

Supplier Quality Manual

Document No:

COMM-SC-2020

Template Revision Date:

15 Jul 2021

Level 1 - Corporate Operations

CORPORATE OVERVIEW

Mission

CommScope's mission is to be the leading global developer, producer and seller of high performance communication solutions for deployment by communication providers and enterprise users. We strive to be recognized for the superior quality and performance of our products, outstanding service to our customers, excellence of our employees and the value we provide to our stockholders.

Structure

CommScope is structured into multiple business units: Some suppliers will provide product across multiple business units, while others will be business unit specific.

Website

www.commscope.com

INTRODUCTION

Suppliers

Welcome to the CommScope Inc. team. As one of our suppliers, you play a vital role in ensuring CommScope's success in meeting our commitment to meet or exceed our customers' requirements and to continually improve our products and services. As an extension of our own operations, we rely on our suppliers to provide material, products and services which meet or exceed all of the requirements of the CommScope contracts, applicable specifications and the quality management requirements outlined herein.

Purpose

This manual provides a framework and guidelines for several key processes that must take place between the supplier and CommScope. By better defining these processes, communication will be improved and simplified; thereby allowing us to strive for world class performance.

This manual is not intended to cover every aspect of the supplier/CommScope relationship. Contingencies and situations will develop that may not be specifically addressed by the framework and guidelines of this manual. In these instances, communication and coordination are the keys to an effective and efficient supplier/customer relationship.

Scope

This manual applies to all suppliers providing materials, products, processing and related services to CommScope, a subsidiary or an end user/customer of CommScope products. The general requirements outlined within this document do not supersede requirements in the CommScope contract, or drawing, including engineering specifications and process specifications. In the event of a conflict between this document and any contract between the supplier and CommScope, or the CommScope Terms and Conditions, the requirements set forth in the contract or the CommScope Terms and Conditions will take precedence.

The supplier acknowledges that the products supplied to CommScope may be used in products for the telecommunications industry. The supplier assumes responsibility for its sub-suppliers; including sub-suppliers specified by CommScope.

The Supplier agrees not to deny responsibility for quality for any reason, including but not limited to:

- CommScope having approved specifications, drawings or other documentations; or
- CommScope having accepted the products upon initial inspection and later, the product is found to be out of specification or otherwise defective.

If a CommScope designated sub-supplier (tier 2) supplies poor quality product, the Supplier may enlist the assistance of the CommScope Supplier Quality Team.

Questions

Questions concerning this manual or its contents may be directed to your respective CommScope Quality Manager or Procurement Category Manager.

CONFIDENTIAL Supplier Quality Manual COMM-SC-2020 Revision Date: 15 Jul 2021 Page 1 of 13

GENERAL REQUIREMENTS

(*) denotes a requirement that has supplementary information in the following section.

The following set of general quality requirements apply to all suppliers:

