

Aerospace series - Quality Management Systems -
Qualification Procedure for Aerospace Standard
Products

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 9133:2018 sisaldab Euroopa standardi EN 9133:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 9133:2018 consists of the English text of the European standard EN 9133:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.06.2018.	Date of Availability of the European standard is 13.06.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

Aerospace series - Quality Management Systems - Qualification Procedure for Aerospace Standard Products

Série aérospatiale - Systèmes de management de la
qualité - Procédure de qualification pour pièces
aérospatiales normalisées

Luft- und Raumfahrt - Qualitätsmanagementsystem -
Qualifikationsverfahren für genormte Teile der Luft-
und Raumfahrt

This European Standard was approved by CEN on 18 September 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 9133:2018) 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 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 December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

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.

This document supersedes EN 9133:2004.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Rationale

This document has undergone full technical revision to reflect improvements introduced to the product qualification process and incorporate identified best practices since its initial release.

This document defines the process by which a manufacturer wishing to manufacture aviation, space, and defence standard products may obtain qualification approval from the controlling Certification Authority (CA). It defines the procedures to be followed by a manufacturer to request, carry out, obtain, and maintain certification approval by confirming the manufactured products meet the minimum technical and performance requirements defined by the product standard and controlling technical specifications.

Foreword

To assure customer satisfaction, the aviation, space, and defence industry organizations must produce and continually improve safe, reliable products that meet or exceed customer and regulatory authority requirements. The globalization of the industry and the complexity of resulting organizations' supply chains have complicated this objective. End-product organizations 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. Furthermore, the aviation, space, and defence suppliers and processors, within the industry, 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 organization includes representation from aviation, space, and defence companies in the Americas, Asia/Pacific, and Europe. This document defines the qualification of standard products and should result in improved quality and safety, and decreased cost, due to the standardization of this process.

1 Scope

1.1 General

This document defines a system for the qualification of standard products for aviation, space, and defence applications. It defines the principles that shall be adhered to when carrying out product qualification; applied in conjunction with the rules and procedures of the CA. The system enables the CA to confirm compliance is achieved and maintained, in accordance with the requirements of its product definition and associated controlling technical specifications by an Original Component Manufacturer (OCM) of standard products.

This document requires an OCM that has been granted product qualification approval to ensure applicable approvals are maintained and renewed in accordance with the CA's quality system for that qualified product.

OCMs and OCM designated Value Added Distributors (VADs) requesting product qualification to this standard, shall as a prerequisite, maintain EN 9100 standard quality management system certification approval. This certification shall be visible in the Online Aerospace Supplier Information System (OASIS) database.

1.2 Application

The application of this document will be mandated either in the product standard or its controlling technical specifications. When invoked, the OCM wanting to produce aerospace standard products will need to gain qualification approval from an aerospace CA. The processes defined herein will be performed impartially for the benefit of the aerospace industry, by the CA, to ensure continued compliance of standard products to the requirements defined in their controlling technical specifications.

OCMs will need to ensure they allow sufficient lead-time to complete this process to gain product approval from the CA to support/satisfy their customer delivery requirements. Qualified products using this process shall not be supplied or used without qualification approval and a valid Product Qualification Certificate (PQC) being granted.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*

EN 9102, *Aerospace series — Quality systems — First article inspection requirements*

EN 9103, *Aerospace series — Quality management systems — Variation management of key characteristics*

NOTE Equivalent versions (e.g. AS, EN, JISQ, SJAC, NBR) of the IAQG standards listed above are published internationally in each IAQG sector.

EN ISO 9000, *Quality management systems — Fundamentals and vocabulary*

EN ISO 9001, *Quality management systems — Requirements*

ISO 10012, *Measurement management systems — Requirements for measurement processes and measuring equipment*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ASD-CERT Quality Manual (see www.asd-cert.org)

AC7101/1¹, *Nadcap Audit Criteria for Materials Testing Laboratories — General Requirements for all Laboratories*

AC7102¹, *Nadcap Audit Criteria for Heat Treating*

AC7108¹, *Nadcap Audit Criteria for Chemical Processing*

AC7114¹, *Nadcap Audit Criteria for Nondestructive Testing (NDT) Suppliers — Accreditation Program*

PD2000¹, *Governance and Administration of an Industry Managed Product Qualification Program*

PD2001¹, *Manufacturer Request for Product Approval and Qualification Process*

3 Terms and definitions

For the purpose of this document, the terms and definitions provided in EN ISO 9000 and the following apply. Furthermore, an acronym log for this standard is presented in Annex A.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

analogy

act of granting product qualification certification approval based on testing that has been carried out on similar qualified product; where the new standard product's manufacturing method is substantially the same as the manufacturing method of the existing qualified product

3.2

Certification Authority

CA

authority that administers a certification system for qualification of standard products (e.g. ASD-CERT, SAE-PRI); acknowledged by the aviation, space, and defence industry Original Equipment Manufacturers (OEMs) and associated regulatory agencies [i.e. Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA), or similar]

3.3

end user

organization purchasing aviation, space, and defence qualified standard products. Could be an OEM, OCM, and/or government agency purchasing standard products to be utilized within an assembly, part, or finished product

¹ Documents published by Performance Review Institute (PRI) and available from www.eAuditNet.com