# BS EN 9114:2015



# **BSI Standards Publication**

Aerospace series — Quality systems — Direct Ship Guidance for Aerospace Companies



BS EN 9114:2015 BRITISH STANDARD

#### National foreword

This British Standard is the UK implementation of EN 9114:2015.

The UK participation in its preparation was entrusted to Technical Committee ACE/1, International and European Aerospace Policy and Processes.

A list of organizations represented on this committee can be obtained on request to its secretary.

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# **English Version**

# Aerospace series - Quality systems - Direct Ship Guidance for Aerospace Companies

Série aérospatiale - Système qualité - Expédition directe recommandations pour compagnies aérospatiales

Luft- und Raumfahrt - Qualitätsmanagement - Direkt Anlieferungen Richtlinie für die Luft- und Raumfahrtindustrie

This European Standard was approved by CEN on 27 September 2015.

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# **European foreword**

This document (EN 9114:2015) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this European Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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#### Rationale

This document was revised to coincide with the 14 Code of Federal Regulations (CFR) Part 21, "Certification Procedures for Products, Articles, and Parts", re-write published October 16, 2009 under Docket No. FAA-2006-25877 and associated policy and guidance material made by the Federal Aviation Administration (FAA). All other changes made to the document presented herein were editorial in nature.

To assure customer satisfaction, the aviation, space, and defence industry organisations must produce and continually improve safe, reliable products that meet or exceed customer and regulatory authority requirements. The globalisation of the industry, and the resulting diversity of regional/national requirements and expectations, has complicated this objective. End-product organisations face the challenge of assuring the quality of, and integrating, product purchased from suppliers throughout the world and at all levels within the supply chain. Industry suppliers and processors face the challenge of delivering product to multiple customers having varying quality expectations and requirements.

The aviation, space, and defence industry established the International Aerospace Quality Group (IAQG) for the purpose of achieving significant improvements in quality and safety, and reductions in cost, throughout the value stream. This organisation includes representation from companies in the Americas, Asia/Pacific, and Europe.

This document standardises requirements for the direct shipment of articles from a supplier of an approved manufacturer to a customer of an approved manufacturer and was originally produced as a cooperative effort between the FAA and the IAQG. The establishment of common expectations, for use at all levels of the supply-chain by organisations, should result in improved quality and safety, and decreased costs, due to the elimination or reduction of organisation-unique requirements and the resultant variation inherent in these multiple expectations.

# 1 Scope

#### 1.1 General

Limited to the aerospace industry, where an approved manufacturer requests a supplier to ship an article against the approved manufacturer's quality system directly to a customer. The direct ship process is not required or applicable to standard parts or military parts. In this process the approved manufacturer is responsible for assurance that the article conforms to type design information.

# 1.2 Purpose

This document provides guidance to approved manufacturers, their suppliers, and customers when an approved manufacturer requests a supplier to ship an article against the approved manufacturer's purchase document directly to a customer, commonly known as "Direct Ship" (see Figure 1).

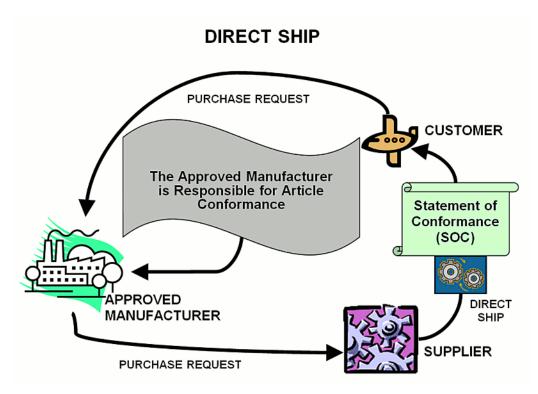


Figure 1 — Direct ship overview

# 2 Applicable documents

These include, but are not limited to:

# 2.1 European aviation safety agency publications:

- a. Commission Regulation (EC) No 748/2012 Annex I (also called Part 21)
- b. European Aviation Safety Agency (EASA) Annex I to Executive Director (ED) Decision 2102/020R [also called Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Part 21]

# 2.2 Federal aviation administration publications:

- a. FAA Advisory Circular (AC) 20-62, "Eligibility, Quality, and Identification of Aeronautical Replacement Parts"
- b. FAA AC 21-29, "Detecting and Reporting Suspected Unapproved Parts"
- c. FAA AC 21-43, "Production Under 14 CFR Part 21, Subparts F, G, K, and O"
- d. 14 CFR Part 21, "Certification Procedures for Products, Articles, and Parts"

#### 3 Terms and definitions

An acronym log for this European Standard is presented in Annex A. For the purposes of this document, the following terms and definitions apply.

