

Supplier Quality Assurance Requirements ('SQAR')

Document responsibility:

If you have any queries about this document, then please contact your contracting manager within the GKN Aerospace Systems Europe and Asia (ASEA) organisation who will be able to put you in contact with the appropriate person(s).

Scope:

This Supplier Quality Assurance Requirements ("SQAR") applies to all suppliers, each of its employees, subcontractors, sub-tier supplier, consultants or agents (all referred as "Supplier") who provides Articles or Services to GKN ASEA and its organisations, irrespective of:

- (i) where the Supplier is located;
- (ii) the industry within which the Supplier operates;
- (iii) any certifications and/or accreditations which the Supplier may have.

This SQAR is in addition to any other agreement or terms and conditions that may be in place between GKN ASEA and the Supplier.

Record of Revisions

Issue	Date	Summary And Reasons For Changes
0	January 1, 2020	Initial Issue

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Purpose

This SQAR details specific requirements and expectations of GKN ASEA, based on the AS/EN/JISQ 9100/9110/9120 requirements. This means that the paragraph structure of this SQAR remained the same. All AS/EN/JISQ 9100/9110/9120 chapters not referenced in this SQAR document shall be interpreted as "Comply with AS/EN/JISQ 9100/9110/9120", with no additional requirements.

Any approval which GKN ASEA gives to the Supplier under or pursuant to this SQAR is solely for the purposes of ensuring that the Supplier meets the minimum quality requirements required by GKN ASEA.

GENERAL

The Supplier shall comply with:

- (a) The requirements specified in the latest revisions of each Specification called out on engineering drawings, planning, purchase order, engineering specifications, Article Data Package (ADP), Procurement Data Package (PDP) and/or other applicable design documents as supplier and/or made available by GKN ASEA or its partners;
- (b) Any additional requirements which the Supplier is required to comply with by the authorities of the country from which it is supplying GKN ASEA;
- (c) The document in which the program (customer) specific quality requirements (compared to the article specific quality requirements) are documented and which is an integral part of the GKN ASEA Program agreements that are applicable to the underlying Purchase Orders. The program specific requirements can be found via: <https://www.gknaerospace.com/en/Utilities/gkn-aerospace-suppliers/systems-europe/>
- (d) The First Article Inspection (FAI) compliancy matrix; <https://www.gknaerospace.com/en/Utilities/gkn-aerospace-suppliers/systems-europe/>
- (e) Any other requirements that GKN ASEA may notify the Supplier of from time to time.

It is each Supplier's responsibility to:

- (a) Access these documents and familiarize itself with the requirements;
- (b) Ensure that they are complying with the latest version, unless specific versions are stated in contractual arrangements of each of these documents; and

Failure by the Supplier to access these documents shall not discharge the Supplier from having to comply with the obligations specified in each of the documents.

Reference Documents

This SQAR does to incorporate the structure and requirements of the following Standards:

- ISO 9001 Quality Management Systems Requirements
- AS/EN/JISQ 9100 Quality Management Systems – Requirements:
 - For Aviation, Space and Defense Organisations
- AS/EN/JISQ 9110 Quality Management Systems – Requirements:
 - For Aviation Maintenance Organisations
- AS/EN/JISQ 9120 Quality Management Systems – Requirements:
 - For Aviation, Space and Defense Distributors
- EASA Part 21 Initial Airworthiness - Commission Regulation (EU) No 748/2012 of 3 August 2012, Airworthiness and Environmental Certification
- EASA Part 145 Continuing Airworthiness - Commission Regulation (EU) No 1321/2014 of 26 November 2014 - Continuing Airworthiness

It also directs the application of the following Standards and supporting documents:

- SAE AS5553 Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition
- SAE AS6174 Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
- SAE AS/EN/JISQ 9102 Aerospace First Article Inspection Requirements
- SAE AS/EN/JISQ 9103 Key Characteristics
- SAE AS/EN/JISQ 9117 Delegated Product Release Verification
- SAE AS/EN/JISQ 9131 Nonconformance Documentation
- SAE ARP 9134 Supply Chain Risk Management Guideline
- SAE AS/EN/JISQ 9145 Requirements for Advanced Product Quality Planning and Production Part Approval Process
- SAE AS/EN/JISQ 9146 Foreign Object Damage (FOD) Prevention Program
- SAE AS 9162 Aerospace Operator Self-Verification Programs
- SAE AS 13000 Problem Solving Requirements for Suppliers
- SAE AS 13002 Requirements for Developing and Qualifying Alternate Inspection Frequency Plans
- SAE AS 13003 Measurement Systems Analysis Requirements for the Aero Engine Supply Chain
- SAE AS 13004 Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
- SAE AS 13006 Process Control Methods
- ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories
- ISO 31000 Risk management – Guidelines

The supplier is required to retrieve the latest revision of the above referenced documents.

4 CONTEXT OF THE ORGANISATION

4.3 Determining the Scope of the Quality Management System

All suppliers to GKN ASEA shall recognise GKN ASEA as an 'Interested Party' and the requirements set out within this SQAR as GKN ASEA's Needs & Expectations, are embedded within its own Quality Management System (QMS) as part of its Context of the Organisation (COTO) definition.

Active and potential suppliers to GKN ASEA must operate within a comprehensive quality system aligned with the type of Articles supplied (scope of supply) and the Supplier type as presented in the table below:

