

Space product assurance - Software product assurance

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16602-80:2018 sisaldab Euroopa standardi EN 16602-80:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 16602-80:2018 consists of the English text of the European standard EN 16602-80:2018.
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 28.11.2018.	Date of Availability of the European standard is 28.11.2018.
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ICS 35.080, 49.140

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English version

Space product assurance - Software product assuranceAssurance produit des projets spatiaux - Assurance
produit logicielRaumfahrtproduktsicherung - Software-
Produktsicherung

This European Standard was approved by CEN on 12 October 2018.

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Table of contents

European Foreword	7
1 Scope	8
2 Normative references	9
3 Terms, definitions and abbreviated terms	10
3.1 Terms for other standards	10
3.2 Terms specific to the present standard	10
3.3 Abbreviated terms	16
3.4 Nomenclature	18
4 Space system software product assurance principles	19
4.1 Introduction	19
4.2 Organization of this Standard	20
4.3 Tailoring of this Standard	22
5 Software product assurance programme implementation	23
5.1 Organization and responsibility	23
5.1.1 Organization	23
5.1.2 Responsibility and authority	23
5.1.3 Resources	24
5.1.4 Software product assurance manager/engineer	24
5.1.5 Training	24
5.2 Software product assurance programme management	25
5.2.1 Software product assurance planning and control	25
5.2.2 Software product assurance reporting	26
5.2.3 Audits	27
5.2.4 Alerts	27
5.2.5 Software problems	27
5.2.6 Nonconformances	28
5.2.7 Quality requirements and quality models	29

5.3	Risk management and critical item control.....	29
5.3.1	Risk management	29
5.3.2	Critical item control.....	29
5.4	Supplier selection and control.....	30
5.4.1	Supplier selection	30
5.4.2	Supplier requirements	30
5.4.3	Supplier monitoring	30
5.4.4	Criticality classification	31
5.5	Procurement.....	31
5.5.1	Procurement documents	31
5.5.2	Review of procured software component list	31
5.5.3	Procurement details	32
5.5.4	Identification	32
5.5.5	Inspection	32
5.5.6	Exportability	32
5.6	Tools and supporting environment.....	32
5.6.1	Methods and tools.....	32
5.6.2	Development environment selection	33
5.7	Assessment and improvement process	34
5.7.1	Process assessment.....	34
5.7.2	Assessment process	34
5.7.3	Process improvement	35
6	Software process assurance	37
6.1	Software development life cycle.....	37
6.1.1	Life cycle definition.....	37
6.1.2	Process quality objectives	37
6.1.3	Life cycle definition review.....	37
6.1.4	Life cycle resources	37
6.1.5	Software validation process schedule	38
6.2	Requirements applicable to all software engineering processes	38
6.2.1	Documentation of processes	38
6.2.2	Software dependability and safety.....	39
6.2.3	Handling of critical software	41
6.2.4	Software configuration management.....	43
6.2.5	Process metrics	45
6.2.6	Verification	46
6.2.7	Reuse of existing software	49

6.2.8	Automatic code generation.....	52
6.3	Requirements applicable to individual software engineering processes or activities.....	53
6.3.1	Software related system requirements process.....	53
6.3.2	Software requirements analysis	53
6.3.3	Software architectural design and design of software items	55
6.3.4	Coding	56
6.3.5	Testing and validation	57
6.3.6	Software delivery and acceptance.....	62
6.3.7	Operations	63
6.3.8	Maintenance	64
7	Software product quality assurance.....	66
7.1	Product quality objectives and metrication	66
7.1.1	Deriving of requirements	66
7.1.2	Quantitative definition of quality requirements	66
7.1.3	Assurance activities for product quality requirements	66
7.1.4	Product metrics	66
7.1.5	Basic metrics.....	67
7.1.6	Reporting of metrics	67
7.1.7	Numerical accuracy.....	67
7.1.8	Analysis of software maturity.....	68
7.2	Product quality requirements	68
7.2.1	Requirements baseline and technical specification	68
7.2.2	Design and related documentation.....	69
7.2.3	Test and validation documentation.....	69
7.3	Software intended for reuse.....	70
7.3.1	Customer requirements.....	70
7.3.2	Separate documentation	70
7.3.3	Self-contained information.....	70
7.3.4	Requirements for intended reuse	70
7.3.5	Configuration management for intended reuse.....	70
7.3.6	Testing on different platforms.....	71
7.3.7	Certificate of conformance	71
7.4	Standard ground hardware and services for operational system.....	71
7.4.1	Hardware procurement	71
7.4.2	Service procurement.....	71
7.4.3	Constraints.....	72

