



National Technical Committee 609 on Data of Standardization
Administration of China



中国电子技术标准化研究院
China Electronics Standardization Institute

Report on Data Standardization Work of the National Technical Committee 609 on Data of Standardization Administration of China

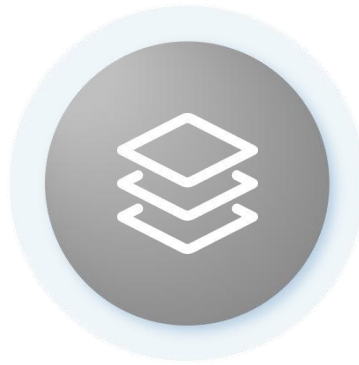
China Electronics Standardization Institute
November 2025



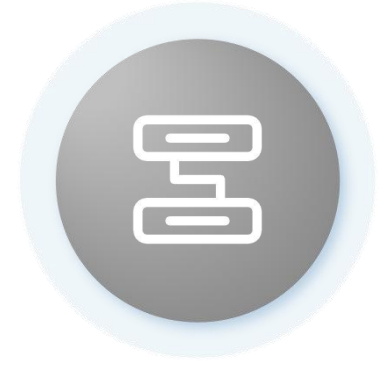
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**Steadily Propel the Key
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1.1 Important work deployments for standardization work in China

General Secretary Xi Jinping made a series of important instructions on standardization work

- **"Strengthening standardization work and implementing standardization strategies represent an important and urgent task, which are with far-reaching implications for economic and social development."**
— Remarks made while working in Zhejiang in 2006
- **"Standards are the achievements of human civilization's progress." "Standards have become the 'universal language of the world'. The world requires coordinated development through standards, as standards facilitate global interconnectedness." "Standards drive innovative development, and they lead the progress of our era."**
— Congratulatory message to the 39th ISO General Assembly 2016
- **"Employing high standards to bolster high-tech innovation, foster high-level openness, and guide high-quality development."**
— Congratulatory message to the 83rd IEC General Assembly in 2019
- **"Build a unified national market, deepen market-oriented reforms of productive factors, and establish a high-standard market system."**
— Report to the 20th National Congress of the Communist Party of China in 2022

1.1 Important work deployments for standardization work in China

The Central Committee of the Communist Party of China and The State Council made systematic arrangements for standardization work

In 2021, the Central Committee of the Communist Party of China and the State Council released the *National Standardization Development Outline*:

- Standards serve as the technical underpinning for economic activities and social development, and they constitute a crucial component of a nation's foundational institutional framework.
- Foster the synergistic development of standardization and technological innovation.
- Improve the level of industrial standardization.

In March 2024, the State Council Executive Meeting discussed and approved the *Working Plan for Upgrading Standards to Bolster High-Quality Economic Development*:

- Upgrading standards holds significant importance in better addressing the needs of the public, facilitating industrial transformation, and driving high-quality development.
- Accelerate the process of standard formulation and revision, adhering to the principle of addressing urgent needs first and **promptly introducing standards as they mature**.
- Additionally, it is crucial to enhance supervision and inspection, refine supporting policies, and ensure the effective implementation of various standards.

In July 2024, the Third Plenary Session of the 20th Central Committee of the Communist Party of China adopted the *Decision of the CPC Central Committee on Further Comprehensively Deepening Reform and Advancing Chinese Modernization*:

- **improve the national standard system** and deepen reforms in the local standard management system.
- **Establish a coherent set of circulation rules and standards** to reduce logistics costs across society.
- **Drive the optimization and upgrading of traditional sectors through the enhancement of national standards**, supporting enterprises in transforming and upgrading traditional industries with digital and green technologies.
- **Establish new infrastructure planning and standard system.**

1.1 Important work deployments for standardization work in China

The Central Committee of the Communist Party of China and The State Council made systematic arrangements for standardization work

In October 2025, Premier Li Qiang chaired the 16th special study session of the State Council:

- **Standards serve as a crucial foundational system**, playing a pivotal role in constructing a modern industrial system and fostering a unified national market. Prioritize the upgrading of standards and expedite the establishment of a standard system that aligns with the demands of high-quality development.
- **Optimize standard supply, closely align with the realities of economic and social development, adhere to the principles of addressing urgent needs first and achieving orderly improvements**, systematically review standard requirements across all sectors and industries one by one, strengthen the empowerment of digital technologies such as artificial intelligence, and systematically advance the development and revision of standards.
- **Reinforce standard implementation**, insist to rigorous oversight with optimized services, **utilizing inspection, testing, certification, and accreditation to facilitate standard implementation**, establishing a responsibility list for implementation of mandatory standards, **emphasizing the referencing of voluntary standards in industrial policies, government procurement, and bidding processes**, and guiding enterprises to implement high-level standards. **Improve the internationalization level of standards, deepen international cooperation and exchanges**, steadily expand the institutional openness of standards.

1.2 The important role of standardization work

Standardization refers to activity of **establishing, formulating, issuing and implementing**, with regard to **actual or po-tential problems** (object), **provisions** for common and re-peated use, aimed at the achievement of **the optimum degree of order** (goal) in a given **scope** (region, area) — GB/T 20000.1

- **The essence of standards lies in the expansion and unification of demands.** A single product or individual demand does not need standards; it is required by the repetition and infinite extension of the same demand.
- **The application of standards simplifies demands that are repeatedly emerged and infinitely extended.**
- **The essence of standards: simplification, unification, optimization, and coordination.**
- **It can be said that standardization is a prerequisite for modern large-scale production; the foundation of scientific management; the demand for adjusting product and industrial structures; a necessary means for market expansion; a platform for facilitating the transformation of science and technology into productivity; and a bridge and link that promotes trade development.**

Data standardization constitutes a critical element of standardization work and an important component of data-related work. It is a key task in implementing the national standardization strategy and supporting the development of the data industry.

1.3 Background of data standardization work

General Secretary Xi Jinping emphasized the importance of building **a digital economy with data as its key element** and give the role to data as both a fundamental resource and an innovation engine. As the core element driving the development of the digital economy, data has garnered significant attention from countries worldwide. **Data standardization, serving as the cornerstone for high-quality development in the data sector**, has emerged as a critical focal point in global competition. China places great emphasis on data standardization work and has made comprehensive arrangements in this regard.

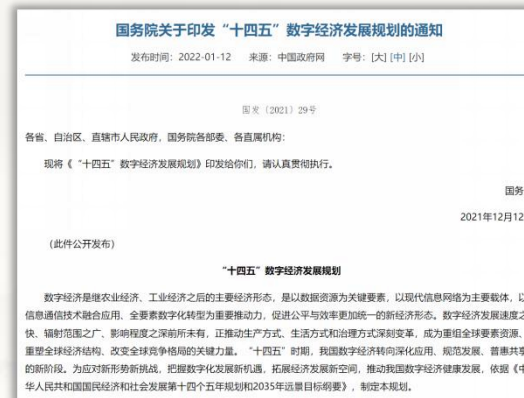
● October 2021

National Standardization Development Outline



● December 2021

Development Plan for Digital Economy during the "14th Five-Year Plan" Period



● March 2022

Opinions on Speeding Up the Construction of a Unified National Market



1.3 Background of data standardization work

● October 2021

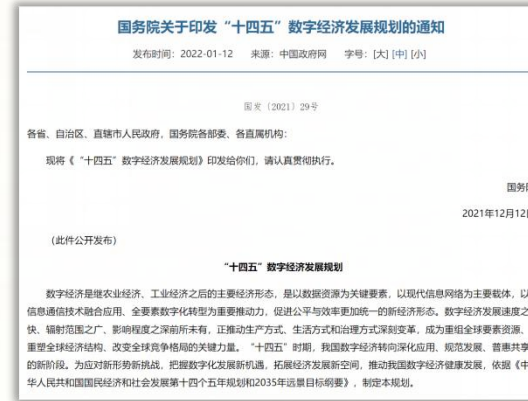
National Standardization Development Outline



- **Emphasized the importance of establishing standards and specifications for data resource property rights, transaction and circulation, cross-border transfer, and security protection, propel standardization construction of the platform economy and sharing economy, and support the growth of the digital economy.**

● December 2021

Development Plan for Digital Economy during the "14th Five-Year Plan" Period



- **Advance the standard system construction for data resources, enhance data management capabilities and data quality, and explore data sharing, exchange, collaboration, and opening up data for business applications.**

● March 2022

Opinions on Speeding Up the Construction of a Unified National Market

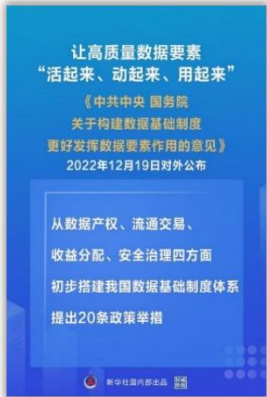


- **Accelerate fostering the data element market and establish and refine fundamental systems and standards and specifications for data security, rights protection, cross-border transfer management, transaction and circulation, opening and sharing, and security certification.**

1.3 Background of data standardization work

December 2022

"Twenty Measures on Data"



December 2023

"Data Elements ×"



September 2024

Opinions on Accelerating the Development and Utilization of Public Data Resources



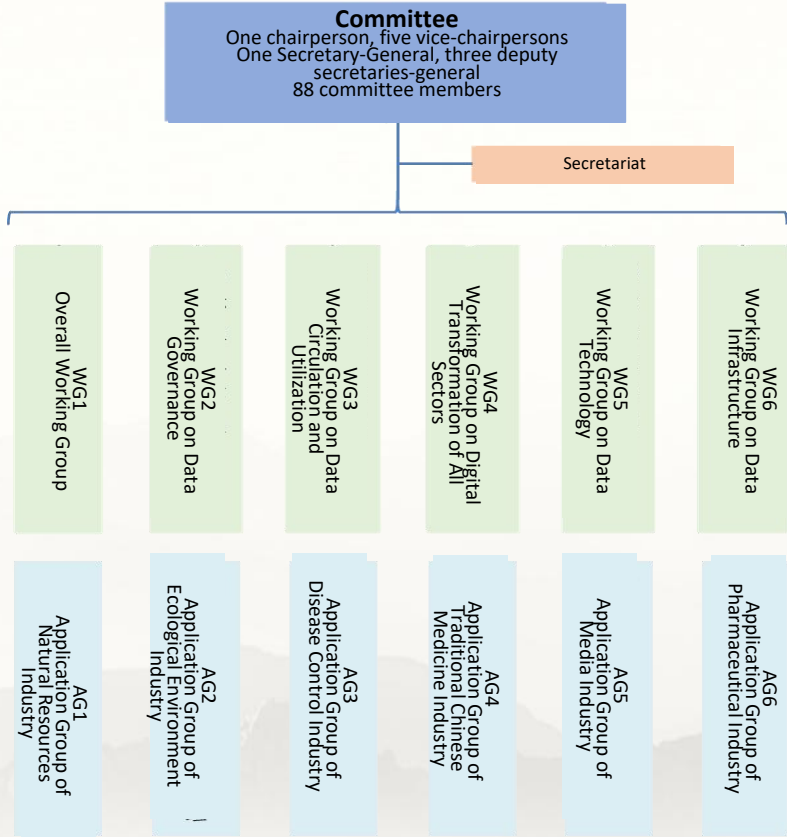
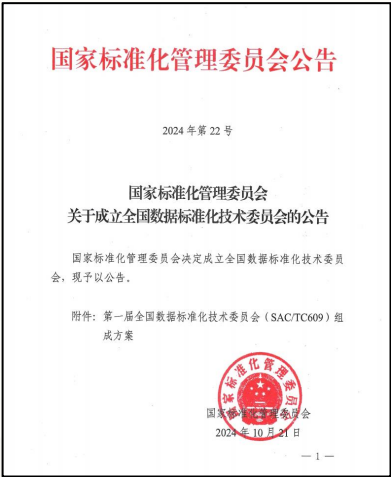
- The basic system for data should be lay out in a systematic manner, and it requires to **explore and refine a policy criteria and institutional frameworks for pricing, circulation, trading, utilization, distribution, governance, and security of the data element property rights.**
- Accelerate the implementation of national standards for capability maturity of data management, and that of data element management specification, and drive the enhancement of standard systems for **metadata management, data anonymization, data quality, value assessment**, and other areas across various departments and industries.
- Promote collaborative manufacturing and advance the construction **for standard ecosystem of product master data.**
- **Optimize standard system, reinforce the standard construction for data collection and management, and work collaboratively to drive the formulation of industry standards.**
- Optimize the data circulation environment to enhance transaction and circulation efficiency, support enterprises within the sector to jointly **formulate data circulation rules and standards**, focus on business needs to facilitate compliant data circulation, and boost data application efficiency among multiple entities.
- Enhance the usability of public data resources and promote **the standardization and normalization of data resource development.**
- Research and develop **standards and specifications for data infrastructure**, fostering facility interconnection and capability interoperability.
- **Coordinate the construction and management of standard systems in the data sectors; organize the development, dissemination, implementation, and assessment of relevant standards.**
- Actively engage in international exchanges and cooperation, **advance the formulation of international governance rules and standards for public data.**

1.4 Construction of data standardization organizations

In October 2024, the **National Technical Committee 609 on Data of Standardization Administration of China** was formally established, tasked with the **formulation and revision of national standards in areas such as data resources, data technology, data circulation, smart cities, and digital transformation, as well as general standards, data infrastructure standards and security standards that support data circulation and utilization.** The committee's work corresponds to the domains covered by ISO/IEC JTC1/SC32, ISO/IEC JTC1/WG11, ISO/IEC JTC1/SC42/WG2, and IEC/SyC Smart Cities. The National Data Administration oversees its daily management and provides business guidance, while the Secretariat is operated by the **China Electronics Standardization Institute**.



In October 2023, under the guidance of the National Data Administration, a specialized team for data standardization work was established.



1.4 Overall strategies of data standardization work

Data standardization serves as a key foundation for fostering innovative development in the digital economy. It holds significant importance in **implementing national strategies, delineating development boundaries, and regulating the development landscape.** It plays a pivotal role in **bolstering technological innovation within the data sector, fostering the market ecosystem for data element market, and facilitating efficient international cooperation in production capacity.** Data standardization has emerged as a critical focal point for achieving global cooperation and mutually beneficial outcomes.

Serve the data sector

Focus on industrial demands

Focus on international development

全国数据标准化技术委员会 2024—2025 年工作要点

为加强数据领域标准化总体协调和规划布局，发挥标准在规范数据基础设施建设、促进数据资源高质量供给、推动数据高效有序流通、引领数据技术迭代创新、形成多元数据融合应用新格局的基础和支撑作用，务实推进 2024—2025 年数据标准化工作，制定本文件。

一、建立规章制度，夯实工作基础

1. 制定《全国数据标准化技术委员会章程》《全国数据标准化技术委员会秘书处工作细则》等文件，建立全国数据标准化技术委员会（以下简称“全国数标委”）规章制度，明确组织架构和秘书处工作职责。

2. 面向社会公开征集成员单位，充分吸纳各方力量参与标准化工作。

3. 上线“全国数据标准化技术委员会工作平台”，申请 www.tc609.org.cn 域名，开发移动端工作 APP，创办微信公众号，并做好运维管理工作。

4. 召开全国数标委全体委员会议、标准周活动。在数字中国建设峰会或中国国际大数据产业博览会，举办数据标准化论坛或对话活动，推进数据标准化工作。

5. 建立标准工作评价机制，开展年度“优秀个人”“优秀单位”“优秀标准”评选。

1

1. Strengthen top-level planning and enhance forward-looking research on standardization in key areas.

2. Expedite the development and revision of standards in critical sectors.

3. Implement standard pilot projects to effectively improve the quality and application of standards.

4. Strengthen international exchange and cooperation, foster competitive advantages on the global stage.

5. Establish rules and regulations to consolidate working foundation.

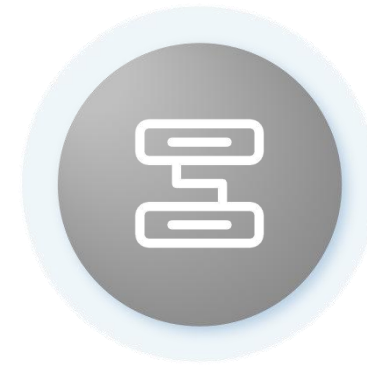
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**The Background and
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**Strategies on the
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**Steadily Advance the
Key Tasks of Data
Standardization**

2.1 Strengthen top-level planning and enhance forward-looking research on standardization in key areas.

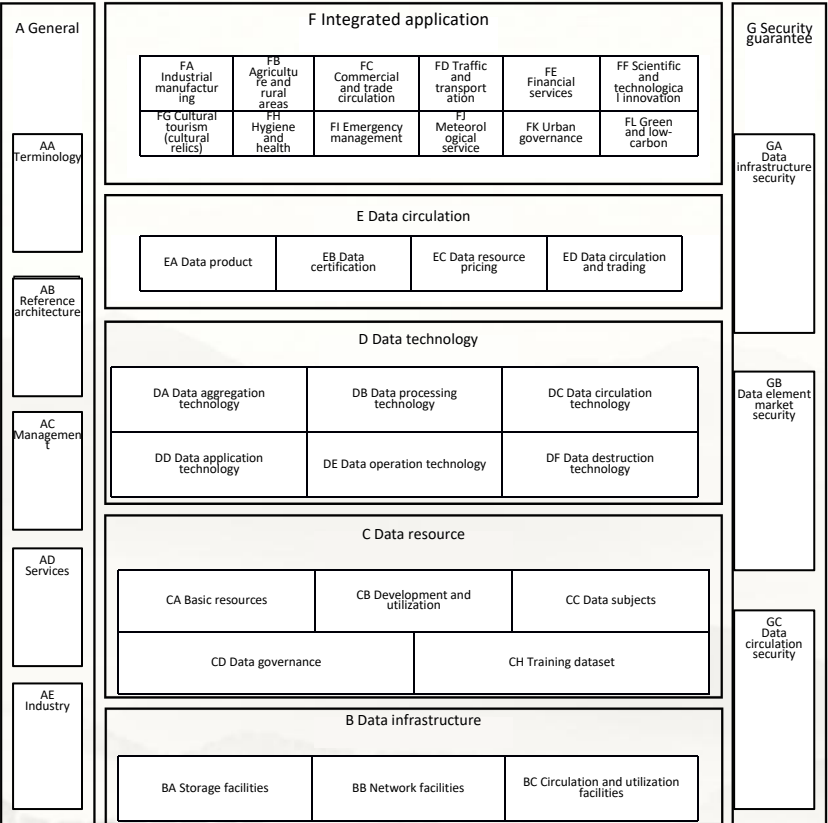
■ In September 2024, the National Development and Reform Commission, the National Data Administration, the Cyberspace Administration of China, the Ministry of Industry and Information Technology, the Ministry of Finance, and the National Standardization Administration of China jointly issued the *Guidelines for the Construction of the National Data Standard System* to establish a national data standard system centered on "*enhancing data availability, mobility, usability, and security*"

国家发展和改革委员会
国家数据局
中央网络安全和信息化委员会办公室
工业和信息化部
财政部
国家标准化委员会

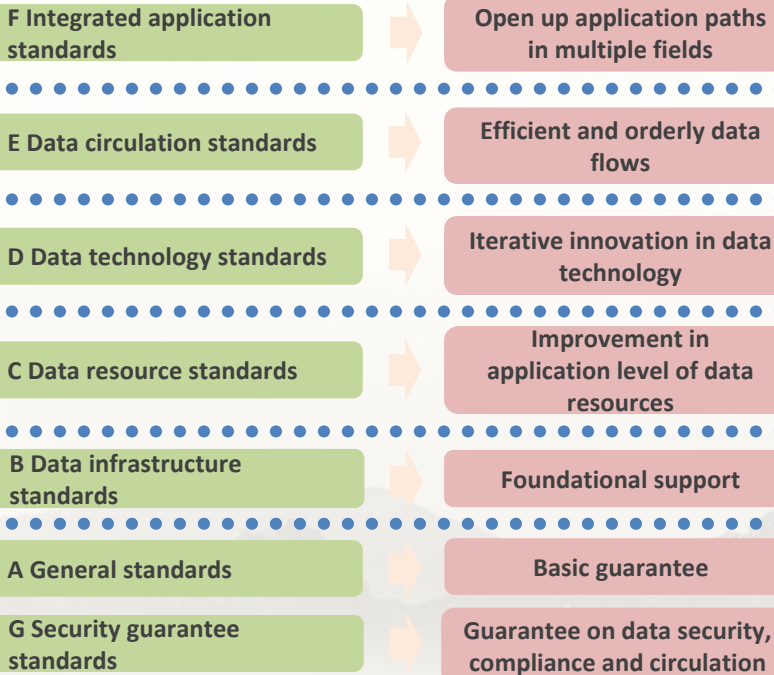
发改数据〔2024〕1426号

国家发展改革委等部门关于印发
《国家数据标准体系建设指南》的通知

为深入学习贯彻党的二十大和二十届二中、三中全会精神，
落实《中共中央、国务院关于构建数据基础制度更好发挥数据要素



Strategies on the Construction of the National Data Standard System



2.1 Strengthen top-level planning and enhance forward-looking research on standardization in key areas.

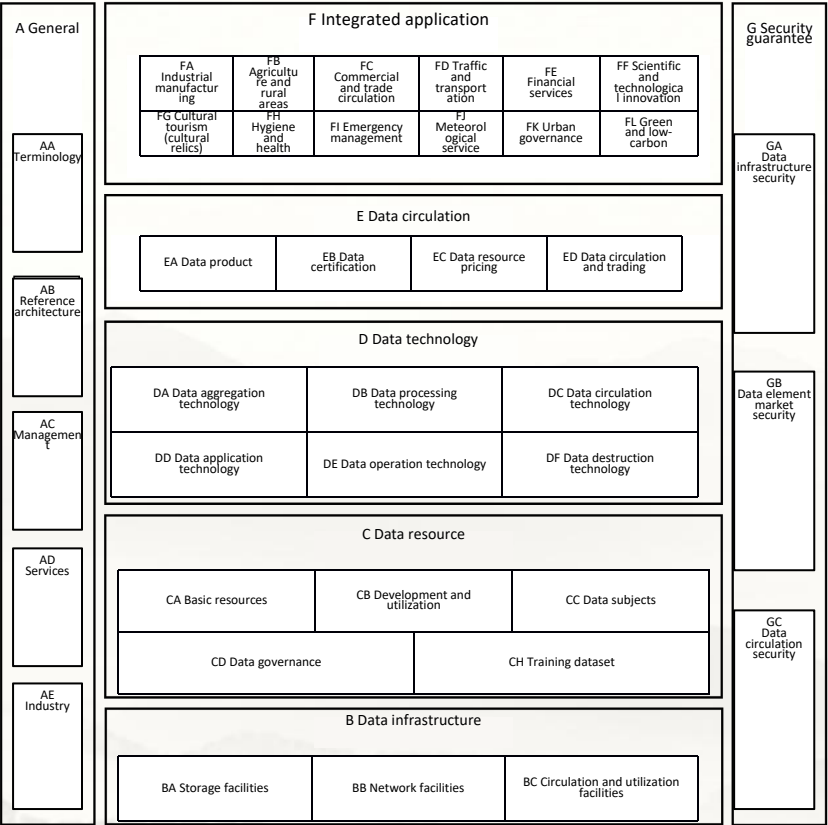
- Objective: By the end of 2026, **formulate and revise over 30** general national standards in data areas such as data circulation and utilization infrastructure, data management, data services, training datasets, and public data authorization operations, in order to **create a series of exemplary standard application cases, establish a platform for standard verification and application services, and nurture a group of third-party standardization service institutions capable of conducting data management assessments, data evaluations, data service capability assessment, and public data authorization operation performance evaluations.**

国家发展和改革委员会
国家数据局
中央网络安全和信息化委员会办公室
工业和信息化部
财政部
国家标准化委员会

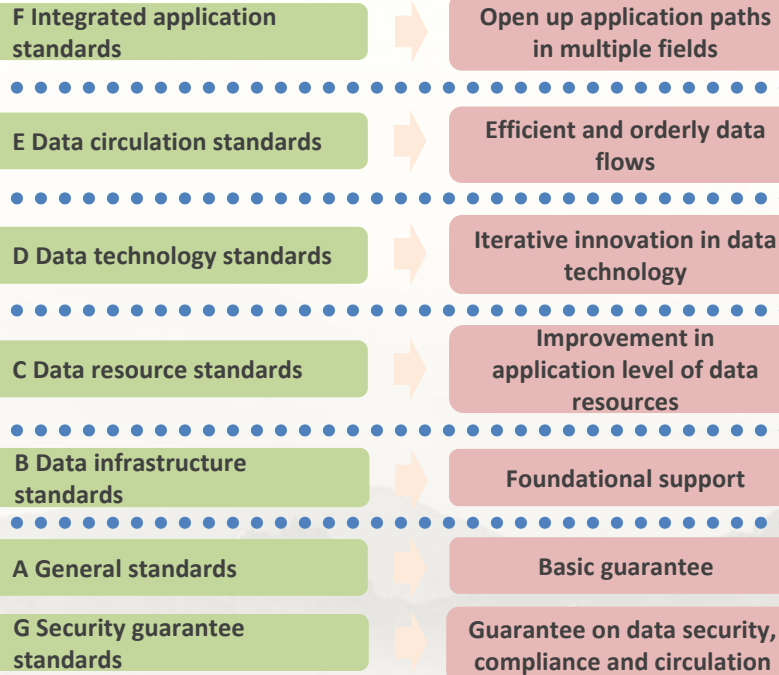
发改数据〔2024〕1426号

国家发展改革委等部门关于印发
《国家数据标准体系建设指南》的通知

为深入学习贯彻党的二十大和二十届二中、三中全会精神，
落实《中共中央、国务院关于构建数据基础制度更好发挥数据要素

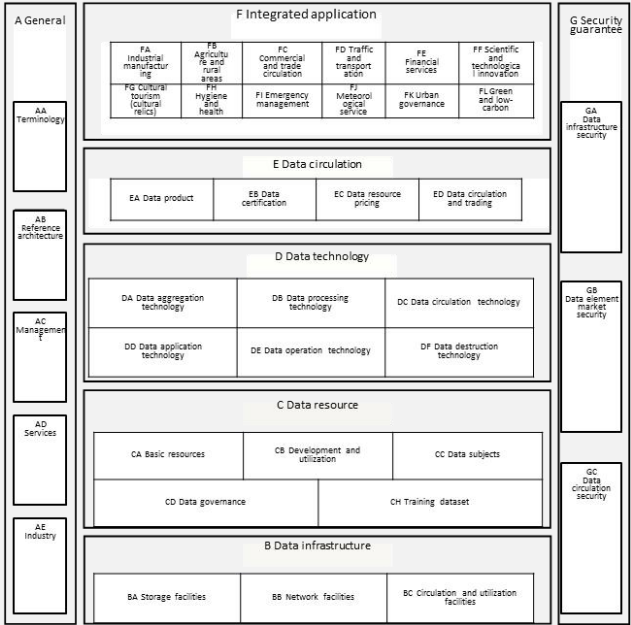


Strategies on the Construction of the National Data Standard System



2.1 Strengthen top-level planning and enhance forward-looking research on standardization in key areas.

- ◆ In accordance with the Guidelines for the Construction of the National Data Standard System, advance the development of the national data standard system and standardize basic data terminology.
- ◆ Publish the *Research Report on Standardization of Trusted Data Space (2025 Edition)*, which will be integrated with and reused in the standardization work for data infrastructure, establishing a standard system for trusted data spaces, and provide guidance for the corresponding standardization work.
- ◆ Issue the *Research Report on Media Data Standardization (2025 Edition)* in collaboration with China Media Group, aiming to implement the *Guidelines for the Construction of the National Data Standard System*, outline an overall planning for the media data standard system, and offer guidance for media data standardization work.
- ❑ Initiate the compilation of the *Research Report on Low-Altitude Data Standardization*, organize discussions during the "Standard Week" event, and define key directions for the standardization of low-altitude data.



