SIST

SLOVENSKI STANDARD
kSIST FprEN 16601-00:2018

01-september-2018

Vesoljski sistem - Skupina standardov EN 16600 - Opis, izvajanje in splošne zahteve

Space system - EN 16600 series - Description, implementation and general requirements

Raumfahrt system - Beschreibung, Implementierung und allgemeine Anforderungen

Système spatial - Série EN 16600 - Description, mise en œuvre et exigences générales

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ICS:

49.140	Vesoljski sistemi in operacije	Space systems and operations

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English version

Space system - EN 16600 series - Description, implementation and general requirements

Système spatial - Série EN 16600 - Description, mise en œuvre et exigences générales

Raumfahrt system - Beschreibung, Implementierung und allgemeine Anforderungen

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/CLC/JTC 5.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Table of contents

Figures

Tables

European Foreword

This document (FprEN 16601-00:2018) has been prepared by Technical Committee CEN/CLC/TC 5 “Space”, the secretariat of which is held by DIN (Germany).

This document (FprEN 16601-00:2018) originates from ECSS-S-ST-00C.

This document is currently submitted to the Unique Acceptance Procedure.

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

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

1 Scope

This document is the top–level document of the EN 16000 Series of European Space Standards. It gives a general introduction into European Space Standards and their use in space programmes and projects.

Its purpose is to provide users with an overview of the European Space Standards System (that is based on the ECSS System), together with an introduction to the various branches of applicability and to the disciplines covered by these set of Standards and the processes involved in generating and using these standards.

As an introduction into space programmes, space projects actors and their customer-supplier relationships are described.

The branches are:

- EN 16001 Series: Space system and Space project management
- EN 16002 Series: Space product assurance
- EN 16003 Series: Space engineering
- EN 16004 Series: Space sustainability

Application of the ECSS System for space projects in the customer-supplier chain is explained and a practical tailoring method is described together with methods for collecting and processing user feedback.

Finally top-level requirements are defined for implementation of the ECSS system in space projects/programmes.

This standard is applicable to all the procurements of space products.

With effect from the date of approval, this Standard announces the adoption of the external document on a restricted basis for use in the European Cooperation for Space Standardization (ECSS) system.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with clause 7 of this standard.

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 revisions 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 most 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

3
Terms, definitions and abbreviated terms

3.1 Terms from other standards

For the purpose of this Standard, the terms and definitions from ECSS-S-ST-00-01 apply.

3.2 Abbreviated terms

For the purpose of this Standard, the abbreviated terms from ECSS-S-ST-00-01 and the following apply:

Abbreviation	Meaning
DRD	document requirements definition
EARM	ESS applicable requirements matrix
ECM	ESS compliance matrix
ESS	European space standard
ID	implementation document
PA	product assurance
PRD	project requirements document
SDO	standard development organization

4
Objectives and policy

The overall objectives of using the European Space Standards system include:

- achieving more cost effective space programmes and projects in Europe,
- improving the competitiveness of European space industry,
- improving the quality and safety of space projects and products,
- facilitating clear and unambiguous communication between all parties involved, in a form suitable for reference or quotation in legally binding documents,
- reducing risk and guarantee interoperability and interface compatibility by applying proved and recognized requirements and methods.

In order to meet the above stated objectives, the following policy principles are applied:

European Space Standards are produced to support the formal customer-supplier relation in developing space programs and projects.

In order to ensure European space programmes and projects' efficiency in terms of technical performance, life cycle cost-effectiveness and on-time deliveries, the European Space Standards System can be adapted to specific domains of application by use of tailoring activities.

NOTE See Annex A "Example of template for an EARM for the requirements".

Systematic feedback of experience from programmes, projects and other appropriate sources allows improvement of the Standards.

5
European Space Standards System description

5.1 Overview

The European Space Standards System has been developed as a cooperative effort between the European space agencies and space industries. It comprises a comprehensive set of documents addressing all essential aspects of the major branches for the successful implementation of space programmes and projects, namely

- Space system and Space project management,
- Space engineering,
- Space product assurance, and
- Space systainability.

All user oriented documents fall in one of those branches.

5.2 Space standards

Space standards are documents for direct use in invitation to tender and business agreements for implementing space related activities.

They state verifiable requirements, supported by the minimum descriptive text necessary to understand their context.

Each requirement contained within a Standard has a unique identification, allowing full traceability and easy verification of compliance.

When a requirement asks for the delivery of a document, the scope and content is specified in a dedicated DRD (Document Requirements Definition), which forms an integral part of a standard.

