aggreko

SUPPLIER QUALITY ASSURANCE MANUAL

Table of contents

GLOSSARY OF TERMS

AAR	Appearance Approval Report
APQP	Advanced Product Quality Planning
BOM	Bill of Materials
DFMEA	Design Failure Mode & Effects Analysis
EHS	Environment, Health & Safety
FMEA	Failure Mode & Effects Analysis
FIFO	First In First Out
NPD	New Product Development
DR	Defect Reports
DPS	Delivery Precision Scoring
SRR	Supplier Recommendation Report
SEA	Supplier Evaluation Audit
KPI	Key Performance Indicator
LPS	Low Performing Supplier
NCP	Non-Conforming (Parts)
PFMEA	Process Failure Mode & Effects Analysis
PPAP	Production Part Approval Process
DPH	Defect Parts Per Hundred
PSW	Part Submission Warrant
ISIR	Initial Sample Inspection Record
SPM	Supplier Performance Measurement
RFQ	Request for Quotation
RFI	Request for Information
FPY	First Pass Yield
SPC	Statistical Process Control
SPR	Significant Production Run
SQA	Supplier Quality Assurance
SQE	Supplier Quality Engineer
8D	8 Discipline – Problem Solving Tool
QCDSI	Quality, Cost, Delivery, Service & Innovation
SRT	Supplier Registration Tool

Group Procurement Policy

Aggreko's reputation for acting responsibly plays a critical role in our success as a business and our ability to generate shareholder value. As a Procurement function we take that responsibility seriously at each stage of the process from placing orders to receiving products, through the organisation to our leadership team. We expect our suppliers to do the same.

In an effort to best leverage our purchasing power we have a single, enterprise-wide Corporate Procurement Policy. The primary goal of the Policy is to provide a framework for ethical, value-focused, timely, intelligent, and effective procurement in the execution of our business.

Our procurement principles reflect our core values and with this Policy we seek to:

- Support our market leadership on a global basis
- Deliver premium value for money that is recognised and sought after by the business
- Build and maintain long-term relationships with suppliers
- Manage risk throughout our supply chain
- Drive constant supplier innovation and the creation of opportunity
- Assure honesty, integrity and transparency through all our transactions

We have produced this document to reflect what we expect in all procurement related activities for Aggreko by all stakeholders. It's also an opportunity for us to communicate the principles that guide our required behaviours as an organisation.

This Policy applies to all our purchases, and all employees are required to follow this Policy.

Trevor Latham
Chief Procurement Officer

PROCESS APPLICABILITY MATRIX

Our business operates in markets that are diverse both by geography and by sector, which can result in contrasting procurement activity across business units. The matrix below offers a guideline of which sections of this manual should be applied as a minimum by each of our business units. The matrix defines minimum requirements based on the activity within each business area, however all the processes defined within the manual can be applied at the local procurement team's discretion.

SECTION NO	SECTION NAME	M&T	NAM	LAM	NOEUR	COEUR	UAE	AFRICA	EURASIA	ASIA	AUSPAC
1	Overview										
2	Supplier selection and evaluation										
3	Requirements applicable to service suppliers										
4	Supplier manufacturing requirements										
5	Production part approval – PPAP										
6	Supplier performance measurement and corrective action										

Section 1 – overview

1.1 Introduction

Aggreko plc is the global leader in the rental of power and temperature control.

We help companies increase profits by creating opportunities, solving problems and reducing risk using our unique network of global locations, equipment and technical services.

With over 100 locations in more than 30 countries we offer 24/7 services to companies across a variety of industries.

We pride ourselves in inspiring confidence in our customers worldwide:

- Confidence in the equipment and services we provide.
- Confidence in the promises we make.
- Confidence in the relationships we build.
- Confidence in the knowledge that we always get the job done.

We have management systems in place to support our lean, customer-focused operations.

These include:

- establishing a global database of suppliers
- controlling the consistency and quality of components and materials
- assuring operating performance to our customers
- implementing a market-leading world's best practice management programme
- protecting our customers from inferior parts, spares and service

Our suppliers are an integral part of the business. Relationships with all suppliers are built on total quality practices and principles to achieve best performance, product, delivery, service and total cost.

We share our knowledge and expertise with our supply base, and we invest substantially in the development of our supply in order to achieve the highest standard of product to our customers. For this, Aggreko expects maximum partnership participation and global performance standards from all suppliers.

For further information about the Aggreko PLC, **aggreko.com**

1.2 Purpose

The purpose of this manual is to define and establish the expected quality requirements for suppliers of goods and services to us.

This supplier quality manual contains a basic quality format to lay the foundation of an effective supplier quality assurance system, which can be referred to in the below model.

It also outlines the process of selecting a new supplier, assessing the capability and performance of each supplier, part approval process and last but not least, the overall supplier management process in terms of evaluating, rating our suppliers as well as control of non-conforming products.

The intent of the supplier quality management process is to be a cooperative effort between us and our suppliers, to ensure and maintain good quality and deliveries throughout the supply chain. This is achieved by helping the supplier develop and maintain internally controlled processes that address our requirements, and ensure minimal quality costs for both us and our suppliers. In addition to these quality requirements, we also expect our direct material suppliers to have a quality management system in place equivalent to ISO 9001. Third party registration to ISO 9001 isn't compulsory however, suppliers must endeavour to meet all the requirements of the standard and be able to demonstrate compliance through business process activities.

During the supplier assessment process we will favour suppliers who have implemented ISO14001 and or equivalent systems for environmental management as well as an occupational health and safety management (i.e. OHSAS 18001 / ISO 45001)

SUPPLIER EVALUATION & SELECTION

Continuous Improvement Activity | EHS Capability | Financial Viability | IT Management Capability | Production or Service Capability | Project Management Capability | Systems & Performance | Resource Capability | Technology

SERVICE SUPPLIER REQUIREMENTS

Training & Competence | Equipment & Facilities | Process & Procedures | Sub-Contractor Management | Verification | Reporting | EHS Capability & Performance

SUPPLIER MANUFACTURING REQUIREMENTS

Inspection | Drawing Control | Customer Property | Deviations | Packing, Shipping & Labelling | Identification & Traceability | Warranty | Sub-Tier Supplier Control | FIFO | Record Retention | Service Parts Requirements

PRODUCTION PART APPROVAL

Key Components | Submission Requirements | Product / Process Change Notification | Deviations

SUPPLIER MANAGEMENT

Nonconformity Management | Corrective Actions | Performance Monitoring | Surveillance Audits | Low Performing Suppliers

1.3 Scope

This supplier quality manual applies to all external suppliers of direct material such as components, products and systems to us and strategic indirect suppliers. Throughout the supply chain, suppliers are expected to ensure that their own suppliers support similar compliance.

