

<b>STN</b>	<b>Zabezpečovanie výrobkov kozmického programu. Príprava, zostavenie a montáž koaxiálnych káblov RF.</b>	<b>STN EN 16602-70-18</b>  31 0542
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Space product assurance - Preparation, assembly and mounting of RF coaxial cables

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. 03/15

Obsahuje: EN 16602-70-18:2014

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2015  
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

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ICS 49.090; 49.140

English version

## Space product assurance - Preparation, assembly and mounting of RF coaxial cables

Assurance produit des projets spatiaux - Préparation,  
assemblage et montage des câbles radiofréquence  
coaxiaux

Raumfahrtproduktsicherung - Vorbereitung, Zusammenbau  
und Befestigung von RF-Koaxial-Kabeln

This European Standard was approved by CEN on 11 April 2014.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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**CEN-CENELEC Management Centre:  
Avenue Marnix 17, B-1000 Brussels**

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## Foreword

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This document (EN 16602-70-18:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-70-18:2014) originates from ECSS-Q-ST-70-18C.

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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.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

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The main part of this Standard is based on industrial experience and recommendations from European soldering technology experts. Modifications are incorporated into the text to provide for the specific requirement of low-outgassing electrical systems which are required by scientific and application satellites. Other additions were made in the light of recent technological advances and results of metallurgical test programmes. The use of processes other than solder assembly is recognized, but only certain general requirements are given in this Standard.

These requirements apply to assemblies designed to operate within the temperature limits from -45 °C to +85 °C. More extreme temperatures or other unusual environmental applications require special design measures or processing steps to provide environmental survival capability.

# 1

## Scope

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This Standard defines the technical requirements and quality assurance provisions for the assembly and mounting of high-reliability, radio-frequency (RF) coaxial-cable interconnections for use as transmission lines in spacecraft and associated equipment.

In general, these assemblies are designed for low-loss, stable operation from the relatively low frequencies through the higher frequencies in the microwave regions.

These transmission-line cables should not be confused with low-frequency cables with conductive sheaths (usually copper braid), which are used in applications where shielding of the centre conductors from the surrounding electrical ambient is required. The interconnection of those shielded cables, not covered by the present standard, is covered in ECSS-Q-ST-70-08.

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 revision 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 more 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
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 16602-60	ECSS-Q-ST-60	Space product assurance – Electrical, electronic and electromechanical (EEE) components
EN 16602-70-02	ECSS-Q-ST-70-02	Space product assurance – Thermal vacuum outgassing test for the screening of space materials
EN 16602-70-08	ECSS-Q-ST-70-08	Space product assurance – Manual soldering of high-reliability electrical connections
EN 16602-70-26	ECSS-Q-ST-70-26	Space product assurance – Crimping of high-reliability electrical connections
EN 16602-70-28	ECSS-Q-ST-70-28	Space product assurance – Repair and modification of printed circuit board assemblies
	MIL-C-17G(3) SUP1	General specification for cables, radio frequency, flexible and semi-rigid. (8 Jan 1996)

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**