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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46922-2025

**Professional digital trunking communication systems based on
12.5 kHz TDMA channels - Technical specification for system
interconnection**

基于12.5kHz信道的时分多址（TDMA）专用数字集群通信系统 系统互联技术规
范

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document is one of a series of standards for dedicated digital trunking communication systems based on a 12.5kHz channel for Time Division Multiple Access (TDMA). The standards have been published as follows:

---GB/T 46922 Interconnection Technology for Dedicated Digital Trunking Communication Systems Based on 12.5kHz Channel (Time Division Multiple Access (TDMA)) Technical Specifications;

---GB/T 46923 General Technical Specifications for Dedicated Digital Trunking Communication Systems Based on 12.5kHz Channel Time Division Multiple Access (TDMA) beg";

---GB/T 34991 Air Interface Material for Dedicated Digital Trunking Communication Systems Based on 12.5kHz Channel for Time Division Multiple Access (TDMA) "Technical Specifications for Data Link Layer and Data Layer";

---GB/T 34992 Air Interface Call for a Dedicated Digital Trunking Communication System Based on a 12.5kHz Channel for Time Division Multiple Access (TDMA) Called the "Control Layer Technical Specification";

---GB/T 46920 Security Technical Requirements for Dedicated Digital Trunking Communication Systems Based on Time Division Multiple Access (TDMA) Channels (12.5kHz) beg";

---GB/T 46919 Mobile Station Technology for Time Division Multiple Access (TDMA) Dedicated Digital Trunking Communication Systems Based on 12.5kHz Channel specification";

---GB/T 46921 Compatibility Testing of Dedicated Digital Trunking Communication Systems Based on 12.5kHz Channel try". Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Industry and Information Technology of the People's Republic of China. This document was drafted by: the Science and Technology Information Bureau of the Ministry of Public Security, Hangzhou YouNeng Communication Systems Co., Ltd., Hytera Communications Co., Ltd., and four other organizations. Chuanhaige Hengtong Private Network Technology Co., Ltd., the First Research Institute of the Ministry of Public Security, Eastcom Co., Ltd., and Beijing Wange Digital Communication Technology Co., Ltd. Limited Liability Company, Guangzhou Weide Technology Co., Ltd. The main drafters of this document are: Rong Jun, Fan Zhai, Yuan Yifang, Song Zhensu, Zhou Jiwen, Song Feihao, Sun Pengfei, Zhu Zhenrong, Jiang Qingsheng, and Wang Xu. Tu Shuzhong, Liu Jun, Deng Jinpei. Time Division Multiple Access (TDMA) based on a 12.5kHz channel Interconnection Technical Specifications for Dedicated Digital Trunking Communication Systems

1 Scope

GB/T 46922-2025 is the Chinese national standard covering joining two trunked radio systems - the interface between networks that lets a fire brigade in one city talk to one in the next, with the call routing, the group management across systems and the security between them. At 81,500 words, first edition, the largest of the three TDMA standards issued together. It was issued on 31 December 2025 and has been in force since 1 April 2026, as a first edition. The document is under the responsibility of the Ministry of Industry and Information Technology. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the interconnection interface protocol architecture for a dedicated digital trunking communication system based on a 12.5kHz channel for Time Division Multiple Access (TDMA). pSIP syntax, DNS extension specifications, RTP extension specifications, and protocol flow. This document applies to the design, manufacture, and engineering of a dedicated digital trunking communication system based on a 12.5kHz channel for Time Division Multiple Access (TDMA). acceptance.

2 Normative references

The contents of the following documents, through normative references within the text,

constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2260 Administrative Division Codes of the People's Republic of China

GB/T 34992 Air Interface Call Control for Dedicated Digital Trunking Communication System Based on 12.5kHz Channel Time Division Multiple Access (TDMA) Layering Technical Specifications YD/T 1522.1 Session Initiation Protocol (SIP) Technical Requirements Part

1. Basic Session Initiation Protocol YD/T 1936 Session Description Protocol (SDP) Technical Requirements

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 User Agent A logical functional entity that supports the SIP protocol acts as a User Account Control (UAC) when generating a request and as a User Account Control (UAS) when receiving a request and generating a response.

3.2 User agent client (useragentclient) The functional entity that sends session requests during the SIP session establishment process.

3.3 User agent server (useragentserver) Functional entities that receive, reject, or forward corresponding session requests during the SIP session establishment process.

3.4 User server (userserver) A functional entity that receives requests and sends responses to them.