

Standard Operating Procedure 14. Supplier Quality Manual (SQM)

Approvals	Revision/Date	Reason for Change
<i>Susan Kasa</i>	01 4/01/17	Complete QMS System Rewrite for AS 9100D

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14.1 Purpose:

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This Boulevard SUPPLIER Quality Manual (SQM) is designed to assist all Boulevard's supply partners in promoting risk based thinking, to support preventive action and planning, fast elimination of nonconformities and continual improvement, to achieve Excellence in Quality, Delivery, Cost and Service. It is also essential to have clear, documented requirements and descriptions of interaction processes, between Boulevard and its SUPPLIERS, defined. It is our mission to provide our Customers with zero-defect products, on-time delivery and to supply them globally at the best cost. This goal can only be achieved with the support and commitment between you, our SUPPLIER, and us. All sections of the SQM are deemed significant to a positive, productive and rewarding SUPPLIER partnership. SUPPLIERS non-compliance to the requirements contained within the scope of this SQM, may drive the initiation of a SUPPLIER Management Review by Boulevard's Management Team. We are convinced that with your understanding and proactive cooperation, we will increase our common competitiveness by adopting a partnership approach. We strive for Excellence and Customer Satisfaction. That is our priority! We look forward to a mutually beneficial business relationship with our SUPPLIERS.

14.2 Communication:

The official business language for all communication and documents, referenced in this SQM, shall be U.S. English. All bilateral communication notifications and questions are to be reviewed and handled through the Boulevard's Purchasing Departmentor, when appointed, by Boulevard's Quality Manager & SUPPLIER Quality Engineering (SQM/SQE) organization on the following topics, such as but not limited to: a) Status changes of the SUPPLIER Management Representative and business ownership b) Status changes of the existing Quality Management System (i.e. new certification, de-certification, reassessments, etc.) c) Any deviation from the requirements, defined within this document, must be formally documented and approved prior to implementation. d) Any request for quality requirements content clarification noted within this document

14.3 Terms & Conditions ("T&Cs"):

In addition to the requirements noted within this document and purchase order clauses, all purchases made by Boulevard, are subject to Boulevard's Standard Terms & Conditions of Purchase which can be found at: Terms and Conditions contained within Boulevard's Web-Site (www.boulevardmachine.com) shall ensure the confidentiality of Boulevard's contracted products, projects under development and related product information. Information is defined as specifications, technical data, drawings, testing requirements, lessons learned, similar shared and communicated information from Boulevard or Boulevard Customers, provided for reference or

development of the SUPPLIERS processes, controls, as part of the contracted products and projects. As such, no information shall be disclosed with any external party, without prior written approval of Boulevard Machine & Gear.

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14.4 Warranty:

Boulevard and Boulevard Customers expect full product functionality and durability during the period of use of a product/ sub-assembly and the complete product. Boulevard's T&Cs describe in detail the minimum warranty period, or for such longer period as specified by Boulevard. The application of risk based thinking, for example, robust product validation during program phases, the use of proven standards during the production process, strict change control, regular system/process and product audits, incl. the implementation of a continual improvement mindset, will ensure satisfaction of the final Customer and will avoid a negative "field-image" of Boulevard and SUPPLIERS. In case of warranty quality issues, where the SUPPLIER- product is involved (evidence of a negative influencing factor within the SUPPLIER product), Boulevard will formally notify the SUPPLIER management. Upon notification, the SUPPLIERS shall implement the 8D- containment and corrective action process immediately without due delay. Costs related to the financial warranty consequence may result in the SUPPLIERS reimbursement to Boulevard. This is justified due to the end Customer obligations related to warranty, field returns and re-calls, where the SUPPLIERS product has a direct negative influence, to the Boulevard's product supplied.

14.5 SCOPE:

SUPPLIERS are fully responsible for the Quality, Delivery and Cost of their products and services. This document describes/establishes Boulevard's SUPPLIER Management requirements for SUPPLIERS who design, and/or manufacture and/or control respective components in accordance with Boulevard's design and product requirements. The SQM requirements apply to SUPPLIERS that provide Boulevard manufactured components, out sourced processes and special processes. The SQM requirements are in addition/complimentary to those in purchase orders, contracts, specifications or drawings. The word 'shall' indicates a mandatory requirement. The word 'should' indicates a guideline (mandatory requirement with some flexibility allowed in compliance methodology). SUPPLIERS choosing other approaches to satisfy a 'should', must be able to show that their approach meets the quality requirements of this document, and must be agreed upon prior to implementation. Boulevard is required to flow down Industry and Customer requirements to SUPPLIERS whose component is incorporated into Boulevard's Aerospace / Commercial customer finished part. The flow down of these requirements are identified on supplied Purchase Order, Blueprints and Technical Documents, and then the requirements are applicable to all SUPPLIERS irrelevant of end component use. Boulevard expects that SUPPLIERS are experts of the industry specific standards and provide active support to Boulevard, to be able to deliver the perfect product and service to Boulevard's

Customers and end- consumers. The content of the SQM does not supersede or amend the terms of any policies of the company, which maybe more detailed or restrictive.

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14.6 SUPPLIER CODE OF CONDUCT:

Introduction:

Boulevard recognizes the shared values we have with customers, employees, suppliers and the parties with whom we do business. We are committed to the highest standards of integrity and ethical behaviors. We require third parties, we do business, with to achieve similarly high standards. Boulevard's SUPPLIER Code of Conduct sets out the general requirements applicable to any SUPPLIER who provides goods or services to Boulevard. Consistent with these commitments, Boulevard requires its SUPPLIERS to acknowledge and adhere to the SUPPLIER Code of Conduct. Boulevard's policies and procedures related to these standards are presented on Boulevard's Website and, as appropriate, in this Boulevard SQM. The provisions of the SUPPLIER Code of Conduct are in addition to, and not in lieu, of the provisions of any legal agreement or contract between a SUPPLIER and Boulevard or any of its affiliates. We expect SUPPLIERS to hold their supply chain, including subcontractors and third-party labor agencies, to the same standards contained in this Code. This SUPPLIER Code of Conduct does not create any third-party beneficiary rights or benefits for SUPPLIERS, subcontractors, their respective employees or any other party. Boulevard reserves the right to update, alter, or change the requirements of its SUPPLIER Code of Conduct, and Suppliers shall accept such changes and act accordingly. Nothing contained in any document issued by the SUPPLIER shall be deemed to modify or amend any part of the SUPPLIER Code of Conduct. All SUPPLIERS are encouraged to visit our website where the Boulevard- Code of Business Conduct and Ethics, and other related policies are located: Boulevard's - Code of Business Conduct and Ethics Policies referenced in the SUPPLIER Code of Conduct, but not currently posted online, are available upon request.

14.7 Scope of SUPPLIER Code of Conduct:

Boulevard's SUPPLIER Code of Conduct is posted online at: (www.boulevardmachine.com)

The following categories are addressed in the SUPPLIER Code of Conduct:

1. Compliance with Laws
2. Human Rights and Labor
3. Workplace Health and Safety
4. Responsibility for the Environment
5. Conflicts of Interest
6. Bribery, Kickback and Fraud
7. Material Content Reporting
8. Responsible Sourcing of Minerals

9. Privacy and Data Protection
10. Intellectual Property
11. Compliance with Export Controls and Economic Sanctions
12. Whistleblower Protection
13. Contractor and SUPPLIER Requirements

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14.8 Enforcement of SUPPLIER Code of Conduct:

Boulevard SUPPLIERS are advised that they may be subject to survey and audit by third parties on behalf of Boulevard to verify compliance with the following provisions. Non-compliance or misrepresentation of compliance by a SUPPLIER may result in sanctions, including, but not limited to, termination of their agreements with Boulevard for default.

14.9 SUPPLIER MANAGEMENT PROCESS:

Boulevard's SUPPLIER Identification:

A) Selection and Approval All identified SUPPLIERS are evaluated, to determine risks, if an adequate quality system, development experience and technology/manufacturing capabilities is/are in place, to continuously ensure the uninterrupted supply of high-quality products / services to Boulevard and their Customers.

B) The identified SUPPLIERS are assessed to the requirements defined in the Boulevard's design, process and system documentation.

C) This assessment may include a SUPPLIER self-survey, a SUPPLIER validation review and/or an onsite audit.

D) SUPPLIER New Component Sourcing Component development for production is managed by the Boulevard Component Sourcing Process, which aligns and interfaces those requirements such as, but not limited to, Customer and End-User Industry requirements, the Product Development and Mass- Production Processes, etc...

E) Selected SUPPLIERS are expected to have the technical competence and proactive leadership, during program phases and mass-production to ensure that all applicable requirements are met as required, prior to releasing product or information to Boulevard.

F) SUPPLIER Performance Monitoring & Improvement SUPPLIERS must demonstrate ongoing performance compliance to the agreed upon requirements.

G) SUPPLIERS performance is monitored in key performance indicator areas including Quality, Delivery and Cost, to demonstrate continual improvement and ongoing capability/ compliance.

H) SUPPLIER Corrective Actions & Escalation SUPPLIERS shall establish and maintain a Quality Management System to protect Boulevard and our Customers from receiving non-conforming material, components, assemblies and services.

I) In case the SUPPLIERS delivery performance has an adverse effect on the Boulevard/- Customer requirements or key performance indicators, a Corrective Action Process, CS

(Controlled Shipment) or a SQIP (SUPPLIER Quality Improvement Plan/Process) shall be applied.

J) If corrective and preventive actions are not effective, delayed or ongoing adverse effects continue demonstrating no improvement, or weaknesses cannot be eliminated in a robust way (re-occurrence of same issues), the Escalation Process will be reinforced

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K) Boulevard's SUPPLIER Business maybe put Hold or SUPPLIER Disengagement In the event SUPPLIER's performance does not demonstrate improvement during the Escalation Process, a disengagement process will be considered. This process will be initiated and communicated by

the Boulevard Purchasing Team, including the launch of the New Business Hold status as an initial, temporary stage or a permanent disengagement as final-stage.

14.10 SUPPLIER QUALITY MANAGEMENT SYSTEM [QMS]:

General Requirements:

The SUPPLIER QMS system shall ensure conformance of all products and processes, including service parts and those that are outsourced to all applicable Boulevard, Boulevard's customer, statutory and regulatory requirements

For simplification, the ISO 9001 requirements are not repeated within this document. SUPPLIERS shall establish, implement, maintain and continually improve their QMS system, which is continually monitored against Boulevard requirements, Customer Specific Requirements (CSR) or expectations of other interested parties, requirements stated in this SQM content, issued drawings /specifications, purchase orders, and/or separate purchase agreement Boulevard requests that SUPPLIERS maintain a certificate to the latest revision of ISO 9001, issued by an accredited third-party certification body.

It is the responsibility of the SUPPLIER to ensure:

- A) Certificate Scope: The scope of the QMS must be consistent with the component being submitted for the site(s), including any remote support locations, which may interface with the manufacturing sites (i.e., design centers, Customer service, logistics, outsourcing, etc.).
- B) Certificate Validity: The certificate, to be submitted to Boulevard, must be valid and not fraudulent. When it is identified that the certificate is fraudulent, Boulevard will be required to take immediate action by initiating a corrective action request from the SUPPLIER.
- C) Information of 1st/2nd/3rd party SUPPLIER QMS- audit results, should be made available for Boulevard, upon request by the Boulevard's Purchase Manager or SUPPLIER Quality Team (SQM/ SQE), and might be taken into consideration for new business opportunities of the SUPPLIER or Boulevard's risk evaluation.

14.11 Product Safety:

[where applicable] The SUPPLIER shall have documented processes for the management of product safety related products and manufacturing processes, which shall include, but not limited to, the following:

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- A) Identification by the SUPPLIER of statutory and regulatory product-safety requirements.
- B) Boulevard's notification of requirements in item above
- C) Special approvals for design FMEA [in case of design by the SUPPLIER]
- D) Identification of product safety-related characteristics.
- E) Identification and controls of safety-related characteristics of product and at the point of manufacture;

- F) Special approval of control plans and process FMEAs;
- G) Reaction plans in case of non-conformity or risk
- H) Defined responsibilities, definition of escalation process and flow of information, including top management, and Boulevard a notification.
- I) Training identified by the organization or customer for personnel involved in product-safety related products and associated manufacturing processes.
- J) No temporary/ unqualified operators at Product Safety Workstations
- K) Changes of product or process shall be approved prior to implementation, including evaluation of potential effects on product safety from process and product changes (see ISO 9001, Section 8.3.6);
- L) Transfer of requirements regarding product safety throughout the supply chain, including customer designated sources
- M) Product traceability by manufactured lot (at a minimum) throughout the supply chain
- N) Lessons learned for new product introduction.
- O) Definition/ clarification if a special approval is needed to be defined between Boulevard and the SUPPLIER In case the SUPPLIER is developing and manufacturing Product Safety components or assemblies for Boulevard, a "Product Safety Representative" shall be defined by the SUPPLIER management.

**In case the SUPPLIER is developing and manufacturing Product Safety components or assemblies for Boulevard, a "Product Safety Representative" shall be defined by the SUPPLIER management.

14.12 Commercial, Aerospace, HVOR, Component SUPPLIERS:

Boulevard strongly recommends SUPPLIERS to maintain third party-registration to the latest revision of ISO 9001 by an accredited third-party certification body or as alternative/additional a valid industry specific QMS certificate.

Certification Exception:

For those SUPPLIERS who are unable to demonstrate third-party certificates, a documented compliance plan must be submitted to the assigned Boulevard Purchase Manager or on request to the assigned SUPPLIER Quality Team (SQM/SQE) for review, acceptance (by Boulevard SQM, SQE) and monitoring. The agreed plan, must define the projected timeline, responsibilities and actions to achieve a QMS certification by a third-party Registrar. SUPPLIERS are responsible and

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accountable for the execution of the Boulevard accepted plan. SUPPLIERS who are unable to execute upon the plan, may require Boulevard to initiate an escalation process against the SUPPLIER. SUPPLIERS, who are not registered to an industry quality management standard as noted above, must have a QMS-system in place to ensure they meet Boulevard's Quality, Delivery and Cost excellence expectation. Boulevard may schedule/request QMS- compliance checks [SENSATA Process Assessment SPA] to measure the gap between fundamental QMS expectation and the reality at the SUPPLIERS site, to evaluate risks for Boulevard and Boulevard Customers. The SUPPLIER must correct identified weaknesses during a period defined by Boulevard.

14.13 Control of Outsourced Processes Relationship:

SUPPLIERS shall ensure full control over outsourced processes. SUPPLIERS shall notify Boulevard regarding any outsourcing projects, prior approval before execution by Boulevard Purchasing Manager is mandatory and required. The control over such a TIER 2 SUPPLIER processes, does not absolve the TIER 1 SUPPLIER of the responsibility for product conformity

to all Boulevard requirements, but also includes costs incurred by Boulevard due of quality nonconformance incidents and delivery disruptions. For a selected TIER 2 SUPPLIER, the same rules are applicable as described. SUPPLIERS shall notify Boulevard Purchasing Manager and SQM/ SQE prior to implementation of any change in the outsourced process relationship between the SUPPLIERS and their respective TIERS. Notification after implementation may warrant Boulevard to initiate Containment / Corrective Action and an Escalation process.

14.14 DOCUMENTATION AND RECORD MANAGEMENT:

General Requirements:

SUPPLIERS shall establish and maintain a procedure/structure, to control all documents that relate to product and process requirements and the expectation of this Boulevard SQM. The process to control documents must include the origination, review, use, safe storage and change control of all documents. Document changes (latest revisions) are to be communicated to the impacted processes to ensure that the operations are being performed, to meet product and process requirements. Document change history must be clearly noted. Documents can be in any type of media, such as paper copies or in an electronic format. Documents may include:

- A) Boulevard Purchase Order and related documentation
- B) Drawings, Customer and Boulevard Specifications, Component Specifications (form, fit & function)
- C) Failure Mode Effects Analysis (FMEA), Control Plan, Work Instructions, Inspection/Testing Instructions/Plans, Control Charts, etc. SUPPLIERS shall clearly demonstrate the relationship

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between the requirements and the documented procedures in their own Quality Management System.

14.15 Product & Process Document Control:

Boulevard requires SUPPLIERS to coordinate and obtain approval from Boulevard, when previously production approved document changes are made that impact product function, testing and control methods. These documents may include but not limited to: Failure Mode Effects Analysis (FMEA), Control Plan, Inspection / Testing Method and Frequency, Equipment refurbishment frequency, etc.

14.16 Documents of External Origin:

SUPPLIERS shall refer to the latest revision of the documents of external origin noted below, as applicable:

Table 1 – Document of External Origin Listing
REQUIREMENT TITLE LOCATION ISO 9001
Quality management systems – Requirements www.iso.org ISO 10007 Quality management systems

Guidelines for configuration management www.iso.org ISO14001 Environmental management

systems www.iso.org IATF 16949 Automotive Quality Management System Standard

www.iatfglobaloversight.org AS 9100 Aerospace Standard - Quality Management System

Requirement www.sae.org AS 9102 Aerospace Standard

First Article Inspection Requirements www.sae.org AS 9103 Aerospace Standard

Variation Management www.sae.org AS 9003 Aerospace Standard

Inspection and Testing www.sae.org AS 9006 Aerospace Standard

Software Supplement for AS 9100 www.sae.org ISO 26262 Road Vehicles

Functional Safety Automotive E/E Systems www.iso.org ECMP Electronic Component

Management Plan www.sae.org APQP AIAG

Advanced Product Quality and Control Plan www.AIAG.org FMEA AIAG

Potential Failure Modes and Effects Analysis www.AIAG.org PPAP AIAG

Production Part Approval Process www.AIAG.org SPC AIAG

Statistical Process Control www.AIAG.org MSA AIAG

Measurement Systems Analysis www.AIAG.org CQI-9 Special Process:

Heat Treating System Assessment www.AIAG.org CQI-11 Special Process:

Plating System Assessment www.AIAG.org CQI-12 Special Process:

Coating System Assessment www.AIAG.org CQI-15 Special Process:

Welding System Assessment www.AIAG.org CQI-17 Special Process:

Soldering System Assessment www.AIAG.org CQI-23 Special Process:

Molding System Assessment www.AIAG.org Example:

USCAR 21 Performance Specification for Cable-to-Terminal Electrical Crimps [see also other Customer specific standards of such application] www.sae.org ASME Y14.5M ANSI -

Dimensioning and Tolerancing www.ansi.org (ELVD)2000/53/EU End of Life Vehicle -

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International Material Data System Directive (ELVD) 2000/53/EU
http://ec.europa.eu/environment/waste/elv_index.htm EC 1907/2006 REACH Regulation EC 1907/2006 on Registration, Evaluation, Authorization (and Restriction) of Chemicals
<http://reach.aiag.org/> 17 CFR Parts 229 and 249 Conflict Minerals Title XV of the Dodd-Frank Wall Street Reform and Consumer Protection Act Conflict Minerals Reporting – Dodd Frank Section 1502, 1503, 1504 <http://www.sec.gov/spotlight/doddfrank/speccorpdisclosure.shtml>

14.17 Control and Retention of Records:

SUPPLIERS shall establish and maintain a procedure defining the identification, collection, access, filing, storage and disposal of quality records. Quality records shall be maintained to demonstrate conformance to specified requirements and the effective operation of the quality system. All quality records shall be stored and retained in such a way, that they are readily retrievable and accessible, within an environment that provides safe storage conditions, a suitable environment to prevent damage and deterioration to prevent loss. The specified retention periods shall be considered “minimums” and do not supersede any governmental or a specific Customer requirement. SUPPLIERS shall be responsible for notifying and flow down to their SUPPLIERS the responsibility, to retain all documents and records referred to in this section. If Boulevard record retention requirements for a specific product vary from those listed, special requirements shall be specified in the Boulevard requirements and purchase order for that product. In the event of a termination of business, all SUPPLIERS shall be contacted in order to transfer any applicable records pertaining to raw parts/or services provided to Boulevard. SUPPLIERS shall make records available for review when requested by the Boulevard Purchasing organization or the Boulevard SUPPLIER Quality team.

14.18 Configuration Management:

SUPPLIERS shall establish, document and maintain a configuration management process appropriate for the component. Configuration Management is a process for establishing and maintaining consistency of a product's performance, its functional and physical attributes with its requirements, design and operational information throughout its life. Guidance on configuration management is provided in ISO 10007.

14.19 Management Responsibility of the SUPPLIER = Customer Satisfaction:

- A) Customer Satisfaction SUPPLIERS shall ensure that Boulevard’s requirements are determined and met with the intent of enhancing Customer satisfaction, monitoring trends within the processes, production and quality systems in place, to assure effectiveness and efficiency.
- B) Product and Process Special Characteristics SC - or Key Characteristics, Part 1 (KPC Key Product Characteristic & KCC Key Control Characteristic) Throughout the product lifecycle (development, pre-launch, serial production and service parts) the SUPPLIER shall establish and

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document the method of identifying and controlling the flow down of all product Special Characteristics [Key Product Characteristics (KPC) and Key Control Characteristics (KCC)] that

are Customer, Boulevard and SUPPLIER identified. Control is considered by means of interface dimensions, functional testing, aging and simulation tests, requalification frequency and scope, etc. The identification and control requirements must flow down to the operator level, such as in: work instructions, visual aids, inspection and testing plans. The identification and control shall also be considered throughout all stages of the product quality/control plan development, such as prototype, pre-launch, safe launch and serial/mass-production. The required inspection details,

testing acceptance criteria (including sample size, frequency documentation and actions to launch in case of non-conformity or abnormality), machine parameter follow up, tooling and maintenance status, shall be detailed in the Control Plan/ documented in procedures & instructions.

C) Acceptance Criteria SUPPLIERS shall pro-actively initiate the identification of acceptance criteria requirements throughout the product lifecycle for the component, commodity and equipment/tooling being sourced. This includes all relationships involved between SUPPLIERS, Sub-tier and Boulevard. Boulevard's SUPPLIER Quality Engineering will support and require that acceptance criteria and standards are defined to avoid misunderstanding and vagueness. Together with the assigned Boulevard Management team, the SUPPLIERS shall clarify acceptance criteria at least for Special Characteristics and the methods to control them, such as measurement and test procedures, checking frequencies, failure catalogues, boundary samples, gage selection, including the required documentation. Approved criteria sample representative(s) that are provided by Boulevard containing a permanent signature and date, are to be retained in a manner to preserve the integrity of initial part condition.

D) SUPPLIER Escalation Process in Programs, Serial Production and Aftermarket [Service/ Spare parts] SUPPLIERS shall establish a robust escalation process, to ensure advance notification to SUPPLIER management and Boulevard to mitigate issues that may jeopardize the key deliverables, such as but not limited to: Quality, Program Deliverables and Delivery (Line Shut or Stoppage, etc.). A proactive notification to the assigned Boulevard Purchasing Manager and SQM by the SUPPLIERS, where the risk to Boulevard or its Customers' final products and programs are impacted, including any products previously shipped, referred to warranty or field, is expected. This Escalation Process and the related advance notification is also to apply, because of issues resulting from the SUPPLIER's sub-SUPPLIERS (related to sub-components, sub-materials and contracted services).