#### 3.1

#### Approved manufacturer [also known as Production Approval Holder (PAH)]

a manufacturer that is responsible for the quality of an article and has obtained the right to use a design from the design approval holder (may be the same entity). This is the holder of a Production Certificate (PC), Parts Manufacturer Approval (PMA), Technical Standard Order (TSO) authorisation, Production Organisation Approval (POA), European Technical Standard Order (ETSO) authorisation, or other production approval issued by any National Aviation Authority (NAA).

#### 3.2

#### article

material, part, product, component, assembly, or appliance which is listed by the approved manufacturer as eligible for installation in a type certificated product or included in the design data approved by the regulatory authority, not inclusive of standard parts

#### 3.3

#### customer

the recipient of a direct ship article (e.g., owner/operator, repair station, distributor)

#### 3.4

#### delegated inspection

the delegation of inspection authority to a supplier on behalf of the approved manufacturer

### 3.5

# direct ship authorisation

the written authorisation granted by an approved manufacturer to a supplier to ship articles directly to a customer, without the articles being processed through the approved manufacturer's own facility. The direct ship authorisation may be limited in scope. Some examples of limitations include part number(s), time period, and customer(s).

# 3.6

# direct ship declaration

a written statement from the supplier that accompanies a direct ship article stating the article was produced under the terms of the approved manufacturer's production approval

#### 3.7

#### product

an aircraft, aircraft engine, or propeller

#### 3.8

#### standard part

a part manufactured in compliance with an established government or industry-accepted specification that contains design, manufacturing, and uniform identification requirements. The specification must include all information necessary to produce and conform the part, and must be published so that any person/organisation may manufacture the part.

#### 3 9

# **Statement of Conformance (SOC)**

evidence provided by the supplier certifying the article conforms to approved data

#### 3.10

# supplier

the furnisher of articles or related services, at any tier, to an approved manufacturer

# 4 Direct ship requirements

#### 4.1 General

The direct ship process involves an approved manufacturer, a supplier, and a customer. In a chronological flow, the customer requests an approved manufacturer to provide an article and delineates any special requirements. The approved manufacturer determines that the article is to be ordered/produced/delivered from a supplier and requests the supplier to ship the article directly to the customer. The contracts are between the customer and the approved manufacturer, and again between the approved manufacturer and the supplier (see Figure 2).

In some cases, the approved manufacturer allows the customer to buy directly from the supplier. In those cases, the supplier should obtain permission from the approved manufacturer for this arrangement.

#### 4.2 Approved manufacturer

#### 4.2.1 Procedures

An approved manufacturer that intends to issue direct ship authorisation to a supplier must have approved quality procedures that will compensate for the absence of inspections normally conducted at the approved manufacturer's facility. Compensating factors shall include onsite evaluations of the supplier and the inspection of the article as either:

- a. Source inspection performed by the approved manufacturer; or
- b. Inspection by the supplier under a delegated inspection authority from the approved manufacturer.

#### 4.2.2 Direct ship authorisation

The approved manufacturer shall provide direct ship authorisation to a supplier.

#### 4.2.3 Records

The approved manufacturer shall issue and maintain records of direct ship authorisation and make them available to regulatory authorities, upon request.

