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STN	**Kozmická technika. Dátové linky v kozmickom programe. Protokoly, synchronizácia a kódovanie kanálov na diaľkové ovládanie.**	**STN EN 16603-50-04** 31 0543

Space engineering - Space data links - Telecommand protocols, synchronization and channel coding

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

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English version

Space engineering - Space data links - Telecommand protocols, synchronization and channel coding

Ingénierie spatiale - Liaisons de données spatiales - Protocoles, synchronisation et codage canal des liaisons télécommande

Raumfahrttechnik - Telekommando-Protokolle, -synchronisation und -kanalkodierung

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Foreword

This document (EN 16603-50-04:2014) has been prepared by Technical Committee CEN/CLC/TC 5 “Space”, the secretariat of which is held by DIN.

This standard (EN 16603-50-04:2014) originates from ECSS-E-ST-50-04C.

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of an identical text or by endorsement, at the latest by March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.

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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 specifies the data structures and protocols for a telecommand space data link and the procedure for physical layer operation.

Usually, the source of data on a telecommand space data link is located on the ground and the receiver is located in space. However, the Standard may also be used for space-to-space telecommand data links.

Further provisions and guidance on the application of this standard can be found, respectively, in the following documents:

- The higher level standard ECSS-E-ST-50 “Communications”, which defines the principle characteristics of communication protocols and related services for all communication layers relevant for space communication (physical- to application-layer), and their basic relationship to each other.
- The handbook ECSS-E-HB-50 “Communications guidelines”, which provides information about specific implementation characteristics of these protocols in order to support the choice of a certain communications profile for the specific requirements of a space mission.

Users of this present standard are invited to consult these documents before taking decisions on the implementation of the present one.

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
	CCSDS 135.0-B-3 Issue 3, October 2006	Space Link Identifiers – Blue Book