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

GB/T 46686.1-2025

**Standard-oriented knowledge graph - Part 1: Implementation
guidelines**

标准知识图谱 第1部分：实现指南

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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 Part 1 of GB/T 46686, "Standard Knowledge Graphs". GB/T 46686 has already published the following parts.

1.Implementation Guidelines 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 National Standards Digitalization Working Group (SAC/SWG29). This document was drafted by:

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Standard Knowledge Graph (SKG) uses technologies such as artificial intelligence and big data to digitize standards and their entire lifecycle. This involves acquiring and integrating standard knowledge from structured, semi-structured, and unstructured standard data. This

is achieved by leveraging the rules inherent in the standards. Sexual knowledge is transformed into a logically clear and structurally complete relational system, enabling functions such as retrieval, recommendation, question answering, and reasoning of standard knowledge, through machine learning. The use of device-readable data in computation enables standards to be read, transmitted, understood, and applied by digital devices, thus driving the digital transformation of standards. GB/T 46686 is proposed to consist of two parts.

1.Implementation Guidelines. The purpose is to provide recommendations for the implementation of standard knowledge graph construction, application, and updating.

2.Quality Assessment. The purpose is to provide a quality assessment index system and evaluation methods for standard knowledge graphs. Standard Knowledge Graph Part

1 Scope

GB/T 46686.1-2025 is the Chinese national standard covering building a knowledge graph out of standards themselves - the entities that are documents, clauses, terms and requirements, the relations of citation, replacement and adoption between them, and the construction and maintenance of the graph. Part 1 of the series, first edition, and it sits with the machine language expression series GB/T 46687. It was issued on 2 December 2025 and has been in force since 1 July 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. 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 provides guidance on standard data preprocessing and the construction, application, and updating of standard knowledge graphs (SKGs), outlining the SKG framework. Examples of system construction and reference examples of industry applications. This document is applicable to all types of organizations for building, applying, and updating SKG.

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 1.1-2020 Standardization Work Guidelines Part

3 Terms and Definitions

The terms and definitions defined in GB/T 42131-2022, as well as the following terms and definitions, apply to this document.

3.1 standard element Relatively independent functional units derived from the content of standardized documents.

Note. Standard elements include normative and informative elements of standardized documents, such as cover, table of contents, preface, introduction, scope, normative references, and core information. Technical elements, etc.

3.2 A knowledge graph containing standard elements (3.1) and their relationships is formed based on information in the standard documents.

3.3 data quality When used under specified conditions, the degree to which the characteristics of the data meet explicit and implicit requirements. [Source: GB/T 25000.12-2017, 4.3]

3.4 The task of identifying the relationships between entities mentioned in a text.