INTERNATIONAL STANDARD

ISO 13541

First edition 2010-09-15

Space data and information transfer systems — Attitude data messages

Systèmes de transfert des informations et données spatiales — Messages de données d'attitude

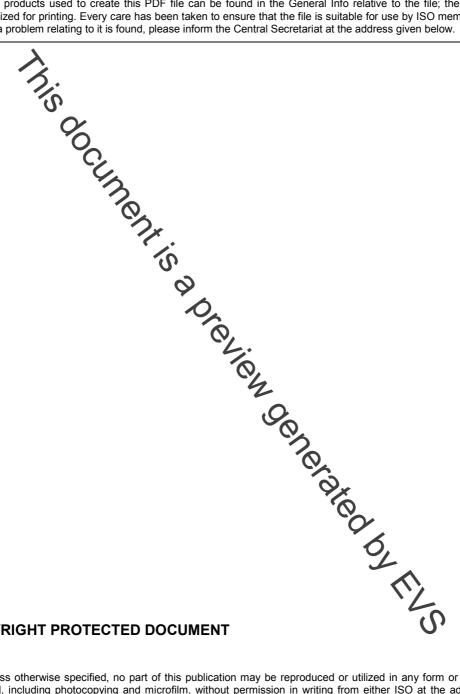


PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2010

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent

national Standard requires
antion is drawn to the possibility that,
ints. ISO shall not be held responsible for .

30 13541 was prepared by the ensultative
CCSDS 504.0-B-1, May 2008) and was adopted (withou,
International Standard) by Technical Colomittee ISO/TC.
SC 13, Space data and information transfer systems. ISO 13541 was prepared by the consultative Committee for Space Data Systems (CCSDS) (as CCSDS 504.0-B-1, May 2008) and was adopted (without modifications except those stated in Clause 2 of this International Standard) by Technical Committee ISO/TC 20, Aircraft and space vehicles, Subcommittee

iii © ISO 2010 - All rights reserved

Inis document is a preview denetated by EUS

Space data and information transfer systems — Attitude data messages

1 Scope

This International Standard specifies two standard message formats for use in transferring spacecraft attitude information between space agencies: the attitude parameter message (APM) and the attitude ephemeris message (AEM). Such explanges are used for:

- preflight planning for tracking or attitude estimation support;
- scheduling attitude and data processing support;
- carrying out attitude operations;
- performing attitude comparisons;
- carrying out attitude propagations and/or sensor predictions;
- testing to initialize sub-system simulators (communications, power, etc.).

This International Standard includes sets of requirements and criteria that the message formats have been designed to meet. For exchanges where these requirements do not capture the needs of the participating agencies, another mechanism may be selected.

The scope and field of application are furthermore detailed in subclause 1.2 of the enclosed CCSDS publication.

2 Requirements

Requirements are the technical recommendations made in the following publication (reproduced on the following pages), which is adopted as an International Standard:

CCSDS 504.0-B-1, May 2008, Attitude data messages

For the purposes of international standardization, the modifications outlined below shall apply to the specific clauses and paragraphs of publication CCSDS 504.0-B-1.

Pages i to v

This part is information which is relevant to the CCSDS publication only.

Page 1-3

Add the following information to the reference indicated:

- [4] Document CCSDS 301.0-B-3, January 2002, is equivalent to ISO 11104:2003.
- [7] Document CCSDS 502.0-B-1, September 2004, is equivalent to ISO 22644:2006.