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PEOPLE'S REPUBLIC OF CHINA**

GB/T 44453-2024

**Information technology service - Digital transformation -
Technical requirements of monitoring and warning system of
cross-disasters**

信息技术服务 数字化转型 跨灾种监测预警系统技术要求

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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 is required. 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. This document was proposed and coordinated by the National Technical Committee for Information Technology Standardization (SAC/TC 28). This document was drafted by: University of Chinese Academy of Sciences, Sichuan Yicheng Zhixun Technology Co., Ltd., China Electronics Technology Standardization Institute, Xiamen Dijia Technology Co., Ltd., Chengdu Zhigu Yunxing Information Technology Co., Ltd., Harbin Xinguang Optoelectronics Technology Co., Ltd., Beijing FiberHub Telecom Co., Ltd., Chengdu Smart Chengdu Research Institute Co., Ltd., Beijing Information Science and Technology University, Chengdu Chengtou Education Investment Management Group Co., Ltd., Guizhou Power Grid Co., Ltd. Guiyang Power Supply Bureau, China Ordnance Material Group Co., Ltd., Sichuan University, Weihai Shenzhou Information Technology Research Institute Co., Ltd., China Mobile Internet Co., Ltd., Shandong Microphotonics Co., Ltd., Beijing Tongniu Information Technology Co., Ltd. Co., Ltd., Beijing Zhongguancun Zhilian Safety Science Research Institute Co., Ltd., and Safetech Engineering Technology Group Co., Ltd. The

main drafters of this document are. Chen Shengxi, Zhang Jun, Guo Xinwei, Zhang Zhan, Wu Canjin, Wang Ruifeng, Qiu Shuaihui, Guo Fei, Xu Zhongping, Jin Chunhua, Chen Shenjie, Wang Yingshu, Wu Bo, Chen Qiyang, Li Junbing, Xu Shouguang, Zhang Peng, Zhang Xuanton, Zhou Jing, Zhang Shengnan, Di Baofeng, Zhuang Renfeng, Wang Chuntao, Peng Xuemei, Xu Fangqiu, Mao Huili, Zhang Shixi, Guan Hongliang, and Li Di. Information technology services digital transformation Technical requirements for cross-hazard monitoring and early warning systems

1 Scope

GB/T 44453-2024 sets the technical requirements for cross-hazard monitoring and early warning systems in China. The premise is one that disaster management has learnt expensively: hazards do not arrive one at a time or stay inside the department that monitors them, a typhoon becomes a flood becomes a landslide becomes a power failure, and a warning architecture built one hazard at a time cannot see the chain. The standard gives a reference model for a cross-hazard system and then the requirements: the service application requirements for cross-hazard monitoring and early warning, the data acquisition and integration across the separate hazard monitoring networks, the data sharing and interface requirements, the analysis and modelling including the identification of hazard chains and compound events, the generation, grading and issuing of warnings, the dissemination to the public and to responders, and the requirements on the platform, its performance, reliability and security. It takes effect on 1 April 2025.

This document establishes a cross-hazard monitoring and early warning system reference model for natural disaster response, and specifies service application requirements and technical architecture. Require. This document applies to the design, system integration and application of cross-hazard monitoring and early warning systems.

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 18030-2022 Information technology Chinese coded character set

GB/T 28181-2022 Technical requirements for information transmission, exchange and control of public security video surveillance network systems

GB/T 34283-2017 National emergency warning information release system management platform and terminal management platform interface specification

GB/T 35561-2017 Classification and coding of emergencies

GB/T 35965.1-2018 Emergency Information Interaction Protocol Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 multi-disasters All natural disasters that occur in a given place and cause damage above a certain level, as well as the secondary disasters they trigger.

3.2 Cross-disasters A comprehensive object formed by managing and handling multiple disaster types with coupled relationships. Examples, cross-hazard monitoring and cross-hazard early warning.

3.3 disaster chain The phenomenon of a series of disasters caused by one disaster.

Note. There is a chain relationship between the disasters that occur, which has the characteristics of induction, timing and expansion. The monitoring and early warning of the disaster chain is a cross-disaster monitoring and early warning. important part.

3.4 disaster configuration management database It is used to construct and store all relevant information about the components, hazard-bearing elements and hazard control elements of a disaster or a series of related disasters. A software system that manages information and the relationships between these elements.