- **Bill of Materials Compliance**: Supplier will use material and suppliers when specified by CommScope. Where Material and sub tier vendors are supplier selected, any changes vs. the qualification samples provided to CommScope must be communicated in advance through a change notice to CommScope.
- Business Continuity: The supplier shall implement an effective Business Continuity Management System (BCMS). The BCMS shall first and foremost protect the suppliers' employees as well as any CommScope employees that could be onsite during an event. The system shall be consistent with ISO 22301 or similar standard in approach and shall manage the threats and impacts associated with an interruption of critical operations that could affect supply of goods into CommScope. The BCMS shall also address the ability to notify CommScope for ANY business disrupting events that could potentially affect/delay shipments of product or the inability to meet obligations set forth in the signed contract or CommScope's Terms and Conditions.
- CommScope designated sources: CommScope defines designated sources in the drawing, BOM, contract or variety of forms etc. for special commodities e.g. IC components, PCB, Plating, Molding resin, Metal etc., Supplier shall ensure that CommScope designated sources provided material conform to requirements.
- Compliance with contractual requirements: The suppler shall ensure that it can meet the requirements for
 products and services to be offered to CommScope. It shall conduct a contract review before committing to
 supply products and services to CommScope
- **Control of sub-tier suppliers:** Supplier has responsibility for sub-tier supplied materials. Sub-tier supplier management activities include but not limited to, perform routine audit with their sub-tier supplier, establish incoming material inspection process, periodically monitor, and track sub-tier supplier performance.
- Control of Non-Conforming Product *
- Control and release of CommScope supplied documents: Suppliers shall control all CommScope supplied documents and data (e.g., Procedures, working instructions, forms, drawings, specifications, reports, standards, records) if these documents and data influence the realization and/or support of products and/or services. For the control of documented information, supplier shall address the following activities, as applicable: a) distribution, access, retrieval and use; b) storage and preservation, including preservation of legibility; c) control of changes (e.g. version control); d) retention and disposition.
- Counterfeit Parts/Materials *
- Document Control *
- **Electronic documents:** Electronic documents are treated as controlled documents. Supplier shall establish the process to ensure electronic document has proper revision control, renew and approval process.
- Environmental product compliance: Suppliers are required to comply with all applicable environmental product laws and regulations. This includes but is not limited to Product content/compliance (hazardous substances, RoHS, REACH, WEEE, etc.).
- Environmentally Sensitive Components/Material: Suppliers authorized to provide Electrostatic Discharge (ESD) sensitive devices to CommScope shall, prior to processing product, establish, document, and implement an Electrostatic Discharge (ESD) Control Program plan in compliance with the requirements of MIL-STD-1686 or equivalent.
 - Suppliers authorized to provide Moisture Sensitive (MS) devices to CommScope shall, prior to processing product, establish document and implement an appropriate program for handling, storage and shipping of products in compliance to J-STD-033D or equivalent.
 - Suppliers authorized to provide or use adhesive/epoxy material in CommScope products must have an appropriate temperature and storage control program.

Revision Date: 15 Jul 2021•

• Inspection: Supplier is responsible to ensure that product is compliant with all testing and dimensional

requirements prior to delivering to CommScope.

- Master sample: Supplier must retain a master sample, when required by CommScope and make it available upon request
- Non-Compliance *
- Notification of Product or Process Changes *
- Packaging verification: Packaging must adequately protect materials and be compliant all applicable requirements. These may requirements may but are not limited to requirements around outer packaging, inside packaging, labeling, data requirements, tape, pallet configuration, and pallet treatment.
- Performance Measures *
- Process Control *
- Product Qualification (PPAP) *
- Protection of Intellectual Property *
- Quality Management System *
- Quality planning: Suppliers should utilize good quality practices to ensure compliant products and associated process and controls systems. Typical tools could include: FMEA, Control plan and 8D methodology for problem solving process.
- Record Retention *
- Request for Product Deviation *
- Responsible sourcing of minerals: Supplier will maintain compliance to applicable RoHS, REACH, Conflict Minerals, and other applicable requirements required by law, contractually specified and or mutually agreed.
- Sample product actual samples as required by CommScope. Typical requirement is 5pcs. If product is made on more cavities, then 5pcs per cavity. (e.g. Molding)
- Supplier Code of Conduct *
- Shelf-life control; Materials The supplier shall furnish data (upon request) that shows (a) the cure or manufacturing date (b) expiration date or shelf life, (c) lot or batch number and (d) when applicable any special handling or storage requirements with each delivery of material or products that have a limited or specified shelf life. For all shelf-life limited materials or products delivered to CommScope, the remaining shelf-life shall be a minimum of 75% of the total shelf life, unless otherwise specified by contract or temporary deviation.
- Shipping Documentation (Direct Ship Partners) *
- Source inspection: Supplier's products may be subject to source inspection by CommScope, a representative
 of CommScope or a regulatory agency such as Underwriters Laboratory (UL). Source inspection may apply to
 all operations performed by the supplier or the supplier's sub-tier sources. The supplier shall provide the
 necessary access; equipment and resources (i.e. movement of material) required to effectively accomplish the
 source inspection.
- Supplier Approval Process *
- Traceability:

Typically, Lot or date code based unless otherwise specified. Components or Assembly must have Lot control at suppliers, Supplier lot traceability system is enable us to trace back manufacturing information to the lot of components or assembly e.g. shift, machine, test data if requested. Beyond that, Supplier should establish traceability system of linking critical raw materials lot (from their sub-tier suppliers) with components or assembly lot.

