

# SABRe



## Supplier Management System Requirements

## DEFINITIONS

Edition 3

Revision 2.1

4 November 2019



## 1. Purpose

- The purpose of SABRe Definitions is to formally communicate the definition of key words / subjects used in SABRe and associated documents.

## 2. Scope

- SABRe Definitions are applicable to all Rolls-Royce suppliers and / or partners.
- SABRe Definitions is available to view and download from the Rolls-Royce Global Supplier Portal (GSP) <https://suppliers.rolls-royce.com>

<b>3. Standards</b>	
<b>BS EN ISO 9001:2015</b>	Quality Management Systems - Requirements
<b>AS/EN/JISQ 9100:2016</b>	Quality Management Systems – Requirements for Aviation, Space and Defence Organisations
<b>AS/EN/SJAC 9102*</b>	Aerospace First Article Inspection Requirements
<b>AS/EN/SJAC 9103*</b>	Variation Management of Key Characteristics
<b>AS/EN/SJAC 9110:2016</b>	Quality Management Systems – Requirements for Aviation Maintenance Organisations
<b>AS/EN/SJAC 9145*</b>	Advanced Product Quality Planning (APQP) / Production Part Approval Process (PPAP)
<b>AS/EN/SJAC 9146:2017</b>	Foreign Object Damage (FOD)
<b>ISO 10005*</b>	Quality Management Systems – Guidelines for Quality Plans
<b>ISO 10007*</b>	Quality Management Systems - Guidelines for Configuration Management
<b>BS EN ISO 9712:2012</b>	Non-Destructive Testing – Qualification and Certification of NDT Personnel
<b>BS EN ISO 10012*</b>	Measurement Management Systems - Requirements for Measurement Processes and Measuring Equipment.
<b>BS/EN ISO 27001*</b>	Information Technology – Security Techniques – Information Security Management Systems Requirements
<b>BS/EN ISO 14001:2015</b>	Environmental Management System Requirements
<b>BS OHSAS 18001:2007</b>	Occupational Health and Safety Management Systems - Requirements
<b>AS13000:2014</b>	Problem Solving Requirements for Suppliers
<b>AS 13002:2015</b>	Requirements for Developing and Qualifying Alternate Inspection Frequency Plans
<b>AS 13003:2015</b>	Measurement System Analysis Requirements for the Aero Engine Supply Chain
<b>AS 13004:2017</b>	Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
<b>BS ISO 31000:2009</b>	Risk Management – Principles and Guidelines
<b>ISO 17025</b>	General Requirements for the Competence of Testing and Calibration Laboratories
<b>(IAEA) GSR Part 2</b>	International Atomic Energy Association (IAEA) GSR Part 2
<b>(IAEA) INSAG 4</b>	International Atomic Energy Authority (IAEA) INSTAG 4
<b>RRES 90000</b>	Engineering Control of Manufacturing and Repair Source and Method
<b>RRES 90009</b>	Requirements for Design and Development Activities
<b>RRES 90059</b>	Tool and Fixture Design for Suppliers
<b>MLC132</b>	Rolls-Royce Global Substance Elimination Policy

# SABRe

## Supplier Management System Requirements

<b>EC748/2012 Part 21</b>	Design Organisation Handbook
<b>EC2042/2003 Part 145</b>	Maintenance Exposition
<b>ISO/TS 16949:2016</b>	Automotive Quality Management
<b>ONR-TAG-077</b>	Supply Chain Management for Procurement of Nuclear Related Items and Services
<b>ECUK 100053</b>	General Quality Assurance Specification (GQAS)
<b>ASME NQA-1</b>	Quality Assurance Programme Requirements for Nuclear Facilities
<b>RRC-M</b>	Design and Construction Rules for Mechanical Components of PWR Nuclear Islands – 2007 Edition and addenda Dec. 2008, Dec. 2009, & Dec. 2010.

### Key

\* - check region for latest standard

Black Font – Rolls-Royce definition that was in SABRe 2

Grey – ISO definition



<b>4. Definitions</b>	
<b>Word / Subject</b>	<b>Definition</b>
<b>Aerospace contracts</b>	Applicable for all products or services intended for flight use.
<b>Accreditation Body</b>	A body that conducts and administers an accreditation system and grants accreditation to certification bodies. For a list of accreditation bodies refer to the International Accreditation Forum at <a href="http://www.iaf.nu">http://www.iaf.nu</a>
<b>Automotive Industry Action Group (AIAG)</b>	AIAG is a not-for profit association originally created to develop recommendations and a framework for the improvement of quality in the automotive industry. The AIAG promotes its objectives primarily by publishing standards which include APQP and PPAP standards.
<b>Approved</b>	The word 'approved' refers to the formal approval of a specific task / application by Rolls-Royce. In all cases where approval has been given by Rolls-Royce, the supplier remains fully responsible for the quality of the product delivered / affected by the implementation of such actions.
<b>Advanced Product Quality Planning (APQP)</b>	APQP is a structured method of defining and establishing the steps necessary to ensure that a product satisfies the customer (see AIAG).
<b>Article</b>	Material, part, component, assembly, or appliance which is listed by the design organisation as eligible for installation in/on the product or included in the design data approved by the authority.
<b>Attribute</b>	A property, quality or feature of a person or thing, for example a product, system or component.
<b>Authorised</b>	The word 'authorised' refers to the formal authorisation of a specific task by Rolls-Royce. In all cases where authorisation has been given by Rolls-Royce, the supplier remains fully responsible for the quality of the product delivered / affected by the implementation of such actions.
<b>Authorised Individual</b>	An individual with documented permission to undertake the activity.
<b>Authorised release certificate</b>	A release document issued for aerospace parts by suppliers who hold National Airworthiness Approval (NAA) and / or holders of Product Manufacturing Approval (PMA).
<b>Authorised release certification</b>	This is the means of confirming conformance with applicable specifications as required by Regulatory Bodies and Customers e.g. Certificate of Conformity (CoC).
<b>Batch</b>	A collection of products making up a batch must have been manufactured by the same production method and on the same machines and at essentially the same time.
<b>Bill of Material (BoM)</b>	List of the raw Material/Products and sub tier components and their quantities required to manufacture an end product.
<b>Business</b>	A Business is a specific division of Rolls-Royce such as Aerospace, Nuclear, Marine, Global Indirect & R <sup>2</sup> Data Labs etc.

