is that quality does not just happen, it must be planned. Quality must be in the design of the product as well as in the development of the process that will produce the product. Three key outputs of APQP are the Process Failure Mode and Effects Analysis, Control Plan, and PPAP. Suppliers are expected to be knowledgeable of and follow the APQP process.

As a supplier to Vernet, awareness of at least two APQP processes happen in conjunction with one another:

A. Vernet US initiates an APQP process internally in the development of new products and/or special projects.
B. As a supplier of a component or assembly to the new Vernet US product, the supplier shall initiate an APQP process of its own when engaged by Vernet US. The supplier's level of involvement will vary depending on where the responsibility for design control resides for the component or assembly that the supplier will be supplying.

NOTE 1: Suppliers are required to utilize the APQP process. The level of oversight from Vernet US will vary depending on risk level determined by Vernet US' SQE.

NOTE 2: Suppliers providing prototype components to Vernet US as part of a EP process are required to comply with source release requirements prior to shipment of any material to Vernet US.

1. Design and Development Controls (8.3.4)

Supplier will support the Vernet DVP&R process. In order to drive reliability into the product upfront, Supplier commits to have zero open engineering or prototype incidents at the start of production as specified in the program

schedule and/or quality issues at component introduction. Products quoted based on technical profiles or based on SUPPLIER application guidelines and limits must be included with the quote along with the testing parameters that established the application guidelines must be included in order to determine technical compatibility with Vernet applications and technical profile. Additional testing to meet Vernet technical validation requirements is the responsibility of SUPPLIER. SUPPLIER must document any critical parameters and specifications not listed on the technical profile. SUPPLIER and Vernet will verify acceptance of the technical requirements by signing the technical profile document and if applicable the application guideline document prior to PPAP and production.

2. Prototype Program

Suppliers shall use Vernet Source Release process for prototype parts.

3. Product Approval Process

The organization shall comply with Production Part Approval Process (PPAP), current edition and Service Production Part Approval Process (Service PPAP), current edition.

Vernet suppliers must have the ability to submit PPAP documentation electronically. Documentation submission requirements will be defined by the Vernet SQE.

Vernet must be notified of pending changes using the Vernet Supplier Change Request Process (SCR). Informed decisions are then made on the impact of the changes and whether a full, partial, or no PPAP submission is required. It is the supplier's responsibility to ensure that Vernet has approved the PPAP before any parts are shipped to a manufacturing location.

NOTE 1: Some Vernet locations may batch certain changes and approve on a calendar basis (e.g., twice yearly).

Vernet Specific PPAP Information:

A. Where the PPAP manual states "…contact the customer" or "…contact the customer product approval activity" that person is the SQE at Vernet.
B. The Submission Level (1 through 5) required by Vernet is defined by the SQE for each PPAP submission.
C. Both, production and service parts shall meet all Vernet engineering design record and specification requirements.
    a. Service parts samples submitted as part of PPAP must be run from tooling intended for service volume production. All service PPAP submissions shall provide evidence of a packaging approval with the submission.

NOTE 1: A Level 5 submission may include supplier site activity such as a Process/Product Audit or other means of verifying the capability of the production system in addition to the onsite completion of the PPAP

NOTE 2: Per AIAG manual, the supplier must complete all elements of a PPAP regardless of the submission level chosen, unless specifically waived in writing or via electronic system by Vernet SQE.

NOTE 3: In cases where PPAP volumes are very low, a "Special Level 4" PPAP may be utilized. You must get approval from your Vernet SQE engineer to use this variation.

NOTE 4: "Off The Shelf" Components: A part that is sold to the general public direct from the manufacturer or through a distributor network and is not being modified in any way to suit Vernet specific needs. These parts may be commercially available as a catalog item.

b. A Level 1 PPAP will be submitted by the supplier to Vernet using the appropriate Vernet PPAP system to signify the supplier has appropriate controls in place for production of the part. Any inspection/test data relevant to product dimensions or part function are to be retained on site by the supplier and available for review by Vernet upon request. Vernet SQE has the right to request additional data as part of PPAP where there are questions regarding off the shelf rule applicability.

D. Three sample parts are the default requirement for dimensional verification during PPAP with some customers requiring more than three samples. The Vernet SQE will notify the supplier if other than three sample parts are required.

NOTE 1: Vernet drawings state specific Engineering, Material, Process, Inspection standards and product notes that are required to enable the supplier to manufacture the part. Compliance to these standards and notes shall be confirmed in writing by the supplier during the PPAP process. The supplier may use the dimension report/ISIR and material/performance documents to record their compliance statements.