1.4 Definitions

SUPPLIER	An organisation or person who provide components, materials, products, systems or services
APPROVED SUPPLIER	A supplier who has successfully met the criteria defined within Section 2 of this manual.
MANUFACTURER	A company that manufactures equipment required to be periodically serviced and/or maintained.
SERVICE SUPPLIER	(a Service Supplier or category of Service Supplier may be referred to here after simply as "Supplier"): A person or company, who at our request conducts inspection work and provides services such as measurements, tests, repair, or maintenance of equipment.
SUBSIDIARY	A company we partly or wholly own.
SUBCONTRACTOR	A person or company providing us with services with a formal contract defining the assumption of the obligations of the Service Supplier.
BULK (RAW) MATERIAL	A substance (e.g. non-dimensional solid, liquid, gas), such as adhesives, sealants, chemicals, coatings, fabrics, lubricants, etc. A bulk material may become production material if issued a production part number.
8D REPORT	Our preferred method of problem solving when a corrective action request has been initiated. 8D refers to the eight disciplines or steps involved in identifying and correcting the problem's root cause.
DEVIATION	Permission to use or release a product that does not conform to specified requirements.
CORRECTIVE ACTION	Action to eliminate the cause of a detected nonconformity or other undesirable situation.
DEFECTIVE PARTS PER HUNDRED (DPH)	The ratio of defective parts over the total number of parts being considered multiplied by one hundred. These defective units include both parts that will be scrapped or to be reworked.
DIRECT SUPPLIER	Determined by the impact of the supplied product/service on the quality of the final product.

FIRST PASS YIELD (FPY)	The number of units coming out of a process divided by the number of units going into that process over a specified period.
INDIRECT SUPPLIER	Determined by not having any impact on the quality of the final product.
ISO9001 QUALITY MANAGEMENT	International Organization for Standardization, quality management system requirements.
ISO14001 ENVIRONMENTAL MANAGEMENT	International Organisation for Standardization for Environmental Management.
KAIZEN	Refers to philosophy or practices that focus upon continuous improvement of processes in manufacturing, engineering, and business management.
LEAN	Is a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.
MARKED UP DRAWING	Drawing provided by the customer, Aggreko, indicating dimensions to be checked through allocation of sequential numbering. Dimensions are to be reported against the sequential numbers.
MEASURING EQUIPMENT	Measuring instrument, software, measurement standard, reference material or auxiliary apparatus or combination thereof necessary to realize a measurement process.
NONCONFORMITY	Non-fulfilment of a specified requirement." In other words, an occurrence of a condition that does not conform to the specifications of the prescribed standards.
ORIGINAL EQUIPMENT MANUFACTURER - OEM	An original equipment manufacturer, or OEM, manufactures products or components that are purchased by another company and retailed under that procurement company's brand name. OEM refers to the company that originally manufactured the product.
PREVENTATIVE ACTION	Action to eliminate the cause of a potential nonconformity or other undesirable potential situation.
PROCESS FLOW CHART	A scientific flowchart technique that identifies the value adding activities and the non-value adding activities in a process.
PROTOTYPE	Production of an original type, form or instance of something serving as a typical example, basis or standard for other things of the same category.
PURCHASE ORDER (PO)	A formal request to a vendor to supply certain goods or services with stated conditions.
PURCHASE PRICE VARIANCE (PPV)	The difference in price between the amounts paid to the supplier and the planned or standard cost of that item.
REWORK	Action on a nonconforming product to make it conform to the requirements.
SCRAP	Action on nonconforming product to preclude its originally intended use, for example the destruction thereof.
TRACEABILITY	Ability to trace the history, application or location of that which is under consideration.
VALUE ANALYSIS (PROCUREMENT ENVIRONMENT)	The study or examination to ascertain its total cost of acquisition, maintenance, and usage over its useful life, wherever feasible, to replace it with a more cost effective substitute.
VALUE ENGINEERING	Is a systematic method to improve the "value" of goods or products and services by using an examination of function. Value, as defined, is the ratio of function to cost. Value can therefore be increased by either improving the function or reducing the cost.

1.5 Supplier types

In order to manage the level of attention given to a particular supplier as a function of the importance of this supplier to the primary process in terms of added value and risk, we distinguished four types of suppliers:

- **Tier 1: strategic supplier**
  With those suppliers, we aim to maintain a close, long-term relationship where joint efforts towards improvement of quality, logistics, design and costs will support us to strengthen our leading market position.
- **Tier 2: core supplier**
  Core suppliers have considerable influence on the quality, timely delivery and cost of our end product. Therefore, we have the ambition to maintain a structured relationship as a base for continuous improvement to our mutual benefit.
- **Tier 3: leverage suppliers**
  Those suppliers have less influence on our end product. We manage the relation based on the monitoring of the fulfilment of our contracts.
- **Tier 4: other suppliers**
  Other suppliers are monitored and managed in proportion with the impact of the relation to our mutual business.

Aggreko will use an internal assessment tool to determine supplier types. Table 1 summarises selection and evaluation criteria for each supplier group.

ELEMENT	TIER 1	TIER 2	TIER 3	TIER 4
SUPPLIER REGISTRATION TOOL (SRT) Stage 1 - Supplier information, quality, compliance & ethical standards Stage 2 - Supplier questionnaire. Stage 3 – Aggreko internal review				
CONFIDENTIALITY AGREEMENT - NDA				
SUPPLIER RECOMMENDATION VISIT		OPTIONAL		
FINANCIAL CHECK		OPTIONAL	OPTIONAL	
SUPPLIER EVALUATION AUDIT (SYSTEM)				
AGREE T&C'S				T&C'S ISSUED WITH FIRST PO

Section 2 – supplier selection and evaluation process

SUPPLIER EVALUATION & SELECTION

Continuous Improvement Activity | EHS Capability | Financial Viability | IT Management Capability | Production or Service Capability | Project Management Capability | Systems & Performance | Resource Capability | Technology

2.1 Introduction

Conformance to high standards for quality from our suppliers will never be compromised. We expect quality products and services delivered on time and at competitive prices resulting in the lowest total cost of ownership.

