

Aerospace series - Quality management systems - Part
1: Requirements for Certification of aviation, space,
and defense

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 9104-1:2023 sisaldab Euroopa standardi EN 9104-1:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.12.2023.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 9104-1:2023 consists of the English text of the European standard EN 9104-1:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 06.12.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 03.100.70, 03.120.10, 03.120.20, 49.020

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EUROPEAN STANDARD

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English Version

Aerospace series - Quality management systems - Part 1: Requirements for Certification of aviation, space, and defense

Série aérospatiale - Systèmes de management de la
qualité - Partie 1 : Exigences relatives à la certification
dans l'aéronautique, l'espace et la défense

Luft- und Raumfahrt - Qualitätsmanagementsysteme -
Teil 1: Anforderungen an Zertifizierungsverfahren für
Qualitätsmanagementsysteme der Luftfahrt,
Raumfahrt und Verteidigung

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

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.

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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

Contents	Page
European foreword	4
Introduction	5
1 Scope	7
2 Normative references	7
3 Terms and definitions	8
4 Principles	10
5 General requirements	11
5.1 Policy and ethics	11
5.2 Oversight	11
5.3 Documented information	11
6 Requirements for industry controlled other party scheme management structure	12
6.1 General requirements	12
6.2 Structure and resource requirements	12
6.3 Operational process requirements for the other party management team, sector management structure, and regional management structure	13
6.4 Management system requirements for the other party management team, sector management structure, and regional management structure	14
7 Industry controlled other party scheme requirements for accreditation bodies	16
7.1 General requirements	16
7.2 Resource requirements for accreditation bodies	17
7.3 Process requirements for accreditation bodies	17
7.4 Management system requirements for accreditation bodies	21
8 Requirements for certification bodies	21
8.1 General requirements	21
8.2 Information requirements	22
8.3 Structural requirements for certification bodies	23
8.4 Resource requirements for certification bodies	24
8.5 Process requirements for certification bodies	24
8.5.1 Organization certification analysis process	24
8.5.2 Integrated management system audits	32
8.5.3 Performance-based surveillance/recertification process	32
8.5.4 Use of information and communication technology in an audit program	33
8.5.5 Planning aerospace quality management system audits	33
8.5.6 Aerospace quality management system audit teams	34
8.5.7 Audit team conclusions and reporting	35
8.5.8 Certification decisions	35
8.5.9 Transfer of certificates	35
8.5.10 Special audits	36
8.5.11 Suspending, expiring, or withdrawing certification	37
8.5.12 Complaints and online aerospace supplier information system database feedback process	37
8.6 Quality management system requirements for certification bodies	38
9 Requirements for certified aerospace quality management system organizations	38

9.1	General requirements.....	38
9.2	Requirements for use of performance-based surveillance/recertification process	39
10	Requirements for auditor authentication bodies.....	39
11	Requirements for training provider approval bodies	39
12	Online aerospace supplier information system database requirements	39
Annex A	(informative) Acronym log	41
Annex B	(normative) Industry controlled other party scheme	43
Annex C	(normative) Use of online aerospace supplier information system database functionality ..	44
Annex D	(normative) Performance-based surveillance/recertification process	47
Bibliography	50

Bibliography 50

European foreword

This document (EN 9104-1:2023) 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 June 2024, and conflicting national standards shall be withdrawn at the latest by June 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 9104-001:2013.

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.

Introduction

To assure customer satisfaction, ASD 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 established the IAQG, with representatives from 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.

The IAQG develops documents that standardize QMS requirements to the greatest extent possible and can be used at all levels of the supply chain by organizations around the world. Their use should result in improved quality, cost, and delivery performance through the reduction or elimination of organization-unique requirements, effective implementation of the QMS, and wider application of good practices. While primarily developed for the ASD industry, these EN 9100-series standards (i.e., EN 9100, EN 9110, and EN 9120) can also be used in other industry sectors when a QMS with supplemental requirements, beyond an ISO 9001 system, is needed.

Subsequently, the IAQG developed a global scheme for the acceptance and recognition of certification of an organization's AQMS performed by Certification Bodies (CBs), using the EN 9100-series, and taking into account the existing schemes for QMS certification. The scheme relies on:

- the use of CBs with specific ASD elements and requirements, under the guidance and oversight of the ASD industry; and
- the use of a harmonized approach with the CBs for improving the quality and process control throughout the entire supply chain.

This document defines the scheme requirements for managing AQMS certification (commonly referred to as the 'ICOP scheme'). Other standards in this series (i.e., EN 9104-2, EN 9104-3) provide specific requirements for defining the industry oversight process, and the AQMS requirements for ASD auditor training, development, competence, and authentication, respectively. The three ICOP scheme requirements documents are:

- EN 9104-1, *Aerospace series — Quality management systems — Part 1: Requirements for certification of aviation, space and defence*;
- EN 9104-2, *Aerospace series — Quality management systems — Part 2: Requirements for the oversight of aviation, space, and defence quality management system certification programs*; and
- EN 9104-3, *Aerospace series — Quality management systems — Part 3: Requirements for aviation, space and defence auditor training, development, competence, and authentication*.

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;
- “annual” or “annually” indicates a 12-month period beginning January 1st and ending December 31st; and
- “days” are calendar days, unless otherwise specified.

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

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.

1 Scope

This document defines the industry-accepted requirements for the ICOP scheme, which provides confidence to ASD customers, that organizations with certification of their QMS, issued by accredited CBs, meet applicable AQMS standard requirements. The requirements in this document are applicable to all participants in the ICOP scheme. If there is a conflict between the requirements of this document, and customer or applicable statutory/regulatory requirements, the latter shall take precedence.

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

EN 9101,^{2,3} *Aerospace series — Requirements for conducting audits of aviation, space and defence quality management systems*

EN 9104-2,² *Aerospace series — Quality management systems — Part 2: Requirements for the oversight of aviation, space, and defence quality management system certification programs*

EN 9104-3,^{2,3} *Aerospace series — Quality management systems — Part 3: Requirements for aviation, space, and defence auditor training, development, competence, and authentication*

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

EN 9120,² *Quality management systems — Requirements for aviation, space and defence distributors*

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

ISO 9001, *Quality management systems — Requirements*

ISO 19011, *Guidelines for auditing management systems*

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

ISO/IEC 17011, *Conformity assessment — Requirements for accreditation bodies accrediting conformity assessment bodies*

ISO/IEC 17021-1, *Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 1: Requirements*

IAF ID 3, *IAF Informative Document for Management of Extraordinary Events or Circumstances Affecting ABs, CABs and Certified Organizations*

² As developed under the auspices of the IAQG and published by various standards bodies [e.g., 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/>.

IAF MD 1, *IAF Mandatory Document for the Audit and Certification of a Management System Operated by a Multi-Site Organization*

IAF MD 2, *IAF Mandatory Document for the Transfer of Accredited Certification of Management Systems*

IAF MD 4, *IAF Mandatory Document for the Use of Information and Communication Technology (ICT) for Auditing/Assessment Purposes*

IAF MD 5, *IAF Mandatory Document — Determination of Audit Time of Quality, Environmental, and Occupational Health & Safety Management Systems*

IAF MD 11, *IAF Mandatory Document for the Application of ISO/IEC 17021 for Audits of Integrated Management Systems*

IAF ML 4, *IAF Multilateral Recognition Arrangements — Policies and Procedures for a MLA on the Level of Single Accreditation Bodies and on the Level of Regional Accreditation Groups*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9000, ISO/IEC 17000, the IAQG International Dictionary⁴ and the following apply.

NOTE An acronym log for this document is presented in Annex A

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

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

3.1

aerospace quality management system

AQMS

QMS based upon ISO 9001 that includes additional ASD requirements, as established in EN 9100, EN 9110, and EN 9120

3.2

aerospace quality management system (AQMS) auditor

person with the demonstrated attributes (i.e., training, audit experience, industry experience) and competence to conduct an audit on ASD organizations

Note 1 to entry: an AQMS auditor is either an authenticated experienced auditor (AEA) or an authenticated auditor (AA), and shall have met the requirements set forth in EN 9104-3.

3.3

industry controlled other party (ICOP) scheme

IAQG and industry managed scheme for the audit and certification of an organization's AQMS by accredited other party CBs, in accordance with the requirements defined in the EN 9104-series

⁴ Located on the IAQG website, www.iaqg.org.