14.20 SUPPLIER Contingency Plans:

SUPPLIERS shall maintain a contingency plan to satisfy Boulevard requirements in order to maintain continuity of quality product delivery in the event of an emergency. Emergencies may include, but are not limited to, natural or human disasters, utility interruptions, labor shortages, raw material or sub-component shortages, cyber-attacks, key tooling or equipment failures and field returns. Contingency plans shall consider communication methods and contacts necessary to facilitate a timeliness exchange between SUPPLIERS and Boulevard.

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14.21 Change Control, Notification and Approval:

SUPPLIERS shall have a process to control and react to changes that are initiated internally and externally, including those initiated by Boulevard. Such changes that affect the product realization and related processes shall include: product design, process design, manufacturing, etc... For proprietary design, impact on form, fit and function (including performance and/or durability) shall be reviewed with the assigned Boulevard's representative, so that the effect can be properly evaluated and assessed for risk. Any change, initiated by the SUPPLIERS and sub-

SUPPLIERS, that affect Boulevard's product and process requirements throughout all stages of the product lifecycle, initial production release, development, serial production and service, require a written SUPPLIER Request for Engineering Approval (SREA) to be submitted to Boulevard's Procurement, incl. information of Boulevard's SUPPLIER Quality Engineering. Prior to any realization of the change, the approval of Boulevard's Procurement is mandatory. Typical MAJOR changes may include but not limited to:

A) MOVEMENT | Facility, equipment, warehousing, etc.

B CHANGING Component material, SUPPLIER source, testing method/frequencies, etc.

C) IMPROVEMENT | "Lean"- efforts, Continual Improvement projects (HOSHIN, KVP), Six Sigma actions, etc.

D) ADDITIONS & REMOVALS | Add or removal of tooling and equipment, etc. In case of questions, contact Boulevard's Purchasing and engineering, if there are doubts if an official, written notification of Boulevard is needed or not. REMINDER: SUPPLIERS are required to notify and obtain approval prior to implementation of the identified change from the Boulevard Procurement Manager. This notification shall occur at the conception of potential change(s) at the SUPPLIERS or Sub-SUPPLIER, to provide ample review and approval timing by Boulevard and their Customers prior to the implementation of the change. SUPPLIERS Boulevard expects SUPPLIERS to include, as part of the SREA, a risk assessment/mitigation concept and validation plan. The "risk based thinking assessment" should consider the 6M-factor methodology (machine, man, method, materials, environment and measurement). In certain situations,

SUPPLIER change notifications are required to meet Boulevard's Customer change notification and timing of submission before implementation of any change. SUPPLIERS must consider those circumstances when notifying Boulevard about planned changes. Examples that do not require notification to Boulevard, but require before and after inspection records, as well as lot control record, includes: equipment and tool maintenance; repair of broken tooling or equipment; or replaced expendable tooling or fixtures; change of manpower and new lots of approved materials; or similar. All changes noted in section

E) Above, shall be managed, monitored, measured and recorded throughout pre and post-change process, with consideration to all affected Special Characteristics (product & process) or relevant

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parameters, including validation plans and results. Change of validation plans and results must be made available to Boulevard's SUPPLIER Quality Engineering and Boulevard's CUSTOMER

Quality Engineering, upon request. Recording of Change description in the history for product & process documentation shall be controlled Record Retention.

14.22 PROCUREMENT MANAGEMENT OF THE SUPPLIER:

Purchasing Process SUPPLIERS shall use the organization and/or Boulevard and Boulevard Customer's approved sources when specified on prints or purchase orders. All SUPPLIERS and Sub-SUPPLIERS must conform to Quality Management System requirements as described. This does not absolve the SUPPLIERS from the responsibilities to ensure qualification and \ requirement compliance.

14.23 Statutory and Regulatory Conformity:

SUPPLIERS shall comply with the statutory and regulatory requirements, in the country of receipt, the country of shipment and the Boulevard identified country of destination, if provided, including recycling, environmental impact and characteristics identified, as a result of the SUPPLIERS knowledge of governmental law and Customer and industry specific standards, related to the product and manufacturing processes. SUPPLIERS shall provide the component material information as requested by the assigned Boulevard Purchase Team and Boulevard's SQE, such as but not limited to:

1) Guidance on statutory and regulatory requirements is provided in End of Life Vehicle - International Material Data System Directive (ELVD) 2000/53/EU, as required as part of the Production Part Approval Process -PPAP, (see section 9.16). Regulation compliance to EC 1907/2006 on Registration, Evaluation, Authorization (and Restriction) of Chemicals (REACH). 17 CFR Parts 229 and 249 Conflict Minerals Reporting requires that materials or production process for those components purchased by Boulevard or Boulevard's third party SUPPLIERS meet the conflict mineral reporting per the requirements set forth in section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Because of the complexity of

regulatory specifications in addition to the above, it is highly recommended if in question of requirements please contact the Boulevard's SQE.

2) Verification of Purchased Products SUPPLIERS are responsible for purchased products. Therefore, SUPPLIERS shall have a process to assure the quality of purchased products that may include, but is not limited to:

- a) Obtaining objective evidence of quality of products from sub-SUPPLIERS (e.g., accompanying documentation, certificate of conformity, test reports, statistical records, process control)
- b) Inspection and audit at sub- SUPPLIERS premises
- c) Review of the required documentation
- d) Inspection of products upon receipt
- e) Delegation of verification to the SUPPLIER, or SUPPLIER certification

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f) Utilize Corrective Action Methodology when Sub-SUPPLIER provides Non-Conforming raw material and -sub-components

g) Monitor sub-SUPPLIER for ongoing performance and ensure Continual Improvement
Purchased product shall not be used or processed until it has been verified as conforming to specified requirements, unless it is released under positive recall methods or procedures.

14.24 Control Plan:

SUPPLIERS shall establish and maintain a process that identifies product and process parameter controls for the Special Characteristics (CC/SC) and other relevant characteristics from receiving inspection through shipment. SUPPLIERS shall ensure that those characteristics are stipulated in the process flow and the Control Plan, describing the measurement control method of the part/process, typically referred to as a Product Inspection Standard, and must be made available for review and approval by the assigned Boulevard SUPPLIER Quality Engineering team. Control plans are considered living documents and should continually reflect the product- and process lifecycle. Typical content of a Control Plan:

A) What to check?

B How to check?

C) The checking frequency and the sample size

D) The acceptance criteria, attributive / appearance and variable criteria

E) Documentation of results

F) The reaction mode in case of non-conformity SUPPLIERS must develop and submit for review the Control Plan and process flowchart/diagram for the product to the assigned Boulevard's SQE. During the pre-launch trials (Run @ Rate), the SUPPLIERS must conduct testing, process analyses and validation to support the contents of the Control Plan. During the Process and Product validation process, the control plan to be reviewed/updated to reflect changes necessary to control the process. Submissions of changes to the Control Plan during the pre- launch phase and after PPAP/FAI must be submitted by the SUPPLIERS and approved by the assigned Boulevard's SQE.