Scope of supply	Supplier Type								
	Manufact-urer	Sub-contractor	Distri-butor	Calibra-tion house	Repair station	Engineering Testing house	Engineering Design house	Engineering Stress house	Agent
Standard parts (catalogue off the shelf)	EN9100	EN9100	EN9120	N/A	N/A	N/A	N/A	N/A	N/A
Metal parts	EN9100 *(1)	EN9100 *(1)	EN9120	N/A	EN9110	N/A	EN9100	ISO9001	N/A
Composite parts	EN9100 *(1)	EN9100 *(1)	EN9120	N/A	EN9110	N/A	EN9100	ISO9001	N/A
Outsourced parts	N/A	ISO9001	N/A	N/A	EN9110	N/A	EN9100	ISO9001	N/A
Special processes *(3)	Nadcap *(2)	Nadcap *(2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Assembly	EN9100 *(1)	EN9100 *(1)	N/A	N/A	Part 145	N/A	EN9100	ISO9001	N/A
Raw material	ISO9001	N/A	EN9120	N/A	N/A	N/A	N/A	N/A	N/A
Auxiliary goods	ISO9001	ISO9001	ISO9001	N/A	N/A	N/A	N/A	N/A	N/A
Calibration	N/A	N/A	N/A	ISO17025 / ISO10012	N/A	N/A	N/A	N/A	N/A
Testing	N/A	N/A	N/A	N/A	N/A	ISO17025 / ISO10012	N/A	N/A	N/A
Engineering	N/A	EN9100	N/A	N/A	N/A	N/A	EN9100	EN9100	N/A
Tooling	ISO9001	N/A	N/A	N/A	ISO9001	N/A	EN9100	EN9100	N/A
Non Product related	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*(1) In case of military programs where - required by the customer and accepted by GKN ASEA - AQAP 2110 (110) or AQAP 2120 (120) is applicable.

*(2) In case of customer or GKN specific special processes res. GKN ASEA's Customer or GKN qualification is required. These processes are reference in the Procurement Data Package or Purchase Order.

*(3) All Special Process Suppliers in the supply chain shall be Nadcap accredited for the following special processes:

- Chemical Processing (CP)
- Coatings (CT)
- Heat Treating (HT)
- Materials Testing Laboratories (MTL)*
- Nonconventional Machining (NM)
- Surface Enhancement (SE)
- Nondestructive Testing (NDT)
- Welding (WLD)

* Accreditation by either Nadcap or by signatories to the ILAC is required for materials testing laboratories.

When requested Suppliers shall provide written confirmation and objective evidence of third party certification to an active version of the required standard as referenced in the above table.

Suppliers who are certified but not to the required level of certification shall have a working plan to become compliant to and are waived in between, or are waived totally by GKN ASEA in formal writing.

Certified suppliers in accordance to ISO9001, ISO17025 must submit their initial and renewal quality system certifications to GKN ASEA within 10 days of receiving the certificate from their registrar. In addition, suppliers are required to notify GKN ASEA immediately if:

- Any adverse change in its quality system resulting in loss of third party registrar's certification status;
- Any adverse action taken by the Supplier's customer, the Government, the Federal Aviation Agency (FAA), or the Civil Aviation Agency (CAA);
- Any change in the Supplier's quality organization, process or procedures that affect conformity verification of the Articles or any part thereof.

In accordance with AS9104/1 (Chapter 8.5 g) the supplier shall provide access to their level 2 data in the International Aerospace Quality Group (IAQG) On-Line Aerospace Supplier Information System (OASIS) database to GKN Aerospace employees, upon request.

5 LEADERSHIP

5.3 Organisational Roles, Responsibilities and Authorities

- a. Resource the organisation sufficiently to maintain the flow down of these requirements and secure compliance throughout the sub-tiers.
- b. Define the personnel accountable for design tasks (Engineering), Suppliers control, Article quality (across all manufacturing shifts) and ensure that they have the authority to stop manufacturing and design related deliverables to correct quality problems as they arise.
- c. Establish a procedure for task and shift handovers that ensures that all necessary information is communicated between the out-going and in-coming personnel.
- d. Specific roles may have specific accountabilities and/or responsibilities as below mentioned, need to comply with AS/EN/JISQ 9110:2016 and in accordance with:
<https://www.easa.europa.eu/regulations>
 - Accountable Manager,
 - Quality Manager,
 - Other Appointed Manager(s)

6 PLANNING

6.1 Actions to Address Risks and Opportunities

- a. Implement a risk management process, such as ISO 31000, across the organisation. When required appropriate governance is implemented in such a way that the organization:
 - Assess the risks identified, and detail these in a risk register,
 - Prepare contingency and / or mitigation plans to reduce risk levels,
 - Secure a regular review of the effectiveness of the risk management process.

The process shall secure a certain continuity of the essential processes and systems (e.g. IT breakdown, disruption due to fire, explosion or natural disaster) after an interruption and a description how the Supplier shall return to normal operation in the shortest possible time.

Note: the risk management shall include, but is not limited to, a process for managing the risk of interruption, which may lead to partial or total unavailability of the essential activities at the Supplier.

Note: to determine and prioritize risks within the Suppliers Supply Chain GKN ASEA highly recommends the Supplier to develop and implement a Risk process in accordance to AS9134. More details are provided in the IAQG Supply Chain Management Handbook, chapter 7.3.
https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqq.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=getSCMHBOOK

- b. Immediately inform the GKN ASEA Procurement contact regarding the following:
- Major incidents affecting the Supplier
 - Risks that could impact the continuity of the Supplier's business / operations,
 - Change of the nominated Quality Representative
 - Change in ownership or discontinuation of business activities
 - Ability to sustain meeting the requirements of this SQAR
 - Breaches of IT Security systems (Cyber Security)

7 SUPPORT

7.1.3 Infrastructure

- a. Implement a process to manage and maintain its internal and external capabilities, which include, but are not limited to key process equipment and tooling.
- b. Assess manufacturing feasibility to ensure that articles are produced in accordance with the standards, specifications and tolerances specified by GKN ASEA or relevant industry standards.
- c. Use a multi-disciplinary team to develop a robust project plan when a new plant, facilities or equipment are implemented or relocated. In these cases, GKN ASEA shall be informed 3 months in advance.
- d. Take all necessary measures to prevent misuse of the Articles covered by the Agreement by securing its facility(ies) and storage areas.

7.1.5 Monitoring and Measuring Resources

- a. Ensure that all devices, used to measure a recorded characteristic that verifies that the Articles meets a specification, are compliant with ISO17025:
- All devices shall have a suitable means of identifying its calibration status to the user. For example, this may be in the form of a sticker affixed on the device stating the calibration date and expiry date.
 - All devices used in the calibration process shall have a unique identification reference number that is kept within a database, which accurately records the device calibration history.
 - The Supplier shall record the measurements taken during the process of calibration per device (unique identification reference).
 - The Supplier shall upon request provide GKN ASEA with such information and any other information that GKN ASEA may require in order to verify the Calibration status.
- b. Ensure all critical and significant characteristics, as defined in AS13003, AS13004 and AS13006 as 'critical' and 'major', have Measurement System Analysis (MSA) studies performed on them to ensure that the monitoring and measurement resources are acceptable.