Suppliers are selected on their ability to meet specified requirements and the capability to serve as a supply chain improvement partner.

The business arrangements with suppliers, which predate the release of this manual, will remain unchanged. These suppliers may be subject to re-approval or surveillance audits based on performance monitoring results, new product project requirements or our strategic procurement direction.

2.2 New supplier selection and evaluation

2.2.1 Potential suppliers will be requested to complete questionnaires related to quality, environment and safety, finance and ethics.

2.2.2 Potential suppliers can access questionnaires online, complete the questionnaires and submit it to our procurement for consideration. The procurement team will provide access to the site.

2.2.3 Typically the first formal contact with a supplier will be a Request for Information (RFI). At that time suppliers may be requested to complete the online questionnaires.

2.2.4 This evaluation collects general data about the company, its products and capabilities. Specific topics included are:

- Quality Systems: ISO9001 or equivalent Quality Management System
- Quality Performance: Past performance in quality, reliability and deliveries. Performance targets will be established based on past performance and industry best practices.
- EHS - ISO-14001 / OHSAS18001 / ISO45001 or equivalent Management System.
- Reliability: Practices in place for verification and validation testing that ensures their products will meet the minimum useful life expectations.

Other requirements:

- Information regarding specific requirements related to environment, corporate and social responsibility, and cost reduction.

2.3 Supplier selection criteria

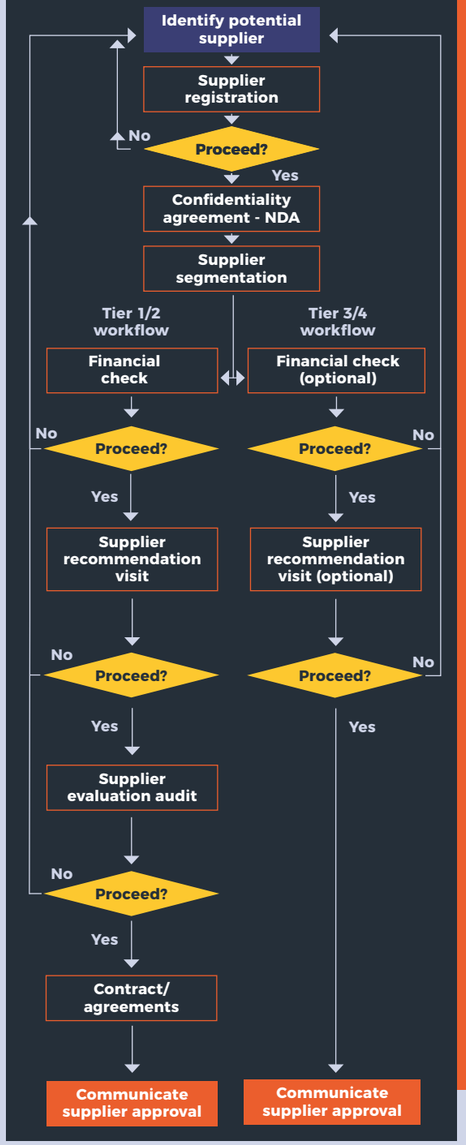
The primary criteria for supplier selection process are based on QCDSI (quality, cost, delivery, service and innovation) and EHS, which are most critical factors. We favour suppliers who have implemented ISO 9001/14001 or equivalent management systems as well as an occupational health and safety management system that complies with OHSAS 18001/ISO45001. Other supplier selection criteria are be based on the following:

CONTINUOUS IMPROVEMENT ACTIVITIES:	Continuous improvement activities revolve around seeking to eliminate non-value adding activities, whilst driving process and product improvement, which can be applied to all aspects of the business. We recognise supplier continuous improvement activities, as the basic rewards are sustained profitability and business growth that both the supplier and we can benefit from. Some supplier continuous improvement activities may include Lean or Kaizen activities, in which our representative will be available to assist.
EHS CAPABILITY / PERFORMANCE:	Evidence that the supplier has a robust system to mitigate environment, health and safety risk in relation to both activities and product supplied.
FINANCIAL VIABILITY:	Financial assessment is the screening process, which needs to be passed by any supplier. Understanding a suppliers total cost structure helps a buyer determine how efficiently a supplier can produce an item.
IT MANAGEMENT CAPABILITIES:	Evidence that the supplier is using such systems provides reasonable assurance that the supplier is staying current with new e-commerce technologies thus optimizing communication.
PRODUCTION MANAGEMENT CAPABILITIES:	Evaluating production scheduling and control system of suppliers enables us to assess on time delivery capability.
PROJECT MANAGEMENT CAPABILITIES:	Evaluates supplier's capability to be able to control all projects in such a way that it meets project on time and within the allowed budget.
RESOURCE CAPABILITIES:	Resource capability is a capacity for a set of resources to integrative produce product or component to our requirements.
TOTAL QUALITY PERFORMANCE, SYSTEMS AND PHILOSOPHY:	Supplier quality management process, systems and quality philosophy is also considered a major part of the evaluation process.
TECHNOLOGY:	Supplier's ability to make and / or modify, their knowledge of tools, machinery, techniques, systems, and methods of organization, in order to solve a problem, improve a pre-existing solution to a problem, achieve a goal, handle an applied input/output relation or perform a specific function.
OTHER:	This may include factors such as technological capability, innovation, etc., as specified by us.

2.4 Supplier evaluation and selection process – flow chart

The primary criteria for supplier selection process are based on QCDSI (quality, cost, delivery, service and innovation) and EHS, which are most critical factors. We favour suppliers who have implemented ISO 9001/14001 or equivalent management systems as well as an occupational health and safety management system that complies with OHSAS 18001/ISO45001. Other supplier selection criteria are be based on the following:

Supplier evaluation & selection (minimum requirements)