14.25 Statistical Process Control [SPC]:

Depending upon the nature of the component and depending on the specified requirements, the appropriate statistical tools/techniques for each process shall be identified, during the Advanced

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Quality Planning, Product Realization Processes and documented in the Control Plan/ Work Instruction. SUPPLIERS shall initiate a reaction plan from the Control Plan for characteristics

that are either not statistically capable or are unstable. • The reaction plans shall include containment of the product and 100% inspection, as appropriate (in case short term/ long term capability indicators are below target, SUPPLIERS reaction plans must identify specific timing and assigned responsibilities to ensure that the process achieves the stable and capable requirements. Corrective actions shall be implemented by the SUPPLIER to permanently sustain the capability requirements defined by Boulevard. The plans shall be reviewed with and approved by the assigned Boulevard's SQE. SUPPLIERS shall submit upon request the SPC capability data (ppk, cpk) on CC/SC and SPC controls within 24hours from the request made by the Boulevard's SQE. This process shall result in the following records to be retained by the SUPPLIERS, corrective actions and effective date of process changes.

14.26 Work Instructions:

SUPPLIERS shall document and control work instructions for all employees having responsibilities for the processes that affect conformity to product requirements. Work instructions shall be derived from FMEAs and Control Plans and accessible for use at the workstations. Any media method maybe used to document and control work instructions.

14.27 Calibration/Verification Records:

SUPPLIERS shall maintain a record/register of the calibration/verification activity for all gages, measuring and test equipment needed to provide evidence of conformity of product to determined requirements, including employee and Customer owned equipment. The record/register shall include:

- a) Unique equipment identification
- b) GRR study results (equipment! and users!)
- c) The measurement standard against which the equipment is calibrated

- d) Revisions following engineering changes
- e) Any out-of-specification readings as received for calibration/verification
- f) An assessment of the impact of out-of-specification condition
- g) Statements of conformity to specification after calibration/verification
- h) Notification if suspect product or material has been shipped, because of poor measurement equipment.

14.28 PPAP Submission Levels:

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The Part Submission Warrant (PSW) or Initial Sample Inspection Report (ISIR) are the formats summarizing the Product Approval Package, documenting and confirming form – fit and function, including durability. SUPPLIERS are required to submit either the PSW or ISIR to

Boulevard's SQE, requesting the reason for submission (New product, design change, annual revalidation, etc.) and the PPAP submission level, as defined below:

Level 1 - PSW report only (cover page), submitted to Boulevard's.

Level 2 - PSW with product samples and limited supporting data.

Level 3 - PSW with product samples and complete supporting data.

Level 4 - PSW and other requirements as defined by the Boulevard's SQE.

Level 5 - PSW with product samples and complete supporting data available for review at the SUPPLIER's manufacturing location.

Boulevard's SQE will determine and communicate the required PPAP submission level based on the reason requested by SUPPLIERS. The PSW/ISIR is the formal communication record between Boulevard's SQE and SUPPLIERS. When additional requirements beyond product quality are required related to the PSW/ISIR, these are to be closely communicated and documented as necessary and may be done so using Boulevard's Purchase Order Clauses.

Boulevard requires at a minimum a Level 3 PSW/ISIR from SUPPLIERS, unless communicated otherwise by Boulevard's SQE. In case of [I] – ST Commercial, a PSW level 4 is required; defining specific PSW/ISIR expectations of SENSATA linked to this business (see also QMS-1006304 - RIS (Request for Initial Samples) as first guideline). SUPPLIERS are required to submit all Level required documents either electronically or hard copy in an organized manner. All Level required documentation must correspond with the samples provided. The Boulevard SQE and SUPPLIERS will agree upon the initial sample due date and the required product sample quantity, especially the quantity of numbered samples documented in dimensional PPAP documents. SUPPLIERS shall ensure that all requirements related to the PPAP documentation submission is fully understood and compliant at submission. SUPPLIERS shall ensure that all related documents related to the PSW/ISIR request are retained in a manner to allow easy accessibility throughout the product lifecycle. The PPAP master representative sample(s) are to be Boulevard's. – Proprietary Information stored in a manner to preserve the product integrity for the duration of the PPAP retention period.

14.29 PPAP – Supplemental:

SUPPLIERS are to demonstrate and ensure the following with regards to PAPP submissions, and when in doubt request clarification from the Boulevard's SQE.

a) All data provided to Boulevard must be current.

b) General statements indicating, "Parts conform to specification", or similar, are not acceptable for Boulevard.

c) When the SUPPLIER does not have access to laboratory or test equipment to supply detailed information, outside resources should be employed at the SUPPLIERS expense.

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- d) Rejection and return of test data or dimensional reports indicating, that the representative production lot from which samples were taken and accompanying documentation does not meet Boulevard's requirements.

- e) Corrected products and documentation must be resubmitted for approval, prior to production quantities being accepted by Boulevard.
- f) If complete data or correct samples cannot be provided the PPAP/ PSW- ISIR will be rejected.
- g) In case of PSW/ ISIR approval, Boulevard will sign and return the document to the SUPPLIER, which will indicate the successful PPAP submission.
- h) After initial approval, SUPPLIERS are responsible for assuring that future products continue to meet Boulevard requirements.
- i) Using continuous improvement techniques and proactive management at the SUPPLIERS, nonconformance is eliminated or the process is optimized permanently.
- j) Any improvement change, including process and manufacturing facility location, should require resubmission for approval and new components, reflecting current quality, held as retain master.

14.30 First Article Inspection:

SUPPLIERS shall conduct a First Article Inspection (FAI) to the requirements defined in the AS9102 standard. The FAI Report (FAIR) must be approved by Boulevard. In addition to AS9102 standards, Boulevard requires a new FAI for the following:

- a) If a change on design affecting form, fit, or function of the part
- b) A change in manufacturing sources, processes, inspection methods, locations of manufacture, tooling and materials that can potentially affect fit, form, or function
- c) A change in numerical control programs that can affect fit, form, or function
- d) A natural or manmade event, which may adversely affect the manufacturing process
- e) A lapse in production for 2 years or specified by Boulevard.

SUPPLIERS are requested to collaborate with Boulevard's SQE directly for clarification as to the FAI requirements specific to the product being sourced.

14.31 SERIAL/MASS- PRODUCTION MANAGEMENT:

SUPPLIERS are responsible for assuring that serial products continue to meet Boulevard's requirements at all times. SUPPLIERS are to manage an effective serial product production, through the use of Product- and Process Controls and active continual improvement culture. SUPPLIERS shall anticipate and understand the industry market expectations and requirements for the components being sourced by Boulevard. Boulevard is to flow down to SUPPLIERS, Boulevard Customer specific requirement, specification and expectations related to the component or part being sourced, through various methods, such as but not limited to:

- 1) Drawings

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- 2) Specifications
- 3) Purchase order clauses
- 4) Contract/agreements

**Requirements SUPPLIERS shall demonstrate the inclusion of the following sections in the serial product production processes.

14.32 Staffing Qualification:

SUPPLIERS shall define a process to manage human resources as follows:

- a) Selection and qualification of employees according to the requirements of their job responsibilities
- b) Documented job descriptions
- c) Provide a retention and sustainment of employees required for the operational processes
- d) Assessment of competency and qualifications through employee development and personal growth at a minimum annual basis
- e) Address the assessment development actions required to help employees achieve their competency expectations
- f) Provide training plans for all employees from top management to operator levels with focus on:
 - Safety, Quality, Delivery, Cost efficiency
 - Boulevard requirements and expectations
 - Product and process nonconformity recognition and reaction plans
 - Define a staffing contingency plan for to ensure a high level of performance in case of urgency or missing regular employees.

14.33 Receiving Inspection:

Purchased material and products shall be subject to inspection after receipt. SUPPLIERS shall determine the risk associated with the definition of the sample frequency or size selected to support the incoming inspection plan, examples including:

- New products, no PPAP release yet
- Receiving's after complaints (by Customers – like Boulevard)
- Poor performing SUPPLIERS, critical products
- Re- occurrence issues
- Skip lot

Operators shall be qualified to perform those tasks assigned within the roles of responsibilities in the receiving inspection process. SUPPLIERS shall not rely solely on “Receiving Inspection” as a method to control nonconforming product. This does not absolve the SUPPLIER’s liability for

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shipping a non-conforming product to Boulevard. SUPPLIERS shall implement throughout the serial product production process the methods of controls to prevent nonconformance escapes to Boulevard.

14.34 Continual Improvement Process:

SUPPLIERS shall have a process for driving Continual Improvement (CI) activities at all facilities, which are to be documented, tracked, and provide evidence of “before and after”.

Boulevard promotes continual improvement and requests SUPPLIERS to ensure that any Continual Improvement activities are complying. SUPPLIERS are requested to contact Boulevard SQE in case of questions or doubts before the CI-actions are implemented. It is Boulevard’s mission to provide its Customers with zero-defect products, on-time delivery and global continuity of supply at the best cost. SUPPLIER supports this mission by implementing and complying with basic serial production practices including:

- Adherence to product and process requirements and specifications

- Built in quality both for process and product
- Monitoring of process capability
- Reacting in timely manner to nonconformities
- Driving continual improvement in product and process activities SUPPLIERS shall ensure that Boulevard’s requirements are determined and met with the aim of enhancing Customer satisfaction, risk reduction, monitoring trends within the processes, product and quality system to assure their effectiveness and efficiency.

14.35 Product & Process Performance Monitoring:

SUPPLIERS shall utilize a methodology such as but not limited to: Man, Machine, Material, Method, Measurement and Environment [6M], to establish and monitor product & process performance considering quality performance production processes (one-piece flow...), active stock level management, and highly qualified employees. SUPPLIERS shall perform process studies on all new and existing manufacturing (including assembly or sequencing) processes to confirm process capability and provide additional input for process controls. SUPPLIERS shall document the results of process studies in specifications, where applicable, for means of production, measurement, test, and maintenance instructions. These documents shall include objectives for manufacturing process capability, reliability, maintainability, and availability, as well as acceptance criteria for GOOD and BAD products and processes. SUPPLIERS shall maintain manufacturing process capability or performance as specified in the Production Part Approval Process -PPAP- requirements noted. Proven processes and routines must be defined with continual adherence and evaluated applying suitable methods to ensure top quality, identify risks and discover and eliminate weaknesses.

For example:

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- Defined process parameters (e.g., pressures, temperatures, times, speeds)
- Data for machines, tools, tooling aids
- Machine and process capability records • Strict application of Control Plan
- Acceptance criteria
- Verification of production start with Ok first piece (work environment and product)

- Avoidance / Mistake Proof: Poka Yoke and Testers (avoiding defects/ catching defects)
- Work instruction & Self inspection Tasks (incl. Stop@Defect)

- Qualification of the team, related to Product Safety, incl. restrictions for temp. workers at “Product-Safety”- Workstations

- Statistical process control charts and reaction plans, incl. control limits and long-term capability calculation
- Final Inspection (Incl. Quality Walls – Safe Launch Control), incl. restrictions for temp. workers

- Handling of non- conforming material (incl. Rework under Control) and corrective actions in case of internal Scrap • Internal supervision and –auditing (product audit, layered audit, process audit, system audit) • Problem Solving Methods

14.36 Annual Product Qualification:

Boulevard requires SUPPLIERS to provide annual product / process data to confirm and support product form-fit function compliance to specifications and requirements, during the lifecycle of the product, until the end of the serial production SUPPLIERS shall submit a product annual

qualification report for all active products being purchased by Boulevard. Unless otherwise defined by Boulevard, a Level 3 PSW or a VDA2 ISIR is expected to be submitted to the Boulevard SQE by SUPPLIERS annually. SUPPLIERS are requested to reference the latest version of the AIAG Manual “Advance Product Quality Planning and Control Plan” or VDA2. For cpk/ ppk- studies the values of the last three month/ or previous three lots can be used.

14.37 Identification and Traceability:

Identification and traceability provides a rapid response when it is required to locate products, components within the product lifecycle within the SUPPLIERS manufacturing operations, Sub-SUPPLIER outsourcing process, warehousing, in-transit, and when a containment of non-conforming product and/or lots is required. SUPPLIERS shall have a defined and documented process for the identification and traceability of products throughout the product lifecycle throughout all stages from incoming raw components, sub-assemblies to the in-process

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transportation within manufacturing to inventory management, warehouse and shipping. Identification and traceability is to consider the following: lot numbers, production shifts, manufactured volumes, sequence numbering, product id/rev., and shipping locations. Non-production trial sample (i.e., prototypes, etc.) shipments are to identify in a clear manner that the content is not for production use. There may be situations that require Boulevard's SQE to prescribe the identification and traceability method as required by the program/product requirements. SUPPLIERS shall maintain the associated traceability records for the defined period as noted in a manner to preserve their integrity. SUPPLIERS shall make such records available upon request by the Boulevard's Purchasing Manager and/or SQE. Any and all requests

for deviations to the retention periods, must be reviewed and approved by Boulevard's SQE as Boulevard Customer and Regulatory requirements must be adhered to.

14.38 Preventive Maintenance:

Equipment, Tooling and Inspection Equipment including Boulevard Owned Property SUPPLIERS are responsible for the maintenance of all tooling, testing, and inspection equipment, to ensure a high level of quality product over lifetime to avoid damage or accelerated wear. Boulevard Owned Property (Equipment, Tooling, Inspection equipment): SUPPLIERS shall establish and maintain a process for permanently marking Boulevard owned property which may include tools, manufacturing, test-, inspection tooling and -equipment. Ownership of each item

must be visible and able to be determined. SUPPLIERS shall have a preventive maintenance program that includes the following: maintenance plans, spare parts, qualified staff and records of maintenance performed.

14.39 Production Tooling Management - including Boulevard Owned Tooling:

SUPPLIERS shall establish and implement a production tooling management system that includes the following:

- a) Boulevard Owned Tooling (tools, manufacturing, testing and inspection tooling and equipment) shall be permanently marked (visible to determine ownership)
- b) Maintenance, repair facilities and resources
- c) Storage & recovery
- d) Set-up, repair and changes
- e) Tool-change programs for perishable tools f) Tool design modification documentation, including engineering change level
- g) Tool modification and revision of documentation
- h) Defining tool identification status, such as production, repair and disposal. SUPPLIERS shall ensure the documentation of all tools affecting a Boulevard product throughout life of the tool.

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**The documentation shall be in a measurable format and submitted to SENSATA Purchasing on request. Boulevard reserves the right to inspect the status of the tooling, testing, and inspection equipment at any time.

14.40 Inventory and Logistics Management:

1) Production Scheduling Production shall be scheduled to meet Boulevard requirements, such as just-in-time, supported by information systems that permits access to production information at key stages of the process and is order driven.

