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**Digital supply chain - General requirements for traceability
systems**

数字化供应链 追溯体系通用要求

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Foreword

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Against the backdrop of the accelerated integration and penetration of next-generation information technologies such as cloud computing, big data, and the industrial internet into the manufacturing industry, and with the help of digital technology... To reduce supply chain

operating costs, building a digital supply chain has become a common choice for enterprises to maintain rapid growth. Facing a digital supply chain... In complex operations, managers need to quickly acquire and analyze inventory data, and grasp information such as the in-transit status of raw materials from multiple tiers of suppliers, in order to achieve [the desired results]. Traceability and management of data such as materials, products, and orders are essential to ensure the smooth operation of the digital supply chain and assist managers in making accurate decisions. Therefore, traceability... It has become a crucial part of the construction and management of digital supply chains. The construction of a digital supply chain traceability system covers all aspects of the supply chain. This section covers business processes and related stakeholders, aiming to help companies comprehensively, in real-time, and accurately grasp supply chain dynamics to ensure product quality meets standards and orders are fulfilled. On-time delivery. However, current digital supply chain traceability systems still suffer from issues such as inconsistent standards, difficulties in information sharing, and lack of standardized operation and management. This issue presents significant challenges for businesses in areas such as obtaining supply and demand information, tracing product origins, and predicting user demand. This document primarily focuses on the characteristics and core concepts of digital supply chains, providing a scientific understanding and systematic framework for enterprises, research institutions, and industry organizations. Establishing and managing a digital supply chain traceability system provides a top-level framework and path guidance, helping managers to clearly understand the overall digital supply chain. The operation process enables effective tracking of product manufacturing, accurate prediction of user demand, and collaborative management of the entire supply chain. General Requirements for Digital Supply Chain Traceability Systems

1 Scope

GB/T 46881-2025 is the Chinese national standard covering the traceability system of a digital supply chain - the units traced, the events recorded at each handover, the identifiers, the data to be kept and shared, and the ability to follow a batch forward to its customers and back to its inputs. First edition, published with GB/T 46888-2025 on procurement management in the same series. It was issued on 31 December 2025 and has been in force since 31 December 2025, 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 establishes the principles and basic framework for building a digital supply chain traceability system, covering the target objects, business processes, and information involved in traceability. The document specifies general requirements for digital supply chain traceability systems in terms of content, supporting platforms, and management elements.

This document applies to industry organizations and enterprises in building, operating, and managing digital supply chain traceability systems, and provides a framework for digital supply chain traceability. This provides a reference for third-party service providers, research institutes, and other organizations engaged in research, management, and consulting on chain traceability systems.

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 20271 Information Security Technology - General Security Technical Requirements for Information Systems

GB/T 23050 Guidelines for Digital Supply Chain Management within the Integration of Information Technology and Industrialization Management System

GB/T 25000.12 Systems and Software Engineering - System and Software Quality Requirements and Evaluation (SQuaRE) - Part

3 Terms and Definitions

The definitions in GB/T 20271, GB/T 23050, GB/T 25000.12, GB/T 38155, GB/T 38159 and GB/T 45403 are as follows: The following terms and definitions apply to this document.

3.1 Digital technologies support target objects such as orders, products, equipment, and assets in the supply chain, including R&D, planning, procurement, warehousing, and transportation. In manufacturing, sales, and service processes, the interrelationships or interactions of key information such as participants, location, time, quality, and details are crucial for obtaining relevant information. A set of continuous elements used.

4. Abbreviations The following abbreviations apply to this document.

12 Data Quality Quantitative Model

GB/T 38155 Traceability Terminology for Important Products

GB/T 38159 General Requirements for Traceability Systems of Important Products

GB/T 45403 Digital Supply Chain Maturity Model