Note: for more details on MSA see the IAQG SCM, chapter 3.11

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

Note: for more details on Critical Items, see the IAQG SCM, chapter 2.4

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

- c. The supplier shall ensure when conversion of measurement units is required it is executed via an authorization process and formally issued.

7.2 Competence

GKN ASEA highly recommends the Supplier to develop and implement an Operator Self-Verification program in accordance to AS9162. By the implementation of an effective operator self-verification program the overall awareness and quality culture of the organization's manufacturing department is improved, and promotes greater first pass quality. Operator self-verification programs highlight operator responsibility and accountability for product quality, promote employee pride of ownership, and recognize superior performance.

When the Supplier use internal or external Auditors to verify the effectiveness of the QMS and all related processes and procedures the Auditor should have been trained to a lead auditor level and preferable accredited via Probitas/IRCA etc.

Employees that are leading continuous improvement projects, handling customer complaints etc. shall be properly trained in the execution of Problem Solving techniques e.g. AS13000 (preferable) or AS9136.

7.5 Documented information

7.5.3 Control of Documented Information

- a. All records needed for design review, risk assessments, qualification, manufacturing, process verification and/or acceptance of the Articles or for any other reason shall be written in English and must be supplied by the Supplier to GKN ASEA along with the Articles when required. Where there are legal requirements for such documents to be in a language other than English, then the Supplier shall supply such documents in the language that such documents are required to be in, as well as providing an English translation of such documents. In the event of any conflict between the English translation and the version in a foreign language, the English translation version shall prevail.

Note: for more details on Compliance Education see IAQG SCM, chapter 7.8

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

- b. Comply with the current revision of documents / specifications at the date of the article launch and any further revisions thereafter.
- c. Flow down GKN ASEA documents / specifications to sub-tier Suppliers (when applicable).
- d. Control records related to GKN ASEA article and / or services in such a way that it will allow a timely recovery of a readable version of any records (including electronic records) within 24 hours after the request is submitted.
- g. Handwritten documents in any form is not preferred and should be avoided. Amendments by hand to any design or product definition documentation or data is not permitted.
- h. Ensure that characteristic and acceptance test data values are recorded in an electronic format that allows ease of data analysis (e.g. in the form of a spreadsheet).
- i. Documents and records (e.g. production data) shall be retained for ten (10) years following the end of the year in which the Article is manufactured or as otherwise specified on the order following date of shipment. In the event of termination of the Agreement, this section shall survive. Data considered essential for continuing airworthiness shall be kept throughout the operational life of the Articles, parts or appliances with a process and related systems that guarantees the data is completely readable throughout this period.
- j. Ensure on-site data access to those Aviation Authorities having jurisdiction over GKN ASEA facilities and GKN ASEA employees.
- k. Electronic imaging/microfilming of records in lieu of storing actual inspection records is permissible. All electronic records shall be controlled, retained, and retrievable per the same requirements identified for hard copy records. For electronic records that are transferred from computer files, the storage media shall be capable of maintaining the data integrity for the full retention period.
- l. The release of a CoC as referred in paragraph 8.6.1, shall be seen as Supplier's express warranty that the Articles involved:
 - Conforms upon delivery to the applicable specification, drawing(s) and all other requirements set forth in the Agreement and the related Purchase Order,
 - That all test and/or inspections required for such release have been completed successfully. GKN ASEA shall be released from his obligation if any.

8 OPERATION

8.1 Operational Planning and Control

Implement a process to manage and maintain its internal and external capacities which include, but are not limited to:

- Comparison between the available Capacity (e.g. key process equipment, tooling, people, supply base) and Forecast to determine future expansions or increases.
- Impact of new business.
- Planning of the required capacity will be executed according a standardized process securing proper verification against forecast and orders.
- Assess manufacturing feasibility to ensure that an article can be manufactured in accordance with the standards, specifications and tolerances specified by GKN ASEA or relevant industry standards.
- Resolve discrepancies between the available capacity and the demands of GKN ASEA.
- Monitor the effectiveness of labour, equipment and processes to ensure planning assumptions are accurate.
- Evaluate, align and embed a 'Condition of Supply' document (the "CoS") that defines any special delivery requirements. If bespoke packaging is required, the Supplier shall design and develop all aspects including interior partitions. In all cases the packaging design must ensure that, the Articles performance and characteristics will remain unchanged during packing, transit and unpacking and be compatible with all material handling equipment. GKN ASEA should be consulted during the design process and requested to approve the design prior to use. Such approval shall not discharge the Supplier for having design responsibility for the packaging. Any bespoke packaging designed by the Supplier must be manufactured in quantities that will support the GKN ASEA build rate. These quantities must also consider lead-time requirements to ensure continuous availability.

Note: AS9145 Aerospace Advanced Product Qualification Process (APQP) provides a method for operational planning and control when conducting activities such as New Product Introduction (NPI) / Article Introduction.

Note: for details on Capacity Management, ordering and Logistics see IAQG SCM, chapter 7.7 https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMGeneral&PAGE=gotoSCM

- During manufacturing and assembly processes, there is a risk that foreign objects influence the performance of the Articles. This influence can be created by the fact that Articles are contaminated. Contamination of Articles supplied to GKN ASEA is not acceptable. Supplier shall maintain a Foreign Objects Damage (FOD) prevention program in accordance to SAE AS9146. The Supplier's FOD prevention program shall include the review of design and manufacturing processes to identify and eliminate foreign object entrapment areas and paths through which foreign objects can migrate. It will also secure that the Supplier shall ensure that the work is accomplished in a manner that is preventing foreign objects or material in deliverable Articles. Supplier shall maintain work areas and control tools, parts and materials in a manner sufficient to preclude the risk of FOD incidents. Supplier shall document and investigate each FOD incident and ensure elimination of the root cause of each such incident. The manufacturing process shall ensure that Articles as purchased must meet appropriate cleanliness requirements as a quality attribute.

