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**NATIONAL STANDARD OF THE
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**General requirements for space environment adaptability
assurance for spacecraft
(English Translation)**

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Table of Contents

- Preface
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Abbreviations
- 5 Basic Principles
- 6 Work items and workflow
 - 6.1 Work Item
 - 6.2 Workflow
- 7 Work objectives and requirements
 - 7.1 Identification of space environment risks
 - 7.2 Space environment adaptability design
 - 7.3 Space environment adaptability design verification
 - 7.4 Space environment adaptability design review and confirmation
 - 7.5 Spatial environment data analysis and support
- Appendix A (Normative) Spacecraft space environment adaptability assurance work items
- Appendix B (Normative) Spacecraft Product Space Environment Adaptability Assurance Workflow
- Appendix C (Informative) Spacecraft Surface Charging and Internal Charged Risk Areas

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

1 Scope

This document establishes the basic principles for ensuring the adaptability of spacecraft to the space environment, and stipulates the work items, work processes, and work objectives. and requirements.

This document applies to the identification, analysis, protection, verification, and review of space environment risks for spacecraft systems, subsystems, and equipment.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 32452 Spacecraft space environment terminology

GB/T 38190 Electron irradiation test method for solar cells for aerospace use

GB/T 39343 Design and procedures for single event tests on aerospace processor devices

GB/T 41543 General specification for simulation test of space environment effects on aerospace materials

3 Terms and definitions

The terms and definitions defined in GB/T 32452 and the following apply to this document.

3.1 Space environment adaptability

The product can achieve all its intended functions, performance and be undamaged under the influence of various space environments that it is expected to encounter during its life cycle. ability.

Note: Space environment adaptability is one of the "six qualities" of spacecraft quality (reliability, safety, maintainability, testability, environmental adaptability, and security). An important part of general quality characteristics requirements.

4 Abbreviations

The following abbreviations apply to this document. APS. Active Pixel Sensor

CMOS. Complimentary Metal-Oxide-Semiconductor