可信数据空间标准化研究报告
(2025 版)

全国数据标准化技术委员会秘书处
二〇二五年八月

传媒数据标准化研究报告
(2025 版)

全国数据标准化技术委员会秘书处
二〇二五年八月

低空数据标准化研究报告
(研究版)

全国数据标准化技术委员会秘书处
二〇二五年十二月

S/N	Standard Project No.	Standard/Technical Document Name
1	20255407-T-907	Data - Basic terminology

2.2 Expedite the development and revision of standards in critical sectors.

2.2.1 Proactively utilize technical documents to efficiently drive the development of key sectors, swiftly foster industry consensus, and establish a robust foundation for the formulation and revision of national standards

◆ In response to "urgent industry needs" or standard requirements still in the "exploratory stage," SAC/TC609 has taken the initiative to advance the development of 59 technical documents in the data field in the form of technical documents.

Among these, 26 technical documents have been officially issued to support national data initiatives, including data infrastructure, trusted data spaces, data annotation/sector high quality datasets, and the national integrated computing network, thereby empowering high quality datasets and data infrastructure to lead in pilot implementations.

全	全	全	国	国	国	国	国	国	国家数据基础设施建设技术文件 NDI—TR—2025—01
									数据基础设施 参考架构 Data infrastructure—Reference architecture (试行 V1.0) 2025年2月28日
2025	2025	2025							9 technical documents on the data infrastructures

全国数据标	全国数据标	全国数据标	全国数据标准化技术委员会技术文件 TC609—S—2025—01
可信数据	可信数据	可信数据	可信数据空间 技术架构 Trustworthy data space—Technology architecture
2025	2025	2025	4 technical documents on the trusted data space

全	全	全	全	全	全	全	全	全	TC609 全国数据标准化技术委员会技术文件 TC609—S—2025—15
									全国一体化算力网 智算中心算力池化技术要求 National Integrated Computing Network—Technical Specification for Pooling of Computing Resource in Artificial Intelligence Data Center
2025	2025	2025	2025	2025	2025	2025	2025	2025	9 technical documents on the national integrated computing network

全国数据标	全国数据标	全国数据标	TC609 全国数据标准化技术委员会技术文件 TC609—S—2025—01
高质量数据集	高质量数据集	高质量数据集	高质量数据集 建设指南 High-quality dataset—Construction guidelines
2025	2025	2025	4 technical documents on the high quality dataset

2.2 Expedite the development and revision of standards in critical sectors.

2.2.2 Accelerate the development and revision of national standards in the data sectors, with a focus on data governance, data circulation and utilization, digital transformation of all sectors, data technology, and data infrastructure.

■ Centering on key sectors, prioritize the revision and development of standards across multiple areas, including:

- data infrastructure,
- trusted data spaces,
- high quality datasets,
- national integrated computing network,
- data anonymization,
- data products and services,
- comprehensive digital transformation,
- the authorized operation of public data,
- data element practitioners,
- important data identification directory,
- urban service entities, data interoperability interfaces, etc.

Among all these projects, 22 have successfully completed the national standard approval procedure, and **11** national standard projects been officially approved.

2.2 Expedite the development and revision of standards in critical sectors.

S/N	Plan No.	Standard/Technical Document Name	S/N	Plan No.	Standard/Technical Document Name
1	20255407-T-907	Data - Basic terminology	17	--	Trusted Data Space - Guidelines for the Construction of a Data Value Assessment System
2	20255404-T-907	Data Product - General Requirements for Quality Evaluation	18	--	Requirements for the Competence of Public Data Development and Utilization
3	20255403-T-907	Data Product - Description Requirement	19	--	Classification and Coding Specifications for Data Product and Service Catalogues
4	--	Data Element - Competency Requirements for Practitioners	20	--	Citywide Digital Transformation - A Model for Assessing the Level of Effective Data Use in Cities
5	--	Data Circulation Security- Important Data Masking Specification	21	--	Citywide Digital Transformation - Urban Digital Infrastructure - Technical Requirements for Common Components
6	--	Important Data Identification Directory - General	22	--	Citywide Digital Transformation - Urban Digital Twin Part 2: Data Reference Architecture
7	--	Important Data Identification Directory - Automobiles	23	--	Citywide Digital Transformation -Technical Architecture of the Digital Twin System for Pipeline Networks
8	--	Important Data Identification Directory - Industry	24	--	Citywide Digital Transformation - Reference Model for Unified Spatiotemporal Framework Technology
9	--	Important Data Identification Directory - Telecommunications	25	--	Citywide Digital Transformation - General Requirements for Urban Road Traffic Sensing Data
10	--	Important Data Identification Directory - Pharmaceutical	26	--	Citywide digital transformation - Evaluation Indicators for the Capabilities of Service Providers
11	--	Important Data Identification Directory - Seed Industry	27	--	High Quality Dataset - Format Requirements
12	--	Important Data Identification Directory - Aerospace	28	--	High Quality Dataset - Classification Guidelines
13	--	Important Data Identification Directory - Geographic Information	29	--	High Quality Dataset - Specification for Quality Evaluation and Test
14	--	Important Data Identification Directory - Civil Aviation	20	--	High Quality Datasets - Data Annotation Requirements
15	20255412-T-907	Public Data Resources Registration - Implementation Guides	31	--	High Quality Dataset - Construction Guide
16	20255401-T-907	Authorized Operation of Public Data Resources - Guidelines for Monitoring and Evaluation	32	--	High Quality Dataset - Requirements for Data Synthesis Technology

2.2 Expedite the development and revision of standards in critical sectors.

S/N	Plan No.	Standard/Technical Document Name
33	--	High Quality Dataset - Functional Requirements for the Quality Evaluation System
34	--	High Quality Dataset - Maturity Model for Construction and Operation Capability
35	--	High Quality Dataset - Embodied Intelligence - Data Sources and Constituent Elements
36	--	High Quality Dataset - Embodied Intelligence -
37	--	High Quality Dataset - Embodied Intelligence - Data Collection and Training Standards for Training Bases
38	--	High Quality Dataset - Data Annotation- Platform Technical Requirements
39	--	High Quality Dataset - Data Annotation- Standardized Competency Requirements for Practitioners
40	--	Data Service Capability Evaluation—Part 2: Assessment Elements
41	--	Data Service Capability Evaluation—Part 3: Implementation Guides
42	--	Technical Requirements for Data Utilization Management
43	--	Guidelines for the Implementation and Evaluation of Data Anonymization Circulation
44	--	Data De-bias Technical Requirements
45	--	Reference Architecture for an Integrated Data Development and Operation and Maintenance Platform
46	--	Management Requirements for Data Interoperability Interfaces
47	--	Technical Requirements for Monitoring Information in Data Circulation and Utilization
48	20255408-T-907	Data Infrastructure - Reference Architecture
49	20255405-T-907	Data Infrastructure - Connection Requirements
50	20255406-T-907	Data Infrastructure - Digital Identity Management and Access Requirements
51	20255409-T-907	Data Infrastructure - Identification Requirements
52	20255402-T-907	Data Infrastructure - Technical Requirements for Connectors
53	20255410-T-907	Data Infrastructure - Data Catalog Description Requirements

S/N	Plan No.	Standard/Technical Document Name
54	--	Data Infrastructure - Technical Requirements for Regional/industry Functional Nodes
55	--	Data Infrastructure - Access Management
56	--	Data Infrastructure - General Requirements for Security Capabilities
57	--	Trusted Data Space - Technical Architecture
58	--	Trusted Data Space - Technical Requirements for Digital Contracts
59	--	Trusted data space - Technical Requirements for Use Control
60	--	Trusted Data Space - Technical Capability Evaluation Specification
61	--	National Integrated Computing Network - Basic requirements for the network transmission service capacity of the public transmission channel
62	--	National Integrated Computing Network - Guidelines for Monitoring and Scheduling Platform
63	--	National Integrated Computing Network-Calculation Specification for Proportion of Green Electricity in Data Centers
64	--	National Integrated Computing Network - Technical Requirements for Network Connection of Computing Power Resources
65	--	National Integrated Computing Network - Technical requirements for computing power and efficiency measurement
66	--	National Integrated Computing Network - Technical Requirements for Computing Power Pooling in Intelligent Computing Centers
67	--	National Integrated Computing Network - Technical Requirements for Management and Scheduling of Computing Power Resources
68	--	National Integrated Computing Network - Technical Requirements for Computing Power Measurement and Billing
69	--	National Integrated Computing Network - Technical Requirements of Computility Operation Service and Transaction Matching for Computility Network
70	--	National Integrated Computing Network - Interface Requirements for Computing Power Monitoring
71	--	National Integrated Computing Network - Requirements for capability assessment of computing power centers
72	--	National Integrated Computing Network - Security Protection Requirements
...	...	...
...	...	...

2.3 Implement standard pilot projects to effectively improve the quality and application of standards.

- ◆ Create a application model for data standard that **integrates standard development - validation pilots - application promotion**.
- ◆ In response to urgent industry demands, organize **over 300 entities** to conduct validation pilot projects centered on 17 standards/technical documents, including **high quality datasets, data anonymization, trusted data spaces, data service capabilities, and national integrated computing network**, aiming to enhance the applicability, scientific rigor, and effectiveness of these standards through practical application.



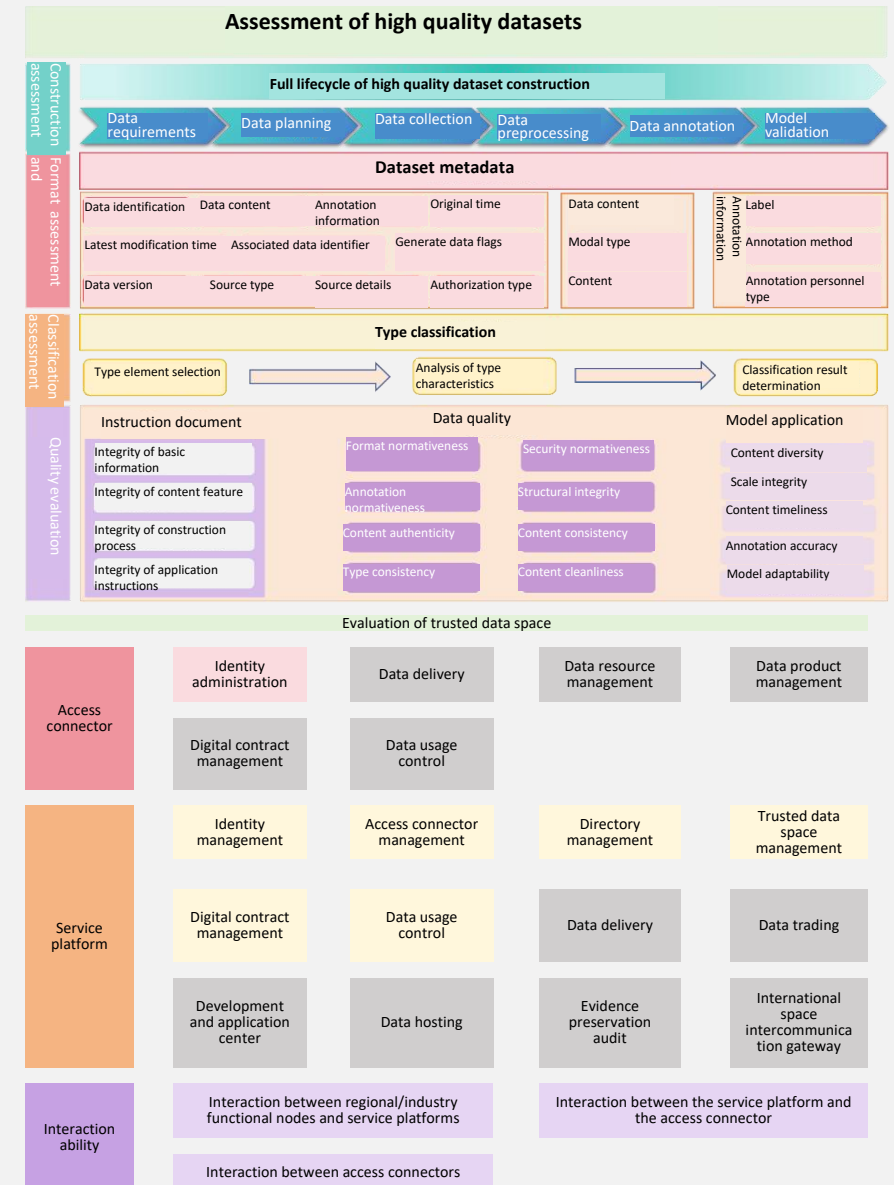
Model room of medical trusted data space



Model room of energy trusted data space

2.3 Implement standard pilot projects to effectively improve the quality and application of standards.

- ◆ Construct a **comprehensive assessment system for high quality datasets based on standards**, covering both **"quality operator assessment"** and **"model operator assessment"**, and to apply and practice in multiple fields such as transportation infrastructure, petrochemicals, and energy production.
- ◆ Develop a **trusted data space evaluation model** and **establish exemplary standard application showcases** (in fields such as healthcare and energy).
- ◆ Build a **Data Service Capability Maturity Model (DSEM)** to assess the maturity levels of six categories of data services, including data processing and analysis, data infrastructure, data circulation and trading, intelligent data applications, data resource provision, and data security technologies, providing a benchmark for capability and a development roadmap for the unified data market.