Word / Subject	Definition
<b>Buyer</b>	An individual within the organisation with the responsibility for implementing a commodity strategy for assigned commodities, categories and products. This role may be performed by someone with a title other than buyer. This must be formally delegated by Purchasing.
<b>Capability</b>	Skills, technologies, products, services, assets and partnerships Ability of an object to realise an output that will fulfil the requirement for that output.
<b>Certification Body</b>	A body that conducts certification conformity (i.e., a certification body that conforms to ISO/IEC 17021 and is accredited to provide audit and certification of quality management systems).
<b>Certified</b>	Authoritatively or officially attested or confirmed as being genuine or true as represented, or as complying or meeting specified requirements or standards
<b>Characteristic</b>	A distinguishing feature of a product, process or system related to a requirement. A distinguishing feature
<b>Characteristic matrix</b>	A document that captures the relationship between each design characteristic and the manufacturing operation steps which create, modify or inspect those characteristics.
<b>Competence</b>	Competence is the demonstrated ability to apply knowledge and skill. <ol style="list-style-type: none"> <li>1. Knowledge is a level of understanding that is gathered from the interpretation of information, training and experience.</li> <li>2. Skill is the ability of applying knowledge by demonstrating a level of aptitude related to doing something well.</li> </ol> Ability to apply knowledge and skills to achieve intended results
<b>Commercial off the Shelf (COTS) Items</b>	Commercially available items intended by design to be procured and utilised without modification (e.g. common electronic components)
<b>Concession</b>	Permission to use or release a product or service that does not conform to specified requirements.
<b>Conformity Assessment Body (CAB)</b>	An Organisation acting as an independent third party when carrying out compliance assessment, such Organisations that carry out and certify compliance against standards are themselves formally accredited by accreditation bodies (such as UKAS); hence they are sometimes known as “accredited certification bodies”
<b>Configuration management</b>	A technical and management process for establishing and maintaining consistency of a product’s functional and physical attributes with its requirements, design and operational information throughout its life. (see ISO 10007). Coordinated activities to direct and control configuration.
<b>Conformance Control Feature (CCF)</b>	A measurable feature of a product whose variation has a significant influence on performance or service life. Additional controls are specified to minimise variation in the feature.

Word / Subject	Definition
<b>Conformance Control Feature (CCF)</b>	A measurable feature of a product whose variation has a significant influence on performance or service life. Additional controls are specified to minimise variation in the feature.
<b>Conformity</b>	Fulfilment of a requirement.
<b>Contract Quality Plan (CQP)</b>	A supplier document specifying which processes, procedures and associated resources of their Quality System will be applied by whom and when to meet the requirements of a specific order, project, product or process to ensure compliance with these, and their own internal requirements. If more than one activity is involved in the project, then an integrated CQP for the entire project is compiled. This document relates to the management system and controls for the project or contract.
<b>Contract Review</b>	Process used by an organisation to review that contract supplied documentation is adequate to enable successful delivery of a specific scope of work.
<b>Control plan</b>	A control plan is a written description of the system for controlling products and processes. They are used to aid the production of quality products according to customer requirements. They describe the actions that are required at each phase of the process including receiving, in-process, outgoing and periodic requirements to assure that all process outputs will be in a state of control (see AS13004).
<b>Corrective action</b>	Action taken to eliminate the cause of a detected nonconformity or other undesirable situation.  Action to eliminate the cause of a nonconformity and to prevent recurrence
<b>Cost of Non-Quality (CoNQ)</b>	A measure to quantify the total cost of quality-related efforts and deficiencies. This is usually recognised as costs associated with Prevention, Appraisal and Failure. Typically, such costs could be Warranties, Penalties, Test rejects, Components damaged during the Repair and Overhaul Process etc.  Sum of internal and external failure costs resulting from processes that are not done right first time.
<b>Counterfeit Part</b>	An unauthorised copy, imitation, substitute, or modified part (e.g., material, part, component), which is knowingly misrepresented as a specified genuine part of an original or authorised manufacturer.
<b>Critical item</b>	Those items (e.g. functions, parts, software, characteristics, processes) having significant effect on the provision and use of the products and services; including safety, performance, form, fit, function, producibility, service life, etc. that require specific actions to ensure they are adequately managed. Examples of critical items include safety critical items, fracture critical items, mission critical items, key characteristics, etc.
<b>Cross-function team</b>	A team of people that that has the accountability to deliver a Scope of Work. The team members are recruited from more than one of the functions within the business rather than from different sub-functions within a function.
<b>Cure date</b>	The date on which the curing process occurred during production of a polymeric component in accordance with the relevant / governing technical specification.

