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Space systems — Spacecraft interface requirements document for launch vehicle services

Systèmes spatiaux — Document d'exigences d'interface du véhicule spatial vis-à-vis du service de lancement



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 14, *Space systems and operations*.

This second edition cancels and replaces the first edition (ISO 17401:2004), which has been technically revised.

The main changes are as follows:

- upgrade orbit definition parameters;
- upgrade SC environment description;
- upgrade SC description (interface, thermal aspects, EMC).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document gives guidelines for writing an interface requirements document (IRD) for launch vehicle (LV) services. The application of this document is intended to facilitate the technical exchanges between spacecraft (SC) and launch vehicle agencies. By reducing the amount of work necessary for requesting launch services, this document will minimize spacecraft contractor's and spacecraft manufacturer's costs.

In some cases, drawings are explicitly requested in order to provide comprehensive information. Explicit international system units are specified for all items. The corresponding scale may be adjusted if not appropriate.

SC organizations may include additional topics if required. Some sections of the IRD may refer to specificities that are not applicable to the launch services of interest, in which case they should be ignored.