Process steps	System	Details
Identify potential supplier	SRT	- Supplier registration tool (SRT) - Complete SRT stage 1&2 (by supplier)
Supplier registration	SRT	- **Stage 1** - supplier information, quality, compliance & ethical standards - **Stage 2** - supplier questionnaire
Confidentiality agreement - NDA	SRT	- **Assign to buyer** - Complete SRT Stage 3 (by Aggreko) - **Stage 3** – Internal Review - Decision to proceed – Yes / No
Supplier segmentation		- **Record No – SRT controlled template**
Financial check		- Obtain signed NDA - **Upload report to SRT**
Financial check (optional)	SRT	- Determine supplier level to establish progression to Tier 1/2 or Tier 3/4 workflow - **Reflect decision on SRT record**
Supplier recommendation visit	SRT	- Conduct financial check. - **Upload report to SRT**
Supplier recommendation visit (optional)	SRT	- Review supplier financial report. - Decision to proceed – Yes / No - **Reflect decision on SRT record** - **Assign to supplier quality**
	Q-Pulse	- Complete supplier recommendation visit & create supplier capability profile.
		- **Record No – Q-pulse controlled** - **Upload record to SRT**
	SRT	- Review supplier recommendation profile. - Decision to proceed – Yes / No
		- **Reflect decision on SRT record.**
Supplier evaluation audit	Q-Pulse	- Conduct supplier evaluation audit. - **Record No – Q-pulse controlled template** - **Upload record to SRT**
	SRT	- Review evaluation audit report - **Upload report to SRT** - **Reflect decision on SRT record** - **Assign to buyer**
Contract/ agreements	SRT	- Establish appropriate contracts - **Upload to SRT** - **Update supplier status on SRT**
Communicate supplier approval	M3	- Communicate supplier approval to Supplier & Aggreko team members
Communicate supplier approval		- Create supplier on M3 and update status

Figure 2 Supplier Evaluation and Selection Process- Flow Chart

2.5. Supplier order management

Our businesses may use an electronic tool for submitting quotes or purchase orders (including the communication of delivery dates and requirements). The supplier will be provided with training required to use the tool.

Section 3 - requirements applicable to service suppliers

SERVICE SUPPLIER REQUIREMENTS

Training & Competence | Equipment & Facilities | Process & Procedures | Sub-Contractor Management | Verification | Reporting | EHS Capability & Performance

3.1 General requirements

3.1.1 Training of personnel

Service Suppliers are responsible for the qualification and training of their personnel to a recognized National, International or Industry standard, where applicable. Where such standards do not exist, Service Suppliers are to define standards for the training and qualification of their personnel relevant to the functions each is authorized to perform.

The personnel are also to have adequate experience and be familiar with the operation of any necessary equipment.

3.1.2 Personnel records

Service Suppliers are to keep records of the approved operators/technicians/inspectors. These records are to contain information on formal education, training and experience for the services they are approved for.

3.1.3 Equipment and facilities

Service Suppliers are to have the necessary equipment and facilities for the services to be supplied. A record of the equipment used is to be kept and available. The record is to contain information on maintenance and results of calibration and verifications. The supplier shall assess and record the validity of previous measuring results when the equipment is found not to conform to requirements and take appropriate action on the equipment affected.

3.1.4 Procedures

Service Suppliers are to have documented work procedures covering all services supplied.

3.1.5 Sub-contractors

Service Suppliers are to retain information of agreements and arrangements if any parts of the services provided are sub-contracted. Particular emphasis is to be given to quality management by Service Suppliers in following-up of such sub-contracts. Sub-contractors providing anything other than equipment are also to meet the requirements of the primary Service Supplier.

3.1.6 Verification

Service Suppliers are to verify that the services provided are carried out in accordance with approved procedures.

3.1.7 Reporting

Service Suppliers shall record and maintain all records or reports related to the activity carried out.

3.1.8 EHS Capability / performance:

Evidence that the supplier has a robust system to mitigate environment, health and safety risks both in relation to activities and in relation to product supplied. We maintain a Global Environmental, Health and Safety Management System that defines best operating practices, objectives, data collection, reporting, audits, performance indicators and goals.

Section 4 - supplier manufacturing requirements

4.1 General requirements

The supplier shall ensure all working areas, within their manufacturing process, are kept in such a way that our product can be produced to the right quality and quantity. Working conditions and housekeeping shall be evaluated, with corrections and improvements implemented accordingly.

It is within each supplier's best interest to utilize lean manufacturing principles in their manufacturing process to ensure production time and cost reduction initiatives are continually improved upon. As part of our focus on supplier development, one of our representatives may request the supplier to participate in improvement activities, e.g. Lean, Kaizen, 5s, at the supplier facility, in order to assist in continuous improvement initiatives.

4.2 In Process inspections

The supplier shall ensure all production part(s) / component(s) and or material(s) manufactured and delivered to us, has been inspected at specified intervals to ensure on-going conformance to our quality requirements.

Depending on the requirements specified on the purchase order, the supplier shall submit records of any actual in-process measurements and / or any other documents required upon request.

4.3 Drawing revision level control

It is the responsibility of the supplier to ensure revision level on the drawing issued is in accordance to the revision level as displayed on our purchase order.

Should the revision level(s) differ, immediately upon discovering the difference the supplier shall inform the relevant representative, who will reissue the correct revision level. Any product and / or component manufactured to an incorrect revision level drawing will not be accepted.

4.4 Deviation request

4.4.1 In the case where the supplier wishes to request a deviation to supply parts that do not fully comply with our requirements, the supplier must inform us and request approval. The request must be approved prior to shipment.

4.4.2 To request a deviation, suppliers must complete and submit a formal deviation request form. This form can be from the suppliers own format however, an Aggreko Deviation Request Form can be made available when requested.

4.4.3 All shipments made under a deviation should be identified on the exterior of the shipping container. Specific labelling type should be agreed between the supplier and the SQE. Any label should include the deviation approval number. Suppliers requesting a deviation must complete an 8D response identifying the cause, corrective action, and measures taken to prevent recurrence.

4.5 Customer property

The supplier shall also have an operating preventative maintenance system to optimize operating performance of the above. The preventative maintenance system shall include a time line schedule for activities required for preventative maintenance, instructions and records of findings.

If applicable, we can require an additional tooling agreement, which includes the detailed specifications for such customer property.

4.6 Identification and traceability

4.6.1 Traceability should be established to limit the size and impact in the event of the need for product recalls or campaigns. The control system must be capable of linking production quantities to production processes to support root cause analysis activity.

4.6.2 When lot control is utilized, the system must establish and maintain one-to-one relationship between a lot/batch traceability number and a certain quantity of produced parts. If a traceability number, other than the serial number, is used for identifying serialized parts, a one-to-one relationship between the traceability number and the serial number must be maintained.

4.6.3 The extent of definition and control shall be based on risk analysis of the product and the potential impact to customers. Suppliers are responsible to ensure that the lot traceability system maintains its integrity throughout the entire supply chain, including raw material, purchased components/products, and sub contracted operations.