• **Test Equipment:** Follow industry compliance with Measurement Systems compliance practices. These include calibration records and Gauge R&R. Necessary measurement/test equipment or 3rd party resource to meet product requirement in print and regulation requirement e.g. UL standard, ROHS etc.

Supplemental Descriptions

CONTROL OF NONCONFORMING PRODUCT

- A supplier shall not knowingly ship product that deviates from the drawing, specification limits, or design intent
 without prior written authorization from the CommScope Supplier Management Team (SMT). If such a condition
 exists, the supplier may petition the CommScope Quality Representative, in writing, to allow shipment of the
 product under a written nonconformance deviation. If requested by CommScope SMT, the supplier must send
 samples of such nonconforming items to CommScope for evaluation. The cost of shipping, inspection, and
 testing to determine the potential acceptability of such product will be charged to the supplier.
- In the event that non-conforming product or services reach CommScope or an end user of CommScope product, a Supplier Corrective Action Request (SCAR) in the form of an 8-D may be issued to the supplier. The SCAR will contain a detailed description of the non-conformance and any applicable information needed for immediate containment. A SCAR reference number will also be provided. This number needs to be referenced on all future communications involving the indicated non-conformance.
- Within 24 hours of receiving notification of a SCAR, the supplier shall contact the issuing party to acknowledge receipt of the SCAR and to communicate the RMA number if material is to be returned. Within 48 hours, the supplier shall communicate any containment actions taken, if required.
- The supplier is then required to use a structured problem-solving approach, preferably in a team environment, to determine the root cause of the non-conformance and to implement a permanent corrective action. Any generally recognized problem-solving tools (PDCA, 5-Why, 3L5W, etc.) are acceptable.
- The root cause and corrective action (RCCA) of an SCAR must be defined and communicated to the responsible CommScope issuing party within 10 working days of the initial receipt of the SCAR, or it will be considered a late response. Late responses can negatively impact the supplier's quality rating. Extensions may be requested and will be considered on a case-by-case basis.
- In all cases, the supplier shall fully contain all product suspected of being nonconforming. In addition, nonconforming product may be returned to the supplier at supplier expense, or the supplier may be required to sort any suspect product already shipped to CommScope sites or be charged back for the cost of sorting by CommScope. Any parts shipped to CommScope that have been approved for deviation shall be clearly identified as such externally on the box, container, or other packaging and on shipping documentation. Inside of each box shall contain a copy of the CommScope-approved deviation document. This required identification or document in the box is not applicable for the parts directly shipping to the end customer.
- Supplier shall either have its own internal failure analysis capability to perform detailed failure analysis or have access through a 3rd party facility to be used at the suppliers' discretion and cost.

COUNTERFEIT PARTS/MATERIAL

Supplier shall not furnish to CommScope any items that are, or contain, Counterfeit Goods or subcomponents. The Products are not counterfeit and are wholly new and contain new components and parts throughout that are (i) genuine; (ii) from the legitimate source claimed or implied by the marking and design of the product offered.

Supplier shall bear sole responsibility for procuring authentic items from its suppliers and subcontractors and shall flow down the requirements of this Section to its suppliers and subcontractors at any tier.

Supplier shall establish, implement, and maintain a documented counterfeit materials and parts prevention system in accordance with Industry Standard AS-5553A as a guideline. Such system shall be adequate to

- Prevent the delivery of Counterfeit Goods, counterfeit materials and/or parts and
- Control materials and parts identified as counterfeit to ensure that items furnished to CommScope are not Counterfeit Goods.

Supplier may be required to demonstrate such system prior to shipment to CommScope. If Supplier does not have such capability, they shall obtain and provide a relevant certification to CommScope.

If Supplier becomes aware or has reason to suspect that it has furnished Counterfeit Goods to CommScope, Supplier immediately shall notify CommScope with a plan of remediation to replace, at Supplier's expense, such Counterfeit Goods with OEM / OCM's or CommScope-approved items that conform to CommScope's requirements. Supplier shall be solely liable for all costs related to the replacement of Counterfeit Goods and any testing or validation necessitated by the installation of authentic items after Counterfeit Goods have been replaced.