Word / Subject	Definition
<b>Customer</b>	<p>A party that receives or consumes products (goods or services) and has the ability to choose between different products and suppliers</p> <p>A person or organisation that could or does receive a product or a service that is intended for or required by this person or organisation.</p>
<b>Customer (internal / external)</b>	<p>Organisations should understand and identify both internal and external customers and their needs. An internal customer is the recipient of a product or service as an output of a process that is internal to the organisation (i.e., the next process in a line of processes – including sub-tier / sub-contract). The external customer is the recipient of a product or service that is provided to a customer that is external to the supplier's organisation (e.g., Rolls-Royce).</p>
<b>Design Subcontractor</b>	<p>An organisation performing design tasks and/or services for Rolls-Royce, irrespective of any design-related approval the company may hold. In the case of Aerospace suppliers a Design Subcontractor needs to be integrated into the design assurance system of the Part 21 approved Rolls-Royce design organisation, (e.g., through a Design &amp; Development Quality Plan).</p>
<b>Development</b>	<p>The process of transforming requirements into specified characteristics or into the specification of a product, process or system.</p>
<b>Deviation Permit</b>	<p>Permission to depart from the original specified requirements prior to product manufacture. This permission operates for a limited period or quantity of product. Deviation Permits are sometimes known as Production Permits in some businesses. Deviation Permits normally apply to one part number, but in some circumstances can apply to raw material or process deviations.</p> <p>Permission to depart from the original specified requirements of a product or service prior to its realisation.</p>
<b>Distributor</b>	<p>A retailer or stockist of goods (e.g., raw material, products). Activities include the purchase, storage and sale of goods in a manner that conforms to requirements.</p>
<b>Document (controlled)</b>	<p>Documents (also known as documented information) are commonly known as forms, procedures, policies or templates and are controlled through released revisions. Additionally, documents may also include information on any medium and in any format including, paper, electronic storage, images or audio visual that, when notified, may be deemed necessary although they are not specifically listed on the Record Retention Schedule</p> <p>Information and the medium on which it is contained.</p>
<b>Documented Information</b>	<p>Information required to be controlled and maintained by an organisation and the medium on which it is contained.</p>
<b>Documented Procedure</b>	<p>A procedure that is documented and specifies the way to carry out an activity or a process.</p>
<b>eConcession</b>	<p>Electronic concession – electronic creation and approval of deviation permit / concession.</p>
<b>eFAIR</b>	<p>Electronic First / Last Article Inspection Report – electronic creation and approval of a FAIR / LAIR. Current eFAIR system provider is Net-Inspect.</p>



Word / Subject	Definition
<b>Engineering Supplier Interface Document (ESID)</b>	Document that maps the Suppliers QMS to RRES90009, confirms compliance status and captures where technical delegation has been authorised.
<b>External Provider</b>	External Supplier (Provider that is not part of the organisation)
<b>First Article Inspection (FAI)</b>	A planned, complete, independent and documented inspection and verification activity to ensure that prescribed production processes have produced an item conforming to engineering drawings, digital product definition, planning, Purchase Order, engineering specifications/other applicable design documents. It is also referred to as First or Last Article Inspection.
<b>First Article Inspection Report (FAIR)</b>	A standard form of a Production Method Verification Report. It comprises the forms and package of documentation for a part number, sub assembly, assembly or installation including verification results. It is also referred to as a First or Last Article Inspection report.
<b>FAIR/LAIR (complete)</b>	All product characteristics defined by the final product definition have been accounted for and a single product has been manufactured with no non-conformance (concession free).
<b>FAIR/LAIR (incomplete)</b>	All product characteristics defined by the final product definition have been accounted for and declared non-conformance has been authorised by a deviation permit or concession.
<b>FAIR/LAIR (reject)</b>	The FAI has not been completed in accordance with the requirements.
<b>Fixed process</b>	A documented method of manufacture, subject to audit, for which equipment, operation sequence, methods, parameters, and control techniques are established and fixed by the approval of Rolls-Royce Engineering.
<b>Fixed process control</b>	Fixed process control is used to ensure effective Rolls-Royce control of the source and/or method of production for features or processes that could have a significant impact on product safety or reliability.
<b>Follow Up Document (FUD)</b>	For all design, manufacturing, assembly, testing, transportation, installation and commissioning activities the supplier shall create FUDs, otherwise known as Inspection and Test Plans (ITPs) to demonstrate that the required level of quality control has been met.
<b>Foreign Object Debris (FOD)</b>	<p>A foreign object may be regarded as a substance, debris or article that is alien to a product. Examples of foreign objects include (but are not limited to) alumina grit, glass beads, swarf, burrs, fibres, resins, powders etc.</p> <p><i>For guidance refer to:</i></p> <p><i>NAS412 (Foreign Object Damage / Foreign Object Debris (FOD) Prevention.</i></p> <p>Any item that is in a product when it is not intended. This includes swarf, tools, parts and accessories such as rags.</p>
<b>Fraudulent Items</b>	Items that are intentionally misrepresented with intent to deceive, including items provided with incorrect identification or falsified and / or inaccurate certification. They may also include items sold by entities that have acquired the legal right to manufacture a specified quantity of an item but produce a larger quantity than authorised and sell the excess as legitimate inventory

