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

**GB/T 7262-2025**

Replacing GB/T 7262-2009

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**Technical requirement and equipment arrangement for highway  
communication**

公路通信技术要求及设备配置

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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 replaces GB/T 7262-2009 "Technical Requirements and Equipment Configuration for Highway Communication". Compared with GB/T 7262-2009, except for the following.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) The definition of highway communication networks has been changed (see 3.1.1, 2009 version 3.1.1);
- b) Added terms and definitions for public communication networks (see 3.1.2);
- c) The abbreviations "PDH" and "SONET" have been removed (see section 3.2 of the 2009 edition);
- d) Added abbreviations "BITS", "FEC", "GE", "LPR", "MLM", "ODU", "OTU", "PRC", "PTN", "SIP", and "SLM".
- "SP", "STP", "UPS", and "VSAT" (see 3.2);
- e) The hierarchy and composition of the highway communication network have been changed (see 4.1 and 4.2, 2009 edition of 4.1 and 4.2);

- f) The basic networking requirements have been changed (see 5.1, 5.1.2 in the 2009 version);
- g) The general requirements for emergency communication systems have been removed (see 5.1.3 in the 2009 edition);
- h) The network structure of the highway communication network was changed (see 5.2, 5.1.1 in the 2009 edition);
- i) The general requirements for fiber optic digital transmission systems have been removed (see 5.2.1 in the 2009 edition);
- j) The nominal operating wavelength and fiber requirements have been changed (see 5.3.1.1, 5.2.2.1 in the 2009 version);
- k) The requirements for error performance, jitter, and drift performance of SDH digital transmission systems have been changed (see 5.3.1.4, 5.2.4 in the 2009 version);
- l) Technical requirements for PTN and OTN optical cable lines have been added (see 5.3.2 and 5.3.3);
- m) The technical requirements for SDH optical interface parameters have been changed (see 5.3.4.1.1, 5.7.2 in the 2009 version);
- (n) Added parameter requirements for PTN and OTN optical interfaces (see 5.3.4.1.2 and 5.3.4.1.3);
- o) The SDH optical interface classification has been changed (see 5.3.4.2.1, version 5.7.3.1 of 2009);
- p) Added PTN optical interface classification and OTN optical interface classification (see 5.3.4.2.2 and 5.3.4.2.3);
- q) The digital synchronization network interface and its basic requirements have been changed (see 5.4.1.5, version 5.6.5 in 2009);
- r) The technical requirements for digital synchronization network performance indicators have been changed (see 5.4.1.6, 5.6.6 in the 2009 version);
- s) The technical requirements for the synchronization link have been changed (see 5.4.1.7, 5.6.7 in the 2009 version);
- t) The clock reliability description has been changed (see 5.4.1.8, 5.6.8 in the 2009 version);
- u) Added technical requirements for the public signaling network (see 5.4.2);
- v) The technical requirements for SDH network management systems have been removed (see section 5.2.5 of the 2009 version);

- w) Added technical requirements for network management networks (see 5.4.3);
  - x) The technical requirements for transmission indicators of the voice switching system have been changed (see 5.5.1.3, 5.3.3 in the 2009 version);
  - y) Added technical requirements for image and data services (see 5.5.2 and 5.5.3);
  - z) The technical requirements for access network systems have been removed (see section 5.4 of the 2009 edition);
  - aa) The technical requirements for the electrical interface have been changed (see 5.5.4.1, 5.7.1 in the 2009 version);
  - bb) The Ethernet interface technical requirements have been changed (see 5.5.4.2, version 5.7.4 of 2009);
  - (cc) The technical requirements for the access network interface have been removed (see 5.7.7 in the 2009 version);
  - (dd) The technical requirements for the communication pipeline have been changed (see 5.6.1, 5.8 in the 2009 version);
  - (ee) Added technical requirements for communication power supplies (see 5.6.2);
  - (ff) Added technical requirements for optical fibers and cables (see 5.6.3);
  - (gg) Changed the communication method of highway emergency communication facilities (see 5.6.4, 5.9 in the 2019 version);
  - (hh) PTN and OTN transmission equipment, as well as softswitch equipment, have been added and configured in the primary highway communication network center and the secondary highway communication network.
- Relevant technical requirements for information network centers and highway level 3 communication network centers (see 6.2.1.2, 6.2.2.2 and 6.2.3.2);
- i) Added configuration of communication network node equipment at all levels and Appendix B (see 6.3 and Appendix B).

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 Transport of the People's Republic of China.

This document was drafted by: China Transport Telecommunications Information Center, China Communications Second Highway Survey and Design Institute Co., Ltd., and Wuhan University of Technology.

Beijing Xingtong Engineering Consulting Co., Ltd., Tibet Autonomous Region Department

of Transportation Communication and Information Center, Jiangxi Tonghui Technology Group Co., Ltd., Huawei Technology Co., Ltd.

The main drafters of this document are: Li Jun, Guo Zhijie, He Yi, Fan Weike, Xiao Songsong, Zhong Nan, Guo Lu, Liu Yong, Wang Enshi, Yang Tao, and Kan Teng.

Xie Tianchang, Zhang Hua, Zhang Ru, Hu Jian.

The release history of this document and the document it replaces is as follows.

- First published as GB 7262.1-1987 in 1987, and revised for the first time in 1993;
- In the second revision in 2009, it was incorporated into GB/T 7262.2-2001 "Technical Requirements and Equipment Configuration for Highway Communication".

The content of the "Standard" (the previous versions of GB/T 7262.2-2001 are: GB/T 7262.2-1991) and The content of GB/T 7262.3-2001 "Technical Requirements for Highway Communication and Equipment Configuration and Networking" (GB/T 7262.3- The previous versions of GB/T 7262.3-1991 were released as follows.

- This is the third revision.

## 1 Scope

This document specifies the basic regulations, technical requirements, and equipment configuration requirements for the planning, design, and networking of highway communication networks.

This document applies to the construction and reconstruction of highway communication networks.

## 2 Normative references

GB/T 7611-2016

GB/T 19516

GB/T 20185-2006

GB 50373

GB/T 51117-2015

GB/T 51242-2017

GB/T 51398-2019