DOCUMENT CONTROL

The supplier shall have processes to ensure that the relevant versions of the applicable documents furnished by CommScope are available at points of use. The supplier is responsible for the timely review, distribution and implementation of all CommScope engineering standards/specifications and changes. The supplier shall maintain a record of the date on which each change is implemented in production. Implementation shall include updated documents.

NON-COMPLIANCE:

Suppliers who fail to adhere to this policy or any Suppliers whose Z2/DPPM remains above the required threshold for longer than 3 months shall incur any or all of the following actions.

- New Business Hold
- Reduction in current business
- Discontinuation of business

NOTIFICATION OF PRODUCT OR PROCESS CHANGES

Supplier shall not make any changes, including but not limited to those set forth below, without prior written notification and prior written approval from CommScope. This includes changes made at all levels of supply (tier 1, 2 and 3). A minimum of 180 days' notice prior to the planned implementation of product or process changes and CommScope approval are required. However, the requirement of minimum 180 days will be dependent on the type of the changes, if the qualification time associated with the change spends less time, then shorter notification time than 180 days maybe accepted. Supplier shall make proper evaluation to avoid production or business discontinuity to CommScope.

A product or process change includes changes that could adversely affect form, fit or function as outlined in this document and shall include but are not limited to below listed..

Supplier is responsible for controlling changes and notifying the CommScope of all changes to the approved part design, manufacturing process, site or sub-tier changes of the same.

- Changes that must be submitted and approved by CommScope include the following:
 - Any planned changes by the supplier to their design, process or manufacturing location changes would include:
 - Use of other material than what was previously approved through the part and/product approval process
 - Production from new, additional, replacement or modified tools, dies, molds, patterns, etc. (Note: Does not include normal preventive maintenance.)
 - Production following any upgrade or rearrangement of existing tooling or equipment
 - Production from tooling and equipment transferred to a different plant site or from an additional plant
 - Change of sub-tier supplier for parts, non-equivalent materials or services.
 - Packaging Change
 - Product produced after tooling has been inactive for production for 12 months of more
 - Change to test/inspection method new technique
 - For bulk material: new source of raw material from new or existing supplier or change in product appearance attributes
- o Changes listed above require a FAI or FAE approval from CommScope. In the event these changes are due to an urgent nature, exceptions to the 180-day notification may apply.

To eliminate the possibility of mixing "old and new" revision-level product, all suppliers will be required to purge their systems of the "old" product prior to shipping the new revision level. This purging can be in the form of: (1) scrap or (2)

ship all old-level products before shipping new level product. CommScope has the right to review inventory levels and approve the suppliers' proposed form of purging. Suppliers must notify CommScope in writing when the "old" material is exhausted and when the "new" level revision starts. The initial shipping schedule of the "new" product and disposition of "old" product will be coordinated through the CommScope purchasing team.

In the event the supplier makes a change the supplier shall submit a Part Change Notification (PCN) form and the supplier must receive written authorization from CommScope to proceed with the proposed change prior to any change implementation. Supplier should contact either the CommScope Procurement or Supplier Quality Contact to ensure Global Supplier PCN Procedure (CS-SC-2025) is followed.

Supplier submits a Supplier PCN Form (CS-SC-2025-01) and deliverables to CommScope PCN SQE Administrator email address <u>90 days</u> prior to any change implementation. Supplier Quality Engineer will supply the PCN form upon request from supplier.

Email address: #SupplierPCN-Global@commscope.com

#RuckusPCN@commscope.com
PCN-Input@commscope.com

PACKAGING, LABELING, DELIVERY & RECORD RETENTION

Preservation, packaging, labeling, and shipping methods must comply with common industry practices and CommScope requirements specified on the contract.

Preservation

In order to detect deterioration, the condition of product in stock should be assessed at appropriate planned intervals. The supplier should use an inventory management system to optimize inventory turns over time and should assure stock rotation, such as "first-in-first-out" (FIFO).

Packaging

The supplier must adequately plan for packaging designed to prevent product contamination, deterioration or loss and to eliminate shipping damage. Suppliers should provide expendable packaging or returnable containers, where appropriate, that provide for sufficient density and protection from any likely damage that may occur. Wood (pallets), expendable materials and packaging must meet local and national standards for safe disposal and/or recycling. Wood packaging material (pallets) used for importing and exporting purposes must meet local, national standards for the countries of import and export.

