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**Emergency management - Specification for data transmission
interface and communication protocol in application of BeiDou
navigation satellite system**

应急管理 北斗卫星导航系统应用数据传输接口和通信协议规范

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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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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Introduction

The Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Term Objectives for 2035 emphasizes deepening the BeiDou The system is promoted and applied to promote the high-quality development of the BeiDou industry. The "14th Five-Year Plan for the Development of the BeiDou Navigation Industry" clearly proposes to support the BeiDou The application engineering construction of national emergency communications and emergency management industries. In 2021, the State Council issued the "14th Five-Year Plan for the National Emergency Response System".

Pointed out that it is necessary to carry out the demonstration of BeiDou system emergency management capability. In July 2022, the National Disaster Reduction Committee issued the "14th Five-Year Plan" National Comprehensive The Disaster Prevention and Mitigation Plan requires the realization of real-time two-way communication and data transmission in all weather, all time and complex terrain conditions, which will provide a basis for emergency management.

The application of Beidou satellite navigation system provides specific guidance.

With the promotion and application of BeiDou satellite navigation system in the field of emergency management, BeiDou related products and services have gradually been integrated into the field of emergency management.

However, in actual applications, it is found that the interoperability between BeiDou products produced by different manufacturers is poor.

Some general data transmission interfaces, communication protocols and application functions are difficult to adapt to special scenarios in the field of emergency management,

which limits the application of Beidou.

The collection and analysis of relevant data restricts the quality, efficiency and scale of the application of the Beidou satellite navigation system in the field of emergency management.

In order to standardize the data transmission interface and communication system of BeiDou application data in the collection, transmission, aggregation, sharing and application of emergency management, The BeiDou satellite navigation system is a unified emergency management system that promotes the secure transfer of application data, achieves efficient coordination of emergency response, and formulates a unified emergency management BeiDou satellite navigation system.

Application of data transmission interface and communication protocol specifications has become a common demand of the industry. This document aims to provide a reference for the design of BeiDou applications in the field of emergency management.

Provide a basis for design, development and use.

Emergency Management Beidou Satellite Navigation System Application Data
Transmission interface and communication protocol specifications

1 Scope

This document specifies the BeiDou application terminal information interface, emergency-specific...

Requirements for network transmission system communication interfaces and communication protocols, and description of verification methods.

This document applies to the BeiDou emergency integrated service system, emergency management BeiDou application terminals, and emergency management business applications in the field of emergency management.

The design, development and use of the system. Terminals and systems related to emergency management in other fields can be used for reference.

2 Normative references

GB 2312

GB/T 6107

GB/T 11014

GB/T 35663

GB/T 39267

GB/T 45935-2025

3 Terms and Definitions

The terms and definitions defined in GB/T 39267 and GB/T 45935-2025 apply to this document.

4 Abbreviations

The following abbreviations apply to this document. HEX. Hexadecimal