4.7 Packaging, shipping and labelling

All product or components shipped to us, locally or imported, shall be done with packaging material in accordance with local regulations. It is the responsibility of the supplier to investigate such requirements.

Product labelling shall also be in accordance with our requirements for all product / component and / or material shipments made.

Packaging shall be of sufficient material(s) and design to provide sufficient protection to the part(s) / component(s) against any adverse conditions that may cause packaging damage or deterioration. This shall include transport and environment conditions, cover safety and is applicable to the point of unloading, storage and unpacking at the customer end.

4.8 First in first out inventory control –FIFO

4.8.1 Suppliers are responsible for having inventory control systems that positively identify and control obsolete material to prevent inadvertent shipment. Where feasible, suppliers shall maintain First In/First Out (FIFO) inventory management practice. The system for FIFO control must ensure controls extend to rework/ repair, test activity and off-site (sub-contract) processes.

4.9 Sub-tier supplier requirements

4.9.1 Our suppliers should encourage their suppliers to maintain an ISO 9001 certified or equivalent management system. Suppliers have full responsibility for the quality assurance and corrective action of products delivered from sub-tier suppliers for use in our products.

4.9.2 Aggreko Procurement reserves the right to have direct access to sub-tier suppliers and processes that could have significant impact on final product quality. This will generally concern technical processes that are of high risk to the product quality or safety. Please check with your SQE to determine if your sub-tier or contract suppliers would fall into one or more of these categories. Access to sub-tier suppliers approval of sub-tier suppliers by us, does not change or reduce the supplier's responsibility for quality of products supplied by those sub-suppliers.

4.9.3 Aggreko Procurement requires suppliers to use the Production Part Approval Process (PPAP) and that this requirement is applied to sub-tier suppliers of products to be used in Aggreko products. Suppliers have the responsibility for managing the PPAP at their suppliers and maintain evidence of compliance.

4.9.4 Once a part is approved, changes at sub-tier suppliers that affect fit, form or function must be documented and approved by us using the Product Process Change Notification process.

4.10 Warranty

4.10.1 Responding to field warranty claims remains a top priority for us. When field failures are determined to be the result of a supplier's product, suppliers will be notified through receipt of a warranty claim. It is expected that suppliers will fully participate in the investigation, root cause analysis and corrective action when field failures are identified. Suppliers should have an established process for the handling, analysis, investigation, reporting and corrective action of customer field returns.

4.10.2 If the non-conformance is generated by a supplier, we may call the responsible supplier for immediate correction or replacement of products. The conditions defining response and responsibility are included in the Procurement conditions or procurement agreement.

4.11 Service part requirements

4.11.1 We have the same level of quality requirements and expectations for parts produced for service and aftermarket as required for production parts when service parts are identical to the serial production parts.

Please refer to contract order.

4.12 Record retention

DOCUMENT TYPE	Examples	Maintenance Interval
PPAP DOCUMENTATION	Drawings, Process Flow Charts, Control Plans, FMEA's, PSW's, Manufacturing Instructions, etc.	Duration of production and service activity Plus 1 year.
QUALITY RECORDS	Inspection Records, Functional Test Results, Material Certifications, Torque Records, Other Test Results (Cleanliness, etc.)	3 years from date of production.
QUALITY SYSTEM DOCUMENTS	Internal Quality System Audits, Product Audits, Supplier audits, Management Reviews	3 years from date of creation.
PRODUCT SAFETY RELATED RECORDS	Inspection Records, Test Results, Materials Certifications, Torque Records, Traceability Records.	15 years from date of product manufacture.

The retention time periods shall be regarded as minimum. Retention periods longer than those identified above may be specified by an organization in its procedures.

***These requirements do not supersede regulatory requirements.**

Section 5 – production part approval process

PRODUCTION PART APPROVAL

Key Components | **Submission Requirements** | **Product / Process Change Notification** | **Deviations**

5.1 Scope

Applies to all key components as defined in Section 5.2

The Production Part Approval Process (PPAP) demonstrates that the manufacturing process used to produce parts for Aggreko is fully developed, thoroughly tested, and capable of serial production of parts conforming to the technical specifications.

For the PPAP, Aggreko defines its requirements in the following section.

Sample parts and the supporting documentation are submitted to show evidence that:

- The design records and specifications have been properly understood and met
- The manufacturing process has the capability to produce conforming parts in the actual production environment.
- The manufacturing process has the capacity to support production quantities at a consistent quality level.

5.2 Key components definition

All parts used in our product are important to customer satisfaction and the safe, reliable operation of the final product. However, some parts require additional attention. At the start of a project, a cross-functional project team identifies parts that will be subjected to closer control and monitoring. These parts are designated as Key Components. The buyer or Supplier Quality Engineer will notify suppliers of parts selected as Key Components and any associated requirements. Suppliers of Key Components will typically be expected to participate in APQP and joint steering committee reviews during each project.

Key component selection criteria:

- Safety critical components
- Regulatory or legal requirements
- Parts with critical characteristics
- Supplier designed products
- Complex part or component
- Parts that constitute vital function in a system.
- High value part or component
- Major engine components
- Expensive or long lead-time tooling
- Long lead-time part
- Parts with known or potential quality concern
- Extensive verification or validation testing
- Parts with features that cannot be verified prior to use by a customer (unchecked characteristics)

5.3 Submission requirements

5.3.1 Prototype submissions

The minimum documentation requirements for prototype submissions:

- Appearance approval report (If applicable)
- Dimensional results
- Material test results
- Performance test results
- Part submission warrant

PPAP submission
Suppliers are required to submit a Level 4 PPAP package for all components unless other arrangements have been agreed between us and our supplier.

The minimum documentation requirements for a Level 4 PPAP:

- Control plan
- Appearance approval report (If applicable)
- Dimensional results
- Material test results
- Performance test results
- Part submission warrant

5.3.2 Suppliers shall only submit PPAP packages based on the production-released drawings.

A copy of the Aggreko drawing must be included in the submission package. PPAPs cannot be approved based on supplier's drawings. Balloons supporting dimensional checks must be done on the Aggreko drawing.

5.3.3 The SQE may ask for the submission of additional information. Agreement to provide additional data must be documented prior to submission of the PPAP. Prior to submission, suppliers should contact the responsible SQE to determine if additional documentation is required. Proprietary documents that cannot be submitted must be available for review. Suppliers may be required to travel to our sites for review of proprietary documents.