Labeling

Labeling and bar code requirements may vary among CommScope divisions. The CommScope procurement and packaging engineer will provide the supplier with the necessary specifications during the FAI process.

PERFORMANCE MEASURES

QUALITY

Z2 Qty:

This metric defines how many quality issues supplier brings to CommScope or end customer. Z2 has different kinds of type, e.g. Z2_FAI means the failure reported during FAI samples qualification; Z2_Vendor means the failure reported during mass production after PN qualification; Z2_Reliability means the failure reported by CommScope routine ORT monitoring.

DPPM:

This metric defines the Defective Parts per Million (DPPM) shipped using the following formula. The definition of "defective parts" is the total number of parts returned to the supplier for any valid quality reason (including those caused by shipping and administrative errors):

$$DPPM = \left(\frac{Count \ of \ Parts \ Defective}{Count \ of \ Parts \ Received}\right) \times 1,000,000$$

DELIVERY

This metric defines the delivery performance rating using the following formula:

COMMSCOPE

"On time" is based on the first commit date and last commit date.

$$\textit{DELIVERY} = \left(\frac{\textit{Count of Parts Received On-Time}}{\textit{Count of Parts Received}}\right) \times 100$$

REMEDIAL ACTIONS FOR POOR PERFORMANCE

Any Supplier who is fails to meet the following requirements will be issued a strike letter:

- Critical field failure
- Interruption of manufacturing process or line stop
- Repetitive issues (Quality and Delivery)
- Supply of Counterfeit parts
- Falsification of data
- Slow response to problem solving process longer than 2 weeks

Supplier is expected to immediately implement the following containment actions, at Supplier's sole cost and expense, to help ensure that the acceptable DPPM returns and remains below the specified quality level:

- Engage 3rd party inspection to 100% inspect all products, as determined by CommScope, intended to be shipped to CommScope which were the cause of the Supplier's Z2/DPPM level to exceed the specified quality level.
- Supplier shall provide written Certificate of Analysis on CommScope defined critical to function product dimensions or attributes for every lot that is shipped until Z2/DPPM has returned to acceptable levels.

The following long-term corrective actions and continuous improvements shall be mutually agreed upon and executed:

- Provide a written long-term corrective action plan to address non-conforming part root-causes identified either internally by Supplier or from CommScope's Supplier Quality Engineers (SQE).
- Engage with CommScope supplier quality on educational programs for quality management system, PFMEA
 analysis, Statistical Process controls or other programs as defined by the CommScope SQE team and
 demonstrate use of these tools in quality improvement in Supplier manufacturing.

PROCESS CONTROL

Supplier shall evidence that processes are defined and positively controlled. Typical evidences include:

- CPK study for CTQ (Critical to Quality) Characteristics
- Error-proofing
- Work instructions
- First Pass Yield (FPY)
- Control of monitoring and measuring devices
- Statistical process control When specified by the drawing (marked as a critical characteristic), the supplier is required to apply effective statistical process controls. The CPK requirement for critical characteristic is above 1.33.
- Preventive maintenance Supplier should identify key processes/equipment and provide resources such as consumables, for machine/equipment maintenance activities and develop an effective planned preventive maintenance system.

PRODUCT QUALIFICATION

First Article Inspection (FAI) consists of

- Dimensional results for each unique manufacturing process (line, mold, cavity, etc.), a record of actual variable dimensional results for all characteristics and any requirements given in the note section of the drawings.
- Material and performance test results (Certificate of Analysis) for all parts and product materials with chemical, physical, metallurgical and functional performance requirements and any requirements given in the note section of the drawings.
- Surface treatment (all metal layers and their thickness and adhesion)
- Marked up drawing
- Process control plan
- Failure Mode Analysis (where applicable)
- Process Capability Study
- Others

COMMSCOPE

First Article Evaluation (FAE) – includes

- Trial build, including functional testing according to specification- this is done by CommScope on final product. The supplier produces the FAE samples as mentioned below.
- Reliability tests as defined in the Qualification Test Plan (QTP) (examples are thermal cycle, salt fog, vibration,
- Certification and test reports

PROTECTION OF INTELLECTUAL PROPERTY (IP)

The supplier shall have an IP procedure that covers the following areas:

- IP protection program, including controlling and limiting access to internal and external IP information such as product designs, drawings, specifications, test requirements and/or other standards.
- Signed nondisclosure agreements with personnel having access to the IP, visitors to facilities, and any thirdparty sources that contribute to the manufacturing of the product for CommScope, including providing components parts or materials embodying the IP.
- Third-party IP standard which ensures that the supplier has authorization and/or license to use the tools, equipment and software that is directly or indirectly a factor during the manufacturing of product for CommScope or one of its subsidiaries.
- If providing packaging, labels or product inserts to CommScope, must have appropriate trademark and copyright license from CommScope. If packaging, labels or product inserts provided by third-party source, must receive written permission from CommScope to extend trademark and copyright license to third-party source.

Evidence of these requirements shall be provided upon request.

Note: in some cases, we may request that the production personnel not be knowledgeable regarding production trade secrets. Please discuss these limitations with the CommScope engineer assigned to your project.

QUALITY MANAGEMENT SYSTEM

Suppliers are expected to implement and document a robust quality management system (QMS) that complies with ISO9001. The system shall promote defect free products through prevention, monitoring and ongoing process improvements.

Additional requirements may be amended to incorporate practices outlined in TL9000. (Other certificates may be considered acceptable, such as IATF 16949, SAE AS9100, ISO13485, BS EN9100, ISO17025, ISO14001, IECQ080000 or equivalent national standards).

Strategic suppliers are required to be certified to the current version of the TL9000 standard where materials are targeted for use in specific Fiber Optic Components -tested products. (This will be communicated during the supplier selection process) or have plans to become certified within a year from becoming an approved supplier to CommScope.

The CommScope Supplier Selection Team (SST) may consider other types of Quality Management Systems along with other factors during the supplier selection process.

Suppliers shall promptly notify the CommScope Quality Representative of any relevant changes to the QMS or personnel. Suppliers shall also notify their CommScope Purchasing Contact within 5 working days should their QMS certification lapse, be suspended or withdrawn.

SHIPPING DOCUMENTATION FOR DIRECT SHIP CONTRACT MANUFACTURERS (if applicable)

In some cases, contract manufacturers will not ship the products to a CommScope facility but will direct ship to the end customer. In these cases, the contract manufacturer will be required to provide specific information on the shipping documentation. CommScope must be listed as the shipping facility when issuing the bill of lading, packing list, pick list or any other shipping documents deemed necessary by the contract manufacturer, the final customer or CommScope. The contract manufacturers' name shall not appear on any of the shipping documents nor should any extraneous information, i.e., sales price or cost, be added to the documents without the express written consent of CommScope.

COMMSC PE

When the purchase order (PO) is issued to the contract manufacturer, a second PO number will be listed in the "ship to" area of the document. This PO number should be referenced on all the shipping documents.

SUPPLIER CODE OF CONDUCT

• Suppliers will be asked to review and sign the CommScope Supplier Code of Conduct. Suppliers shall ensure operations are being performed in a manner that is appropriate, as it applies to their ethical, legal, environmental and social responsibilities. Below are the basic requirements:

Compliance with Applicable Laws and Regulations

 Suppliers must adhere to the laws and regulations in the locality in which they reside as well as the United States Law where applicable. This includes all local, state and federal laws/regulations in the country of origin. Supplier must also consider the countries in which they export/sell and from which they import/buy and adhere to the laws and regulations within that country as well. Product which is sold in one country that is being used for assembly into another product that is exported globally, must comply with the country regulations and laws of the finished/exported product.

Compliance with Environmental, Health and Safety Laws

The Supplier must maintain and operate its manufacturing/production facilities and processes in accordance
with local, state, and federal laws/regulations in the country of origin. At no time shall any CommScope person
be exposed to hazardous materials or unsafe conditions as a result of supplier shipments to a CommScope
location, or while visiting a supplier's location. For items with inherent hazards, safety notices must be clearly
visible. As applicable, documented safety handling and protection information must be provided.

Product Safety

In all instances where a product is manufactured to a new design, for a new system, or for a new product, it is
important that supplier and CommScope allocate responsibility for assuring that all performance, endurance,
content, maintenance, safety and warning requirements are met. It is preferred that this allocation of
responsibility be in writing.

Non-Discrimination

• Suppliers shall not discriminate on the basis of race, color, sex, religion, age, physical disability, political affiliation, or other defining characteristics as prohibited by local, state, and federal laws/regulations in the country of origin.

Child Labor

Child labor is strictly prohibited. Suppliers shall not employ workers below the minimum legal age of
employment in accordance with local, state, and federal laws/regulations in the country of origin as well as the
ILO and UNICEF guidelines. Child labor laws must be followed. Young workers (under the age of 18 but over
the minimum legal age for employment) shall not be employed for any hazardous work, night work or work that
is inconsistent with the personal development.

Forced/Indentured Labor

• Suppliers shall not use any form of forced or indentured labor, slavery or human trafficking. Supplier shall not require workers to surrender any government-issued documents.

Occupational Safety

Worker exposure to potential safety hazards (e.g., electrical and other energy sources, chemical, machine, fire, vehicle, and fall hazards) is to be controlled through proper design, engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tag-out). Where hazards cannot be adequately controlled by these means, the Supplier shall provide its workers, while on Supplier's premises, with appropriate personal protective equipment. Workers shall not be disciplined for raising safety concerns.

Work Hours/Rest Day

• Suppliers shall not exceed the daily and monthly working hours permitted by local, state and federal laws/regulations in the country of origin. Workers shall be allowed at least one day off following every six consecutive working days.

Wages and Benefits

• Suppliers shall compensate workers in accordance with local, state and federal laws/regulations within the country of origin. This includes minimum legal wages, overtime premiums and benefits as required by law. Deductions from wages as a disciplinary measure shall not be permitted.

Ethics

At CommScope, we have a zero-tolerance policy towards bribery and corruption. Evidence of corruption, bribes, improper advantage or any other form of illegal activities/practices by the supplier or an associated operation will result in a termination of all relations with CommScope. Suppliers will conduct business in a manner that meets the CommScope 'Code of Ethics and Business Conduct' policy.

Code of Conduct and Policy Enforcement

This document applies to suppliers and their sub-tier suppliers. It is the responsibility of the supplier to verify and monitor the compliance of this Quality Manual within their operations as well as their sub-tier suppliers' operations.

Confidentiality

The supplier shall ensure the confidentiality of CommScope contracted products and any projects under development, any related product information, as well as the intellectual property shared as the result of this partnership/relationship.

RECORD RETENTION

The supplier shall retain quality records for a time period specified by the CommScope contract or related reference documents. Upon request, the supplier shall be capable of retrieving and delivering required records to CommScope within 48 hours from time of request by CommScope.

REQUEST FOR PRODUCT DEVIATION

- CommScope's goal is to utilize product that meets all product specifications, both specific and implied. However, if non-conforming material is produced, the supplier can request a deviation to allow for the shipment of the known suspect or non-conforming material.
- Supplier's name and address
- Person requesting the deviation and their contact information
- CommScope part number and material description
- Description of non-conforming material involved
- Root cause of non-conformance

Fax or email the information above to the appropriate quality representative along with any other supporting documentation (example - pictures). The CommScope quality representative will internally route the request for the necessary review and approval.

The CommScope quality representative will send the approved/rejected request back to the supplier. If approved, the request will detail any special instructions for the handling, marking or shipment of the material. Material received under an approved deviation will not affect a supplier's quality rating, if the approval is received prior to the delivery of any material. However, multiple TDA requests could signify an internal issue. Multiple requests for temporary deviations could result in remedial actions.

SUPPLIER APPROVAL PROCESS

All suppliers will be approved prior to the issuance of contracts or shipments (EXCEPTIONS MAY APPLY). All tier 1 suppliers must be approved by CommScope, regardless of approvals given by customers or other entities. CommScope reserves the right to approve sub-tier suppliers where critical processes are involved.

Suppliers shall permit access to Supplier's premises by CommScope representatives, CommScope customers and applicable regulatory agencies for the purpose of evaluating supplier's facilities, processes, goods, quality records. Suppliers will be subject to an on-site audit by a team from CommScope or a designated 3rd party auditor.

A typical process shown below. Consult CommScope Supplier Selection Process (document CS-SC-2000 is the general guideline of supplier selection), may differ from the actual if update.

