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Irish Standard Recommendation
S.R. CEN/CLC/TR 17603-10-12:2021

Space engineering - Calculation of radiation and its effects and margin policy handbook

S.R. CEN/CLC/TR 17603-10-12:2021

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National Foreword

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TECHNICAL REPORT

RAPPORT TECHNIQUE

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CEN/CLC/TR 17603-10-12

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English version

Space engineering - Calculation of radiation and its effects and margin policy handbook

Ingénierie spatiale - Manuel de calcul du transport des radiations et de leurs effets, et politique des marges

Raumfahrttechnik - Handbuch zur Berechnung von Strahlung, Strahlungseffekten und Marginregeln

This Technical Report was approved by CEN on 19 March 2021. It has been drawn up by the Technical Committee CEN/CLC/JTC 5.

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European Foreword

This document (CEN/CLC/TR 17603-10-12:2021) 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 16603-10-12.

This Technical report (CEN/CLC/TR 17603-10-12:2021) originates from ECSS-E-HB-10-12A.

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).

1 Scope

This handbook is a part of the System Engineering branch and covers the methods for the calculation of radiation received and its effects, and a policy for design margins. Both natural and man-made sources of radiation (*e.g.* radioisotope thermoelectric generators, or RTGs) are considered in the handbook.

This handbook can be applied to the evaluation of radiation effects on all space systems.

This handbook can be applied to all product types which exist or operate in space, as well as to crews of on manned space missions.

This handbook complements to EN 16603-10-12 “Methods for the calculation of radiation received and its effects and a policy for the design margin”.