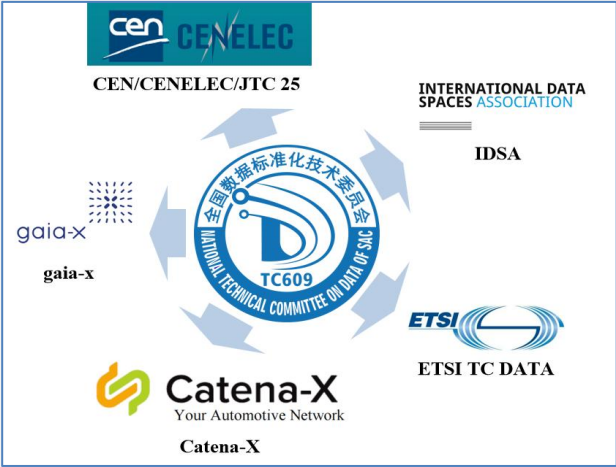


2.4 Strengthen international exchange and cooperation, foster competitive advantages on the global stage.

- ◆ Hosted the plenary session of the ISO/IEC JTC 1/SC32 Data Management and Interchange Subcommittee in Hainan province of China.
- ◆ Engage in interactions and exchanges with high-caliber international organizations such as CEN/CENELEC JTC 25, ETSI TC Data, IDSA, Catena-X, and Gaia-X in areas including data space technology and data standardization, established cooperation mechanisms, and promoted mutual recognition of bilateral standards.
- ◆ Organized experts to actively participate in the formulation of international standards in the data field, lead the publication of four international standards covering data quality, metadata, and urban data usage, proposed seven international standard proposals related to data usage, data management, smart cities, and data models etc., and continuously planned the international standardization pathway for trustworthy data utilization, contributing "Chinese wisdom" to the global landscape.
- ◆ Served as the Secretary of the Data Utilization Working Group under the ISO/IEC JTC1/SC32/WG6 Data Management and Interchange Subcommittee and have recently been appointed as the Convenor of the Data Working Group under the ISO/IEC JTC1/SC42/WG2 Artificial Intelligence Subcommittee, supporting the establishment of the ISO/IEC JTC4 Joint Technical Committee on Smart and Sustainable Cities and Communities.

2.4 Strengthen international exchange and cooperation, foster competitive advantages on the global stage.

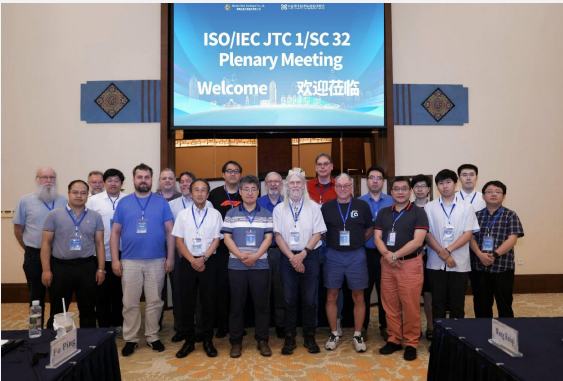
S/N	International standard/proposal name
1	Artificial Intelligence - Data Quality for Analytics and Machine Learning (ML) - Part 4: Data Quality Process Framework (Published)
2	Information Technology - Metadata Registry System (MDR) - Part 34: Metamodel for computable data registration (Published)
3	Information technology - Criteria for concept systems (Published)
4	Information technology — Data use in smart cities Part 2: Use case analysis and common considerations (Published)
5	Artificial Intelligence - Machine Learning (ML) Model Description Framework
6	Information Technology - Guidelines for ICT Infrastructure Planning of Smart Cities - Overview
7	Information Technology - Data use in smart cities - Part 1: Framework
8	Information Technology - Data use in smart cities - Part 3: Measurement, Evaluation and Reporting
9	Information Technology - City Data Model - Part 4: Service Level Concepts - Public Health Emergencies
10	Information Technology - Data Usage - Organizational Data Usage and Evaluation
11	Information Technology - Data Usage - Data Management Maturity Model



Interact and communicate with high-level foreign organizations and establish cooperation

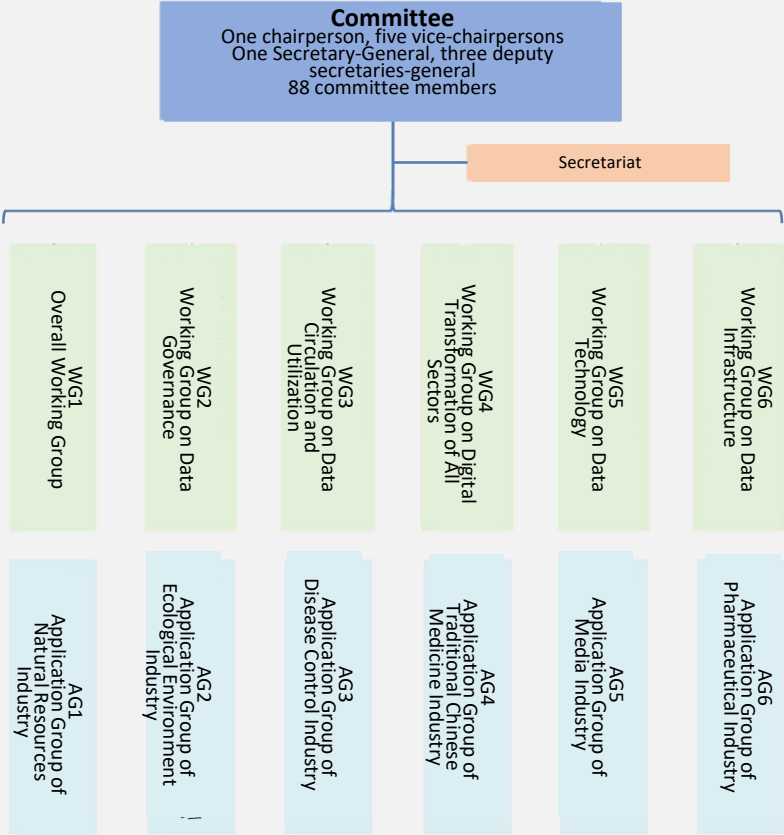
ISO/IEC JTC 4
Smart and sustainable cities and communities

Expected to be established in January 2026

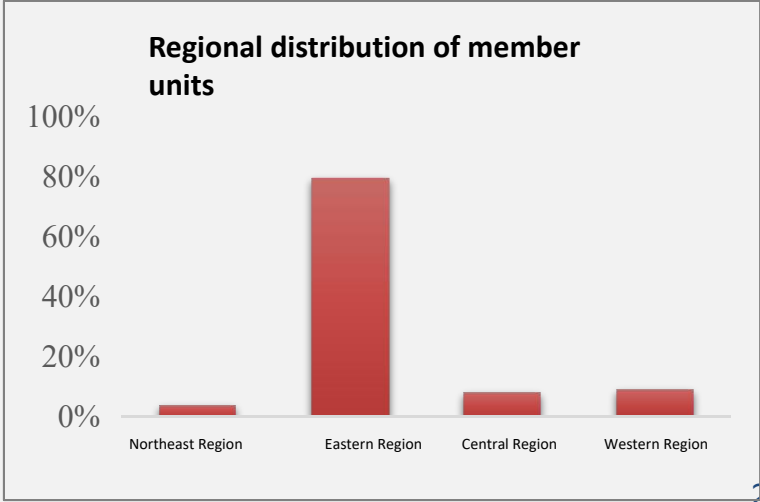
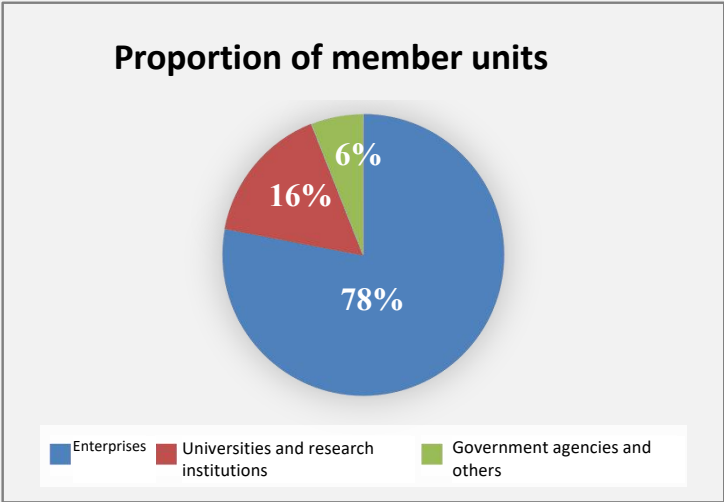


Held the plenary session of the ISO/IEC JTC 1/SC32 Data Management and Interchange Subcommittee

2.5 Establish rules and regulations to consolidate working foundation.



- ◆ Establish rules and systems: issued **five** institutional documents of the standards committee, including the **charter, secretariat work rules, procedures for standard development and revision, charter for working group, and procedures for the development and revision of technical documents.**
- ◆ Continuous improvement of organizational structure: **Six working groups and six industry application groups** have been established to advance standard development efforts.
- ◆ "Open-door" approach to standard drafting: A broad range of member organizations have been solicited, with **over 1,500 member units** already joined and more than **130 additional units** currently undergoing the application review process.



2.5 Establish rules and regulations to consolidate working foundation.

- ◆ The **digital management platform of the National Technical Committee 609 on Digital Standardization (www.tc609.org.cn)** has been officially launched, covering a comprehensive range of key functions including full-cycle management of standard development and revision, conference management, member unit administration, news and dissemination, notification and announcement issuance, achievement promotion, and international collaboration.
- ◆ The **mobile app of the National Technical Committee 609 on Digital Standardization** is set to be launched soon, and you are all welcome to download and give it a try.
- ◆ Operates the **official WeChat account of the National Technical Committee 609 on Data of Standardization Administration of China**, which has published nearly 100 pieces of information each year, with a total readership exceeding 150,000, and has established promotional collaborations with multiple media channels.

2.6 Standard of basic data terminology

As data elementization progresses, a big amount of conceptual innovations are emerging in the data field, and the consensus on fundamental data-related concepts is being reshaped and further solidified. The standardization of basic data terminology serves as the cornerstone for constructing a knowledge system in this field and provides a reliable framework for the high-quality development of digital infrastructure.

Integrate international standards, domestic standards and official definitions

National standards issued by National Standardization Administration of China

- GB/T 35295:2017 Information Technology - Big Data - Terminology
- Standard series GB/T 5271.1-37 Information technology – Vocabulary
- GB/T 40685:2021 Information Technology Service - Data Asset-Management Requirements

The terms approved and published by of the National Data Administration and the National Review Committee for Scientific and Technological Terms

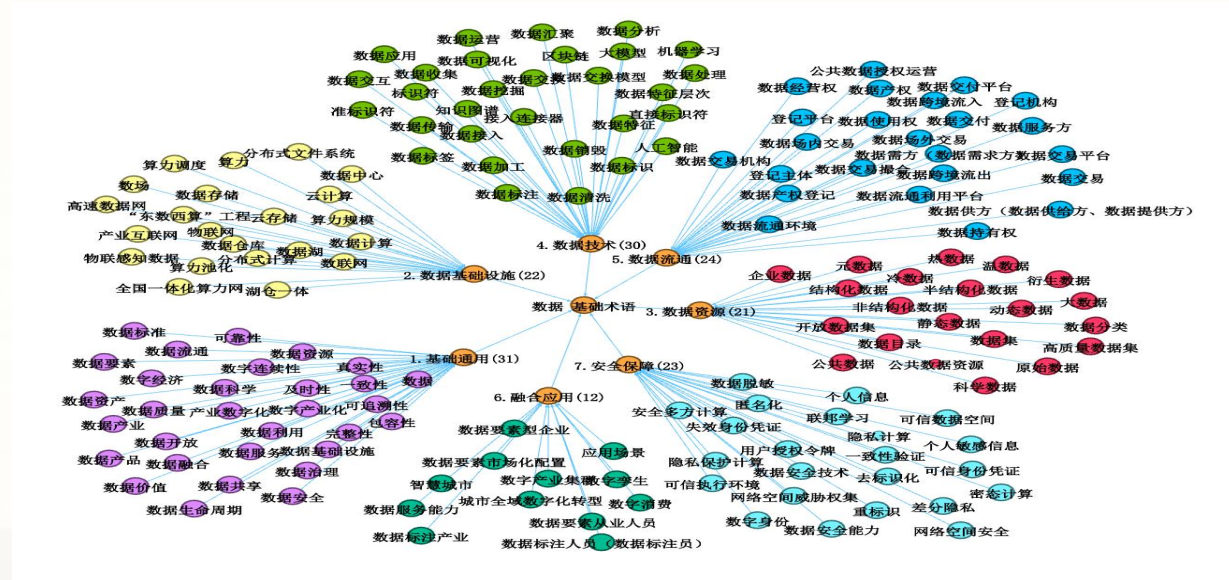
- In 2024, the National Data Administration issued the first and second batches of explanations for commonly used terms in the data sector.
- In 2025, the National Data Administration released second batch of explanations for commonly used terms in the data sector.
- Between 2020 and 2021, 21 linguistic versions of the "Big Data Encyclopedia Terminology Dictionary" were successively published.
- Computer Science Terminology (Third Edition) and Communication Science Terminology (Second Edition), etc. were also released.

International standards issued by ISO/IEC JTC 1

- ISO/IEC 2382:2015 Information technology — Vocabulary
- ISO/IEC 20546:2019 Information technology — Big data — Overview and vocabulary
- ISO 8000-2:2022 Data Quality - Part 2: Vocabulary

2.6 Standard of basic data terminology

- This standard fully takes into account the existing terminology needs. It has systematically compiled 163 terms, categorized into seven sections based on the conceptual framework: **General (31 terms)**, **Data Infrastructure (22 terms)**, **Data Resources (21 terms)**, **Data Technology (30 terms)**, **Data Circulation (24 terms)**, **Integrated Applications (12 terms)**, and **Security Guarantee (23 terms)**.



2.7 Standardized construction of data infrastructure

In alignment with the **development of data infrastructure (particularly in the 18 pilot cities)**, **six technical documents pertaining to data infrastructure** will be issued in March 2025. These include the *Data infrastructure—Reference architecture*, *Data Infrastructure - Connection Requirements*, *Data Infrastructure - Digital Identity Management and Access Requirements*, *Data infrastructure—Identification requirements*, *Data Infrastructure - Technical Requirements for Connectors*, and *Data Infrastructure - Data Catalog Description Requirements*, and they are prepared to be submitted as **national standard project**, with **standard drafts that will be formulated for public comment** at the 8th Digital China Construction Summit, with the **initiation of a standard verification pilot program**.

The technical document for data infrastructure has been released.