Note: for more details on FOD, see IAQG SCM, chapter 3.4 https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMGeneral&PAGE=gotoSCM

8.1.1 Operational Risk Management

Critical to manufacture the Articles is the capability of a Supplier to meet stringent controls governing the manufacturing or supporting processes that it employs. The Supplier must adopt process controls that are designed and implemented to reduce or eliminate the risk of failures occurring. The Supplier shall define its process steps in a controlled document, assess each step for potential risk(s) and develop appropriate controls that reduce the occurrence of any potential failure modes. GKN ASEA prefers to use the standards and templates as described in;

- AS13003, Measurement System Analysis
- AS13004, Process Failure Mode and Effect Analysis and Control Plans
- AS13006, Process Control Methods
- AS/EN/SJAC 9145:2016 Advance Product Quality Planning

The Supplier shall provide, or when it is IP sensitive present during an on-site visit, a copy of such controlled documents to GKN ASEA. The Supplier will use every effort to eliminate any risks associated with or connected to the Articles and shall supply Articles that meets the standards required by GKN ASEA. It is essential that the Supplier ensure that every aspect, associated with the Articles, meets adequate processes including but not limited to the technical design, processes and materials. The Supplier agrees that it is, and shall remain fully responsible for all such matters.

Note: for more details on Operational Risk, see IAQG SCM, chapter 7.3

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

8.1.2 Configuration Management

The Supplier shall check the ADP, PDP or international standards relevant to the Articles and its production processes, as referenced on the Purchase Order. This check shall be performed prior to commencement of the manufacturing and / or start of a process to identify differences between the actual configuration and the agreed configuration, including identification of the article status with respect to monitoring and measurement requirements. Where no specific revision of (or deviation to) the specification is mentioned on the purchase order, the Articles shall comply with the latest revision of the specification as mentioned on the purchase order. Ensure that Design Changes are controlled by a configuration management process.

Note: for more details on Configuration Management, see IAQG SCM, chapter 7.5

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

8.1.3 Product Safety

- a. Plan, implement, and control the processes needed to assure article safety, as appropriate to the organisation.
- b. Ensure individual awareness and individual contribution to article safety is known to all involved in the creation of the article, including supporting and enabling processes.
- c. Determining the requirements of the articles and services through operational planning and control (including FOD/FOD programs/activities).
- d. Establishing criteria for the acceptance of the articles and services through design verification.
- e. The communication and adequacy of external providers of their contribution to article safety.
- f. Ensure the presence and risks related to human factors such as environment, tiredness, complacency, distraction are known and mitigated.
- g. Notify GKN ASEA in 24 hours of any potential unsafe condition.

Note: for more details on Product Safety, see IAQG SCM, chapter 3.9

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

GKN ASEA may wish to amend the Specification in relation to the delivery of the Article ordered. Where this right to amend is invoked, GKN ASEA will provide a 'Condition of Supply' document (the "CoS") that defines any special delivery requirements (8.1) including packaging requirements. A CoS may include specific packaging requirements or standards. In any event, the Supplier has an obligation to use returnable or recycle packaging where possible.

8.1.4 Prevention of Counterfeit Parts

Suppliers shall:

Have a process for Counterfeit Parts prevention in accordance with SAE AS6174. When a Supplier delivers in relation to the order an Electrical, Electronic or Electromechanical parts (components designed and built to perform specific functions, and are not subject to disassembly without destruction or impairment of design use) the Supplier shall have a process in place according to SAE AS5553.

When Supplier concludes they were not authorized to supply EEE parts they have delivered, a notification/disclosure in writing must be send to GKN ASEA per 8.7 Control of Nonconforming Outputs. Where GKN ASEA identifies, or reasonably suspects an Article (or any part thereof) at any of its own or customer's facilities to be a counterfeit part then GKN ASEA shall isolate the counterfeit part and the Supplier shall immediately replace it with a part that can be traced to an approved source.

The counterfeit part will be quarantined until the Supplier arranges collection or destruction of such part in accordance with this SQAR. Suspect or confirmed counterfeit parts will not be returned to the Supplier except under controlled conditions that would preclude the resale or re-introduction of the counterfeit part into the supply chain. This means that where GKN ASEA agrees to return the counterfeit parts, it will, at Supplier's cost, destroy the part to prevent its reintroduction into the supply chain before the Supplier collects it.

Note: for more details on Counterfeit see IAQG SCM, chapter 3.5

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqq.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

8.2 Requirements for Products and Services

8.2.3 Review of the Requirements for Products and Services

- a. Review the requirements related to the design of the Article, the Article itself and the purchase order, prior to committing to supply the Article / design or acceptance of orders.
- b. Review of chosen/determined processes in relation to the design and the customer requirement(s) together with the GKN ASEA Technical Authority when required.
- c. In case of a new or updated project, submit the conclusion to GKN ASEA via the Request for Quotation (RFQ).
- d. Secure a NADCAP approval for any process identified in the NADCAP approval system is applied when such a process is required by the ADP, PDP.

8.4 Control of Externally Provided Processes, Products and Services

8.4.1 General

Supplier shall have the requirements of this SQAR flowed down and shall actively and demonstrably assure understanding of, and compliance to these requirements throughout their complete supply base. To secure all suppliers will receive the requirements and a complete supplier network map is maintained.

8.4.2.1 Work Transfers

- a. Ensure that no change takes place until the Supplier has submitted and received approval to proceed from GKN ASEA.
- b. Ensure that work transfer (source change) documentation / information is communicated along the purchase order cascade.
- c. Demonstrate that any export control risks associated with the work transfer have been properly assessed and any changes to, or requirements for new export authorisations have been planned.
- d. When an Article is transferred, a FAI in accordance to AS9102 is required. If the Article was subject of an APQP, the transfer will lead to an APQP update.

GKN ASEA requires from the Supplier that a Work Transfer is been managed via a structured process that includes regular reviews to secure all potentials risks are determined and eliminated. GKN ASEA highly recommends the best practice as published by the IAQG in their "Supply Chain Management

Handbook (SCMH)" under Chapter 7.1. See:

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=getSCMHBOOK&vgenNum=1247&scmhs=3

8.4.3 Access to the Supplier premises

GKN ASEA and her Customer's shall have the right to audit, verify and control the Supplier and/or Supplier's Suppliers (when applicable) with regard to any quality aspect; however this shall not reduce or limit any obligation or liability of Supplier. For this purpose, the Supplier shall take adequate measures to provide Fokker or her Customers' with access to all information and facilities where work under any order is being performed.

GKN ASEA and her Customers shall respect legal and regulatory requirements (e.g. ITAR) when an audit is determined. When due to the regulations an audit cannot be performed by a GKN ASEA or a Customer representative, GKN ASEA shall use a 3rd party which is authorized by GKN ASEA or Customer to perform the audit. Audit verification and control by GKN ASEA or her Customer's shall not be used as evidence of effective quality control by the Supplier nor shall it preclude subsequent rejection.

8.5 Production and Service Provision

8.5.1 Control of Production and Service Provision

- a. When applicable the Supplier shall document and implement an Electrostatic Discharge (ESD) Control Program in accordance with ANSI/J-STD-001 or its equivalent, ESD Association Standard for the development of an ESD Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices). Parts shall be properly packaged and identified as required in ANSI/J-STD-001. All Articles shall be placed in conductive or static-dissipative packages, tubes, carriers, conductive bags, etc. for shipment. The packaging shall be clearly labeled to indicate that it contains electrostatic sensitive Articles. Electrical parts that may be used or shipped in conjunction with ESD sensitive parts shall be treated as ESD sensitive. All soldering must be performed by qualified operators trained to a minimum of ANSI/J-STD-001 or its equivalent.
- b. Create a test / inspection plan for all Article characteristics and production operations including:
 - Where in the sequence the testing / inspection operations are performed
 - A reference to each Article characteristic to be tested / inspected at each operation
 - The type of equipment required and any specific instructions associated with their use
 - Criteria for acceptance and / or rejection
 - A reference to Article test / inspection activities to be witnessed by the customer
 - Control plans for characteristics that are not tested / inspected when the Article is in the final condition (inaccessible characteristics, characteristics tested / inspected before the Article is in its final condition, characteristics that cannot be measured directly, characteristics subject to sample or reduced inspection). A reference for creation such Process Control Document (PCD) is provided in AS/EN/JISQ 9103 or AS13004.
- c. Produce records of test and inspection, these shall include as a minimum:
 - Item inspected
 - Activity performed
 - Procedure / Instruction for the inspection activity
 - Date of inspection or surveillance activity
 - Personnel who performed the inspection or surveillance
 - Results of the inspection / surveillance
- d. If the process is not stable or capable, identify and implement improvement activities to address the shortfall and develop containment plan that assures conforming Article.
- e. The minimum Process Capability requirements are determined in the ADP, PDP or applicable specification.
- f. Ensure product test / inspection activities are conducted in an acceptable environment. This shall include lightening conditions that provide at least 700 LUX, and where accurate visual inspections are required to be performed, white light intensity of at least 1000 LUX.

- g. All Supplier Personnel engaged in inspection tasks on Articles shall have regular eye sight assessments, which must as a minimum be in accordance with the relevant national standard or compliant with near vision requirements of Snellen 14/18, (20/25), Jaegar 2 at 14 inches, or Ortho-Rater 8.
- Individuals performing visual inspections on welds shall be compliant with the American Welding Society Standard (AWS) D17.1.
- h. Ensure Vision correcting eyewear, e.g. glasses, contact lenses, etc. used to pass the vision examination are worn when performing an article verification/inspection activities. Any changes to vision correcting eyewear will require a re-examination before being used.
- i. Ensure that where personnel fail, a colour perception examination, their capability to distinguish and differentiate colours used in performance of applicable article verification / inspection activities is determined and documented.
- j. Ensure requirements for viewing distance, angles and inspections times are set properly.
- k. For the appointment of competent persons, including any required qualification, Supplier shall:
- Ensure employees directly inspecting the articles are formally authorised.
 - Ensure the article is released by authorised personnel.
- l. Key Characteristics (KC's) are any Article or process characteristics that affect safety or compliance with regulations, fit, function, performance or subsequent processing of the article. KC's are identified on drawings/specifications or in a separate controlled document. If required by the drawing and/or specification a document, in accordance with AS9103 or AS13004, relating to the variation management of KCs shall be compiled by the Supplier for definition and control of all KC's unless otherwise agreed in writing by GKN ASEA.
- For guidance:
- Design KC's are those that are defined as such in the ADP, PDP or Specification, typically this will be by the use of a KC designation on the Specification with a Geometric Dimension & Tolerancing (GD&T) definition of the actual KC and its tolerance; and
 - Process KCs are defined by the Supplier following detailed analysis of the process through a process map and risk analysis. These should be defined parameters that a process must meet in order to supply a compliant article.
 - Customer KC's are those defined by customer (e.g. critical to end user or final assembly).

In accordance with the requirements KC's shall be identified and specifically addressed in Design Failure Mode and Affect Analysis (DFMEA), Process Failure Mode and Affect Analysis (PFMEA), Control Plans, Process Flows, Work Instructions and other associated documents. These documents shall be maintained and include controls and records of all results. GKN ASEA prefers that the above referenced documentation is in accordance to AS13004.

The measurement and recording of KC's shall be continual and controlled by Statistical Process Control (SPC) where possible, however sampling plans may be considered where statistical process controls can be demonstrated in accordance with the agreed Cpk and Cmk values between the Supplier and GKN ASEA.

GKN ASEA and/or GKN ASEA's Customer must approve sampling plans in writing prior to any reduction from continual process control. Results shall be formally recorded and provided to GKN ASEA when required. A Process Control Document (PCD) template is provided in AS/EN/JISQ 9103 or AS13004 for this purpose.

8.5.1.1 Control of Equipment, Tools and Software Programs

Establish a system for the management of pre-production and production tooling, jigs and fixtures that includes (but is not limited to) the following:

- Unique tool identification
- Validation of tool prior to release for production
- Protection from damage and deterioration during storage
- Maintained as fit for purpose
- Storage and recovery
- Tool set-up
- Tool life control / tool-change programmes

- Tool design modification documentation, including engineering change level
- Tool modification and revision
- GKN owned tooling stored in fire safe conditions and supplier must have a contingency plan.

8.5.1.2 Validation and Control of Special Processes

Special processes are defined as those that are difficult to inspect during the process itself and thus the output is entirely dependent on Article control of all process inputs. Examples of Special processes are:

- Chemical Processing – surface treatments, corrosion protection systems etc.;
- Coatings;
- Heat Treating;
- Materials Testing Laboratories;
- Non-Destructive Testing;
- Welding; and
- Any processes identified as special processes in accordance with the Nadcap approval system as referenced by Nadcap, see website: <https://p-r-i.org/nadcap/>

A Supplier that uses these processes shall be expected to comply with Nadcap requirements and/or any other specific GKN ASEA or GKN ASEA's Customer requirements for each process. Exceptions to this may be approved by GKN ASEA in writing. It is only provided when GKN ASEA is satisfied that appropriate process controls are in place and meet GKN ASEA's and/or GKN ASEA Customer's requirements. In all cases process controls will be expected to be documented and any change to the documented control systems must be notified to GKN ASEA in accordance with the change process in this SQAR prior to any change being made.

All special processes shall be subject to continual process controls. Sampling plans may be considered where statistical process controls can be demonstrated as meeting $CpK > 2.0$. Sampling plans must be approved by GKN ASEA and/or GKN ASEA's customer prior to any reduction from continual process control.

All special processes and other processes that GKN ASEA specifies shall be qualified. The Supplier must ensure that processes covering the following areas are qualified:

- Personnel;
- Materials;
- Equipment; and
- Inspection.

Processes that require qualification for any article will be defined by GKN ASEA once the Supplier has submitted a detailed process map of how they intend to produce the relevant Articles. GKN ASEA shall define any qualification requirement for each process defined in the Supplier's process map, typically this will be either a GKN ASEA, GKN ASEA's Customer or OEM process specification. Qualification shall be approved by GKN ASEA or GKN ASEA's Customers prior to commencement of production or supply through the relevant process.

In certain circumstances it may be accepted by GKN ASEA that Articles may pass through processes that are not qualified but are in the process of becoming qualified (i.e. testing is underway but not completed). This will be based on the risk analysis and mitigation of those risks and confidence based on previous experience of both GKN ASEA and the Supplier. However, any liabilities during this interim period are the responsibility of the Supplier and not GKN ASEA or GKN ASEA's ASEA Customers. Supplier shall not proceed with using processes that are not qualified without obtaining GKN ASEA's prior written consent.

A qualification plan shall be documented by the Supplier and submitted to GKN ASEA covering the following:

- List of certificates/approvals;
- List of articles to be qualified (incl. qualification schedule);
- List of special- and inspection processes and test methods to be qualified per manufacturing facility (including qualification schedule);

- List of processes certified and/or scheduled to be certified by NADCAP (including associated schedule);
- If required a PPAP file and a First Part Qualification (FPQ), and;
- FAI-planning and scheduling.

The Supplier shall list in the qualification plan all material/source couples to be qualified which will be integrated into the article and the associated qualification schedule.

The implementation of any qualification process pursuant to this SQAR shall not discharge the Supplier from any liability or responsibility relating to the article under the Agreement and/or this SQAR and the Supplier shall remain fully responsible for the article.

8.5.1.3 Production Process Verification

Suppliers shall:

- a. Carry out a First Article Inspection (FAI) on all characteristics in accordance with AS/EN/JISQ 9102, when required by the Order or when required per provisions of AS/EN/JISQ 9102. The FAI shall be produced on production equipment and using processes which will be utilized on production runs.
 - In case of GKN ASEA owned drawings and/or specifications GKN ASEA, GKN ASEA's Customer or its representative and the applicable airworthiness authorization (or its delegate) shall have the right to witness the FAI process.
 - When characteristics measured during the manufacturing process (not accessible in the final Article) have potential to be affected by subsequent operations (e.g. welding or heat treatment), the supplier must obtain agreement from the GKN ASEA Technical Authority on whether additional verification is required.
 - Use capable measurement equipment in accordance with AS13003.
- b. When required on the Order a PPAP-file is created by the supplier and submitted to GKN ASEA in accordance with AS9145.
- c. Perform a Last Article Inspection Report (LAIR) when the source or location of the manufactured Article is planned to change, or at the request of GKN ASEA.
- d. Ensure that the measurement equipment, inspection personnel and Coordinate Measuring Machine (CMM) programme and programmer are independent to those used for measurement in the production process.

If not otherwise agreed the supplier shall submit FAIRs via Net-Inspect. To get access to the tool and get training, contact Net-Inspect at: <http://www.net-inspect.com>

Note: for more details on First Article Inspection, see IAQG SCMh, chapter 3.2

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

8.5.2 Identification and Traceability

Ensure that GKN ASEA is able to identify the origin of all Articles that form the purchased article or are used to supply the articles. GKN ASEA should be able to identify the origins of such articles even after any process that is carried out. The final article identification format will be defined in GKN ASEA, OEM or International specification(s) referenced in the design data or other supporting documentation.

The Supplier shall, upon request, supply all article certifications from an approved source to GKN ASEA. If the evidence of supply chain traceability to an approved source is not available, the Supplier must notify GKN ASEA immediately and obtain approval from GKN ASEA prior to purchasing and incorporating the articles or any such component in its manufacturing process.

If the ADP / PDP / Order determines the Article ordered as Class 1 the Article shall have detailed traceability in accordance with all applicable laws and/or regulations including the latest EASA/FAA rules applicable at the time of the Supplier performing its obligations.

The Supplier shall, if required, clearly mark batch and/or serial numbers on all associated certifying documentation. Where possible, batch numbers of fasteners shall be recorded against any supplied assembly to aid in any traceability event.

Without prejudice to any other requirements which the Supplier is required to meet, in order for the Supplier to meet its traceability requirement, a Supplier must be able to demonstrate the following to GKN ASE:

- Operations performed on an Article;
- Consumables consumed in processing;
- Details of the operators & inspectors that performed activities in connection with the Article;
- Raw materials involved in certifying the Article;
- Traceability through the sub-tier processes if used.

The Supplier shall ensure that all part identification shall comply with and match the statements made on any release documentation.

