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Space product assurance - Quality assurance

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English version

Space product assurance - Quality assurance

Assurance produit des projets spatiaux - Assurance
qualité

Raumfahrtproduktsicherung - Qualitätssicherung

This European Standard was approved by CEN on 15 July 2019.

CEN and CENELEC 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 and CENELEC 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 and CENELEC 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 Foreword

This document (EN 16602-20:2020) has been prepared by Technical Committee CEN-CENELEC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-20:2020) originates from ECSS-Q-ST-20C Rev.2.

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of an identical text or by endorsement, at the latest by September 2020, and conflicting national standards shall be withdrawn at the latest by September 2020.

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 will supersede EN 16602-20:2014.

The main changes with respect to EN 16602-20:2014 are listed below:

- Clause 3: Title of clause corrected. Term "acceptance authority media" added. References to ECSS-S-ST-00-01 made for terms "ground segment sub-system", "ground support equipment" and "repeatability"
- Term "stamp control" replaced by "acceptance authority media control"
- Titles of clauses 5.2.7 and 5.2.7.1, 5.8.3.2, A2.1<3>, Annex I modified
- Pre-Tailoring matrix updated using the TA agreed symbols as stated in Table 6 1 "Definitions of the columns of Table 6 2"
- Informative Annex I "Deliverable QA documents per review" updated
- Informative Annex J "ECSS-Q-ST-20 applicability according to programme phases" deleted
- Update of issue of EN 9100 standard in Bibliography

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association.

This document has been developed to cover specifically space systems and has therefore precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

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1 Scope

This Standard defines the quality assurance (QA) requirements for the establishment and implementation of a Quality Assurance programme for products of space projects.

Discipline related qualification activities are complemented in standards specific to those disciplines (e.g. ECSS-E-ST-32-01 for fracture control).

For software quality assurance, the software product assurance standard, ECSS-Q-ST-80 is applicable.

This Standard is applicable to all space projects.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.

For the tailoring of this standard the following information is provided:

- A table providing the pre-tailoring per “Product types” in clause 6
- A table providing the pre-tailoring per “Project phase” in Annex J

Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this ECSS Standard. For dated references, subsequent amendments to, or revision of any of these publications do not apply. However, parties to agreements based on this ECSS Standard are encouraged to investigate the possibility of applying the more recent editions of the normative documents indicated below. For undated references, the latest edition of the publication referred to applies.

EN reference	Reference in text	Title
EN 16601-00-01	ECSS-S-ST-00-01	ECSS system - Glossary of terms
EN 16602-10	ECSS-Q-ST-10	Space product assurance - Product assurance management
EN 16602-10-04	ECSS-Q-ST-10-04	Space product assurance - Critical-item control
EN 16602-10-09	ECSS-Q-ST-10-09	Space product assurance - Nonconformance control system
	EN 61340-5-1 (2007)	Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements
	ANSI-ESD S20.20-2007	Development of an Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment