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Space engineering - Test and operations procedure language

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 engineering - Test and operations procedure language

Ingénierie spatiale - Language de procedure pour les
essais et des operations

Raumfahrttechnik - Sprache für Test- und
Bedienprozeduren

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

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Foreword

This document (EN 16603-70-32:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16603-70-32:2014) originates from ECSS-E-ST-70-32C.

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of an identical text or by endorsement, at the latest by March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.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

Introduction

The procedure is the principal mechanism employed by the end-user to control the space system during pre-launch functional testing and post-launch in-orbit operations.

This Standard identifies the requirements to be satisfied by any language used for the development of automated test and operation procedures.

It also defines a reference language that fulfils these requirements. This language is called the “procedure language for users in test and operations (PLUTO)”.

1 Scope

This Standard specifies:

- The capabilities of the language used for the definition of procedures for space system testing and operations.
- The PLUTO language.

Clause 4 defines the context in which procedures operate.

Clause 5 contains the requirements for the procedure language.

Annex A specifies the PLUTO language. This includes:

- The “building blocks” that constitute procedures and the role that each of these building blocks plays in achieving the overall objectives of the procedure.
- The dynamic aspects of procedures i.e. the execution logic of each building block and execution relationships between these blocks.
- The syntax and semantics of the language itself.

Annex B specifies the engineering units to be supported by the procedure language.

Annex C specifies the mathematical, time and string functions to be supported by the procedure language.

This standard may be tailored for the specific characteristics 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
	ISO/IEC 14977	Information technology - Syntactic metalanguage – Extended BNF

koniec náhľadu – text ďalej pokračuje v platenej verzii STN