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Vesoljsko inženirstvo - Vesoljske podatkovne povezave - Okvirni protokol za prenos telemetrijskih podatkov

Space engineering - Space data links - Telemetry transfer frame protocol

Raumfahrttechnik - Telemetrieübertragungs-Rahmen-Protokoll

Ingénierie spatiale - Liaisons des données spatiales - Protocole trame de transfert de télémétre

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This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/CLC/TC 5.

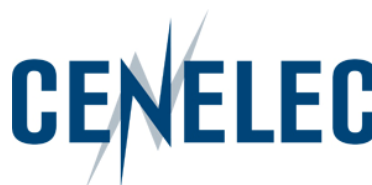
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Foreword

This document (FprEN 16603-50-03:2013) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN (Germany).

This document (FprEN 16603-50-03:2013) originates from ECSS-E-ST-50-03C.

This document is currently submitted to the Unique Acceptance Procedure.

This document has been developed to cover specifically space systems and will therefore have 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 contains the definition for Telemetry Transfer Frames which are fixed-length data structures, suitable for transmission at a constant frame rate on a space data channel.

The Telemetry Transfer Frame provides a standardized data structure for the transmission of space-acquired data over a telemetry space data link.

Usually, the source of the data is located in space and the receiver is located on the ground. However, this Standard may also be applied to space-to-space telemetry data links.

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

- 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.