首页 > 新闻动态 > 国家数据局数字科技和基础设施建设司 全国数据标准化技术委员会秘书处联合发布国家数据基础设施建设有关技术文件

国家数据局数字科技和基础设施建设司 全国数据标准化技术委员会秘书处联合发布国家数据基础设施建设有关技术文件

发布于：2025-03-06 来源：国家数据局

为贯彻落实党的二十届三中全会关于建设和运营国家数据基础设施的部署要求，国家发展改革委、国家数据局、工业和信息化部联合印发了《国家数据基础设施建设指引》，并明确了建设目标。为推进国家数据基础设施体系化、集约化、一体化建设，国家数据局指导全国数据标准化技术委员会研究形成了《数据基础设施 参考架构（试行）》《数据基础设施 互联互通基本要求（试行）》《数据基础设施 用户身份管理和接入规范（试行）》《数据基础设施 标识管理规范（试行）》《数据基础设施 接入连接器技术要求（试行）》《数据基础设施 数据目录描述规范（试行）》等6项技术文件，引导地方、行业、领域、企业按照“统一目录标识、统一身份登记、统一接口要求”推进国家数据基础设施建设。

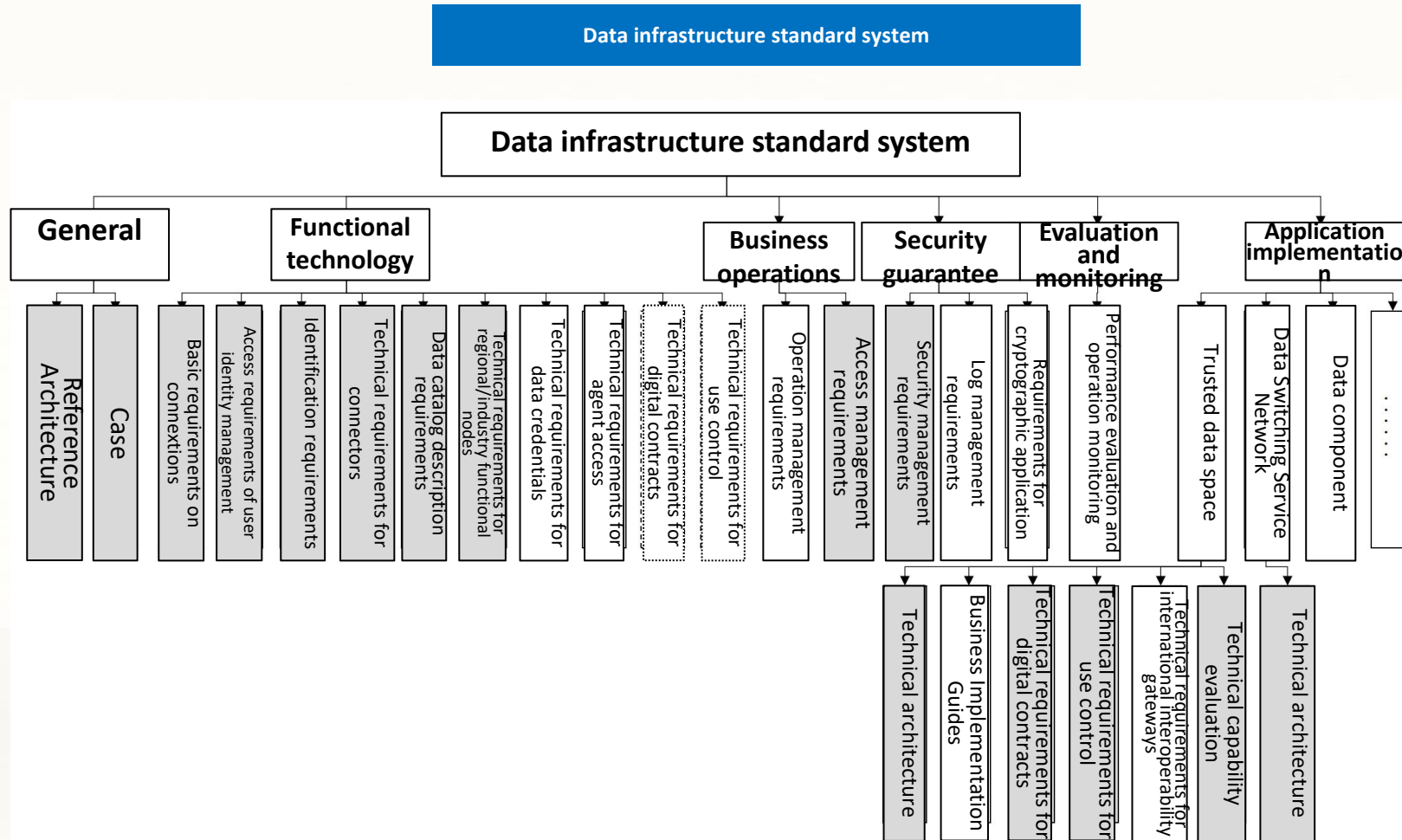
上述技术文件围绕数据基础设施架构、互联互通、用户身份管理、标识管理、接入连接器、数据目录描述及安全保障等提出了技术标准要求，为构建横向联通、纵向贯通、协调有力的国家数据基础设施提供基础支撑。

国家数据局将推动相关技术文件试行试用，不断迭代优化，后续将会同国家标准委以国家标准形式印发。

The pilot program for verifying data infrastructure standards has been launched.

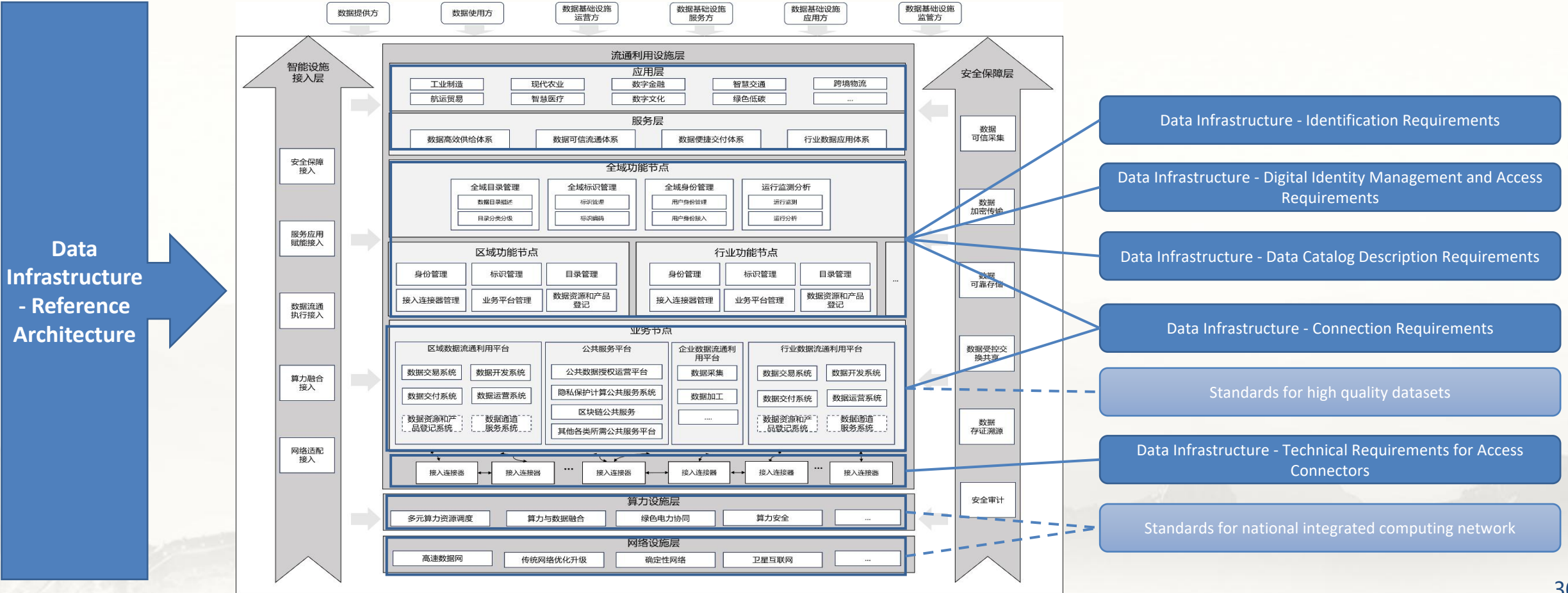


2.7 Standardized construction of data infrastructure



2.7 Standardized construction of data infrastructure

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2.8 Standardization construction of trusted data space

By leveraging collaborative efforts from standardization organizations and industry alliances, the EU aims to establish a secure, trustworthy, and cross-sectoral data-sharing ecosystem. It has already set up 17 categories of data spaces, covering manufacturing, transportation, energy, agriculture, healthcare, finance, media, cultural heritage, and more.



CEN/CENELEC JTC 25 is responsible for standardization work in the area of data management, dataspace, cloud and edge, including:

- data governance, data quality and data lifecycle management;
- interoperability, portability and switch ability;
- organizational frameworks and methodologies, including IT management systems;
- processes and products evaluation schemes;
- smart technology, objects, distributed computing devices, data services.

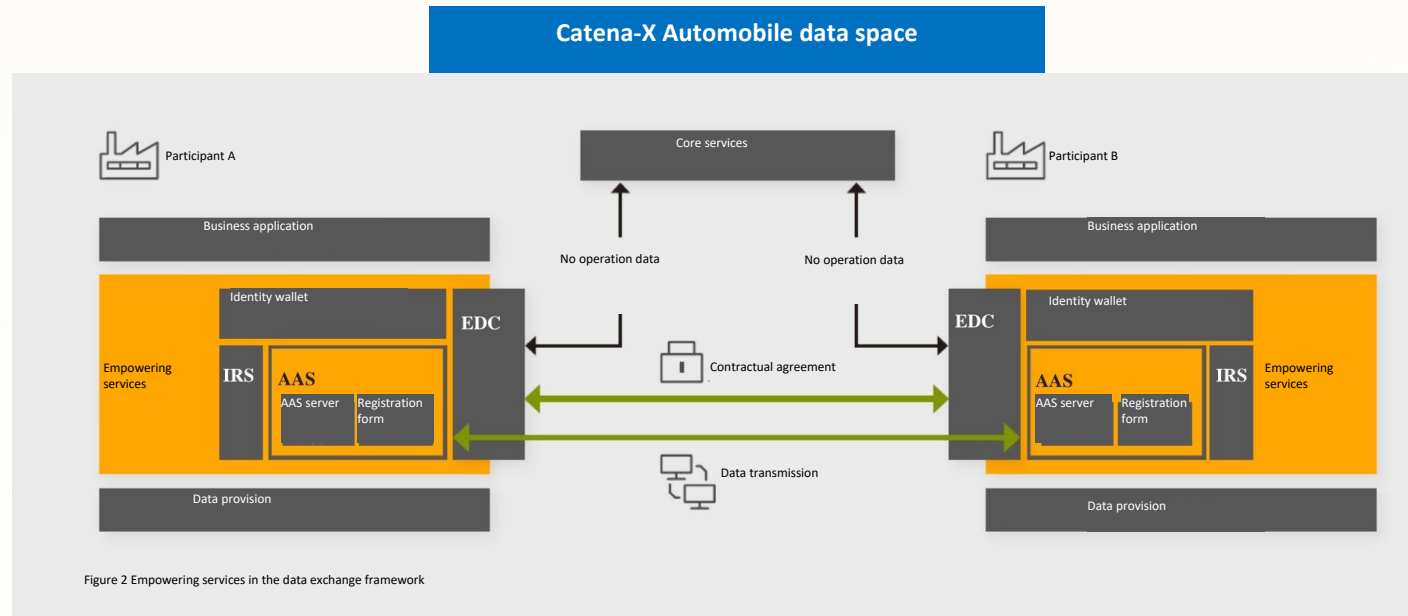


The International Data Space Association (IDSA) drives theoretical innovation and practical advancements in the field of data spaces. Its established reference architecture model for data spaces delineates key components, their interactions and controls, and the guiding principles for data space architecture, offering architectural guidance and support for constructing, participating in, or delivering data space services.



Gaia-X focus on the data autonomy of data subjects and has formulated and implemented the Gaia-X Trust Framework which outlines the bottom-line requirements for compliant participation in data circulation and sharing of relevant subjects, thereby empowering users with greater control over their own data assets.

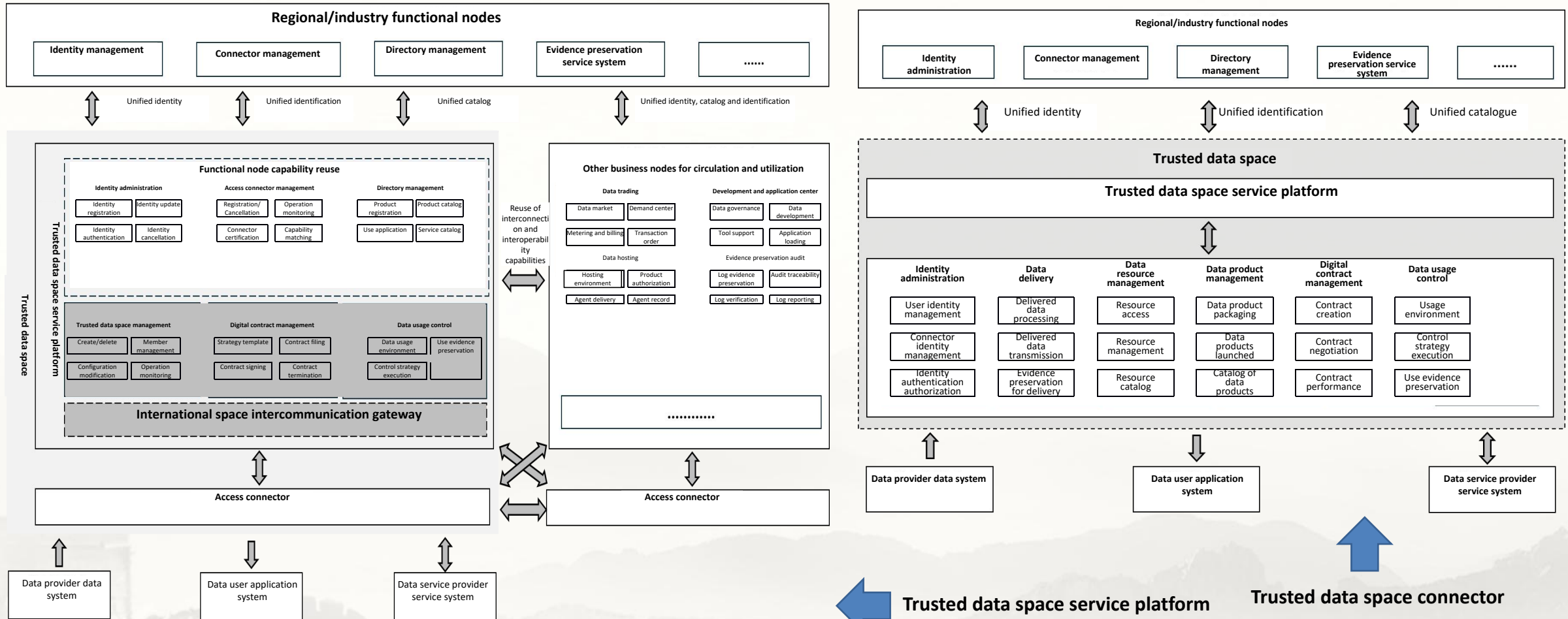
2.8 Standardization construction of trusted data space



Case: The Catena-X is automotive industry ecosystem alliance, aims to establish an open and collaborative data ecosystem designed specifically for the automotive industry. It enables sovereign, standardized, and secure data exchange across the entire value chain aims to create an open and scalable network to facilitate secure, cross-company, and standardized information and data exchange within the automotive sector. At present, Catena-X has established a industrial data space for automotives in Europe, leading by giants such as BMW, Mercedes-Benz, SAP and Bosch and joined by SMES. It offers services including data marketplaces, identity authentication, digital twins, and semantic dictionaries. By employing unified data and information flow standards, it achieves seamless data interconnection and interoperability. To date, it has **enabled automotive battery data interconnection with Japan** and deployed data centers in North America.

