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**Space Data and Information Transmission System Telemetry
Space Data Link Protocol**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to modify and adopt ISO 22645.2016 "Space Data and Information Transmission System Telemetry Space Data Link Protocol".

Compared with ISO 22645.2016, this standard has many structural adjustments. Appendix A lists this standard and ISO 22645.2016

The chapter number comparison list.

Compared with ISO 22645.2016, there are technical differences between this standard, and the clauses involved in these differences have been passed on the outer margins.

The vertical single line (?) is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

This standard also made the following editorial changes.

---Deleted part of the references to the principle definition document structure in Chapter 1 of ISO 22645.2016;

--- Change Appendix A "Abbreviations" in ISO 22645.2016 to Chapter 4 of the main text;

---The informative appendix B "References" of ISO 22645.2016 was deleted.

This standard was proposed and managed by the National Aerospace Technology and Application Standardization Technical Committee (SAC/TC425).

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Space Vehicle General Design Department, Anhui Wantong Technology Co., Ltd.

Division, Shenzhen Institute of Aerospace Science and Technology Innovation, Beijing
Institute of Telemetry Technology, Beijing Institute of Tracking and Communication
Technology.

1 Scope

This standard specifies the telemetry space data link protocol business, data unit format, protocol process, management parameters and support space data

According to the protocol procedures of the link security protocol.

This standard applies to the transmission of telemetry data from spacecraft to earth station and between spacecraft and spacecraft.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 2900.54 Electrotechnical terminology radio communication. transmitter, receiver, network and operation (GB/T 2900.54-2002,

IEC 60050-713..1998, IDT)

3 Terms and definitions

The following terms and definitions defined in GB/T 2900.54 apply to this document.

3.1

package

A basic data unit composed of application data plus packet header.

Note. Packet service transmission via virtual channel.

3.2

Telemetry transmission frame

A protocol data unit oriented to the transmission process suitable for transmission of telemetry data.

Note. The telemetry transmission frame provides a data structure for the transmission