The Supplier shall pay particular attention to part identification during process mapping, risk analysis and control planning phases of an article as the incorrect identification and documentation of parts accounts for a high degree of delay or rejection of articles on receipt across the aerospace industry.

On GKN ASE's request, applicable objective evidence shall be available to GKN ASE within 48 hours after becoming available to the Supplier.

The Supplier shall use inspection stamps which are unique to the Supplier and to the Authorised Release Signatories signing off GKN ASE Articles to identify acceptable inspection status for Articles and associated documentation (the "**Inspection Stamps**"). The Inspection Stamps are to be controlled by the management personnel for quality within the Supplier's organisation.

A register shall be compiled and procedure shall be created to record:

- the control of the Inspection Stamps;
- the individual Inspection Stamp holders;
- quarantine periods for Inspection Stamps withdrawn for mis-inspection events; and
- the consequences of poor inspection performance.

Where an Inspection Stamp has been lost, that lost Inspection Stamp number shall be quarantined and not used for at least 2 years. Stamps that are withdrawn due to termination of employment or withdrawal of authority to inspect due to mis-inspection events shall be quarantined, and not used for a minimum of 6 months.

No sampling inspection is acceptable on GKN ASE designed articles unless the details of any sampling plan have been formally approved by GKN ASE in writing. Where GKN ASE does approve a sampling inspection, then in addition to any other matters which GKN ASE may prescribe, the Supplier will be required to document the process to cover the sampling process.

8.5.6 Control of Changes

In case of changes related to Articles and/or processes that are qualified according to international standards (e.g. MIL, EN, etc.) or supplier specifications and qualification, leading to a (potential) decreased Form Fit and Function (FFF)-performance of the Articles, despite the Articles are still in accordance to the qualifying specification, GKN ASE must receive a notification 90 days in advance when and where the FAI shall take place.

The supplier must obtain GKN ASE's prior written approval for any process change before implementing any change in the situation where GKN ASE is the specification / drawing holder. Where GKN ASE's Customer owns the specification or drawing, or have determined that all FAI's must be approved by GKN ASE's Customer, the supplier must obtain GKN ASE's Customer prior written approval for any process change before implementing any change.

Acceptance of a FAI by GKN ASE, or any absence of GKN ASE to witness a FAI, shall not affect any obligation or liability of Supplier pursuant to the requirements of the Order, including those specified in this document. Any approval that GKN ASE gives to the Supplier shall not discharge the Supplier from

any liability or responsibility associated with the change and the Supplier shall remain fully responsible for the Articles.

In the following cases the Supplier shall perform a full or a partial FAI;

- A change in the design affecting fit, form or function of the Articles
- A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, that can potentially affect fit, form or function
- A change in numerical control program or translation to another media that can potentially affect fit, form or function.
- A natural or man-made event, which may adversely affect the manufacturing process.
- A lapse in Articles for two (2) years, since the last delivery, or lower when this is specified differently on the Order or in the ADP / PDP.
- A change of supplier for Articles, non-equivalent materials, or services
- Articles and process changes related to components of the articles manufactured internally or manufactured by suppliers.

GKN ASEA accepts Customer approvals on FAIs performed by the Supplier for GKN ASEA's Customers in case where the Customer is drawing / specification holder. This means that GKN ASEA's Customer can also reject the FAI report, which will be followed by GKN ASEA.

Note: for more details on First Article Inspection, see IAQG SCM, chapter 3.2

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

8.6 Release of Products and Services

All Articles supplied to GKN ASEA shall have all the necessary documentation with them at the point of delivery. The elements that make up the documentation pack will depend on the Articles being supplied. As a minimum, unless otherwise specified by GKN ASEA in writing. The Supplier shall provide the following documentation with any article:

- EASA Form 1/FAA Form 8130-3 (for POA organisations) or a CoC, see details 8.6.1;
- For detailed parts (fabrications or machining) that have been subjected to subcontract operations or special processes, the CoC (or Kit List) must define the special process description, specification and the process source for each individual part;
- In case of authorized release, the Certification signed by an Authorised Release Signatory employed by the Supplier, that materials and/or process items comply in every aspect with the requirements of the Order and Specification contained in the Order, PDP or ADP;
- When a kit of parts is supplied, a kit list, duly stamped and signed by an Authorised Release Signatory must be included with the dispatched documentation.
- When the articles ordered are considered as articles which have a shelf-life, GKN ASEA shall only accept the articles when 75% of the shelf-life is remaining during the release for shipment of the articles. In case of expiring with a short period the receipt at GKN ASEA shall take into account the transport lead-time required.

When required it can also be requested to provide:

- Weight report;
- Traceability records (i.e. History Cards, mill certification etc.);
- FAI Forms;

Unless otherwise specified by GKN ASEA in writing, the form of the documentation shall be agreed between the Supplier and GKN ASEA.

To ensure an acceptable delivery, particular attention shall be given to the process controls that surround the creation of release documentation and the formal dispatch of Articles. Final checks shall be performed by the Supplier to ensure that the documentation, article identification and any other associated elements are in accordance with the requirements of this SQAR and the Agreement. Unless otherwise agreed in writing by GKN ASEA, these checks shall be recorded in article inspection records.

8.6.1 Certificate of Conformity

Each Certificate of Conformity (CoC) shall be based on objective evidence (e.g. Measuring and / or test reports), demonstrating and stating full compliance with the requirements of the Order. On GKN ASEA's request, applicable objective evidence shall be available to GKN ASEA within 48 hours after becoming available to the Supplier.

The original CoC shall be packed and supplied together with the articles as required per GKN ASEA's Delivery Instructions.

Depending on the Suppliers status, market position and QMS certification, different types of certificates are required:

	AS / EN 9100	AS / EN 9120
Manufacturer owned specification, manufactured in accordance to an international or customer specific specification	COC	-----
Manufacturer materials used to build a (semi) final component	COC + Test report	-----
Subcontractor	COC	-----
Subcontractor Special Processes	COC + Test report	-----
Distributor Standard parts	-----	COC + COC OEM*
Value added Distributor**	-----	COC
Distributor Raw material	COC + COC OEM* + Test report	COC + Test report
Agent	COC + COC OEM*	-----

* = Original Equipment Manufacturer

** = Value added distributor (Authorized distributor) is a Supplier that adds features or services to an existing article before it is delivered to GKN ASEA. The added value can come e.g. from an assembly of separate articles that individually are manufactured by an OEM, but needs a final assembly and marking to secure it is conforming GKN ASEA's specification as recorded on the Order.