Supplier Assessment - Phase 1

- Supplier Questionnaire
- Financial stability, manufacturing footprint
- Equipment and process capability

COMMSCOPE

- NDA
- Business license
- RoHS/WEEE, REACH compliance

On-Site Assessment – Phase 2 (Desk audit is possible as an alternative method if on-site audit is not feasible)

- **Technical Assessment** to determine whether the supplier has the required technical resources, including production and inspection equipment, facilities, engineering resources, CommScope specified computer-aided design language/format, electronic communication capability etc.
- Business & Manufacturing Assessment to determine whether the supplier has the financial resources, production capacity and other business resources needed to fulfill CommScope demand/volume needs and continuity of supply.
- Quality Management System to evaluate whether the suppliers QMS meets one or more of the applicable standards and is functioning effectively.
 - **Sub-Tier Supplier Control** to evaluate the effectiveness of the suppliers' sub-tier management system. To ensure that products or services procured from the sub-tier sources and delivered to CommScope conform to all applicable CommScope requirements.
 - Continuous Improvement & Corrective Action to determine if the suppliers' culture, methods and skills are present to actively pursue continuous improvement activities.
- Corporate Responsibility & Sustainability an audit of the supplier's labor, ethics, EHS (environmental, health and safety) and Business Continuity practices to ensure that supplier meets applicable requirements.

Product Qualification & Approval - Phase 3

There are several types of products requested from suppliers; black box (supplier owns IP), white box (CommScope owns IP), gray box (supplier and CommScope own IP) and custom (customer owned design). Regardless of the type, the Supplier shall submit the items listed above under General Requirements - Product Qualification.



1100 CommScope Place SE P.O. Box 1729 Hickory, North Carolina 28602

T: +1 800 982 1708 F: +1 828 324 2200 www.commscope.com

Supplier Quality Manual Acknowledgment

Supplier hereby acknowledges that it has access to and has reviewed CommScope's Supplier Quality Manual, available in hardcopy upon request and on CommScope's website at http://www.commscope.com, and certifies that Supplier will at all times comply with the provisions thereof.

Supplier Business Name:	
Supplier Representative Signature:	
 Name of Signer (Print or Typed/Keyed): 	
Title of Signer:	
Date of Signature:	

Revision History

Release Date	DCR	Revisions
_	_	(For revision history older than *19 May 2016, archived document may be made available for reference only – pending
		VP, Supplier Quality approval)
25 May 2016	051916-1	Previously CTV-74-003 • Updates for BNS
18 Aug 2016	072916-1	Header updated
26 Oct 2016	102516-2	Add Sign Off Sheet
10 Jul 2017	052217-1	Addition of PCN process elements on page 6 (highlighted in red for DCR) • Signature Block updated for clarity
14 Jul 2021	2021- 05-24-2239	Transition to a corporate level, "COMM" document. Previous Identification: CS-SC-2020 General update, eg Major update on "general requirements" e.g short briefing of CommScope designated sources, Compliance with contractual requirements, control of sub-tier suppliers, add specific requirements eg CPK>1.33, FMEA, Test equipment installation, compliance, MSA, traceability etc Adjust the sequence of the description. Change PCN min 180 days mandatory notification to business dependent Add Z2 into quality metric etc Plus other minor update, eg better define counterfeits parts. Changes highlighted in yellow for approval workflow will be removed before release. Owner: Huifei (Catherine) Cheng (Director, Quality (China & PAC))/Approvers: David Hoffman (VP, QA Engineering) • Fraser Gordon (VP Procurement Operations) • William Pleasant (VP, & Deputy General Counsel)
14 Jul 2021	2021- 06-28-1041	NO CHANGES have been made to the contents of the document. This is a supplemental, cosmetic -type workflow to get the document into the system. The previous workflow 2021-05-24-2239 has the official approval records. This previous workflow broke down and would not publish to system, likely because William Pleasant left CommScope before final workflow publication routine. The DC will assume all roles and the reset roles in Source library after document publication to CST library.
15 Jul 2021	2021- 07-15-0330	Editorial/Cosmetic update. Very minor update only, better define counterfeits product. Owner: Huifei (Catherine), DC assumed all other roles and will reset roles in Source Library after document publication to Released library.