2.8 Standardization construction of trusted data space

Trusted Data Space - Technical Architecture aims to elucidate the connotation and scope of trusted data space, foster compatibility and convergence in trusted data space technologies, and provide guidance for local governments, industries, sectors, and enterprises in planning, constructing, operating, and managing trusted data spaces.



2.9 Standardization construction of high-quality datasets

To expedite the development of high quality datasets in the industry, under the guidance of the National Data Administration, the Secretariat of the National Technical Committee 609 on Data of Standardization Administration of China has actively facilitated the publication of four technical documents/national standards. These include the *Construction Guide*, *Format Requirements*, *Classification Guidelines*, and *Specification for Quality Evaluation and Test* for high quality datasets, aiming to address the pressing challenges currently faced in their construction through a "standardization" approach.

Prominent issues currently faced in the construction of high quality datasets

It remains unclear for how to construct high quality datasets , lacking a defined "methodology ", and organizations lack guidance in undertaking high quality dataset construction efforts.

The basic metadata of high quality datasets lacks standardization and uniformity, hindering their reading and utilization through a unified interface and impeding the circulation and application of datasets.

The classification of high quality datasets is ambiguous, making it challenging to effectively implement "categorized construction" and support the development and training of various model types, including general-purpose, industry-specific, and scenario-based models.

The absence of unified standards for quality evaluation of high quality datasets is detrimental to enhancing dataset quality through evaluation and expediting the dataset construction process.

Addressed through "standardization" methods

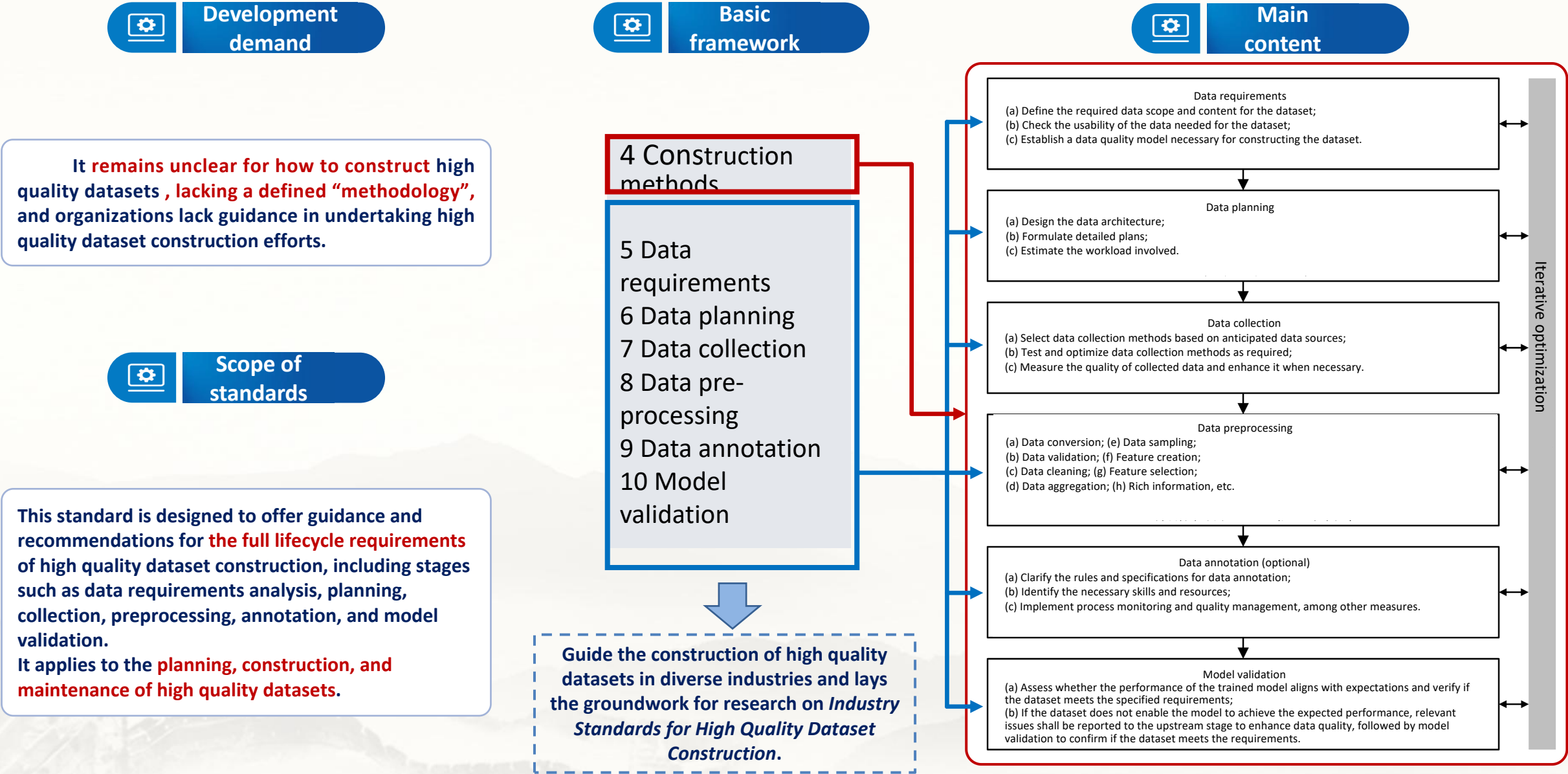
High Quality Dataset - Construction Guide

High Quality Dataset - Format Requirements

High Quality Dataset - Classification Guidelines

High Quality Dataset - Specification for Quality Evaluation and Test

2.9 Standardization construction of high quality datasets



2.9 Standardization construction of high quality datasets

Development demand

The basic metadata of high quality datasets lacks standardization and uniformity, hindering their reading and utilization through a unified interface (or script) and impeding the circulation and application of datasets.

Scope of standards

This standard aims to standardize the basic metadata and its representation methods for high quality datasets. It is applicable for guiding and organizing the construction, management, and processing of high quality datasets.

Basic framework

- 5 Metadata attribute
 - 6 Data metadata
 - 6.1 Data identification
 - 6.2 Relevant data identification
 - 6.3 Data content
 - 6.4 Annotation information
 - 6.5 Original time
 - 6.6 Lastest modification time
 - 6.7 Data version
 - 6.8 Authorization type
 - 6.9 Source type
 - 6.10 Source details
 - 6.11 Generate data flags
 - 7 Data content metadata
 - 7.1 Modal type
 - 7.2 Content
 - 8 Annotation information metadata
 - 8.1 Labeling
 - 8.2 Annotation method
 - 8.3 Annotation personnel type

Main content

Table 1 Metadata attribute

No.	Attribute name	Definition
1	Chinese name	Chinese name of metadata
2	English name	English name of metadata
3	Definition	Explanation of the meaning of metadata
4	Data type	Valid value type of metadata
5	Range of value	The collection of values allowed by metadata
6	Data filling requirements	Data filling requirements for metadata
7	Remarks	Additional notes for metadata

Chinese name: 数据标识
English name: id
Definitions: The global unique identifier of data
Data type: String
Range of value: It should comply with the requirements of NDI-TR-2025-04
Data filling requirements: 1
Remarks: None.

Chinese name: 关联数据标识
English name: rid
Definitions: A collection of data identifications of other data that have a clear relevance with the current data
Data type: Array
Range of value: It should comply with the requirements of NDI-TR-2025-04
Data filling requirements: 0
Remarks: It can be an ordered list of one or more data identifications.

Chinese name: 数据内容
English name: data_content
Definitions: Specific content of the data
Data type: Array
Range of value: It should comply with the requirements of Chapter 7.
Data filling requirements: 1
Remarks: The data content may consist of a single data item, a combination of multiple data items within the same modality, or a combination of multiple data items across different modalities.

2.9 Standardization construction of high quality datasets



Development demand

The demand for datasets in AI models is shifting from "general knowledge" to "specialized knowledge". Developing and training various types of models, including general models, industry-specific models, and scenario-based models, needs distinct datasets. These datasets must encompass general knowledge, industry-wide general knowledge, and industry-specific expertise. **To effectively support the deployment and application of general, industry, and scenario-based models, it is essential to "classify and construct" high quality datasets.**

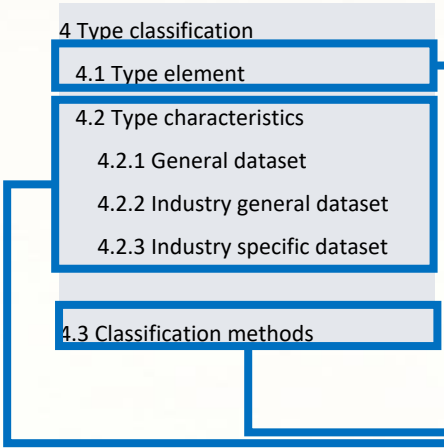


Scope of standards

This standard aims to standardize the **categorization** of high quality datasets by defining their **type elements**, **characteristics**, and **classification methods**. It applies to guide organizations in conducting high quality dataset classification tasks.



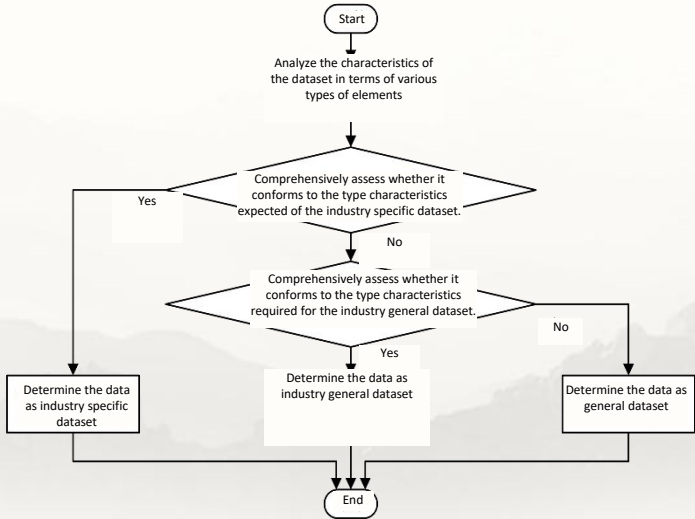
Basic framework



Main content

- a) **Knowledge content:** The professionalism, depth of knowledge, and target audience of the knowledge contained in the data set.
- b) **Source type:** The sources of data collection in the dataset, including network resources, reference types, system platforms, organizational structures, and other sources.
- c) **Timeliness:** The update speed or validity period of the data in the dataset.
- d) **Annotation personnel type:** The type of personnel who annotate or review the data in the dataset.
- e) **Sensitivity level:** The degree of risk that arises after the data in the dataset is made public.
- f) **Model type:** The types of artificial intelligence models supported by the data in the dataset for development and training.
- g) **Subject scope:** The scope of general knowledge domains, industry domains, business scenarios, etc. involved in the dataset.

Dataset type Type element	General dataset	Industry general dataset	Industry specific dataset
Knowledge content	It is aimed at the public and can be understood without a professional background	It is aimed at the industry practitioners and requires a certain professional background to understand	It is aimed at the internal business personnel and requires deep professional background to understand
Source type	The sources are not rigorously vetted, primarily coming from Internet resources such as encyclopedias and Q&A platforms, comprehensive books, and other types of references, as well as synthetic data.	The sources are clearly identified, mainly originating from professional references such as papers, reports, and standards, industry-specific organizations, and synthetic data.	The sources are well-defined, primarily derived from internal business systems, management platforms, and other system platforms within the organization, or from documents, drawings, and other forms of references.
Timeliness	It is generally stable for a relatively long period of time and has a low requirement for timeliness	According to the development and changes in the industry field, the requirement for timeliness is moderate	According to the changes in business scenario requirements, the timeliness requirements are relatively high
Annotation Personnel type	Ordinary annotation personnel	Personnel with a disciplinary background or professional experience	Industry and sectoral experts
Sensitivity level	Low sensitivity level	Low sensitivity level	High sensitivity level
Model type	General model, industry model	General model, industry model	Scenario models
Subject scope	It does not belong to a specific industry field, with a broad subject scope	It focuses on specific industry fields, with a medium subject scope	It focuses on specific business scenarios, with a narrow subject scope



2.9 Standardization construction of high quality datasets



Development demand

Datasets form the foundation for developing and training artificial intelligence models, with increasingly stringent quality demands for developing and training high-caliber models. Quality evaluation of datasets is the primary method to determine their "high quality" and a crucial approach to enhance dataset quality and expedite their development through evaluation-driven improvements. Nevertheless, **China currently lacks unified standards and specifications for evaluating the quality of high quality datasets.**



Scope of standards

This standard is designed to standardize the **quality evaluation** of high quality datasets by defining **indicator requirements** and **evaluation criteria**. It serves as a guide for organizations conducting quality evaluations of high quality datasets.



