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ICS 33.040.40
CCS M10

YD

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

YD/T 4453-2023

Technical requirements for application layer authentication and key management based on 5G mobile communication network

基于5G移动通信网的应用层认证和密钥管理技术要求

(English Translation)

Issued on: December 20, 2023 **Implemented on: April 1, 2024**

Issued by: Ministry of Industry and Information Technology

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https://chinastandards.org/standards/yd-t-4453-2023

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1 Foreword

YD/T 4453-2023 was issued by Ministry of Industry and Information Technology on 20 December 2023 and has been in force since 1 April 2024.

The YD/T prefix marks a recommended standard. It is not law in itself: it becomes binding when a contract names it, when a regulation or a mandatory standard refers to it, or when a producer declares conformity with it.

The document runs to 15 pages in English translation.

2 Scope Preview

This standard specifies the technical requirements for application layer authentication and key management based on 5G mobile communication networks, mainly including the authentication and key management architecture for 5G applications, application authentication key management processes and security requirements, related service requirements, etc. This standard does not cover roaming related requirements. This standard applies to the R&D and design of application layer authentication and key management functions based on 3GPP technology and 5G system credentials and master authentication.

YD/T 4453-2023 falls under ICS 33.040.40, in the field of telecommunications.

This catalogue holds 3,420 other YD/T standards in that field.

In this catalogue, YD/T standards carry edition years from 1982 to 2026.

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3 About this standard

Sector: Telecommunication Industry Standard (Recommended)

Issued by: Ministry of Industry and Information Technology

English translation: about 15 pages (approximate)

4 Related standards

Standards on related subjects:

GB/T 47325-2026 - Security technical requirements and test methods for over-the-air updates in the internet of vehicles

GB/T 47324-2026 - Cybersecurity protection requirements for internet of vehicles platforms

YD/T 1730-2008 - Implementation Guide for Security Risk Assessment of Telecom Network and Internet

YD/T 6017.7-2026 - The capability evaluation system of cyber security products - Part 7: Evaluation method of zero trust business security products

YD/T 6017.6-2026 - The capability evaluation system of cyber security product - Part 6: Evaluation method of cyber deception (honeypot)

YD/T 6017.4-2026 - The capability evaluation system of cyber security products - Part 4: Security products testing methods based on deployment methods

5 Classification and status

International classification (ICS): 33.040.40

Chinese Standard Classification (CCS): M 10

Prefix YD/T: recommended standard.

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