The Space standards focus primarily on what is required to comply with each standard, rather than how to achieve this. This approach provides the flexibility for different customers and suppliers to use established “in–house” procedures, or processes, to comply with these standards.

5.3 Structure and architecture of ECSS Standards System

5.3.1 Overview

The present document is the top level user document of the European Space Standards. Beneath this document there are several branches, one each for space project management, space engineering, space product assurance and space sustainability.

The disciplines addressed by the European Space Standards system are given in Figure 5-1.

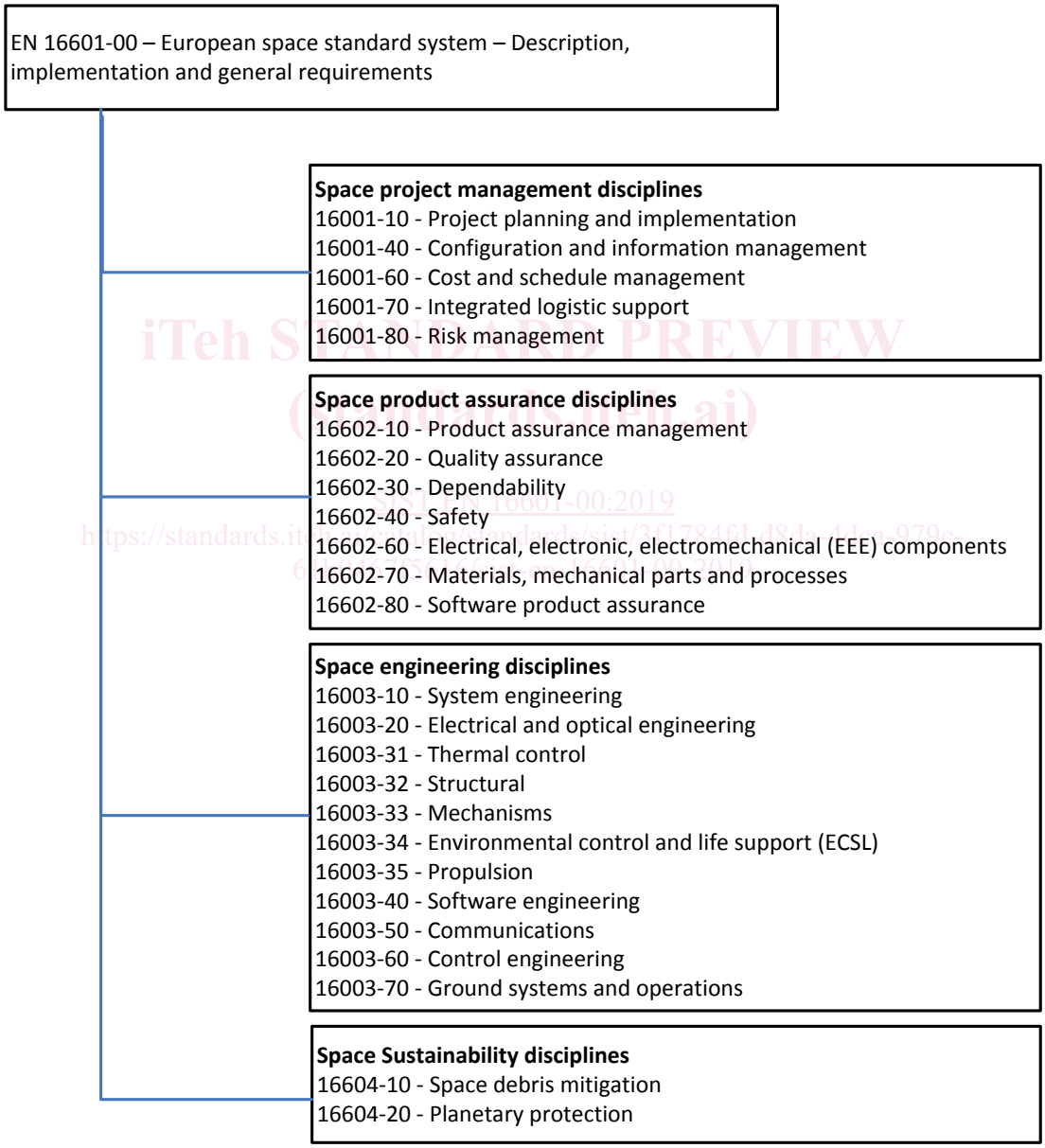

Figure 5-1: Disciplines of the ECSS Standards system