5.4. PPAP levels:

The Aggreko SQE may ask for alternative PPAP levels as per the table below:

Item		Level 1	Level 2	Level 3	Level 4	Level 5
1	PSW	S	S	S	S	S
2	SAMPLE COMPONENT	S	S	S	S	R
3	DIMENSIONAL REPORT (ISIR)	S	S	S	S	R
4	AAR (IF REQUIRED)	S	S	S	S	R
5	MATERIAL,PERFORMANCE TEST RESULTS	S	S	S	S	R
6	WORK INSTRUCTIONS (SOP)		S	S	*	R
7	CAPACITY PLAN		S	S	*	R
8	PROCESS FLOW DIAGRAM		S	S	*	R
9	CAPABILITY STUDIES			S	*	R
10	CONTROL PLAN			S	S	R
11	FMEA (PROCESS)			S	*	R
12	GAUGE R & R			S	*	R

S = The supplier shall submit a copy of the records or documentation and retain a copy at appropriate locations
R = The supplier shall retain at appropriate locations and make available to Aggreko upon request.
* = Items for submission determined by Aggreko Supplier Quality Engineer

All proposed changes to the product, production process, material or suppliers after PPAP must be submitted to Aggreko in writing for approval. Requests for change must be submitted at least 12 weeks prior to the introduction of the change.

5.5 Product process change notification

5.5.1 In accordance with Aggreko purchasing conditions, a supplier cannot implement a change to a product or production process after PPAP approval, without prior approval from Aggreko.

5.5.2 The purpose of this requirement is to prevent quality & delivery issues resulting from unapproved, untested changes or modifications after PPAP approval. This applies, but is not limited to the following cases:

- Transferring of the production line: partly or totally; to a new or existing location, plant or building
- New production layout or changes to production line
- Change of a sub-tier supplier
- Changes of a process at a contract supplier, (surface treatment, machining.....)
- Change at sub-tier suppliers that affect fit, form or function of the product
- Renewal of current tooling
- Change to the raw material
- Outsourcing all or part of production to a sub-tier supplier
- Request for change to product design including dimensions, tolerance, function, appearance

5.5.3 The supplier desiring or requiring a change shall submit a proposal to the buyer with a copy sent to the Supplier Quality Engineer as soon as the modification project is known, and at least 12 weeks prior to the intended start of production. Suppliers may be required to submit additional information to support evaluation of the proposed change.

5.5.4 Since we are a global company with facilities on most continents, suppliers must be prepared to support the impact of a change request at all our using facilities. This expectation applies to all changes covered by submission and approval of a Product Process Change Notification. Suppliers making a process or product change must be capable and willing to provide information and resources required to secure product quality and uninterrupted deliveries.

5.5.5 Introduction of changes without our approval may result in any or all of the following actions:

- All costs related to correcting the situation created by an unauthorized change will be charged back to the supplier.
- The supplier's 3rd party Certification Body will be formally notified that the supplier is not following quality system or customer requirements.
- Supplier will be required to complete corrective action and demonstrate effective controls to prevent recurrence.
- Supplier will be put on hold for new business until effective corrective action is taken.

5.5.6 After we receive, the request is submitted to a team for analysis. Based on the impact on us and the risk associated with the change, the Product Process Change Notification may have one of the following decisions:

- Authorize the supplier modification.
- Ask to adapt the content of the supplier modification.
- Ask the supplier to delay the implementation until extra actions/verifications are performed, (Actions include, but are not limited to, audits, safety stock, testing, ...).
- Ask the supplier to cancel the proposed modification.

5.5.7 Once approved by us, suppliers will be notified by an official letter. Upon receipt of the approval letter, suppliers should implement the modification project according to the agreed implementation plan.

5.5.8 The level of PPAP documentation required to support the introduction of the change will be determined by the SQE. Authorization to start shipping (with the changes implemented) is only granted via the return of the signed PSW following PPAP approval.

Section 6 – supplier performance and corrective action

SUPPLIER MANAGEMENT

Nonconformity Management **Corrective Actions** **Performance Monitoring** **Surveillance Audits** **Low Performing Suppliers**

We recognize that the performance of the supply base has a direct and immediate impact on organizational performance. In response to this, we have developed a system for the measurement and evaluation of supplier performance. The indicators resulting from this process are compiled on an ongoing basis. The data is reviewed and evaluated at all levels of our organization. These measurements will be regularly communicated to our suppliers.

Even under ideal conditions and careful preparation, problems may occur. In addition to performance, we measure a supplier based on their cooperation in aggressively seeking to resolve problems. Suppliers are evaluated on the promptness in response when notified of a problem, the timeliness of their response, and the effectiveness of actions taken to resolve the problem.

We invite suppliers to work as partners in the problem solving process.

6.1 Managing non conforming parts

DEFECT REPORTS

6.1.1 It is in the interest of both we and the supplier, to identify and address non-conforming parts as quickly as possible.

In the event non-conforming parts or materials have been identified at one of our locations, suppliers will be notified using a Defect Report [DR]. The Defect Report is sent by email to the supplier's quality contact

6.1.2 Suppliers shall take all necessary actions to respond to nonconforming product that reach one of our facilities. Every effort is taken to investigate and document non-conformances and to notify the supplier immediately. When possible, suppliers will be given early notification of a problem prior to the issuing of a Defect Report (DR).

6.1.3 We have developed a process for determining the non-conformance disposition and quantity for each Defect Report. This is a formal process, which has been formally adopted into our quality management system.

6.1.4 All costs (administrative, sorting, handling, shipping, and rework) associated with addressing a non-conformance will be the supplier's responsibility. These costs may include any secondary costs incurred by us resulting from a non-conformance. These include the costs associated with tear down, reassembly, re-testing, and logistics support.

6.1.5 Under normal circumstances, suppliers are expected to respond immediately to any non-conformance and ensure that all receiving facilities are protected within 24 hours. Suppliers are required to notify us immediately if it is suspected that non-conforming material has been shipped to one of our facilities.

6.1.6 Depending on the type of non-conformance and material status, supplier parts may be sorted, reworked or adjusted. Supplier approval is required before any rework or adjustment will be performed. Suppliers should be prepared to take any or all of the following actions after nonconforming material is identified at one of our facilities.

- Replacement nonconforming material
- Provide resources to perform required sorting or rework
- Provide third party sorting resources
- Authorize us to begin third party activities on the supplier's behalf
- Provide instructions and acceptance criteria required to support inspection, sorting, or rework

6.1.7 We have agreements with third party sorting companies who are capable of providing sorting activity on the part of the supplier. All costs associated with work and materials associated with the activity of this third party are the supplier's responsibility. Suppliers have the option to use this service or to contract a third party to do sorting or rework on their behalf. Third parties selected by the supplier must be approved by us prior to starting any sorting or rework.