2) Storage and Inventory Where applicable, the SUPPLIERS shall provide provisions for preservation of product in accordance with component specifications and/or applicable regulations, for:

- Cleaning
- Prevention, detection and removal of foreign objects
- Special handling for sensitive products
- Marking and labeling including safety warnings • Shelf life control and stock rotation • Special handling for hazardous materials
- Ensuring that documentation required by the contract/order to accompany the product is present at delivery, is protected against loss and deterioration. SUPPLIERS shall have a process to assess the condition of product in stock to at appropriate planned intervals to detect deterioration. SUPPLIERS shall utilize an inventory management system to optimize inventory turnover time and assure stock rotation, such as “First-In - First-Out” (FIFO), including the status of products considered to be obsolete. Control of obsolete product shall be controlled in a manner like the

14.41 Packaging and Transport:

The choice of packaging can have a significant effect on product quality. SUPPLIERS must ensure that parts are packaged in a manner which preserves the product in storage, handling and transit. Unless otherwise stated by Boulevard, packaging requirements will be noted on a detailed packaging instruction. Back- up packaging plans need to be tested and defined. This will be agreed with the Boulevard Purchasing Department / Boulevard SQE before mass-production shipments. SUPPLIERS shall have a defined process for the handling of packaging materials within the Logistics Management process that considers the following:

- Appropriate, clean packaging
- Assessment of any deterioration due to poor / dirty packaging and reaction plan • Special freight transportation selection (by taxi, by plane, etc.), as required and approved by Boulevard, violation of this item may cause a Boulevard claim. SUPPLIERS shall ensure that the following information is available on each package or supply container:
 - SUPPLIER name and address
 - Boulevard location and address
 - Part number, part description

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- Quantity
- Lot number
- Engineering level Any detailed or additional requirement, related to labeling and identification of components or packaging, to be agreed upon between the SUPPLIER and the Boulevard's Purchasing / Supply Chain / SQE teams. Prior to shipping products, linked to a Boulevard approved Engineering Change; the SUPPLIERS shall ensure that the first three shipments are:
 - Clearly identified
 - Contain delivery documents, as appropriate
 - Part number
 - Revision level
 - Lot number
- Reason statement, such as "Engineering Change XXXX – Shipment" Any detailed or additional requirement, related to labeling and identification of changed components, to be agreed upon between the SUPPLIER and the Boulevard .

14.42 Control of Non-Conforming Material:

SUPPLIERS shall establish and maintain documented procedures to protect Boulevard from receiving nonconforming material, components, and assemblies. The control system for non-conforming material procedures should include:

- a) Identification methods – clearly distinguishing the status of the material – OK, NOT OK, SUSPECT, etc.
- b) Segregation manner – separating materials in a way to prevent re-introduction into the process or shipment, including containers, cages, etc.
- c) Material review responsibility –clear authority level for the disposition of the non-conforming material, including release
- d) Disposition status control – identify and segregate the material after disposition when it is to be reworked, regraded, scrapped, etc.
- e) Disposition documented instructions – provide clear direction to authorized and competent operators to reinstate the material to an acceptable status and available at point of use
- f) Inspection documented instructions – provide clear direction to authorized and competent operators or inspectors to re-inspect the repair, rework, regraded material and available at point of use

Release and approval instructions – when required, final authorization for release of repair, rework, regraded material and available at point of use SUPPLIERS shall ensure that all personnel involved in the handling and dispositioning of nonconforming product are competent and trained. Boulevard's guidance on control of nonconforming material:

- a) May forbid rework to be performed, unless prior authorization is approved by Boulevard's SQE
- b) Reworked products shall be re-inspected to the original acceptance criteria and in accordance with the Control Plan or documented procedures.

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- c) Records of all activities related to the repair/rework shall be retained and include the following information part details, batch numbers, personnel who completed process, and re-inspection records.
- d) Installation of additional check points, Quality Walls to sort poor quality before shipping to Boulevard.
- e) Tracking and monitoring of recording of all non-conformances to permit defect analysis and the generation of internal corrective action plans.
- f) All records are to be made available to Boulevard SQE upon request.

14.43 Request and Approval of Deviation:

Derogation / Concession / Waiver Boulevard expects that all products supplied, meet all specification and all contractual requirements. Written approval is required prior to shipment of product, which does not conform to drawing or specification. SUPPLIERS are required to submit in writing the deviation request with supporting information to the Boulevard Purchasing and/ or the assigned SUPPLIER Quality Engineering team. All deviations requests shall be submitted to Boulevard's Quality Management team. Until obtaining Boulevard's deviation approval, the SUPPLIERS shall initiate all necessary controls to prevent the product from being shipped to Boulevard. Boulevard will review the request, supporting information, assess the risk associated and provide written approval or rejection to the SUPPLIERS, outlining the timing of deviation, quantities and as required the implementation of corrective actions. A validation plan and a risk assessment, build by the SUPPLIERS, considering the 6M- factor analysis, is part of the SREA documentation.

A SUPPLIER deviation request must contain the following information:

- a) SUPPLIER Part number
- b) Boulevard Part number
- c) SUPPLIER concession number (if applicable)

- d) Description of deviation requested (Include photos of deviation if applicable)
- e) Impact to Boulevard if the deviation request would be rejected
- f) Confirm that deviation does not affect functionality the product, evidence required!
- g) Total number of parts requested to be produced at this level and/or
- h) Time period requested to be produced at this level
- i) Confirm how all products under the concession are identified (Picture of identification required)
- j) SUPPLIER authorized quality representative signature SUPPLIERS shall include a copy of the Boulevard's SQE approved deviation request form with all deviation shipments to Boulevard as part of the packaging documentation.

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The copy of the deviation request must show the following:

- a) Total products allowed, or a time period to be shipped under deviation.
 - b) Quantity of product in the shipment.
 - c) Total quantity of product shipped under concession to date.
 - d) SUPPLIERS shall maintain a record of the approved deviation/ concession request.
- SUPPLIERS shall ensure compliance with the original or superseding specification and requirements when the authorization expires.

14.44 Cost of Non- Conformity:

SUPPLIERS shall be responsible for any charges and cost incurred in the following cases associated with shipment of nonconforming product to Boulevard that are directly impacted by the SUPPLIERS:

- Violate the agreed acceptance criteria, drawing requirements, Boulevard and Boulevard's Customer specifications, PPAP approvals.
- Production slow down or line stops at Boulevard and Boulevard's Customer.
- Boulevard recalls.
- Boulevard's Customer recalls Boulevard SUPPLIER Cost Complaint Reports may also include costs caused by SUPPLIER, such as but not limited to:
 - Problem investigation
 - Administrative activities, handling the complaint (Standard: 1000 US\$ per confirmed complaint (CARE)).
 - Boulevards internal sorting costs, as far as Boulevard is not supported actively by the SUPPLIER:
- Material/ Productivity lost because of Scrap or Rework of sub- components/ finished goods

- Additional or unexpected transport activities. Tool and Equipment crash at ST because of poor SUPPLIER product etc.
- Business trips / audits of Boulevard members to contain damage and ensure Customer satisfaction
- Warranty cases Boulevard Purchasing will be informed and involved when the SUPPLIERS are notified of cost incurrence, based on specific SUPPLIER Cost complaint-/ debit note reports.

14.45 Corrective Action Management:

SUPPLIERS shall have a documented process to drive root cause analysis of noncompliance to requirements both internally and externally. The process shall include response time, root cause analysis methodologies (8D, 5Why, etc.), systemic look across and preventive/ curative risk elimination. When the SUPPLIERS protection system fails, non- conforming material, components or assemblies is detected at any point of the supply chain, at Boulevard or at the Boulevard's Customer, a claim [e.g.: CARE] will be issued by Boulevard to SUPPLIERS.

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14.46 Boulevard EXPECTS from its SUPPLIERS:

- FAST PROTECTION - top priority when a claim is issued by Boulevard and Boulevard's Customer
- FAST RESPONSE - rigor and speed in all aspects, communication, actions, etc., ensuring that Boulevard and Boulevard's Customers maintain continuity of OK part shipments

- CONTROL – Effective actions to avoid reoccurrence of the claim issue Detection and Notification: SUPPLIERS will be notified within 24hrs of the detected NOK (products) by the Boulevard SQE/.

14.47 Incoming Inspection department:

SUPPLIER Initial Response: Upon notification, SUPPLIERS shall implement without delay an immediate action to contain any additional defects from being shipped to Boulevard.

14.48 Containment:

SUPPLIER shall have a process to effectively contain the claim issue, which shall include all stages of the supply chain, including but not limited to inventory, in-process, and in-transit.

Containment is to remain in place until appropriate actions are launched to eliminate root- causes and corrective actions are in place and effective.