Basic framework

- 4 Indicator requirements
 - 4.1 Evaluation indicators
 - 4.2 Requirements for documentation indicators
 - 4.3 Data quality indicator requirements
 - 4.4 Model application indicator requirements
- 5 Evaluation criteria
 - 5.1 Overall evaluation requirements
 - 5.2 Documentation indicators
 - 5.2.1 Calculation guidelines for documentation indicators
 - 5.2.2 Scoring guidelines for documentation indicators
 - 5.3 Data quality indicators
 - 5.3.1 Calculation guidelines for data quality indicators
 - 5.3.2 Scoring guidelines for data quality indicators
 - 5.4 Model application indicators
 - 5.4.1 Calculation guidelines for model application indicators
 - 5.4.2 Scoring guidelines for model application indicators



Main content

The quality requirements for high quality datasets should cover indicators across three dimensions: documentation, data quality, and model applicability.

- a) Documentation:** The dataset documentation should be complete, covering basic information, content features, construction process, and application instructions.
- b) Data quality:** The data within the dataset should meet the fundamental requirements for developing and training artificial intelligence models.
- c) Model applicability:** The dataset should effectively support the development and training of the targeted artificial intelligence model.

Documentation indicators include following sub-indicators:

a) Integrity of basic information; b) Integrity of content features; c) Integrity of the construction process; d) Integrity of application instructions.

Data quality indicator requirements include following sub-indicators:

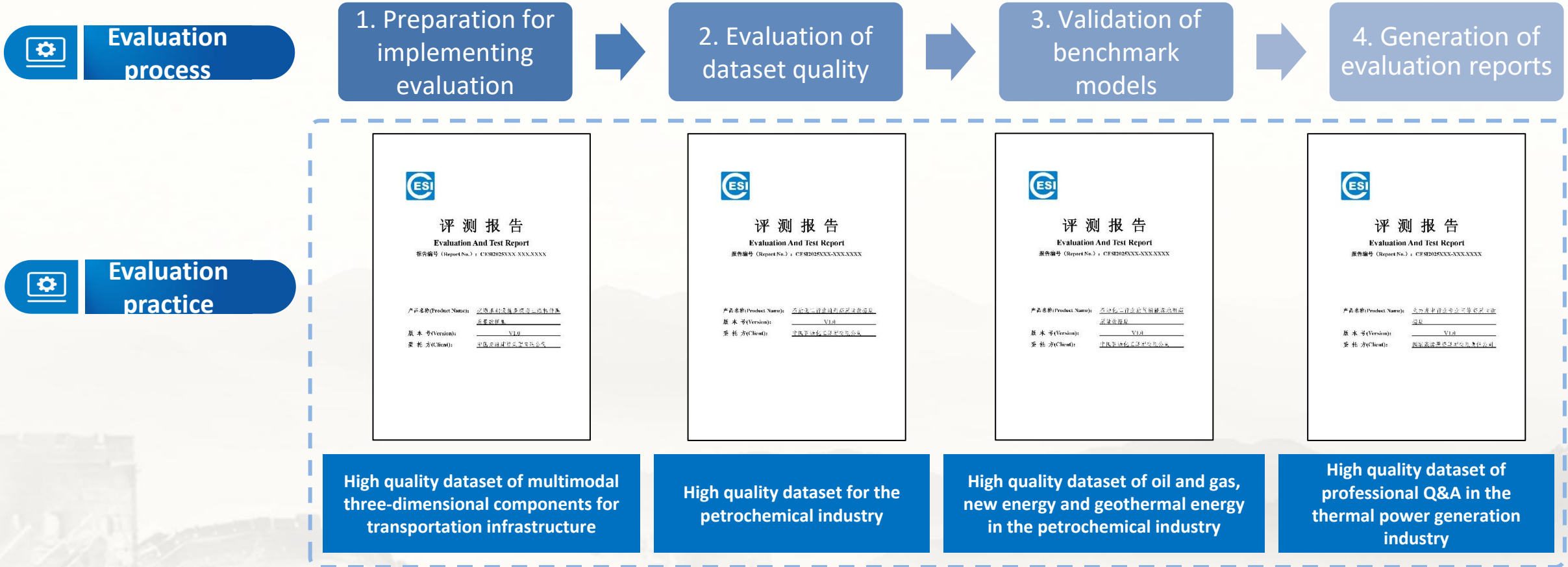
a) Format standardization; b) Safety standardization; c) Annotation standardization; d) Structural integrity; e) Content authenticity; f) Content consistency; g) Type consistency; h) Content cleanliness.

The criteria for model application indicators include following sub-indicators:

a) Content diversity; b) Scale integrity; c) Content timeliness; d) Annotation accuracy; e) Model adaptability.

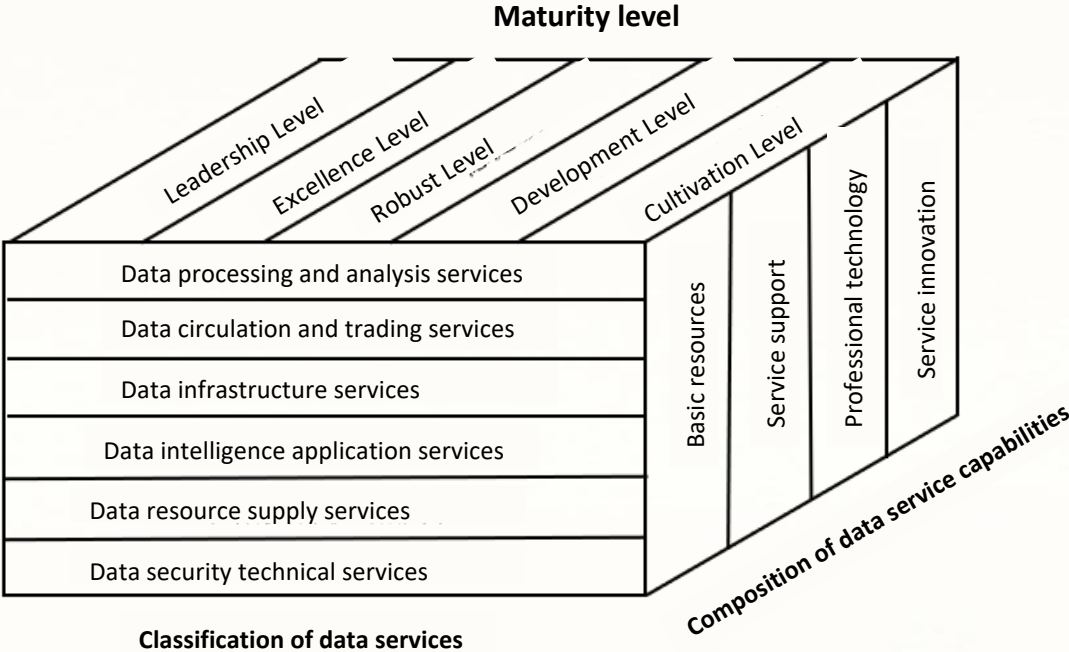
2.9 Standardization construction of high quality datasets

- A high quality dataset evaluation process is established centered on the "data + model" evaluation methodology, covering four key stages: **preparation for implementing evaluation, evaluation of dataset quality, validation of benchmark models, and generation of evaluation reports.** Currently, in accordance with the four issued technical documents on high quality datasets, we have successfully conducted **evaluation practices** for multiple entities, including China Communications Construction Group, Sinopec (China Petroleum and Chemical Corporation), and CHN Energy, and subsequently issued evaluation reports.



2.10 Standardization construction of data service capabilities

- Implement the requirements outlined in the *Guidelines for the Construction of the National Data Standard System* concerning the cultivation of data service capabilities, and initiate the development of a series of national standards for Data Service Capability Evaluation Maturity (DSEM).
- Aims to address key challenges such as opaque service capabilities and insufficient market trust, support SMEs in achieving stepwise growth, foster technological integration and service innovation, facilitate the transformation of static data assets into dynamic data services, and establish a robust, orderly, and sustainable data industry ecosystem.
- **Part 1: Models.** Aims to define the **classification** of data services, the **components** of data service **capabilities**, **maturity levels**, and standardize the structure of data service capability evaluation models.
- **Part 2: Elements.** Aims to specify the capability **elements** inherent in various data service capabilities and provide guidance for determining data service capability levels.
- **Part 3: Implementation Guides.** Its purpose is to outline the implementation guides for determining the maturity level of data service capabilities, including **principles**, **procedures**, and **determination methods**.



Starting from a deep commitment to promoting the development and utilization of data resources, with the ultimate objective as "**enhancing data availability, mobility, usability, and security**", conduct capability maturity evaluation across six categories of data services: **data processing and analysis, data infrastructure, data circulation and trading, data intelligent applications, data resource provision, and data security technology**. By adopting an evaluation framework that integrates basic resources, service support, professional technology, and service innovation, maturity of data service capabilities is categorized into five distinct levels: **Cultivation Level, Development Level, Robust Level, Excellence Level, and Leadership Level**.

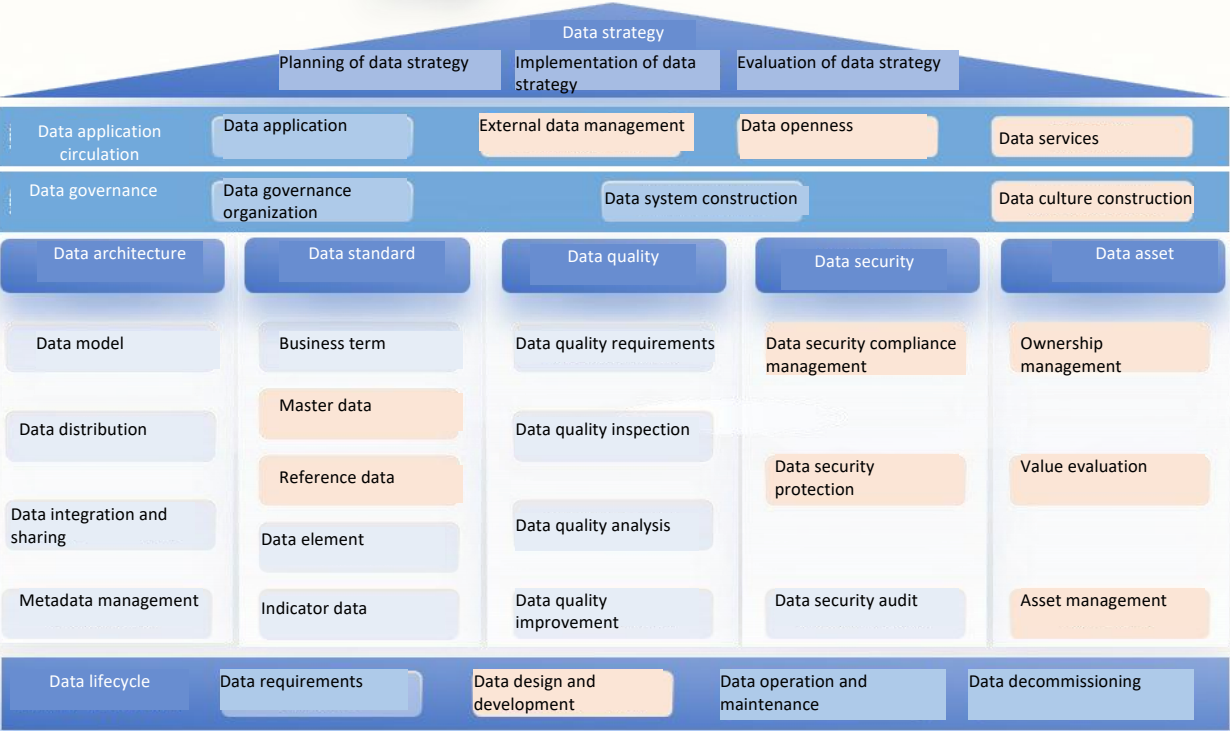
- ✓ **Part 1: Model:** It has entered the standard approval phase.
- ✓ **Part 2: Elements & Part 3: Implementation guides:** The project is currently submitted for approval.

Based on these standards, **42 exemplary units** have been selected for pilot verification of data service standards, covering multiple key industries including industrial manufacturing, commerce and trade, transportation, financial services, and technological innovation.