NOTE 2: When specified on the drawing, a master cad model may become a source for product definition. Verification of features only defined by the MCM must be agreed with the SQE. Engineering approval for the MCM measurements is required.

When a Vernet drawing references Vernet Engineering Standard 10012, Source Approval, all changes, regardless of their nature must be reviewed by Vernet Engineering. Vernet Engineering will determine the level of testing required prior to making the change. Tests may be performed by Vernet, the supplier or a combination of both. The supplier has the obligation for maintaining evidence of the test results (regardless of who performed the tests) per the PPAP requirement "Material, Performance Test Results", and for evidence of Vernet Engineering approval(s) per the PPAP requirement "Engineering Approval."

NOTE 1: Some Source Approval testing may extend beyond the need date for production parts. In these cases, Vernet Engineering may authorize PPAP Interim Approval until the testing has been satisfactorily completed. Vernet Product Engineering must provide approval to permit Interim PPAP approval for any components that have not completed source approval testing.

NOTE 2: Other, non-Source Approval functional, material or performance testing which is required on the drawing falls under PPAP element "Material, Performance Test Results."

Many Customers of Vernet require material content be reported. When required, Vernet Product Engineering Group will make the request through email. This information may be requested through various formats such as: IMDS, REACH, RoHS, etc.

Preservation, Part Identification, and Packaging parameters shall be included in the Process Flow Diagram, PFMEA, and Control Plan.

When a PPAP submission for a part has not been made to Vernet in the last 24 months, the requirement for the next PPAP, regardless of the change to the part or process, is a complete PPAP submission which shall include updated dimensional data, Control Plan, PFMEA, and updated Process Capability data at a minimum, as well as any other information requested by the Vernet SQE.

Vernet PPAP Run Size Expectation:

When annual usage is over 3600 pieces, a 300-piece run, with 100 of the 300 pieces collected and measured in sequential order for statistical analysis is required. High Volume PPAP's will not be fully approved without sufficient data. The Vernet SQE and the supplier will agree to the requirements per these instructions. A 30-piece machine study is NOT appropriate for PPAP approval.

Low and Ultra-Low Volume PPAP Rules:

When estimated annual usage is less than 3600 pieces, AIAG PPAP rules apply with the following Control Plan specific requirements:

1. The supplier shall document in their Control Plan that they will either: perform 100% inspection and record the results or conduct an Initial process study with a minimum of 30 production pieces and maintain SPC control charts of the special characteristics during production;
2. That they will conduct first piece full layout inspection to verify set-up. 100% inspection or SPC Control Charts for Special Characteristics and set-up records containing the first piece inspection data shall be maintained per AIAG PPAP Record Retention requirements. The Vernet SQE may require Pre-control as defined by Vernet US on special and any identified special characteristics.

In cases where annual usage is less than 360 pieces and statistical analysis of data impractical (e.g., normal manufacturing runs of less than 30 pieces) the supplier, upon agreement with the Vernet SQE, may use a Special Level 4 PPAP. This variant of the AIAG PPAP process is a Level 4 PPAP that requires submittal of the following elements: Design Record, Process Flow, Process FMEA, Control Plan, Dimensional Results, Material/Performance Test Results, Measurement Systems Analysis, and Part Submission Warrant. In addition, the supplier shall document in their Control Plan that they will perform 100% inspection of special characteristics and record the results and conduct first piece full layout inspection to verify set-up. 100% inspection for Special Characteristics and set-up records containing the first piece inspection data shall be maintained per AIAG PPAP Record Retention requirements. Special Level 4 PPAP's are intended only for those components with such low volumes that statistical information is invalid.

The significant production run shall consist of at least one-month production quantity of the Demonstrated Capacity (e.g., Capacity = 2100 pieces, PPAP run size = 175 pieces).

Interim Approval of a PPAP shall only be used on an exception basis. The Vernet SQE will review the supplier PPAP submission and decide if an Interim approval is allowed using the Vernet US guidelines. All interim approvals will require a detailed action plan to resolve the issues that prevented Full PPAP Approval. Material covered by an Interim approval that fails to meet the agreed to plan can be rejected.

R. Design and Development Outputs (8.3.5) Manufacturing process design output

PFMEAs and control plans are required for prototype, pre-launch, and production phases.

S. Control of Externally Provided Processes, Products and Services (8.4)

Vernet requires that Vernet suppliers allow and facilitate Vernet visits and audits of Sub-Tier suppliers as requested.

Suppliers are encouraged to apply the principles outlined in "CQI-19 AIAG Sub-Tier Supplier Management process guidelines" to all their sub-tier suppliers. Vernet reserves the right to require that a supplier apply the principles outlined in CQI-19 to address issues identified in the supplier's sub-tier supplier development and management process.

1. General

Quotation Criteria - When submitting a quotation, the following criteria shall be addressed:

Clear understanding and agreement on the product specifications, requirements and applications. Supplier is encouraged to seek participation in the Drawing Quality Review (DQR) process to ensure full understanding of Vernet US Print requirements.

When an Enhanced RFQ is requested, the quote should include a product/process design with a Zero-Defect Mentality mindset. Contact you Sourcing Manager or SQE for more information.

Internal capabilities sufficient to manufacture products at consistent, acceptable, quality and performance levels.

Recommendation of any changes that will prove advantageous to product quality, performance, price and delivery.

Notice of any exceptions to be included with quotation bid.

Any tooling, gauges etc. provided by Vernet shall be controlled within the supplier's system (e.g. for calibration requirements) Supplier Selection Process

2. Supplier Selection Process

For potential suppliers to Vernet US the selection team from Vernet US, will assess the supplier against specific requirements including Quality, Technical, Regulatory, financial, Warranty Commitment, Target Cost and Future Cost Reductions.

Potential suppliers will be asked to complete a Supplier Selection Assessment as a prelude to a site visit by the selection team. During the site visit, qualified members of the selection team will perform a Supplier Selection Assessment and/or a Focused Quality System Assessment. The selection team will be comprised of representatives of engineering, manufacturing, purchasing, quality and finance. The Supplier Selection Assessment looks at many of the supplier's systems in detail with the objective of determining which areas need to be improved prior to launching a Vernet US product at that facility. The Focused Quality System Assessment, rather than looking for the presence of an entire quality system, focuses on the effective implementation of the system and looks for evidence of routine execution.

Process/Product audits of similar products being run on the process proposed for Vernet may also be included as part of the Supplier Selection Process.

T. Information for External Providers (8.4.3)

Cascade and communicate all Vernet quality requirements throughout the organization's supply chain.

U. Control of Production and Service Provision (8.5.1)

The control plan shall include:

A. First off/last off part validation, as applicable

V. Preservation (8.5.4)

The supplier shall meet packaging requirements agreed upon by Vernet and supplier at the time of production tooling order.

W. Control of Changes (8.5.6)

Process/ Product Supplier Change Control (including Embedded Software changes)

A. The supplier shall notify the Vernet SQE of any proposed process or product changes as described in the AIAG PPAP manual.
B. The supplier shall obtain approval for all process and product change requests from their Vernet SQE prior to implementing a change. Proposed changes shall be approved using the Vernet Supplier Change Request Process (SCR). Informed decisions are then made on the impact of the changes and whether a full, partial, or no PPAP submission is required. It is the supplier's responsibility to ensure that Vernet has approved the PPAP before any parts are shipped to a manufacturing location.
C. Changes to the supplier's direct material supply base require the supplier to submit a Supplier Change Request (SCR). Upon approval of the Supplier Change Request the supplier may be required to submit a PPAP by the Vernet SQE.
D. The supplier shall gain approval from the Vernet SQE using the Supplier Change Request process when any alternate process is to be used.

NOTE: An alternate process is one that is different than the process used during PPAP

NOTE: Rework or Salvage processes not approved during the initial PPAP process shall be treated as a process change.

E. Products produced on alternate processes may be subject to increased inspection and test requirements as agreed with the SQE.

X. Release of Products and Services (8.6) Annual Layout

1. Annual Layout

To ensure continuing conformance to all Vernet requirements, an annual layout, including all sub-components, shall be performed when requested.

Y. Performance Evaluation (9)

Vernet will monitor the quality performance of the supplier primarily through In-plant and OEM Defect PPM measures. Vernet will report these measures to the supplier. Less than 50 PM is the goal for both measures. Failure to meet this goal may result in corrective action activity as described in the Non-Conforming Material section of this document. Vernet will set interim goals (targets) for suppliers who cannot immediately meet the zero-defect goal. These targets will be reduced each year with the expectation that these suppliers will eventually meet the zero PPM goal.

Vernet will monitor the reliability performance of selected suppliers' components (especially suppliers with design control) through Warranty claims, service campaign practice. Vernet will report these measures to the supplier.