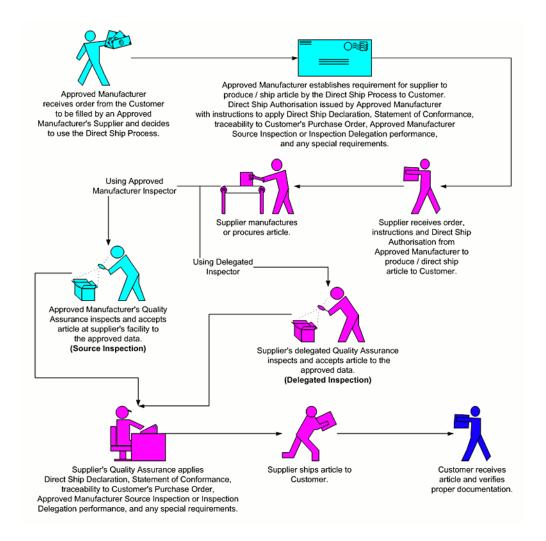


Figure 2 — Direct ship flow

# 4.2.4 Flow down of direct ship requirements to suppliers

The approved manufacturer shall obligate the supplier to:

- a. Direct ship the article.
- b. Meet any special customer requirements accepted by the approved manufacturer.
- c. Maintain evidence of direct ship authorisations granted by the approved manufacturer.
- d. Maintain evidence of direct shipments made on behalf of the approved manufacturer.
- e. Provide with the shipment a signed direct ship declaration.
- f. Provide with the shipment a signed/stamped SOC certifying that the article conforms to approved data.
- g. Provide with the shipment traceability to the customer purchase request.
- h. Provide evidence with the shipment that acceptance or inspection has been accomplished by the approved manufacturer or through a delegated inspection authority.

i. When delegated inspection is used, provide with the shipment a statement that delegation of inspection authority has been granted by the approved manufacturer, and that the inspection was performed on behalf of the approved manufacturer.

### 4.2.5 Special considerations for foreign customers

An approved manufacturer must ensure the requirements of the importing country will be met, prior to authorising direct shipment to a customer located in a foreign country.

# 4.3 Supplier

#### 4.3.1 Records

The supplier shall maintain records of and make them available, upon request:

- a. Direct ship authorisation by the approved manufacturer.
- b. Direct shipments made on the behalf of the approved manufacturer.

#### 4.3.2 Compliance

The supplier shall adhere to all approved manufacturer flow down requirements, including:

- a. Direct ship the article.
- b. Provide a signed direct ship declaration with the shipment.
- c. Provide a signed/stamped SOC certifying that the article conforms to approved data with the shipment.
- d. Provide evidence with the shipment that acceptance or inspection has been accomplished by the approved manufacturer or through a delegated inspection authority.

When delegated inspection is used, also provide with the shipment a statement that delegation of inspection authority has been granted by the approved manufacturer and that the inspection was performed on behalf of the approved manufacturer.

- e. Show traceability with the shipment to the customer purchase request.
- f. The requirements of the importing country will be met prior to shipment to a customer located in a foreign country.

#### 4.4 Customer

# 4.4.1 Examination of direct ship articles

Customers who receive articles shipped under an approved manufacturer's direct ship authority shall examine the articles and the accompanying documentation to ensure the airworthiness condition of the articles is adequately established.

#### 4.4.2 Documentation required with direct ship articles

Direct ship articles shall be received with one or more documents containing:

- a. A signed direct ship declaration.
- b. A signed/stamped SOC certifying that the article conforms to approved data.
- c. Evidence that acceptance or inspection has been accomplished by the approved manufacturer or through a delegated inspection authority.

When delegated inspection is used, also provide with the shipment a statement that delegation of inspection authority has been granted by the approved manufacturer, and that the inspection was performed on behalf of the approved manufacturer.

d. Traceability to the customer purchase request.

# 4.4.3 Notification of Discrepancies

Any identified non-conformance or noncompliance is to be coordinated and resolved through the approved manufacturer. In those cases in which the approved manufacturer allows the customer to buy directly from the supplier, these issues should be resolved through the supplier.

# 5 Notes

A change bar (|) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document, including technical revisions. Change bars and (R) are not used in original publications, nor in documents that contain editorial changes only.

# Annex A (informative)

# **ACRONYM LOG**

AC	Advisory Circular
AMC	Acceptable Means of Compliance
EASA	European Aviation Safety Agency
ED	Executive Director
ETSO	European Technical Standard Order
FAA	Federal Aviation Administration
GM	Guidance Material
NAA	National Aviation Authority
PAH	Production Approval Holder
PC	Production Certificate
PMA	Parts Manufacturer Approval
POA	Production Organisation Approval
SOC	Statement of Conformance
TSO	Technical Standard Order





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