14.49 Quality Performance:

SUPPLIER Performance Tracking & Quality Data Recording Boulevard will monitor and track the SUPPLIER performance against individual targets to provide a “Worst/Best SUPPLIER” Overview. The KPIs will be used to (initiate):

- Schedule audits
- Launch escalation process • SUPPLIER improvement actions [SQIP]
- Potential new business offerings or -holds The performance tracking overview may consider more than one of the following aspects below:
- Score of a system or process audit.

- Score of any other kind of a Boulevard audit [ppm audit, 8D audit, Risk Assessment, Technology Audits etc.]

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• Number of escalation cases [ALERT] in Programs and Serial Production - Escalation Process
Excellence in performance is the expectation to our SUPPLIERS, to avoid negative impact to Boulevard sites and Customers.

Boulevard will launch an escalation process in case of performance indicators are far from target, the commodity average or corrective actions agreed during audits, visits and reviews are not implemented or have a significant delay which may cause risks for programs and serial production. The escalation process shall ensure that:

- The severity is specifically addressed within the SUPPLIERS organization
- That the adequate Controlled Shipment level is announced
- The adequate management level is involved (at Boulevard and the SUPPLIERS)
- That an escalation announced by a Customer is addressed also to an involved SUPPLIER.

- That help by third parties or Boulevard is initiated
- That certification bodies might be informed about a major issue
- To speed up the communication process between SUPPLIERS and Boulevard
- To avoid the final escalation stages New Business Hold [NBH]

14.50 New Business Hold [NBH]/ Disengagement:

Boulevard reserves the right to place SUPPLIERS on New Business Hold (NBH), when the SUPPLIERS:

- Continually demonstrate negative performance trending against Boulevard's quality and delivery KPIs
- Cannot successfully exit CS status according to plan and timing
- Cannot successfully demonstrate improvement.

In the event SUPPLIER's performance does not demonstrate improvement during the Escalation Process, a disengagement process will be considered. This process will be initiated and communicated by the Boulevard Purchasing Team.

14.51 AUDIT PROGRAMS:

Boulevard's 2nd party - SUPPLIER audits.

Boulevard may require an on- site SUPPLIER Quality Audit to assess the SUPPLIERS Excellence status related to Quality, Product Safety, Delivery and Cost. Audit purpose: Audits can be announced ad- hoc because of poor performance, to check potential risks, or as a planned preventive, repetitive action. Audit location: Audits will be conducted at the SUPPLIERS facility.

Audits are determined on risk analysis, associated with product / regulatory requirements, as well the need, type, frequency and scope of the audit, such as, but not limited to:

- QMS- Audit •
- Process Audit
- Product Audit

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- Product Safety Audit
- Technical Assessment (by Commodity, incl. product related software/embedded software)
- Quality Alert Audit
- SUPPLIER claim/ppm Audit
- Production Readiness Check • New Business opportunities (part of SUPPLIER identification or selection)
- Conformation of Continues Improvement, Re-Audit
- Boulevard's Code of Conduct Compliance Audit
- De-Escalation Audit frequency:

***SENSATA SQE will coordinate with the SUPPLIER the audit type, dates and duration.

14.52 SUPPLIER audit frequency:

Is based on the following risk evaluation factors: Main scope:

- Strategic SUPPLIERS and/or
- Key Technology SUPPLIERS and/or
- Significant Business Impact]
- Yearly

14.53 SUPPLIER internal - Process Audits:

The SUPPLIER process audit program shall utilize tools and techniques of a risk based audits process approach, example:

- 1) AIAG CQI
 - 2) GM BIQS – VW Formel Q etc.
 - 3) VDA 6.3
 - 4) Software capability assessments – like Automotive SPICE, VDA 2 - appendix 6 etc.
- Check sheets, flow charts or any similar methods to support audits of the manufacturing processes SUPPLIERS shall audit each manufacturing process to determine its effectiveness against process requirements, on all shifts.

A Yearly cycle, is Boulevard's's minimum expectation, as part of an annual plan. Risk evaluations, performed by the SUPPLIER, or intervention of Boulevard's SQE/ SQM because of inadequate performance, may indicate shorter audit frequencies. Layered process oriented audits to be scheduled to ensure the involvement of the whole organization at the SUPPLIER'

14.54 SUPPLIER internal - Product Audit:

Standard Operating Procedure 14.

Supplier Quality Manual (SQM)

SUPPLIERS shall audit products at appropriate stages of production and delivery to verify conformity to all specified requirements, such as product dimensions, functionality, packaging or labeling, at a minimum of once per year, performed by production independent staff. Data of

Product Audits, related to product safety, fit-form - function, might be used for annual re-qualification programs.

14.55 Standard Non-Key characteristic:

Standard dimension vs. standard (incl. tolerance) a] first article inspection (dimensional data) for production release First Article Inspection/ OK first part First Article Inspection OK first part

* Capability values shown are minimums. Required values might be elevated, depending upon Boulevards end Customer or Boulevard's product requirements.

14.56 Special Characteristics Identification and Control:

- 1) Special Characteristic is a product characteristic (material, dimension, performance) or a process parameter whose variation can affect compliance. Critical Characteristic [Safety & Regulation] - CC:
- 2) Compliance with safety requirements for the user of a vehicle or a product • Compliance with regulations (environment, safety) Significant Characteristic - SC:
- 3) Do not relate to safety or regulatory considerations, but relate to Fit, Form or Function
- 4) Compliance to Boulevard and Boulevard's CUSTOMER product requirements related to quality, reliability or durability SUPPLIERS shall have a method to identify and control the flow down of this designated Special Characteristic as identified by Boulevard, Boulevard's

CUSTOMER and SUPPLIER, including Sub-SUPPLIER. The flow down is to include, but not limited to, the following process steps and control documents, drawings, specifications, Key Characteristics list [including Pass Thru Characteristics], FMEAs, Control Plan and Work

Instructions, equipment and process parameter control sheets, etc. SENSATA requires SUPPLIERS to comply with the "Characteristics Symbol Identification and Control" table (see also Appendix A), unless agreed upon in writing by the assigned ST Design Engineering and/or SQE.

Standard Operating Procedure 14.

Supplier Quality Manual (SQM)

14.57 Control of Inspection, Testing and Equipment and Measurement Systems Analysis:

All devices used to test and measure production parts according to product specifications and requirements (drawings, inspection standards, process control requirements or other quality

standards) are to be controlled throughout product lifecycle from development, serial production to manufacturing of service parts/aftermarket products. SUPPLIERS shall have a defined process to identify, control and maintain inspection related tools such as checking fixtures, gages, or other inspection/test equipment, which are used to measure product requirements against defined specifications and Control Plan. All inspections, tests and equipment must be calibrated annually, at a minimum. Shorter frequencies may be warranted, when supported by the SUPPLIERS Measurement Systems Analysis (MSA) process or equipment wear risk. SUPPLIERS shall define the methods - instructions to handle – and perform the measurement and testing to avoid negative variability impact or differences, as agreed upon with Boulevard’s SQE and Engineering. SUPPLIERS are to refer to the AIAG Measurement Systems Analysis Reference Manual. SUPPLIERS shall have a process defining the manner of recall when an inspection, testing or

equipment is found to be out of calibration or error in testing method. This process shall consider all products produced within the defined timeframe, including notification of Boulevard’s SQE.

14.58 Performance indicators:

Shall be based on objective evidence data and includes, but is not limited to:

SUPPLIERS notification to Boulevard related to quality (incl. rework and scrap), warranty/ field issues, including disruptions to continuity of supply that impact Boulevard production and line-shutdowns,

- Corrective action (8D) progress response and monitoring, GATEBUSTERS/Re-occurrence and ppm.

- Delivery schedule performance (including incidents of NOTD not-on-time-delivery)

SUPPLIERS have to monitor Sub-SUPPLIER quality and delivery performance and take action when objectives are not achieved, including those that affect Boulevard’s requirements.