A. The Suppliers must have the ability to submit Failure investigation electronically.
B. The Supplier shall monitor and participate to reduce field warranty claims. It is important to control problem resolution time in their processes.
C. In the event a reliability/safety problem results in a recall, the supplier shall work with Vernet to urgently remediate the problem.

Z. Monitoring, Measurement, Analysis and Evaluation (9.1)

The supplier shall allow on-site verification activities as required by Vernet and Vernet customers.

The supplier shall allow on-site Process/Product Audits and System Assessments when requested by Vernet.

The supplier shall allow and facilitate visits by Vernet personnel to their suppliers for purposes of audit, PPAP review, APQP review, review of corrective action effectiveness, or any other reason related to the quality of components produced for Vernet.

The supplier shall allow direct communication with their manufacturing facility as well as any sub-tier supplier’s manufacturing facilities on quality issues.

1. Monitoring and Measurement of Manufacturing Processes

The supplier shall maintain routine quality data (e.g., quality indices updates, reliability test results, any data collection defined in control plans, etc.) that are required by the Vernet Engineering drawing, agreed to in the APQP/PPAP elements of the Cycle, or established as part of a corrective action plan. Such data shall be made available to Vernet upon request and provided within one (1) business day of such request.

Supplier shall perform and maintain results for any required Functional Reliability Verification (FRV) testing that is identified on the component drawing by a functional reliability specification. Functional Reliability verification is intended to be ongoing and conducted by the supplier during the life of a component or sub-assembly to assess the

ongoing capability of the component or sub-assembly to meet a functional reliability specification. Possible verification methods include but are not limited to: Fail-safing, in-process checks, process control, dimensional checks, and test-to-failure audit.

2. Application of Statistical Concepts

Suppliers are encouraged to adopt Six Sigma as a formal improvement process, particularly when aimed at improving quality or reducing costs.

Suppliers shall use statistical tools for managing and improving processes wherever possible. Statistical tools may include but are not limited to Statistical Process Control.

AA. Customer Satisfaction (9.1.2)

1. Supplier Relationship Management Scorecard

Vernet Purchasing and Supplier Quality use the Supplier Scorecard to evaluate customer satisfaction with selected external production and service suppliers. Vernet stores, analyzes and reports organization performance data collected from other sources within Vernet,

The Supplier Relationship Management Scorecard reports performance in three categories:

- Quality
- Cost
- Delivery

2. Controlled Shipping

Vernet may, at its discretion, require the organization to participate in Controlled Shipping /Consequential Management activities. This may include third party containment/component certification processes that are provided at the supplier's expense. These actions will be implemented at the direction of Vernet Purchasing Supplier Quality Leader. These activities will be monitored at a senior level at Vernet and require the active participation of senior management at the supplier.

If a supplier is placed on Controlled Shipping Level 2, they are required to notify their Certification Registrar as part of the containment process.

BB. Internal Audit (9.2)

1. Quality management system audit

Supplier shall conduct an Internal Quality Management Systems audit at least once per year.

2. Manufacturing process audit

Layered Process Audits

Suppliers should implement a Layered Process Audit program to promote continuous improvement within their facility.

Supplies should refer to AIAG CQI-8: Layered Process Audits for guidance on establishing an LPA program.

Special Process Assessments

- CQI-9 Special Process: Heat Treat System Assessment, latest edition
- CQI-11 Special Process: Plating System Assessment, latest edition
- CQI-12 Special Process: Coating System Assessment, latest edition
- CQI-14: Automotive Warranty Management, latest edition
- CQI-15 Special Process: Welding System Assessment, latest edition
- CQI-17 Special Process: Soldering System Assessment, latest edition
- CQI-23 Special Process: Molding System Assessment, latest edition
- CQI-27 Special Process: Casting System Assessment, latest edition

Evaluation shall be self-assessment. The self-assessment shall be made available on request from Vernet. The self-assessment may be conducted as part of the supplier's internal quality audit or conducted separately. The self-assessments are to be retained on-site. This requirement shall apply to any sub-tier suppliers that perform these processes for the direct supplier to Vernet.

CC. Nonconformity and Corrective Action (10.2)

Suppliers are required to use the following:

A. In the event that quality problems are experienced with product provided by a supplier, Vernet corrective action process may escalate through several phases depending on the adequacy and timeliness of the supplier's response and the effectiveness of the actions taken. It may also go straight from problem notification to Senior Management depending on severity and urgency.

NOTE 1: Reworked or repaired material is considered non-conforming unless prior approval of these processes was granted by the Vernet SQE and appropriate Vernet Engineering resources.