Word / Subject	Definition
<b>Global Supplier Portal (GSP)</b>	The Global Supplier Portal (GSP) <a href="https://suppliers.rolls-royce.com">https://suppliers.rolls-royce.com</a> is a secure web-based work area that is used to provide information and interaction between suppliers and Rolls-Royce.
<b>Group (or family) of products</b>	A product group (or family) refers to products that share the same or similar characteristics related to fit, form, function and configuration that are produced by the same production process at the same source.
<b>Hold Point</b>	A predetermined stage beyond which work shall not proceed without the attendance of and written authorisation of a Rolls-Royce representative or Rolls-Royce inspection authority or agency whichever is applicable.
<b>Independent</b>	Autonomous, non-dependent and free from influence, control, relationship, action, judgment or guidance.
<b>Industry standard part</b>	See 'standard catalogue hardware'.
<b>Inspection</b>	Conformity evaluation of product features by observation, judgment, testing, gauging and measurement.  Determination of conformity to specified requirements.
<b>Inspection and Test Plan</b>	Document which defines the sequential quality control, testing activities and associated arrangements that are to be applied to a specific scope of work or individual piece of plant and equipment.
<b>Item</b>	An all-inclusive term used in place of any of the following; appurtenance, assembly, component, equipment, material, module, part, software programme, structure, sub-assembly, subsystem, or unit.
<b>Key Characteristic(s)</b>	The feature of a material or part whose variation has a significant influence on product fit, performance, service life or manufacturability. This definition is further explained in AS9103.  An attribute or feature whose variation has a significant effect on product fit, form, function, performance, service life, or producibility, that requires specific actions for the purpose of controlling variation.
<b>Key process</b>	A business process which is regarded by an organisation's top management as being critical to customer satisfaction, competitive advantage, or the success of the organisations strategy.
<b>Key subcontractor / sub-tier supplier</b>	A supplier that is regarded as being critical to the continuity of supply and the success of the organisation's strategy.
<b>Last Article Inspection (LAI)</b>	A repeat First Article Inspection conducted on a part that is representative of the Production Method to provide a benchmark of the manufacturing system prior to implementing a source/method change or making the manufacturing system dormant.
<b>Lift Time Quality Records (LTQR)</b>	Record(s) that provide documentary evidence of the research & development, design, build, construction, commissioning, decommissioning and demolition of / on a nuclear installation.
<b>LUX</b>	The LUX is a unit of illumination and luminous emittance

Word / Subject	Definition
<b>Major Incident (Business Continuity)</b>	An event that impacts beyond the scope of a locally-managed incident and has (or may have) wider implications for an affected Business / Function and / or the wider Group.
<b>Manifest</b>	Rolls-Royce plc employs a logistics provider to operate an inbound collection service from an agreed selection of suppliers. Rolls-Royce generates a parts list that tells the supplier and logistics provider which parts and quantities by delivery location must be collected on a designated day (this is a manifest).
<b>May</b>	The term 'may' refers to a permissible practice or action. It does not express a requirement.
<b>Measurement</b>	Process of experimentally obtaining one or more values that can reasonably be attributed to a quantity e.g. determining the mass of an item. <b>Process to determine a value</b>
<b>Measurement System Analysis (MSA)</b>	Measurement system analysis (MSA) is an experimental and mathematical method of determining how much of and the nature of the variation within a measurement process and how this contributes to overall process variability; and the proportion of the tolerance consumed by the measurement system. <i>For guidance refer to:</i> <i>Measurement Systems Analysis (AIAG), ISBN 978-1-60-534082-1</i> <i>ISO 14253-2 - Geometrical product specifications (GPS) -- Inspection by measurement of workpieces and measuring equipment - Part 2: Guidance for the estimation of uncertainty in GPS measurement, in calibration of measuring equipment and in product verification.</i>
<b>Metallic Material Reprocessor</b>	The source(s) in the supply chain responsible for any subsequent mechanical / thermo processing of the original raw material product to the final supply condition (this may be the Mill source).
<b>Metallic Raw Material</b>	A metallic material that will be used to create a product but has not been transformed by a production process into a product. The following are considered metallic raw materials: ingot, billet, forging stock, bar, rod, wire, sheet, plate, strip, foil, extrusion, drawn shapes and tubing. The following are not considered metallic raw materials: castings, forgings, or sintered powder metal parts.
<b>Metrological function</b>	The metrological function has administrative and technical responsibility for defining and implementing the measurement management system in accordance with ISO10012.
<b>Modification Bulletin</b>	A Rolls-Royce document describing a type design change to an already certified configuration standard of a gas turbine.
<b>Monitor</b>	An arrangement for observing, detecting, or recording the operation of a process or system.
<b>Monitoring / measuring equipment</b>	Monitoring / measuring equipment are the devices used to monitor and / or measure a product or process and will use the same units of measurement as stated on the product definition.  Determining the status of a system, a process, a product, a service or an activity.