6.1.8 Nonconforming parts or material will be returned to suppliers or scrapped at Aggreko based on supplier's direction.

6.2 Corrective action response reporting (SCAR)

6.2.1 The SCAR process is a common problem solving process used in responding to customer returns or major quality issues. It defines the key steps involved in problem resolution including containment of the problem, root cause analysis, problem correction, and problem prevention.

6.2.2 Each time a non-conformance or a defect has been documented, the causes for the problem must be investigated and reported. It is recommended that suppliers respond using our SCAR format. Suppliers may respond using their corrective action format as long as it includes all key areas of the SCAR format. To avoid delay and extra work, suppliers should submit their corrective action response format for approval to their SQE.

6.3 Corrective action response timing

6.3.1 It is of vital importance that the supplier starts the problem solving process upon notification. It is critical that appropriate actions occur immediately to contain the problem and avoid any further disturbances to production or potential quality hazard.

6.3.2 When notified of a non-conformance suppliers are requested to react in accordance with the following timeline:

- **Immediately:** Acknowledge receipt of DR
- **24 Hours:** Begin containment activity to include sorting internally, in-transit and at Aggreko, (3rd party allowed). Problem analysis started.
- **48 Hours**: Containment completed and short term corrective action fully implemented
- **10 working days:** (Timing starts after confirmation of non-conformance) Root cause analysis complete for both occurrence and non-detection, permanent corrective action defined and implemented.
- **20 working days:** Effectiveness of permanent corrective action checked and recurrence prevented.

6.3.3 In addition to correction of the documented problem, suppliers shall apply the lessons learned to all similar products or processes. Permanent countermeasures for all defect categories should be implemented for all parts and processes.

Submission response timing

Timing	Activity
24 HOURS	Problem identified and containment initiated
48 HOURS	Containment completed
10 DAYS	Root cause analysis and actions completed
20 DAYS	Effectiveness verified

If the resolving time lasts longer than 20 days, the supplier must reach an agreement with SQE.

6.4 Supplier Monitoring

Performance data related to quality, delivery and service is continually collected and monitored for all Tier 1 & 2 suppliers. On a monthly basis, the procurement department produce and review performance reports based on this data and follow up with suppliers who are not meeting our requirements. On an ongoing basis we share this information with our suppliers and co-ordinate performance reviews to discuss issues and concerns. We expect that the top management is involved and engage appropriately to resolve performance issues.

When any of the monitored measurement parameters indicate a negative performance trend or significant abnormality, the supplier will be considered for elevation into the Low Performing Supplier process. See Section 6.8.

6.4.1 Supplier performance measurement (spm)

The SPM process has been developed as a better indicator of a supplier's actual performance than using DPH alone.

Scorecard Main Categories and Sub-Criteria

The AGGREKO SPM scorecard has four main performance categories including cost, quality, delivery, and innovation and Business Alignment Goals. Based on our strategic goals and objectives, AGGREKO applies the following weights to the performance categories:

20% **Cost**

30% **Quality**

30% **Delivery**

20% **Innovation and business alignment**

Each category is further divided into sub-criteria each with its own weight:

Cost – 20%

- Annual Cost Reduction % - 100%

Quality – 30%

– Defects per hundred (DPH) / new product fleet acceptance (NPFA) – 60%

- SCAR performance (corrective action requests) – 40%

Delivery – 30%

– Delivery to commit date – 50%

– Delivery to lead-time – 50%

Innovation and business alignment – 20%

- Innovation / NPI
- Responsiveness
- Business processes
- Quality systems

Sub-Criteria Scoring

For each category, we use a 5-point system, where **5 is the highest and 1 is the lowest.**
The sub-criteria scoring has been defined in the tables below :

DPH / NPFA

Logic (DPH)	Logic (NPFA rating)	Result
>5.0 DPH	NPFA = 1 - 2	1
3.1 - 5.0 DPH	NPFA = 3	2
1.5 - 3.0 DPH	NPFA = 4	3
0.5 - 1.4 DPH	NPFA = 5	4
<0.5 DPH	NPFA = 5 (≥ 3 Mths)	5

SCAR

Logic (Qty)	Result
≥ 3 SCAR's	1
2 SCAR's	2
1 SCAR	3
0 SCAR's	4
0 SCAR's (≥ 3 Mths)	5

PPV

Logic (%)	Result
> 103%	1
≥ 101% ≤ 103%	2
≥ 100% < 101%	3
≥ 97% <100%	4
< 97%	5

DPS

Logic (Del - commit date)	Logic (Del - lead-time	Result
<93% on-time	<93% to lead-time	1
93-94% on-time	93-94% to lead-time	2
95-96% on-time	95-96% to lead-time	3
97-98% on-time	97-98% to lead-time	4
99+% on-time	99+% to lead-time	5

Innovation and Business Alignment

Sub-criteria	Score
Innovation and NPI	12 pts
Responsiveness	12 pts
Business Processes	14 pts
Quality Systems	12 pts
Total Possible Points	50 pts

Grading

Logic	Result
4.0 - 5.0	A
3.0 - 3.99	B
< 2.99	C

6.4.2 Explanation of terms used in SPM.

DPH - DEFECTS PER HUNDRED:	The number of parts rejected, divided by the number of parts delivered multiplied by 1 hundred.
NPFA - NEW PRODUCT FLEET ACCEPTANCE	Measures the number of negative NPFA receipts and considers resultant quality impacts.
SCAR -SUPPLIER CORRECTIVE ACTION REQUEST	Measures the number of supplier corrective actions requested during the reporting period.
PPV - PURCHASE PRICE VARIANCE	Measures supplier's average price variance in the period being reported.
DPS - DELIVERY PRECISION SCORE:	Delivery to commit date Measures the supplier's ability to deliver product on-time to the AGGREKO designated location. Delivery to lead-time Measures the supplier's ability to deliver PO line items within agreed lead-times.

Formula for calculating SPM:

Weighted Cost Score + Weighted Delivery Score + Weighted Quality Score + Weighted Innovation & Business Alignment Score

The SPM is calculated and updated on the supplier score card on a quarterly basis.

6.5 The Aggreko surveillance audit

Periodically our supplier quality will conduct an in depth audit of the process steps that have a direct impact on the quality of delivered products. Suppliers are required to develop a robust improvement plan to close the gaps identified during the audit.

6.5.1 We routinely conduct process and system audits as a prevention activity as well as tool to support corrective action. Audits may be performed under any of the following circumstances:

- During APQP
- During production ramp up
- New supplier evaluation
- Introduction of a new process
- Move production to a new location
- Poor quality performance.
- After a major incident

6.5.2 We reserve the right to perform process audits whenever it is deemed necessary. Suppliers will be given reasonable advance notice of a pending audit. An agenda will be communicated by the SQE detailing the audit focus areas.

6.6 Continuous improvement

6.6.1 Suppliers are expected to use the lessons learned from each incident to improve production process, product design, or underlying business systems. The goal is to eliminate the possibility of similar incidents, not only by making procedural and processes adjustments on the manufacturing floor, but by removing the environment that allowed the issue to surface. Lasting improvement requires correcting the systems and strategies that support the production process.

6.6.2 In addition to isolated events, suppliers shall use statistical data to continually evaluate and refine their processes. This evaluation should include analysis of quality incidents, defect rate, scrap, downtime, and customer failures. The clear objective of this analysis must be reduction of variation with the finished product. The supplier shall have on-going, active improvement projects that target two or three of the largest problem areas and be able to demonstrate a positive trend in reducing incidents and repeat occurrences.

6.7 Low performing supplier – LPS

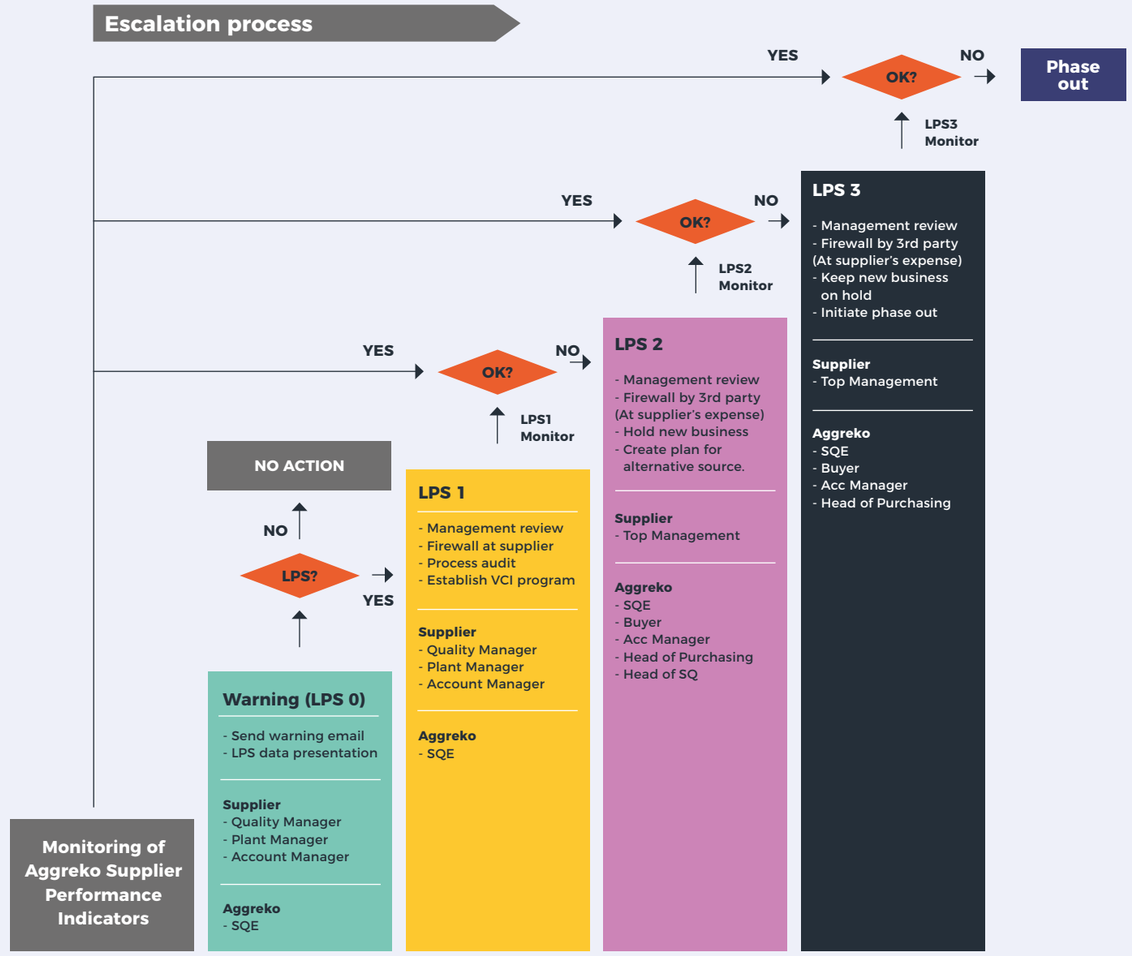
6.7.1 We monitor supplier performance on an ongoing basis. When any of the monitored measurement parameters indicate negative performance trend or significant abnormality, the supplier is consideredfor elevation into the Low Performing Supplier process.

6.7.2 Suppliers will be notified of the potential inclusion in the LPS process by a warning letter sent to the supplier's quality department. The letter will include the reason or reasons a supplier is being considered for entry into the LPS process.

6.7.3 The LPS procedure provides a clearly defined guide to the analysis, actions and monitoring that will take place while a supplier is engaged in this process. Supplier improvement activities are initiated and monitored through a three-stage elevation process. Each stage has defined criteria for entry and exit and identified actions to be completed during the stage. Exit criteria are based on improved performance results and implementation of process improvements. Suppliers that do not meet the criteria for a stage by the target completion date are elevated to the next LPS stage level.

The goal of the Low Performing Supplier (LPS) process is to initiate and drive improvement activities with our suppliers who are performing below expectations.

6.7.4 Each time the supplier is elevated to a higher stage, the actions required will be those of all previous stages, plus the additional actions required by the new stage. At any time that the exit criteria is met for a specific stage the supplier is moved to the "Monitoring" status. A supplier can be placed in the LPS based on performance for an individual part number, multiple part number bases or organizational performance.



Power **how** you need it,
when you need it, **where** you need it.

aggreko

Visit us at **aggreko.com** to get in touch