B. Vernet will notify the supplier when a nonconformance has occurred. At the time of notification, the supplier will also be advised if a corrective action response is required.
    a. When an MNC is issued to the supplier, it is Vernet US' expectation that the supplier takes immediate action to contain any additional defects. The supplier is expected to take appropriate corrective action to prevent additional defects from being produced or reaching any Vernet site. Vernet SQE's may check supplier's actions taken as part of the Vernet Process/Product audit process.
    b. The MNC gives the supplier the opportunity to document actions taken and Vernet suggests that the supplier document these actions. In some cases, a Vernet Plant may request that the supplier respond to an MNC. If response is requested, the supplier is expected to comply.
    c. If a SCAR (Supplier Corrective Action Request) is issued, the following **must** take place:

i. Suppliers are expected to submit evidence of problem-solving tools used during root cause investigation of the issue. Suppliers are expected to use the Vernet SCAR worksheet to aid in the investigation process and ensure a thorough corrective action response is complete.
ii. Supplier is required to take immediate containment actions to enable Vernet US facilities to operate and protect Vernet from further non-conforming product.

d. The supplier shall submit documented containment results within 24 hours of notification of non-conformity
e. The supplier's containment process must cover all possible areas of potential defects including:
    i. Supplier's manufacturing location
    ii. All potential transportation links (e.g. supplier to ship, ship to warehouse, warehouse to Vernet, etc.)
    iii. All warehousing operations from the supplier through the Vernet facility
    iv. The notifying Vernet facility and any other potential Vernet facilities
    v. The AIAG inventory containment form shall be submitted to Vernet in order to document containment has taken place at all possible inventory locations.
f. Root cause shall be identified and short-term action in place within 48 hours of finding the defect. If a part is "required" to complete the root cause analysis, the 48 hours begins when the supplier receives the part. However, all attempts shall be made to complete the root cause analysis without having component physically in hand. Photographs, measurement data, and defect descriptions are usually sufficient for this purpose.
g. Long term action plan submitted within 10 working days of receipt of SCAR
h. Long term action plan in place within 30 days of finding the defect. Past Due SCARs will be escalated to Vernet management for further review.
    i. Timeliness of suppliers' responses to these due dates are measured and included in the Supplier Scorecard. Failure to submit in a timely fashion could result in a new business hold.
    ii. All SCAR responses will be reviewed by the Vernet US SQE for adequacy.
i. Vernet reserves the right to institute third party sorting/certification of product at the Suppliers location if a Supplier Corrective Action is inadequate or in the case of a recurring defect. Any charges accrued associated with the activities conducted by the Third party will be at the Supplier's expense.
j. PFMEA and Control Plan are to be reviewed and relevant revisions made as part of the problem-solving process. The expectation is that these documents will be submitted as part of the completed SCAR response. Proprietary process documentation requires evidence that the review has been completed by the Vernet SQE. Process changes as a result of the problem-solving process are expected to be submitted to Vernet for review using the SCR process and PPAPs completed where required.

C. Repetitive nonconformance, adverse quality trends, or other issues may escalate the corrective action process to include, but not be limited to:
    a. Formal Process/Product Audit of the supplier's facility by Vernet US Supplier Quality, looking for systemic issues

b. Focused problem-solving activity with agreed measures and targets and routine progress reporting into Vernet US.
c. Submission of capability information on selected characteristics
d. Submission of Paynter Charts tracking defects and Step 3 and Step 6 action monthly
e. Participation in 6 Sigma projects
f. Participation in a formal Vernet Supplier Improvement Process program (SIP)
g. Participation in Controlled Shipping/Consequential Management activities, which may include Third Party containment/component certification processes that are provided at supplier's expense. These actions will be implemented at the direction of Vernet Purchasing Supplier Quality Leader

These activities will be monitored at a senior level at Vernet and require the active participation of senior management at the supplier.

D. The final escalation of the corrective action process, if required, is a meeting of the supplier's highest management with appropriate Vernet Purchasing or Corporate senior management. The supplier must be prepared at this meeting to commit resources to resolve the issues. Failure to follow through with these commitments would initiate re-sourcing activity by Vernet.
E. Vernet monitors supplier-caused disruption costs to Vernet and its Customers. Costs associated with supplier caused disruptions will be recovered from the supplier. Typically, these costs could arise from:
    a. Nonconforming material detected within Vernet or by its customers
    b. Supplier caused warranty issues
    c. Line stoppages at Vernet or its customers due to supplier issues
    d. SQI work beyond normal planned activity Problem Solving

1. Problem Solving

Vernet SCAR worksheet shall be used for problem solving.

Suppliers with high value, chronic or repeat quality issues are expected to participate in any Vernet driven problem-solving initiative.

2. Warranty Management Systems

Organizations shall use CQI-14: Automotive Warranty Management, latest edition to integrate warranty into their quality management system.

3. Continual Improvement

Suppliers are expected to have a tool / process for identifying past and potential defects and ensuring that those defects cannot reach Vernet or its customers as part of their continual improvement process.

Vernet expects suppliers to monitor the outputs of their quality system and continually improve in quality, service, and cost. This philosophy should be fully deployed throughout the supplier's organization. Continual improvement in product characteristics means optimizing at a target value and reducing variation around that value. This assumes that product characteristics currently meet specifications. Vernet customers have high expectations of the quality of the Vernet US products and in order to meet these expectations we are equally demanding of our supply base.

Suppliers are expected to apply continual improvement techniques to non-product characteristics that impact quality, service, and cost such as machine downtime, floor space utilization, first-time PPAP approvals, testing methods, process flows, etc. Lean manufacturing methods are a proven way of achieving these improvements and are encouraged by Vernet.

DD. Forms

Many forms utilized by Vernet are referenced through PPAP, APQP, etc. Of all those referenced forms, the one that is required to be used without modification is the Part Submission Warrant (PSW) illustrated in PPAP. Other referenced forms (e.g., the Control Plan in APQP), are preferred to be used without modification; however, supplier modified forms are acceptable provided all information contained on the reference format is included.

Other forms utilized by Vernet may be Vernet required (e.g., Advanced Quality Planning Status Report) (e.g., SCAR Worksheet). The Vernet SQE will answer supplier questions on whether a form must be used without modification (Vernet required) or if the form may be substituted with a form meeting the intent (Vernet preferred).

EE. References

References cited by this document are the latest versions available at the date of publication. When a cited document is revised after the date of publication, the newer version shall apply.

A. References cited in these Customer-Specific Requirements
B. Automotive Industry Action Group (AIAG) North American Automotive Quality Core Tool Manuals
   - Chrysler, Ford, General Motors Advanced Product Quality Planning and Control Plan (APQP): Second Edition July 2008.
   - Chrysler, Ford, General Motors Production Part Approval Process (PPAP), Fourth Edition, March 2006.
   - Chrysler, Ford, General Motors Failure Mode and Effects Analysis (FMEA), Fourth Edition, June 2008.
C. AIAG Quality Manuals:
   - CQI-8: Layered Process Audit Guideline, 2nd Edition
   - CQI-9 Special Processes: Heat Treat System Assessment, 3rd Edition
   - CQI-11 Special Process: Plating System Assessment, 2nd Edition
   - CQI-12 Special Process: Coating System Assessment, 2nd Edition
   - CQI-14: Automotive Warranty Management, 3rd Edition
   - CQI-15 Special Process: Welding System Assessment
   - CQI-16: ISO/TS 16949:2009 Guidance Manual
   - CQI-17 Special Process: Soldering System Assessment
   - CQI-19: Sub-tier Supplier Management Process Guideline
   - CQI-23 Special Process: Molding System Assessment
   - CQI-27 Special Process: Casting System Assessment, latest edition
D. ISO Standards
   - ISO 9001:2015 “Quality Management Systems – Requirements”

E. International Automotive Task Force (IATF) Publications
- IATF 16949:2016 “Fundamental quality management system requirements for automotive production and relevant service parts organizations”
- Automotive Certification Scheme for ISO/TS 16949; Rules for achieving and maintaining IATF recognition; 5th Edition for IATF 16949, 1 November 2016.

F. Purchasing and Supplier Quality Documents and Applications
- IQS Chain Management
- Supplier Portal
- SCAR Worksheet and 3P5Y
- Supplier Scorecard
- MQV (Manufacturing Quality Verification) Tool
- IMDS and Reach / ROHS

G. Aerospace Standards
- AS9100 Rev D

FF. Revision Log

Revision No:	Modification:	Date:
1	Transferred and Updated for Vernet	5/31/18
2	Update with some FR req	12/11/18
3	Updated for more global similarities	2/18/19
4	Updated to mention AS9100	9/9/2020
5	Updated to include AS 8.4.3 requirements	11/13/2020
6	Updated retention period	9/17/2021
Revised By: Shelby Kushner	**Verified By:** David Hunsucker	
Creation Date: 4/19/18		