The Certificate of Conformity shall meet the following requirements:

1. Content need to have a "certified statement" such as: "We hereby certify that the articles listed above have been manufactured / inspected in accordance with the drawings, agreement / purchase order expect as specifically noted"
2. Supplier name and address
3. Country of Origin of manufactured articles
4. GKNs ASEA Order number + position
5. Description of the delivered article
6. Part number and the applicable specification
7. Delivered total quantity per purchase order line
8. Date of certification
9. Delivered quantity per batch number
10. Date of manufacturing (date code)
11. A signature from a responsible who is trained, authorized and independent from the production organization (this requirement is not valid for ISO 2.1 certificates) which is trained and authorized

In addition to the requirements above the Certificate of Conformity shall meet the following requirements if applicable:

12. Non-Conformance report reference (NC number) and the related permit for Alternative/ Waiver/Concession
13. Shelf life material: the manufacture date and expiry date
14. Engineering drawing revision number (e.g. Subcontracting)
15. Serial number(s) or date code(s) or lot/batch/heat number(s) (as applicable)
16. ECCN code when the article ordered is export controlled

17. When articles are delivered with deviations and GKN ASEA's prior approval is provided for this delivery, GKN ASEA's reference must be recorded on the CoC
18. If you are an "Authorized Distributor" GKN ASEA expect with every delivery a copy of the active letter from the OEM stating you as supplier are authorized to manufacture/assemble their components to the final product as referenced on the Order.

Remarks:

1. Accuracy between CoC and physical articles must be 100%. Deviations will lead into wrong declarations with a scrap disposition as a potential result.
2. In case the supplier is a non-value added distributor the CoC must be accompanied by a CoC(s) showing a full supply chain traceability towards the final qualified OEM.
3. In case of several article number come from different qualified manufacturing facilities, each manufacturing facility shall be mentioned in front of each item.
4. For administrative reasons a reference to GKN ASEA's item number is highly recommended.

Note: for more details on CoC, see IAQG SCMH, chapter 5.2

https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH

Test and measurement report

A test report shall contain a statement of compliance, with results of the specific inspection. The test report shall be validated by a manufacturer's authorized inspection representative, independent of the manufacturing department.

Hardness and Conductivity test results shall be provided by the Supplier for each delivered batch, using the Hardness-Conductivity Results template, see <https://www.gknaerospace.com/en/Utilities/gkn-aerospace-suppliers/systems-europe/>, or held at the Supplier's Site when formally agreed by GKN ASEA.

The Supplier is entitled to issue Certificates of Conformance, with an electronic signature to GKN ASEA, provided that the following requirements are met:

- The Supplier's system, which generates electronic signatures, shall ensure that only authorized personnel can initiate and issue Certificates of Conformance.
- Traceability to the person that has placed the electronic signature shall be ensured.
- The Certificates of Conformity shall indicate that it has been electronically authorized and shall quote the name of the "authorized person". An electronic representation of the person's signature may also be shown, but is not mandatory.
- Transmission to GKN ASEA shall be via "paper copies" in the conventional manner or via an electronic transmission.
- GKN ASEA reserves the right to require Certificates of Conformity carrying an authorizing signature where this is a requirement of the Customer of GKN ASEA.

Supplier accepts full liability for the authenticity of the electronic signature.

8.7 Control of Nonconforming Outputs

Without prejudice to any other rights and remedies that may be available to GKN ASEA, whether at law or otherwise, all Articles supplied by the Supplier to GKN ASEA shall be:

- Fit for purpose;
- Free from defects (latent or actual);
- In accordance with the Specifications;
- Of a standard expected by GKN ASEA; and
- In accordance with any and all instructions, descriptions or specifications supplied by GKN ASEA.

It is the policy of GKN ASEA to **not** accept an Article that does not meet the requirements. Where a Supplier identifies that an Article does not meet GKN ASEA's requirements after it is shipped to GKN ASEA, it must notify GKN ASEA within one (1) business days. However, if the condition can create possible safety of flight issues, all available information must be submitted immediately by contacting GKN ASEA.

Any article released by a supplier or sub-tier supplier that is subsequently determined as to be nonconforming shall be handled as an Escape. The notification of the Escape shall be reported to GKN ASEA in accordance with SAE AS9131.

The Supplier shall not dispatch any non-conforming Articles without GKN ASEA's prior consent. Such consent shall be without prejudice to GKN ASEA's rights and remedies in respect of a nonconforming Article.

Supplier shall not use dispositions like "Use-as-is" or "Repair" for nonconforming deliverable articles, unless specifically authorized in writing by GKN ASEA.

Articles dispositioned "Scrap" shall be conspicuously and permanently marked, or positively controlled, until physically rendered unusable.

The Supplier shall establish a procedure to escalate issues and associated risks, including a reporting mechanism for article or design escapes if the article or design has been released to GKN ASEA or any customer.

If GKN ASEA determines an Article which does not meet the intended specifications or other references applicable to the Article ordered, GKN ASEA shall contact the supplier. In all cases the Supplier is expected to analyze the notification and take appropriate actions (e.g. but not limited to containment actions, corrective action). It is determined by GKN ASEA if the supplier shall perform a Problem Solving analysis in accordance to the AS13000 guidance. If determined, GKN ASEA will notify the supplier of these expectations.

The standard response time on the corrective and preventive actions are:

- Problem Definition and Containment actions (D1-D3)
 - o Containment actions determined immediately after the notification is received
 - o Reporting to GKN ASEA within 2 working days after the notification
- Identify and Verify Root Causes and Implement Corrective actions (D4-D6)
 - o Reporting to GKN ASEA within 5 working days after the notification
- Define and Plan Preventive Action(s) (D7)
 - o Reporting to GKN ASEA within 10 working days after the notification

If the supplier have a proper substantiation that will explain why a longer throughput time is required, an extension on the above mentioned throughput times could be requested to GKN ASEA. The supplier will contact the GKN ASEA initiator of the request to discuss an extension period.