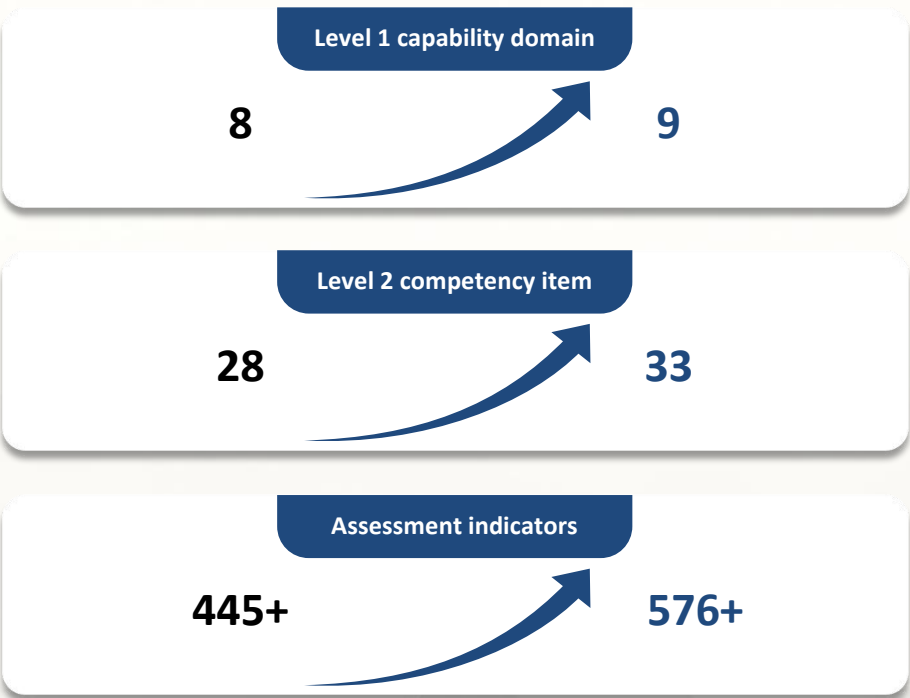
2.11 Standardization construction of data capability management maturity (DCMM)

DCMM 2.0: Core supporting system of a new paradigm

Add more than 18 new terms

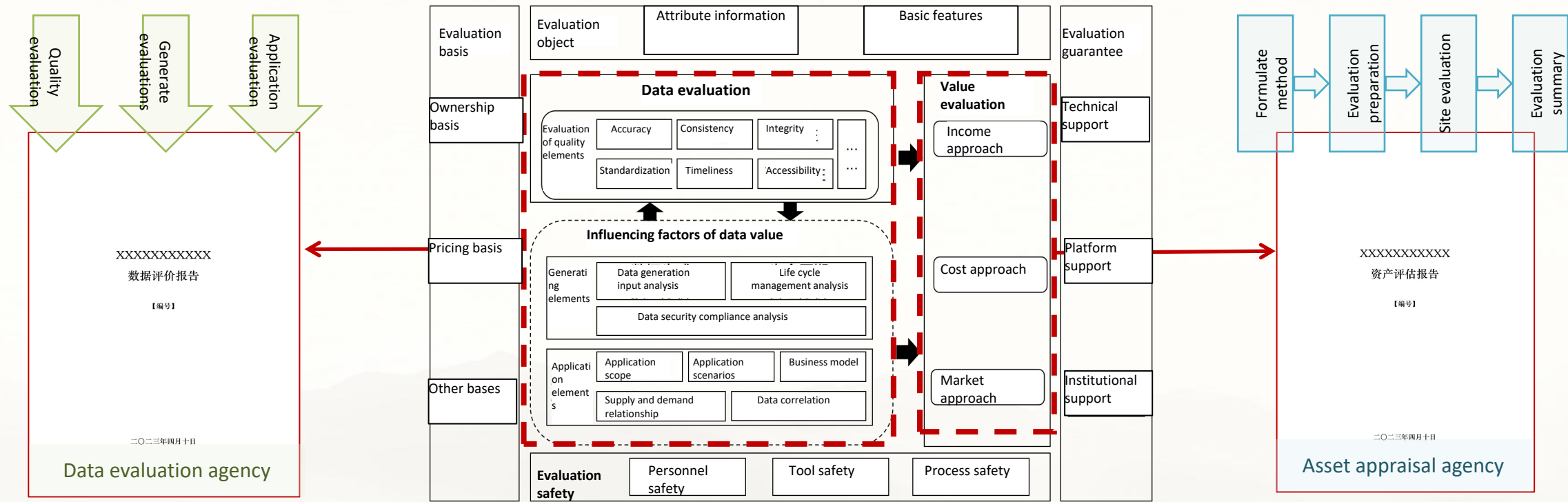


From DCMM1.0 to DCMM2.0



2.12 Standardization construction of data asset value assessment

- GB/T 36344-2018 Information Technology - Evaluation Indicators for Data Quality; GB/T 40685-2021 Information Technology Service - Data Asset - Management Requirements
- GB/T 46353-2025 Information Technology - Big Data -Data Asset Valuation



Guided by standards, training and certification programs have been implemented for **data evaluators and data asset managers**. A total of **20 training sessions** have been conducted, spanning regions including **Beijing, Shanghai, Shenzhen, Tianjin, Chongqing, Chengdu, Jiangxi, Suzhou**, among others, fostering a pool of professional talents for the data element market.



Over a dozen enterprises across diverse sectors such as finance, satellite technology, environmental protection, transportation, language processing, and electricity have achieved promising outcomes through the application of standardization in pilot projects.

2.13 Standardization construction of data products

The scope of the key standards outlined in **Data Product - Description Requirement**: it include the description and presentation of data product information by suppliers, processors, and data trading platforms, as well as the assessment of the integrity, standardization, and consistency of such descriptions by third-party service providers.

The descriptive information for data products is categorized as follows:

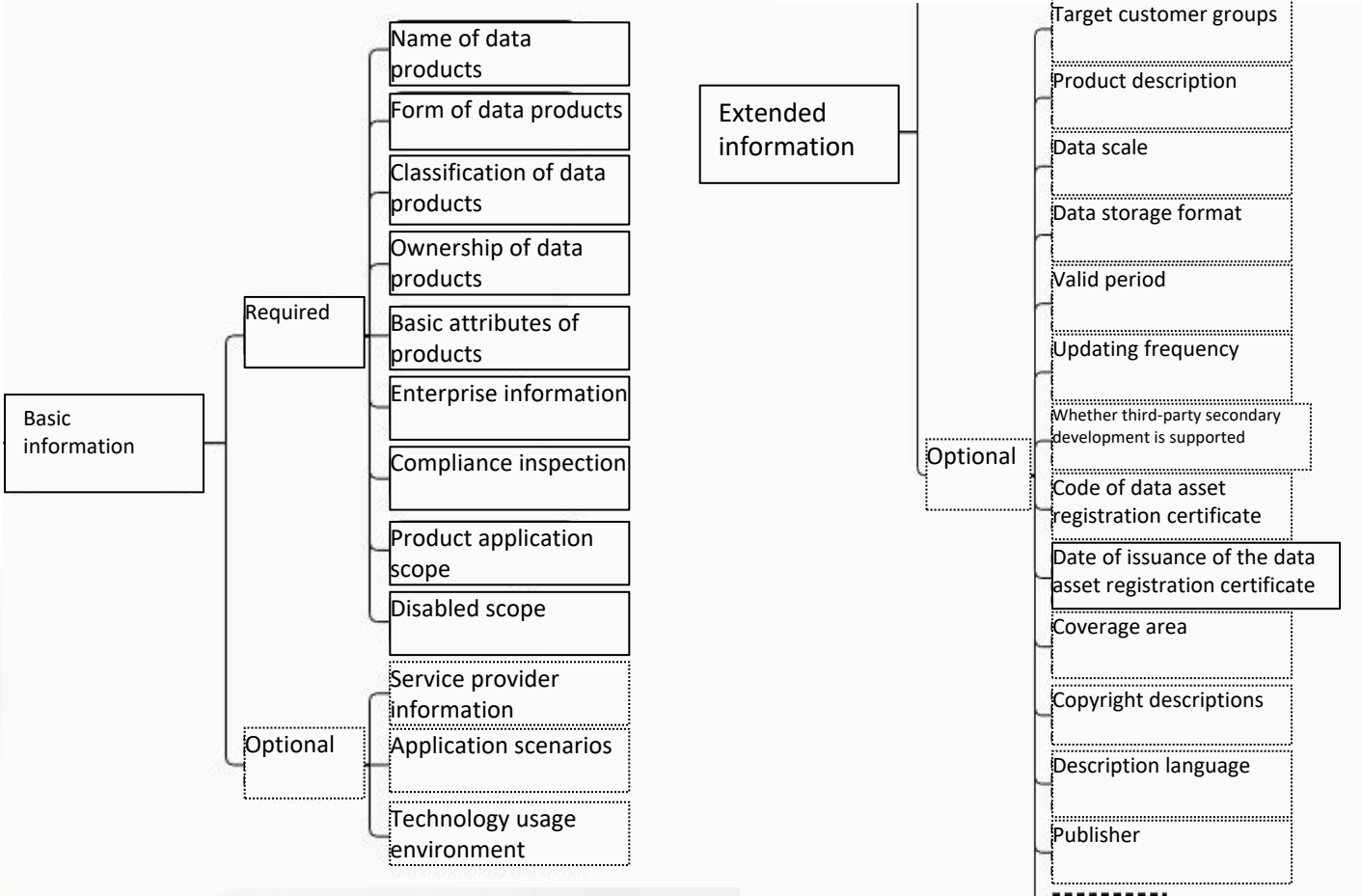
- **Basic Information**: applies to all data products.
- **Extended Information**: relevant only to specific categories of data products.
- **Value-Added Information**: includes additional information that enhances the understanding of data product details.

During the registration process, the descriptive information for data products can be further classified based on necessity:

- **Required Information**: ensures a comprehensive understanding of the essential aspects of the data product.
- **Optional Information**: provides supplementary details for a deeper understanding of the data product.

The framework for describing data product information is illustrated in the figure.

2.13 Standardization construction of data products



2.13 Standardization construction of data products

Data Product - General Requirements for Quality Evaluation

Application scope

It specifies the general requirements for evaluating the quality of data products, and it is applicable to **the quantitative assessment and management of data product quality during transaction and circulation**. It covers, but is not limited to, the application by data suppliers, purchasers, third-party evaluation organizations, regulatory bodies, and others in scenarios such as data product quality certification, verification, assessment, and dispute resolution.

2.13 Standardization construction of data products

Data Product - General Requirements for Quality Evaluation

Key issues planned to be solved

As a crucial tool for assessing data quality and determining pricing in the data transaction and circulation process, this standard mainly resolves three key issues:

- 1

Bridging the dimensional gap between data product quality tailored for transaction, circulation and traditional data quality evaluation criteria.
- 2

Addressing the challenges in the quality of quantitatively evaluating the production quality and descriptive compliance of data products.
- 3

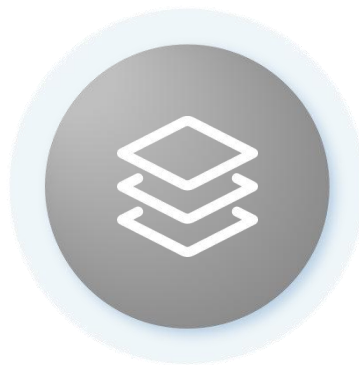
Tackling the issue of quantitatively assessing the usage quality of data products in artificial intelligence application scenarios.
- Further expand and refine
- Establish an evaluation method
- Focus on the implementation capabilities of AI

Scope of application of general quality evaluation for data products		
Evaluation of data product quality		
I. Evaluation method for the quality of data product samples	II. Evaluation methods for the production quality of data products	
	Data governance dimension	Data processing and analysis dimension
Standardization Integrity Accuracy Consistency Timeliness Accessibility	- Coverage rate of governance rules - Standardization of data governance processes - Metadata management maturity - Data lineage traceability	- Data processing defect rate - Consistency of data processing and transformation - Interpretability of the algorithm model - Conductivity of quality defects - Data value gain index - Analysis process standardization
III. Evaluation method for the conformity of data product descriptions		
Evaluation of the types of description information for data products		
Basic information	Extended information	Value-added information
Format standardization verification		
Time span verification		
Content coverage verification		
IV. Data usage quality evaluation method		
General evaluation method		
Importance of data characteristics	Excellent rate of data feature distribution	Quality evaluation at different stages of data activities
Generalization rate of data to model	Robustness of data to model	
Quantification of information density	Degree of data documentation	Cost quantification of the evaluation method
Training efficiency of data to model	Accuracy of data to model	

CONTENTS



The Background and
Significance of Data
Standardization Work



Thoughts on the
Construction of the
National Data Standard
System



Steadily Propel the Key
Tasks of Data
Standardization

3.1 Promote high-level and systematic exchanges and discussions on data standardization

ONE General Committee Meeting



- Main Responsibilities:**
- (I) Review the Constitution of the TC609;
 - (II) Review the annual work summary of the TC609;
 - (III) Deliberate on the key work priorities for the following year;
 - (IV) Review draft for approval of national standards;
 - (V) Report on fund utilization;
 - (VI) Discuss and decide on other significant issues.

Two "Standard Week" activities



Twice a year

Results reporting

Thorough discussion

Two standard themed activities



Data Standardization Forum of the Digital China Summit



Data Standardization Theme Activity of Guiyang Big Data Expo

N standard discussion and promotion meetings: Expand the meeting based on the actual situation, with N possibilities for expansion

TC609 made three significant breakthroughs during the second "Standard Week" in 2025.

New Participants

- Over the course of the two "Standard Weeks", the number of member organizations saw a **25% increase**. The inaugural "Standard Week" attracted a total of **1,178 applicants**, while the second "Standard Week" drew **2,458 registrated participants**, including over **1,200 new participants**.

New Standards

- During the first "Standard Week", over **40 standard items** were discussed. Building on this foundation, the second "Standard Week" will see more than **70 new standards** undergoing thorough discussion by all member units.

New Fields

- During the second "Standard Week," all member units will engage in collective brainstorming on **new fields** such as "**important data identification**," "**embodied intelligence**," "**data synthesis**," "**urban service entities**," and "**low-altitude data**."

3.2 Enhance promotion and exchange to foster diverse standard capability outputs

1. Prioritize urgent needs and advance research and revision of key national standards

- Closely monitor the strategic layout and technological advancements in the data sector, and consistently advance standardized research on **high quality datasets, data infrastructure, and trusted data spaces** etc.
- Expedite the formulation and revision of key national standards in areas including **data infrastructure, data management, data services, high quality datasets, product master data, trusted data spaces, data valuation and pricing, data transaction and circulation, anonymization in data circulation, and citywide digital transformation.**

2. Identify immediate needs and implement standard verification and application pilots

- Select **industries and regions with high enthusiasm to conduct pilot verifications of key data standards, promptly summarize exemplary practices and practical experiences in data standardization,** and support the revision of standards.
- Foster the integrated development of data and industry applications, **establish a batch of data standards for integrated applications,** and continuously drive industry empowerment and development.
- **Launch extensive pilot applications of key data standards across regions and industries, create replicable and promotable data standardization demonstration projects to further invigorate the data industry ecosystem.**

3. Strengthen promotion and communication to create diversified standard capability output.

- Collaborate with local governments, relevant associations, and alliances to **actively promote the application of data standards and provide talent training,** thereby supporting the sound development of the data industry.
- Based on key standards in the data field, nurture and develop a serial of **service capabilities for data standard testing, evaluation, and assessment.**
- Strengthen exchanges and cooperation with international standardization bodies such as **ISO, IEC, and ITU,** as well as foreign organizations including **CEN, DIN, IDSA, Catena-X, and gaia-x.**



National Technical Committee 609 on Data of
Standardization Administration of China



中国电子技术标准化研究院
China Electronics Standardization Institute

Thanks!

