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Space engineering - Verification guidelines

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/CLC/TR 17603-10-02:2021.
This Technical standard information includes the English version of CEN/CLC/TR 17603-10-02:2021.

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European Foreword

This document (CEN/CLC/TR 17603-10-02:2021) has been prepared by Technical Committee CEN/CLC/JTC 5 "Space", the secretariat of which is held by DIN.

It is highlighted that this technical report does not contain any requirement but only collection of data or descriptions and guidelines about how to organize and perform the work in support of EN 16603-10-02.

This Technical report CEN/CLC/(TR 17603-10-02:2021) originates from ECSS-E-HB-10-02A.

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 TR covering the same scope but with a wider domain of applicability (e.g.: aerospace).

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Scope

This handbook provides additional information for the application of the verification standard EN 16603-10-02 to a space system product.

This handbook does not contain requirements and therefore cannot be made applicable. In case of conflict between the standard and this handbook, the standard prevails.

This handbook is relevant for both the customer and the supplier of the product during all project phases.

To facilitate the cross-reference, this handbook follows as much as is practical, the structure of the standard and quotes the requirements, to make it self standing and easier to read (*the text from the standard is in italic*).

As the Standard applies to different products at different product levels from single equipment to the overall system (including space segment hardware and software, launchers and Transportation Systems, ground segment, Verification tools, and GSE) several examples of tailoring, to match the specificity of each application, are proposed in Annex B.

Specific discipline related verification aspects are covered in other dedicated standards and handbooks. In particular the detailed aspects for Testing are covered in the EN 16603-10-03 and in its corresponding handbook TR 17603-10-03.

The application of the requirements of the standard to a particular project is intended to result in effective product verification and consequently to a high confidence in achieving successful product operations for the intended use, in this respect this handbook has the goal to help reaching these objectives.

2 References

This document is the handbook corresponding to the Verification standard ECSS-E-ST-10-02C.

The following documents are referenced in this text or provide additional information useful for the reader.

EN Reference	Reference in text	Title
EN 16601-00-01	ECSS-S-ST-00-01	ECSS system - Glossary of terms
EN 16603-10	ECSS-E-ST-10	Space engineering - System engineering general requirements
EN 16603-10-02	ECSS-E-ST-10-02	Space engineering - Verification
EN 16603-10-03	ECSS-E-ST-10-03	Space engineering - Testing
EN 16603-40	ECSS-E-ST-40	Space engineering - Software
EN 16603-50	ECSS-E-ST-50	Space engineering - Communications
EN 16603-70	ECSS-E-ST-70	Space engineering - Ground systems and operations
TR 16703-10-03	ECSS-E-HB-10-03	Space engineering - Testing guidelines
-	ECSS-E-TM-10-21	Space engineering - System modelling and simulation
EN 16601-10	ECSS-M-ST-10	Space project management - Project planning and implementation.
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 16602-20-07	ECSS-Q-20-07	Space product assurance - Quality assurance for test centres.
EN 16602-40	ECSS-Q-ST-40	Space product assurance - Safety.
EN 16602-60	ECSS-Q-ST-60	Space product assurance - Electrical, electronic and electromechanical (EEE) components.
EN 16602-70	ECSS-Q-ST-70	Space product assurance - Materials, mechanical parts and processes.

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