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Space product assurance - Availability analysis

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/15

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English version

Space product assurance - Availability analysis

Assurance produit des projets spatiaux - Analyse de
disponibilité

Raumfahrtproduktsicherung - Verfügbarkeitsanalyse

This European Standard was approved by CEN on 6 March 2014.

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Foreword

This document (EN 16602-30-09:2014) has been prepared by Technical Committee CEN/CLC/TC 5 “Space”, the secretariat of which is held by DIN.

This standard (EN 16602-30-09:2014) originates from ECSS-Q-ST-30-09C.

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of an identical text or by endorsement, at the latest by March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.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).

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Scope

This Standard is part of a series of ECSS Standards belonging to ECSS-Q-ST-30, Space product assurance – Dependability. The present standard defines the requirements on availability activities and provides where necessary guidelines to support, plan and implement the activities.

It defines the requirement typology that is followed, with regard to the availability of space systems or subsystems in order to meet the mission performance and needs according to the dependability and safety principles and objectives.

This Standard also describes the process that is followed and the most significant methodologies for the availability analysis to cover such aspects as

- evaluation of the space element or system availability figure,
- allocation of the requirement at lower level, and
- outputs to be provided.

This Standard applies to all elements of a space project (flight and ground segments), where Availability analyses are part of the dependability programme, providing inputs for the system concept definition and design development.

The on-ground activities and the operational phases are considered, for availability purposes, in order to

- acquire additional information essential for a better system model finalization and evaluation, and
- monitor the system behaviour to optimize its operational performance and improve the availability model for future applications.

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

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN