



BSI Standards Publication

**Aerospace series — Quality management systems —
Requirements for conducting audits of aviation,
space, and defence quality management Systems**

National foreword

This British Standard is the UK implementation of EN 9101:2023. It supersedes BS EN 9101:2018, which is withdrawn.

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 committee manager.

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English Version

Aerospace series - Quality management systems - Requirements for conducting audits of aviation, space, and defence quality management Systems

Série aérospatiale - Systèmes de management de la
qualité - Exigences pour la conduite d'audits des
systèmes de management de la qualité dans
l'aéronautique, l'espace et la défense

Qualitätsmanagementsysteme - Luft- und Raumfahrt -
Anforderungen an die Durchführung von Audits von
Qualitätsmanagementsystemen in Luftfahrt, Raumfahrt
und Verteidigung

This European Standard was approved by CEN on 7 August 2023.

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

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European foreword

This document (EN 9101:2023) 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 document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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

This document supersedes EN 9101:2018.

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

0 Introduction

0.1 General

This document has been revised to align with the latest revision of the International Aerospace Quality Group (IAQG) 9104-1 standard, incorporating inputs received from interested parties, standard clarifications, and Other Party Management Team (OPMT) resolutions.

Industry established the IAQG, with representatives from Aviation, Space, and Defence (ASD) 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 and standardizes the requirements for conducting audits of ASD Quality Management Systems (QMS). It can be used at all levels of the supply chain by organizations around the world.

This document supplements the existing International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17021-1 conformity assessment standard and provides requirements for an audit and reporting process, based on the:

- a) process and continual improvement approach defined in EN 9100-series standards;
- b) specific ASD additions in EN 9100-series standards;
- c) use of common audit tools; and
- d) uniform, transparent, and standardized reporting of audit results.

In this document, the following terms are used:

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

Words “example” or “e.g.” indicate suggestions given for guidance, and information marked “NOTE” is for guidance in understanding or clarifying the associated requirement¹.

Auditing is a basic tool to assess effective implementation of and conformity to QMS requirements. In addition to assessing conformity, this document focuses on the evaluation of effectiveness (see ISO 9000:2015, 3.7.11) of the QMS and its associated processes.

An organization is not only required to be in conformity with QMS requirements, but to be effective in meeting customer expectations and delivering products and services that meet those expectations.

¹ Notes to entry used in definitions, however, are considered normative and will provide additional information that supplements the terminological data such as statements, instructions, recommendations or requirements relating to the use of a term.

0.2 Auditing approach

This document supports the engagement and evaluation of an organization's QMS process approach, as required by the EN 9100-series standards. When evaluating an organization's QMS, there are basic questions that should be asked of every process, for example:

- a) Is the process appropriately determined?
- b) Are responsibilities assigned?
- c) Are the processes adequately implemented and maintained?
- d) Is the process effective in achieving the desired results?

The collective answers to these and other associated questions will contribute to the evaluation results.

In addition, product and service quality (as delivered), customer satisfaction, and QMS effectiveness can be considered as interrelated. This relationship should be reflected in the audit process and associated results.

0.3 Audit documented information

This document defines the documented information to be generated, during the audit process. The documented information is critical in providing the organization and its customers with objective evidence on the conformity and effectiveness of the QMS (including process effectiveness) and reporting the audit results in a standard format/structure.

1 Scope

1.1 General

This document defines requirements for the preparation and execution of the audit process. In addition, it defines the content and composition for the audit reporting of conformity and process effectiveness to the EN 9100-series standards, the organization's QMS documentation, and customer and statutory/regulatory requirements.

The requirements in this document are additions or represent changes to the requirements and guidelines in the standards for conformity assessment, auditing, and certification as published by ISO/IEC (i.e. ISO/IEC 17000:2020, ISO/IEC 17021-1). When there is conflict with these standards, the requirements of this document take precedence.

NOTE 1 In this document, the term "EN 9100-series standards" comprises the EN 9100, EN 9110, and EN 9120 standards, developed by the IAQG and published by various national standards bodies.

NOTE 2 In addition to this document, the IAQG publishes deployment support material on the IAQG website (see <http://www.iaqg.org>) that can be used by audit teams, when executing the audit process.

1.2 Application

This document is intended to be used for audits of EN 9100-series standards by Certification Bodies (CBs) for certification of organizations, under the auspices of the ASD industry certification scheme [also known as the Industry Controlled Other Party (ICOP) scheme]. The ICOP scheme requirements are defined in the EN 9104-series standards (i.e. EN 9104-1, EN 9104-2, EN 9104-3).

NOTE Relevant parts of this document can also be used by an organization in support of internal audits (1st party) and external audits at suppliers (2nd party).

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 9100:2018,² *Quality management systems — Requirements for aviation, space and defence organizations*

EN 9110:2018,² *Quality management systems — Requirements for aviation maintenance organizations*

EN 9104-1:2022,^{2,3} *Aerospace series — Quality management systems — Part 1: Requirements for certification of aviation, space and defence*

ISO 9000:2015, *Quality management systems — Fundamentals and vocabulary*

ISO/IEC 17000:2020, *Conformity assessment — Vocabulary and general principles*

² As developed under the auspice of the IAQG and published by various standards bodies [e.g., AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN), SAE International, European Committee for Standardization (CEN), Japanese Standards Association (JSA)/Society of Japanese Aerospace Companies (SJAC), Brazilian Association for Technical Norms (ABNT)].

³ Published as ASD-STAN Standard at the date of publication of this document by AeroSpace and Defence industries Association of Europe — Standardization (ASD-STAN), <https://www.asd-stan.org/>.