Word / Subject	Definition
<b>Must</b>	Use of the word “must” indicates a mandatory requirement.
<b>NADCAP</b>	A worldwide co-operative programme of major companies designed to manage a cost effective consensus approach to special processes / products and provide continuous improvement within the aerospace and defence industries – see also Performance Review Institute (PRI) <a href="http://www.pri-network.org/PRI/">http://www.pri-network.org/PRI/</a>
<b>National Aviation Authority</b>	The National Aviation Authority is the government statutory authority in each country that oversees the approval and regulation of civil aviation.  Approvals by the European Aviation Safety Agency (EASA) and / or the Federal Aviation Administration (FAA) are applicable for the supply of product related to Rolls-Royce aerospace contracts / purchase orders.
<b>Net-Inspect</b>	Net-Inspect is a Global Supply Chain and Quality Management Portal for online First Article inspection reporting.
<b>New Product Introduction (NPI)</b>	Refers to the introduction of a new product definition to the suppliers business and manufacturing / production facilities.
<b>Non-Aerospace contracts</b>	Applicable for all non-aerospace products or services or for non-flight aerospace products or services.
<b>Nonconforming product</b>	Product that contains one or more features which do not comply with the specified requirements.
<b>Nonconformity</b>	Non-fulfilment of a requirement.
<b>Non Power system</b>	Any other components or ancillary items that are not incorporated into the system that generates power
<b>Note</b>	Information marked “NOTE” is for guidance in understanding or clarifying the associated requirement. Where appropriate, the note will be identified in the text with a note number.
<b>Nuclear Safety</b>	The achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards.
<b>Nuclear Safety Culture</b>	The assembly of characteristics and attitudes in an organisation and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance.
<b>Organisation</b>	A group of people and facilities with an orderly arrangement of responsibilities, authorities and relationships (e.g., company, corporation, firm, enterprise, institution, charity, sole trader, association, or parts or combination thereof).  Person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives.
<b>Other-party certification</b>	International Aerospace Quality Group (IAQG) oversight and improvement initiatives related to the Industry Controlled Other Party (ICOP) Aviation, Space and Defence Quality Management System (QMS) certification scheme.
<b>Overall Equipment Effectiveness (OEE)</b>	Overall equipment effectiveness (OEE) is a set of metrics used to evaluate and indicate how effectively a manufacturing operation is utilised.  $OEE\% = Availability \times Quality \times Performance$

Word / Subject	Definition
<b>Pen-Testing</b>	A penetration test is an authorised simulated attack on a computer system, performed to evaluate the security of the system. The test is performed to identify both weaknesses (also referred to as vulnerabilities), including the potential for unauthorised parties to gain access to the system's features and data, as well as strengths, enabling a full risk assessment to be completed.
<b>Policy</b>	<p>A policy is typically described as a principle or rule to guide decisions and achieve rational outcome(s). The term is not normally used to denote 'how' it is actually done; this is normally referred to as a procedure. A policy will contain the 'what' and the 'why'.</p> <p>Intentions and direction of an organisation as formally expressed by its top management</p>
<b>Power system</b>	Components of the engine, motor, fan, plant that form the system that produces power generation.
<b>Primary packaging</b>	Primary packaging is the first level of packaging applied to the product.
<b>Procedure</b>	<p>The mandatory way to carry out an activity or a process, incorporating agreed best practice. Examples of Rolls-Royce procedures are Group Procedures, Lower level Procedures, Work Instructions or Group Quality Procedures. When a procedure is documented, the term "documented procedure" will be used.</p> <p>Specified way to carry out an activity or a process</p>
<b>Process</b>	<p>A collective set of interdependent procedures or procedural steps that, when completed one after another, will direct the user to achieve a specific end goal.</p> <p>Set of interrelated or interacting activities that use inputs to deliver an intended result.</p>
<b>Process audit</b>	A process audit is a review of a specific process to verify process effectiveness / efficiency and / or compliance to requirements. The process audit also reviews the sequence and interaction of processes including the process inputs, outputs, controls and resources by "walking the process".
<b>Process capability</b>	The ability of a process to consistently produce product that fully meet technical specifications.
<b>Process characteristics</b>	Process characteristics are process variables (input variables) that have a cause and effect relationship with the identified product characteristics. A process characteristic can only be measured at the time it occurs.
<b>Process Failure Mode and Effect Analysis (PFMEA)</b>	A Process Failure Mode and Effect Analysis (PFMEA) is a systematic group of activities intended to recognise and evaluate the potential failure of a process and the effects of that failure and to identify actions that could eliminate or reduce the chance of the potential failure occurring.
<b>Process flow diagram</b>	A process flow diagram (or process flow chart) is a graphical or symbolic representation of a process. Each step in the process is represented by symbols and contains a short description of the process step. The flow chart symbols are linked together with arrows showing the process flow direction.



Word / Subject	Definition
<b>Process parameter</b>	A measurable factor that determines the range of variation in a process.
<b>Process yield</b>	Process yield is the number of products produced by a process (output) divided by the number of products going into that process (input) over a specified period of time. Only conforming products with no rework are counted as an output of an individual process.
<b>Product</b>	<p>The output of a process that can be delivered to a customer or to the next process. Products can be services, software, methods, hardware, documentation, advice and processed materials or a combination of these categories. It can refer to components, modules and complete power systems as appropriate.</p> <p>Output of an organisation that can be produced without any transaction taking place between the organisation and the customer</p>
<b>Product audit</b>	A product audit verifies that the product conforms to requirements.
<b>Product characteristics</b>	Product characteristics are features or properties of a product, component or assembly that are described in the product definition.
<b>Product definition</b>	A complete description of the product and its attributes. This includes its physical characteristics, functional characteristics and how to make, operate, maintain and support it in service and dispose of it.
<b>Product Introduction (PI)</b>	Refers to the introduction of an existing product definition that is new to the suppliers business and manufacturing / production facilities.
<b>Product Safety</b>	The state in which a product is able to perform to it's designed or intended purpose without causing unacceptable risk of harm to persons or damage to property.
<b>Product verification</b>	Product verification is the confirmation through the provision of objective evidence that the monitoring and measurement of product characteristics has verified that the product meets defined requirements.
<b>Production</b>	The processes and methods used to transform inputs into outputs using resources to provide a product or service.
<b>Production method</b>	A sequence of production processes and their associated instructions used by a source to produce a product.
<b>Production product approval (PPAP)</b>	<p>PPAP or Production Product Approval Process is used to establish confidence in suppliers and their production processes, by demonstrating that all customer engineering design record and specification requirements are properly understood by the supplier and that the process has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.</p> <p>The receipt from the internal customer organisation of a Production Submission Warrant (PSW) classified as approved for the product in scope. When a PSW has received either an interim approval or reject status they are not approved through PPAP.</p>

Word / Subject	Definition
<b>Production Product Approval (PPA file)</b>	A Production Product Approval (PPA) file contains data related to the applicable Production Product Approval Process submission level for each product or product group.
<b>Programme</b>	A group of related projects, which may include related 'business as usual activities', that together, achieve a beneficial change of a strategic nature for an organisation.
<b>Project</b>	A project is a temporary endeavour in which human, financial and material resources are organised in a novel way to undertake a unique scope of work, of given specification, within constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives.
<b>Provider</b>	Organisation that provides a product or service
<b>Purchaser</b>	Person or organisation placing an order or contract to buy a product.
<b>Purchasing</b>	Purchasing (or subcontracting) is the activity related to the buying, acquisition or procurement of materials, products or services, from a source that is external to the organisation.
<b>Purchasing contact</b>	Person placing an order or contract to buy a product.
<b>Purchase Order</b>	A purchase order is a buyer's written contractual agreement with a supplier of goods or services that specifies information such as payment terms, delivery dates, item identification, quantities, shipping terms and all other obligations and conditions.
<b>Purchase order cascade</b>	The purchase order information flow of from a sub-contractor / sub-tier supplier via the first-tier supplier and onto Rolls-Royce.
<b>Quality</b>	The degree to which a set of inherent characteristics fulfils requirements.
<b>Quality plan</b>	<p>A controlled document (generated by the supplier and / or Rolls-Royce) which specifies processes, procedures and associated resources to be applied by whom / when to a specific project, product, process or contract. Usually generated as a project, product, or contractual specific document (see ISO10005).</p> <p>Specification of the procedures and associated resources to be applied when and by whom to a specific object.</p>
<b>Raw material</b>	A material that will be used to create a product but has not been transformed by a production process into a product (e.g., bar, billet, sheet, tube, plate etc.).
<b>Raw material manufacturer</b>	The source in the supply chain responsible for the original manufacture of the raw material product.
<b>Reaction plan</b>	A reaction plan ensures that processes that cease to be in control and / or capable resume normal product verification / inspection until the cause has been identified, corrected and process capability and control are re-established.

Word / Subject	Definition
<b>Requirement</b>	<p>A statement that identifies a system, product or process's characteristic or constraint, which is unambiguous, clear, unique, consistent, stand-alone (not grouped), and verifiable, and is deemed necessary for stakeholder acceptability.</p> <p>Need or expectation that is stated, generally implied or obligatory.</p>
<b>Record</b>	<p>Retained documented information and evidence that activities have been performed or results have been achieved. They always document the past. Records can be on paper, microfiche, computer files and other formats.</p> <p>Document stating results achieved or providing evidence of activities performed.</p>
<b>Reduced inspection</b>	<p>Reduced inspection is split into two categories, as follows:</p> <p><b>Reduced inspection of variables</b> – The inspection of selected features created by the same process in a specific group within a single part, from which the conformity of other un-inspected features within the group is inferred. All parts are inspected. Skip lot inspection is not acceptable.</p> <p><b>Reduced inspection of formed characteristics</b> – The control method related to the inspection and control of a form tool and a sample of the product characteristic produced by the form tool which is used to verify the conformity of the remaining identical product characteristics of the entire batch.</p> <p><i>The term "reduced inspection" is <u>NOT</u> to be associated with any references stated within any international / national standard (e.g., Acceptance Quality Limit (AQL), normal, reduced, tightened inspection etc.).</i></p>
<b>Release document</b>	<p>A formal serialised document that accompanies each delivery of a product and clearly indicates the release status of such items together with their compliance to the relevant purchase order, associated technical specifications and / or regulatory requirements – as applicable.</p>
<b>Repair</b>	<p>Action taken on a nonconforming product or service to make it acceptable for the intended use.</p> <p>Includes remedial action taken on a previously conforming product to restore it for use, for example as part of maintenance.</p>
<b>Rework</b>	<p>Action on a non-conforming product or service to make it conform to the requirements. Rework is defined as the repeat of already authorised standard operations to make the product conforming.</p>
<b>Right First Time (RFT)</b>	<p>Right First Time (RFT) is a measure of how successful your organisation is at meeting requirements related to a product or product feature first time, without resulting in the need for rework, concessions or scrap. RFT also provides your organisation with the ability to detect process change and enable continual improvements within a data driven environment.</p> <ul style="list-style-type: none"> <li> <math display="block">RFT = \left( 1 - \left( \frac{\text{number of non-conforming features}}{\text{total number of features measured}} \right) \right) \times 100\%</math> RFT calculation: </li> </ul> <p>Product that meets specified requirements without rework or concession.</p>
<b>Risk management</b>	<p>A risk is an uncertainty which, if it occurs, will have an effect upon the continuity of supply of product to Rolls-Royce (see ISO31000 for guidance).</p>

