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Quality Management Systems – Requirements for Aviation Maintenance Organizations



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Denna standard ersätter SS-EN 9110:2015, utgåva 3.

The European Standard EN 9110:2018 has the status of a Swedish Standard. This document contains the official version of EN 9110:2018.

This standard supersedes the SS-EN 9110:2015, edition 3.

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EUROPEAN STANDARD

EN 9110

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2018

ICS 03.100.70; 03.120.10; 49.020

Supersedes EN 9110:2015

English Version

Quality Management Systems - Requirements for Aviation Maintenance Organizations

Systèmes de Management de la Qualité - Exigences
pour les Organismes d'Entretien de l'Aéronautique

Qualitätsmanagementsysteme - Anforderungen für
Luftfahrt-Instandhaltungsbetriebe

This European Standard was approved by CEN on 10 March 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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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SS-EN 9110:2018 (E)

European foreword

This document (EN 9110:2018) 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 November 2018, and conflicting national standards shall be withdrawn at the latest by November 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 9110:2015.

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 been revised to incorporate the new clause structure and content of EN ISO 9001:2015. In addition, industry requirements, definitions and notes have been revised in response to both EN ISO 9001:2015 revisions and stakeholder needs.

Foreword

To assure customer satisfaction, aviation, space and defence organizations must provide and continually improve, safe and reliable products and services that meet or exceed customer and applicable statutory and regulatory requirements. The globalization of the industry and the resulting diversity of regional and national requirements and expectations have complicated this objective. Organizations have the challenge of purchasing products and services from external providers throughout the world and at all levels of the supply chain. External providers have the challenge of delivering products and services to multiple customers having varying quality requirements and expectations.

Industry has established the International Aerospace Quality Group (IAQG), with representatives from aviation, space and defence companies in the Americas, Asia/Pacific and Europe, to implement initiatives that make significant improvements in quality and reductions in cost throughout the value stream. This document has been prepared by the IAQG.

This document standardizes quality management system requirements to the greatest extent possible and can be used at all levels of the supply chain by organizations around the world. Its use should result in improved quality, cost and delivery performance through the reduction or elimination of organization-unique requirements, effective implementation of the quality management system and wider application of good practice. While primarily developed for civil and military aviation industry organizations providing maintenance services, this document can also be used in other industry sectors when a quality management system with additional requirements over an EN ISO 9001:2015 system is needed.

This document includes EN ISO 9001:2015¹ quality management system requirements and specifies additional civil and military aviation maintenance and continuing airworthiness industry requirements, definitions and notes as shown in bold, italic text.

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SS-EN 9110:2018 (E)**Intended application**

This document is intended for use by organizations whose primary business is providing maintenance or continuing airworthiness management services for civil or military aviation articles and products; and by original equipment manufacturers with maintenance, repair and overhaul operations that are operated autonomously or that are substantially different from their production operations.

Organizations that design, develop or provide aviation, space and defence products and services; and organizations providing post-delivery activities, including the provision of maintenance, spare parts or materials for their own products and services should use the IAQG-developed EN 9100 standard (see Bibliography).

Organizations that procure parts, materials and assemblies and resell these products to a customer in the aviation, space and defence industry should use the IAQG-developed EN 9120 standard (see Bibliography). This includes organizations that procure products and split them into smaller quantities, as well as those that coordinate a customer or regulatory controlled process on the product.

0 Introduction**0.1 General**

The adoption of a quality management system is a strategic decision for an organization that can help to improve its overall performance and provide a sound basis for sustainable development initiatives.

The potential benefits to an organization of implementing a quality management system based on this International Standard are:

- a) the ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements;
- b) facilitating opportunities to enhance customer satisfaction;
- c) addressing risks and opportunities associated with its context and objectives;
- d) the ability to demonstrate conformity to specified quality management system requirements.

This International Standard can be used by internal and external parties.

It is not the intent of this International Standard to imply the need for:

- uniformity in the structure of different quality management systems;
- alignment of documentation to the clause structure of this International Standard;
- the use of the specific terminology of this International Standard within the organization.

The quality management system requirements specified in this International Standard are complementary to requirements for products and services.

This International Standard employs the process approach, which incorporates the Plan-Do-Check-Act (PDCA) cycle and risk-based thinking.

The process approach enables an organization to plan its processes and their interactions.

The PDCA cycle enables an organization to ensure that its processes are adequately resourced and managed and that opportunities for improvement are determined and acted on.

Risk-based thinking enables an organization to determine the factors that could cause its processes and its quality management system to deviate from the planned results, to put in place preventive controls to minimize negative effects and to make maximum use of opportunities as they arise (see A.4).

Consistently meeting requirements and addressing future needs and expectations poses a challenge for organizations in an increasingly dynamic and complex environment. To achieve this objective, the organization might find it necessary to adopt various forms of improvement in addition to correction and continual improvement, such as breakthrough change, innovation and re-organization.

In this International Standard, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

Information marked as “NOTE” is for guidance in understanding or clarifying the associated requirement.

0.2 Quality management principles

This International Standard is based on the quality management principles described in EN ISO 9000. The descriptions include a statement of each principle, a rationale of why the principle is important for the organization, some examples of benefits associated with the principle and examples of typical actions to improve the organization’s performance when applying the principle.

The quality management principles are:

- customer focus;
- leadership;
- engagement of people;
- process approach;
- improvement;
- evidence-based decision making;
- relationship management.