



SLOVENSKI STANDARD
SIST EN 16602-40-12:2015
01-januar-2015

Zagotavljanje varnih proizvodov v vesoljski tehniki - Analiza drevesa okvar - Obvestilo o prevzemu (Adoption Notice) ECSS/IEC 61025

Space product assurance - Fault tree analysis - Adoption notice ECSS/IEC 61025

Raumfahrtproduktsicherung - Fehlerbaumanalyse - Adoption notice ECSS/IEC 61025

Assurance produit des projets spatiaux - Analyse par arbre de panne - Notice d'adoption de la norme ECSS/CEI 61025 **(standards.iteh.ai)**

Ta slovenski standard je istoveten z: EN 16602-40-12:2014
SIST EN 16602-40-12:2015
<https://standards.iteh.ai/catalog/standards/sist/a928c0b1-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>

ICS:

49.140 Vesoljski sistemi in operacije Space systems and operations

SIST EN 16602-40-12:2015

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 16602-40-12:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>

EUROPEAN STANDARD

EN 16602-40-12

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2014

ICS 49.140

English version

Space product assurance - Fault tree analysis - Adoption notice ECSS/IEC 61025

Assurance produit des projets spatiaux - Analyse par arbre
de panne - Notice d'adoption de la norme ECSS/CEI 61025

Raumfahrtproduktsicherung - Fehlerbaumanalyse -
Adoption notice ECSS/IEC 61025

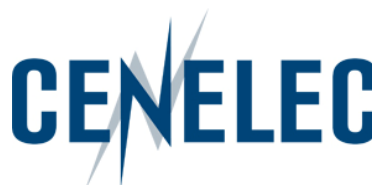
This European Standard was approved by CEN on 13 March 2014.

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.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>



CEN-CENELEC Management Centre:
Avenue Marnix 17, B-1000 Brussels

Table of contents

Foreword	3
1 Scope	4
2 Normative references	5
3 Terms, definitions and abbreviated terms	6
3.1 Terms defined in other standards	6
3.2 Abbreviated terms.....	6
4 Principles	7
5 Requirements	8
5.1 ECSS usage restriction.....	8
5.1.1 Applicability	8
5.1.2 Procedure	8
5.1.3 Software tools supporting FTA.....	9
Bibliography	10

Foreword

This document (EN 16602-40-12:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-40-12:2014) originates from ECSS-Q-ST-40-12C.

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 March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.

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 mandate 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This Standard defines requirements for the performance of Fault Tree Analysis (FTA) on space projects and incorporates the IEC 61025 standard into the ECSS system.

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 ECSS-S-ST-00.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 16602-40-12:2015](https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015)

<https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>

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
EN 16602-30	ECSS-Q-ST-30	Space product assurance – Dependability
EN 16602-40	ECSS-Q-ST-40	Space product assurance – Safety
	IEC 61025 (1990-10)	Fault tree analysis (FTA)

<https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>

Terms, definitions and abbreviated terms

3.1 Terms defined in other standards

For the purpose of this Standard, the terms and definitions from ECSS-S-ST-00-01 apply, in particular for the following terms:

dependability

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
ECSS	European Cooperation for Space Standardization
IEC	International Electrotechnical Commission
FT	fault tree
FTA	fault tree analysis
NUREG	U.S. Nuclear Regulatory Commission, Washington, DC

4 Principles

The standard IEC 61025 (1990-10) titled “Fault tree analysis (FTA)” defines basic principles, provides the steps necessary to perform an analysis, identifies appropriate assumptions, events and failure modes, and provides identification rules and symbols.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 16602-40-12:2015](https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015)

<https://standards.iteh.ai/catalog/standards/sist/a928cdbf-8d88-4233-91a2-6d3996aa0438/sist-en-16602-40-12-2015>