7.4.4	Selection	72
7.4.5	Maintenance	72
7.5	Firmware	72
7.5.1	Device programming	72
7.5.2	Marking	73
7.5.3	Calibration.....	73
Annex A (informative) Software documentation.....		74
Annex B (normative) Software product assurance plan (SPAP) - DRD		80
B.1	DRD identification	80
B.1.1	Requirement identification and source document.....	80
B.1.2	Purpose and objective.....	81
B.2	Expected response.....	82
B.2.1	Scope and content	82
B.2.2	Special remarks	86
Annex C (normative) Software product assurance milestone report (SPAMR) - DRD		87
C.1	DRD identification	87
C.1.1	Requirement identification and source document.....	87
C.1.2	Purpose and objective.....	88
C.2	Expected response	88
C.2.1	Scope and content	88
C.2.2	Special remarks	89
Annex D (normative) Tailoring of this Standard based on software criticality.....		90
D.1	Software criticality categories	90
D.2	Applicability matrix.....	91
Annex E (informative) List of requirements with built-in tailoring capability.....		102
Annex F (informative) Document organization and content at each milestone.....		103
F.1	Introduction.....	103
F.2	ECSS-Q-ST-80 Expected Output at SRR	103
F.3	ECSS-Q-ST-80 Expected Output at PDR	105
F.4	ECSS-Q-ST-80 Expected Output at CDR	110
F.5	ECSS-Q-ST-80 Expected Output at QR	112
F.6	ECSS-Q-ST-80 Expected Output at AR.....	113

F.7 ECSS-Q-ST-80 Expected Output not associated with any specific milestone review	115
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Bibliography.....	117
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Figures

Figure 4-1: Software related processes in ECSS Standards.....	20
Figure 4-2: Structure of this Standard.....	21
Figure A-1 : Overview of software documents	74

Tables

Table A-1 : ECSS-E-ST-40 and ECSS-Q-ST-80 Document requirements list (DRL)	75
Table B-1 : SPAP traceability to ECSS-E-ST-40 and ECSS-Q-ST-80 clauses	80
Table C-1 : SPAMR traceability to ECSS-Q-ST-80 clauses.....	87
Table D-1 : Software criticality categories.....	90
Table D-2 : Applicability matrix based on software criticality	91

European Foreword

This document (EN 16602-80:2018) has been prepared by Technical Committee CEN/CLC/JTC 5 "Space", the secretariat of which is held by DIN (Germany).

This document (EN 16602-80:2018) originates from ECSS-Q-ST-80C Rev.1.

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 May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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 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 will therefore have precedence over any EN covering the same scope but with a wider do-main of applicability (e.g. : aerospace).

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.

1

Scope

This Standard defines a set of software product assurance requirements to be used for the development and maintenance of software for space systems. Space systems include manned and unmanned spacecraft, launchers, payloads, experiments and their associated ground equipment and facilities. Software includes the software component of firmware.

This Standard also applies to the development or reuse of non-deliverable software which affects the quality of the deliverable product or service provided by a space system, if the service is implemented by software.

ECSS-Q-ST-80 interfaces with space engineering and management, which are addressed in the Engineering (-E) and Management (-M) branches of the ECSS System, and explains how they relate to the software product assurance processes.

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

Tailoring of this Standard to a specific business agreement or project, when software product assurance requirements are prepared, is also addressed in clause 4.3.

2

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 16003-40	ECSS-E-ST-40	Space engineering — Software general requirements
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 16602-20	ECSS-Q-ST-20	Space product assurance – Quality assurance
EN 16602-30	ECSS-Q-ST-30	Space product assurance – Dependability
EN 16602-40	ECSS-Q-ST-40	Space product assurance – Safety
EN 16601-10	ECSS-M-ST-10	Space project management – Project planning and implementation
EN 16601-10-01	ECSS-M-ST-10-01	Space project management – Organization and conduct of reviews
EN 16601-40	ECSS-M-ST-40	Space project management – Configuration and information management
EN 16601-80	ECSS-M-ST-80	Space project management – Risk management
	ISO/IEC 15504 Part 2:2003	Software engineering - Process assessment – Part 2: Performing an assessment - First Edition