Word / Subject	Definition
<b>Risk assessment (or evaluation)</b>	The process of analysing and evaluating hazards; it involves both casual and consequence analysis requiring determination of probability and risk.
<b>Rolls-Royce Approved Supplier</b>	A supplier holding a formal letter / certificate of approval issued by Rolls-Royce.
<b>Rolls-Royce Standard Part</b>	A Rolls-Royce standard part is a part designed by Rolls-Royce that is similar to an external standard part but is designed to meet the specific requirements of the Rolls-Royce application It is controlled by a Rolls-Royce source and method control system. RRES 90080 (Qualification Testing Requirements and Procedures for Rolls-Royce Standard Parts) covers the global qualification procedures for those Rolls-Royce standard parts, where qualification of the manufacturer is required.
<b>Rough Machining</b>	A machining activity that is used to remove excess material from the product and defined to conclude a minimum of 0.5mm form from final product dimensions
<b>Safety Policy</b>	Top management's formally expressed commitment to product safety. This policy shall reflect the organisation's philosophy of safety management and outlines the methods that the organisation will use to achieve desired safety outcomes.
<b>Sample Inspection</b>	Sample inspection is the inspection of a sample of products taken from a batch from which the product conformity of the entire batch is derived.
<b>Scorecard</b>	A scorecard is the means by which a supplier's transactional performance such as quality, cost and delivery is captured and then measured by Rolls-Royce.
<b>Secondary packaging</b>	Secondary packaging is used to contain one or more primary packaged products.
<b>Shall</b>	Use of the word "shall" indicates a mandatory requirement.
<b>Shelf life</b>	Product(s) in stock which have a defined timescale after which it becomes unusable (e.g., an expiry date) is said to have a shelf life.
<b>Should</b>	The word 'should' refers to a preferred approach on implementing a capability that is expected to be followed. Any other approach to satisfy a 'should' needs to be able to demonstrate that the approach meets the intent of the expectation.
<b>Source</b>	Any manufacturing, assembly or repair area or facility engaged in any or all of the production sequence of a product.
<b>Source change (Control of Work Transfers)</b>	<p>A source change (control of work transfers) is used to control and verify that the product conforms to requirements during and after a temporary or permanent transfer of work. Examples of source change activity include (but are not limited to):</p> <ul style="list-style-type: none"> <li>• Moving activities from the supplier's facility to another facility.</li> <li>• Moving activities from the supplier's facility to a subcontractor / sub-tier supplier.</li> <li>• Moving activities from a subcontractor / sub-tier supplier to the supplier's facility.</li> <li>• Moving activities from one subcontractor / sub-tier supplier to another subcontractor / sub-tier supplier.</li> </ul> <p>Any transfer of work within the supplier's facility that could have an effect</p>

# SABRe

## Supplier Management System Requirements

	upon the continuity of supply of product (this includes moving from one machine to another within the same building).
--	---

Word / Subject	Definition
<b>Special Requirements</b>	Those requirements identified by the customer, or determined by the organisation, which have high risks of not being met, thus requiring their inclusion in the operational risk management process. Factors used in the determination of special requirements include product or process complexity, past experience, and product or process maturity. Examples of special requirements include performance requirements imposed by the customer that are at the limit of the industry's capability, or requirements determined by the organisation to be at the limit of its technical or process capabilities.
<b>Standard catalogue hardware (items)</b>	Standard catalogue hardware is any item purchased from a catalogue available to the public or a part or material that conforms to an established industry or national authority published specification, having all characteristics identified by text description, national / military standard drawing, or catalogue item.  A part or material that conforms to an established industry or national authority published specification, having all characteristics identified by text description or industry / national / military standard drawing.
<b>Statistical Process Control (SPC)</b>	Statistical Process Control (SPC) is the application of statistical methods to the monitoring and control of a process to ensure that it operates at its full potential to produce conforming product.
<b>Stockist</b>	A retailer or distributor of goods (e.g., raw material, products). Activities include the purchase, storage and sale of goods in a manner that conforms to requirements.
<b>Sub-contractor</b>	Under Aerospace rules, a supply source which does not hold a Production Organisation Approval (POA) by a National Aviation Authority is considered as a sub-contractor under the direct control of the POA holder's quality management system. The POA holder retains the final responsibility for the work carried out within the sub-contractor's facilities. Sub-contractors can provide Certificates of Conformity only.
<b>Submission level (SL)</b>	The PPAP submission level dictates the amount/degree of action, data and documentation provided within the internal customer submission.
<b>Sub-tier supplier</b>	Suppliers not working under a direct purchase order from Rolls-Royce but performing work on Rolls-Royce products at a lower level in the supply chain (via purchase order cascade).
<b>1<sup>st</sup> (First) Tier supplier</b>	A supplier working under a direct purchase order from Rolls-Royce. A 1 <sup>st</sup> tier supplier may control further sub-tier suppliers in accordance with SABRe requirements.
<b>Supplier</b>	A supplier is any organisation (or person) providing a product or service that is linked to the purchaser by a contract or purchase order (e.g., producer, distributor, retailer or vendor of a product, or provider of a service or information). This definition includes such transactions between Rolls-Royce facilities.



# SABRe

## Supplier Management System Requirements

	See External Provider
<b>Suspected Unapproved Parts</b>	A part for which there is objective and credible evidence indicating that the part is likely an unapproved or counterfeit part.

Word / Subject	Definition
<b>Supplier PPAP Coordinator</b>	A responsible person identified by the supplier's organisation to be responsible (solely or as part of their role responsibilities) for ensuring that all necessary activities are identified, implemented and monitored to satisfy the Production Product Approval Process (PPAP).
<b>Technical Authority</b>	The role in the organisation that is accountable for specifying manufacturing engineering and process requirements and for making technical decisions. In relation to production, repair and product verification, typically this will be the relevant Manufacturing Engineering Manager but it may also be delegated to others.
<b>Tertiary packaging</b>	Tertiary packaging is the outermost level of packaging.
<b>Third-party certification</b>	Third-party certification involves an independent assessment declaring that specified requirements pertaining to a product, person, process or management system have been met.
<b>Traceability</b>	<p>The ability to identify and trace the history, distribution, location, and application of products and materials. A traceability system records and follows the trail as products and materials come from suppliers and are processed and ultimately distributed to customers. It also enables the origin and processing of components in an assembly to be identified.</p> <p>Ability to trace the history, application or location of an object.</p>
<b>Top management</b>	Person or group of people who directs and controls an organisation at the highest level.
<b>Unclassified product</b>	Products / parts with no classification and are therefore designated neither critical nor sensitive.
<b>Unapproved Part</b>	A part that was not produced or maintained in accordance with approved or acceptable data and applicable statutory, regulatory, and customer requirements.
<b>Validation</b>	<p>Activities performed to demonstrate that a product is capable of meeting the requirements for the specified application or intended use (where known). This may include certification activities, as / where applicable.</p> <p>Confirmation through the provision of objective evidence that the requirements for a specific intended use or application have been fulfilled.</p>
<b>Variation</b>	The change in the output or result of a system (process).
<b>Verification</b>	<p>Verification uses objective evidence to confirm that specified requirements have been met.</p> <p>Confirmation through the provision of objective evidence that specified requirements have been fulfilled.</p>
<b>Waiver</b>	A waiver is a type of concession raised in <i>advance</i> of manufacture.

# SABRe

## Supplier Management System Requirements

<b>Will</b>	Use of the word “will” indicates a mandatory requirement.
<b>Witness Point (by the customer)</b>	An event that allows the right of access for Rolls-Royce representatives, their customer and regulatory authorities to perform an assessment, inspection, surveillance or other investigative activities at the supplier’s manufacturing / production facility (including any level of the supply chain involved in the purchase order / contract).

Word / Subject	Definition
<b>Work instruction</b>	Defines mandatory detailed instructions for the execution of an activity or activities. WIs may be called different names across the organisation, for example: standard process, Health, Safety & Environment (HS&E) management standards, etc. WIs that are not applicable globally or linked from the RRMS may be owned and governed locally.

<b>Change History</b>					
<b>Revision</b>	<b>Date</b>	<b>Description of Change</b>	<b>Author</b>	<b>Owner</b>	<b>Approval</b>
2.1	4 November 2019	Definition of Rolls-Royce Standard Part added	Michèle Garner	Michèle Garner	Paula Adkins
2.0	17 August 2018	Addition of Major incident, change to reference in Control Plan, characteristic matrix (CR 2844), reduced inspection and process capability. Updated Nuclear UK picture.	Michèle Garner	Michèle Garner	Paula Adkins
1.1	5 April 2018	Removal of draft off pages 2-21, NAS412 from the Standards table and addition of picture on front page for Global Indirect Procurement and R <sup>2</sup> Data Labs	Michèle Garner	Michèle Garner	Paula Adkins
1.0	2 April 2018	First Issue to Align with SABRe 3	Michèle Garner	Michèle Garner	Paula Adkins
<b>Document update policy</b> This document may be updated periodically. Major updates will be indicated by an increase to a higher revision number (e.g., revision 1.0 to revision 2.0). Minor updates and corrections will be indicated by a decimal change in the revision number (e.g., revision 1.0 to revision 1.1).					

© Rolls-Royce plc 2018

The information in this document is the property of Rolls-Royce plc and may not be copied, communicated to a third party or used for any purpose other than that for which it is supplied, without the express written consent of Rolls-Royce plc.

While the information is given in good faith based upon the latest information available to Rolls-Royce plc, no warranty or representation is given concerning such information, which must not be taken as establishing any contractual or other commitment binding upon Rolls-Royce plc or any of its

# SABRe

## Supplier Management System Requirements

subsidiary or associated companies.