



NSAI
Standards

Irish Standard
I.S. EN 16603-31:2014

Space engineering - Thermal control general requirements

I.S. EN 16603-31:2014

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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

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Foreword

This document (EN 16603-31:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16603-31:2014) originates from ECSS-E-ST-31C.

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of an identical text or by endorsement, at the latest by March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.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 supersedes EN 14607-1:2004.

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

ECSS-E-ST-31 defines requirements for the discipline of thermal engineering.

This Standard defines the requirements for the definition, analysis, design, manufacture, verification and in-service operation of thermal control subsystems of spacecraft and other space products.

For this Standard, the complete temperature scale is divided into three ranges:

- Cryogenic temperature range
- Conventional temperature range
- High temperature range.

The requirements of this Standard are applicable to the complete temperature scale. However, where applicable, requirements are stated to be applicable only for the cryogenic or high temperature range. References to these specific requirements have been summarized in Annex G and Annex H.

This standard is applicable to all flight hardware of space projects, including spacecraft and launchers.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.

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