



# SESEC V

## China Standardisation Newsletter

September - October 2024



Seconded European Standardisation Expert in China  
(SESEC)

# Index

<b>Takeaways .....</b>	<b>2</b>
<b>Activities Supported by SESEC .....</b>	<b>4</b>
SESEC Supports ETSI's Visit to CAICT and CCSA .....	4
<b>Horizontal Actions .....</b>	<b>5</b>
The 12th Annual Sino-German Standardisation Cooperation Commission Meeting .....	5
<b>Digital Transition .....</b>	<b>7</b>
New Mandatory Standards for Vehicle Cybersecurity, Software Updates, and Automated Driving Data Storage ..	7
China Launches Cybersecurity Week .....	8
China Releases AI Safety Governance Framework .....	10
China's Regulations on Network Data Security Management .....	12
New Policy Promotes the Use of Public Data .....	13
China Computer Federation Holds Standard Technology Conference in Suzhou .....	14
Latest Developments in China's AI Standards .....	14
China's Action in Regulating AI-Generated Content .....	15
China's Data Standardization System .....	16
China's National Data Bureau Inception: Key Updates and Initiatives in October .....	18
China Releases National Recommended Standard on Security of Office Devices .....	20
China Leads the IEEE Standard Development for Digital Product Passport .....	20
China Releases General Requirements for Vehicle Data .....	21
<b>Green Transition .....</b>	<b>23</b>
China Releases Guidelines for Product Carbon Footprint Accounting .....	23
Major Changes Coming to the Mandatory Energy Efficiency Standard for Microcomputers .....	24
Mandatory Safety Standards for Lithium Batteries in Electronic and Electrical Equipment .....	24
China Seeks Comments for Green Product Certification Management .....	25
China Publishes PV Standard System .....	26
China Initiates Product Carbon Footprint Certification Pilot Program .....	27
China Issues Working Plan to Enhance Carbon Emission Accounting System .....	28
China's Actions in Traction Battery Standardization .....	29
<b>Others .....</b>	<b>31</b>
Landscape of Standard Essential Patents in China .....	31
<b>Annex 1 - Landscape of Key Chinese Stakeholders in the Field of Standardization .....</b>	<b>33</b>
<b>Annex 2 - China Standardization strategy - 3 Years Implementation .....</b>	<b>33</b>

# Takeaways

## ETSI Strengthens Ties with China's CAICT and CCSA During Strategic Visit

On October 8, 2024, ETSI's newly appointed (elected) Director-General, Mr. Jan Ellsberger, and Chief Technology Officer, Mr. Issam Toufik, paid a visit to China's leading telecommunications institutions: the China Academy of Information and Communications Technology (CAICT) and the China Communications Standards Association (CCSA). The visit, fully supported by SESEC, underscored the growing cooperation between ETSI and China in the field of information and communications technology (ICT).

## The 12th Annual Sino-German Standardization Cooperation Commission Meeting

The 12th Annual Meeting of the Sino-German Standardisation Cooperation Commission (SGSCC) was held from the 13th to 16th October 2024, bringing together industry leaders, government officials, and technical experts to advance key topics in standardisation, such as climate protection, semiconductors, electromobility, intelligent and connected vehicles, and Industry 4.0. The event took place at the Dorint Hotel in Bonn and featured a range of engaging sessions, discussions, and networking opportunities for more than 140 participants.

## Mandatory Standards for Vehicle Cybersecurity, Software Updates, and Automated Driving Data Storage

At the end of August 2024, the Standardization Administration of China (SAC) issued three mandatory national standards for the automotive industry: *GB 44495-2024: Technical Requirements for Vehicle Cybersecurity*, *GB 44496-2024: General Technical Requirements for Software Updates of Vehicles*, and *GB 44497-2024: Intelligent and Connected Vehicles — Data Storage System for Automated Driving*. These standards will take effect on January 1, 2026, and will become core technical requirements for automotive products entering the Chinese market.

## China Launches Cybersecurity Week

On September 11, 2024, the opening ceremony of this year's China Cybersecurity Week was held in Guangzhou, marking the start of a week-long series of activities across the country, from Sept. 9 to 15. The ceremony was organized by the National Technical Committee 260 on Cybersecurity of the Standardization Administration of China (SAC/TC260), the China Cybersecurity Industry Alliance, and the China Electronics Standardization Institute. Over 150 representatives, including experts, researchers, and industry professionals, attended the event. Mr. Guo Tao, deputy head of the cybersecurity coordination bureau at the Cyberspace Administration of China (CAC), delivered the keynote address.

## China Releases AI Safety Governance Framework

On September 9, 2024, the National Technical Committee 260 on Cybersecurity (SAC/TC260) officially released the Artificial Intelligence Safety Governance Framework (hereinafter referred to as the Framework). This Framework serves as a comprehensive guide for establishing an all-encompassing, full-lifecycle governance system for AI development, ensuring its healthy growth and regulated application. The Framework aligns with China's approach toward AI, namely the "people-centered approach" and its vision of "AI for good". The Framework supports the implementation of the Global AI Governance Initiative proposed by China.

## China's Regulations on Network Data Security Management

On September 30, 2024, China's State Council issued the Regulations on Network Data Security Management 2024 (hereinafter referred to as the Regulations), which will take effect on January 1, 2025. As a critical part of China's cybersecurity and data protection framework, these Regulations provide detailed guidelines for implementing key laws, including the Cybersecurity Law, the Data Security Law, and the Personal Information Protection Law (PIPL). Reflecting four years of legislative work beginning in 2020, the final version of the Regulations marks a shift towards balancing data security with economic development.

## Latest Developments in China's AI Standards

On September 4, 2024, the National AI Standardization Committee (SAC/TC28/SC42) convened a week-long meeting in Qingdao, unveiling the latest progress in China's AI standardization efforts. The key updates are summarized.

## China's Data Standardization System

On October 8, 2024, six key Chinese authorities, namely the National Development and Reform Commission, the National Data Bureau, 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 National Data Standard System Construction Guidelines (hereafter referred to as the Guidelines). The Guidelines align with China's broader ambition to unlock the economic and strategic value of data, as articulated in the Opinions on Building Basic Systems for Data to Better Give Full Play to the Role of Data Resources (known as the Twenty Data Measures).

## China Releases Guidelines for Product Carbon Footprint Accounting

At the end of August, the State Administration for Market Regulation (SAMR) officially approved and released the GB/T 24067-2024 Greenhouse Gas—Product Carbon Footprint—Quantification Requirements and Guidelines, led by the Ministry of Ecology and Environment (MEE). This standard is a foundational component of the Implementation Plan for Establishing a Carbon Footprint Management System, jointly issued by 15 ministries, and of the Action Plan for Strengthening the Carbon Peak and Carbon Neutrality Standards and Measurement System (2024 – 2025). It provides guidance for various industries to develop specific product carbon footprint accounting standards. These standards will underpin China's product carbon footprint management system, supporting the country in achieving its carbon peak and carbon neutrality goals.

## Major Changes Coming to the Mandatory Energy Efficiency Standard for Microcomputers

From September 14 to 28, 2024, the National Technical Committee for Energy Fundamentals and Management Standardization (SAC/TC20) solicited public comments on the mandatory national standard Minimum Allowable Values of Energy Efficiency and Energy Grades for Microcomputers (Draft for Review). The draft outlines energy efficiency grades, minimum energy performance standards, and testing methods for desktop microcomputers, all-in-one desktop microcomputers (referred to as all-in-one computers), and portable computers (collectively referred to as microcomputers). It applies to general-use microcomputers, but excludes the following types: a) Tablet computers, desktop/rack-mounted workstations, and microcomputers for industrial applications; b) Microcomputers with two or more independent display units; c) Microcomputers with a rated power supply output exceeding 500W; d) Portable computers and all-in-one computers with display screens smaller than 294.6 mm (11.6 inches).

## Mandatory Safety Standards for Lithium Batteries in Electronic and Electrical Equipment Set to Launch

From September 19 to October 18, 2024, the Ministry of Industry and Information Technology (MIIT) sought public comments on a number of proposed mandatory national safety standards for lithium-ion batteries and battery packs used in electronic and electrical equipment. The proposed standards include: *GB 31241.1: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 1: General Requirements*, *GB 31241.3: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 3: Electric Tools*, *GB 31241.4: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 4: Toys*, and *GB 31241.5: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 5: Household Electric Appliances*.

## Landscape of Standard Essential Patents in China

On October 24, 2024, China's State Administration for Market Regulation (SAMR) unveiled its response to a proposal from a National People's Congress delegate on promoting the development of the traction battery recycling industry. The response highlights China's standardization efforts and plans for the future, and specifically the commitment of SAMR and the National Standardization Administration (SAC) of advancing standardization in support of the industry. The following text is the translation of the response.



# Activities Supported by SESEC

## 1. SESEC Supports ETSI's Visit to CAICT and CCSA #Standardization Event

On October 8, 2024, ETSI's newly appointed (elected) Director-General, Mr. Jan Ellsberger, and Chief Technology Officer, Mr. Issam Toufik, paid a visit to China's leading telecommunications institutions: the China Academy of Information and Communications Technology (CAICT) and the China Communications Standards Association (CCSA). The visit, fully supported by SESEC, underscored the growing cooperation between ETSI and China in the field of information and communications technology (ICT).



The visit to CAICT was marked by a warm welcome from Vice President Ms. Wang Zhiqin, who opened the meeting by highlighting CAICT's ongoing projects and developments. Discussions between ETSI and CAICT spanned a wide array of critical topics, including ETSI's strategic direction, Internet of Vehicles (IoV), international standards development, artificial intelligence (AI), big data, association standards, and 6G. Bilateral parties expressed optimism for future collaboration, particularly in the realm of cutting-edge technologies.

At CCSA, Mr. Wen Ku, Chair of the board, along with three colleagues, engaged in discussions with the ETSI delegation. Both sides reflected on the strong history of collaboration between CCSA and ETSI, highlighting key achievements and milestones. A significant part of the meeting revolved around exchanging updates on their respective activities and exploring new areas for collaboration, such as through 3GPP. The discussions also delved into ETSI's internal work division and the European Union's Standard Essential Patents (SEP) Regulation. Both parties left with a deeper understanding of each other's goals and operations, further strengthening their strategic alignment.

This visit signals ETSI's commitment to maintaining strong international partnerships, particularly with China, as both regions look ahead to shaping the future of global ICT standards.





## Horizontal Actions

# 2. The 12th Annual Sino-German Standardisation Cooperation Commission Meeting

#Standardization

The 12th Annual Meeting of the Sino-German Standardisation Cooperation Commission (SGSCC) was held from the 13th to 16th October 2024, bringing together industry leaders, government officials, and technical experts to advance key topics in standardisation, such as climate protection, semiconductors, electromobility, intelligent and connected vehicles, and Industry 4.0. The event took place at the Dorint Hotel in Bonn and featured a range of engaging sessions, discussions, and networking opportunities for more than 140 participants.

This year's meeting underscored the importance of Sino-German collaboration in shaping global standards, with a focus on innovative technologies that will drive the industries of tomorrow.

### Day 1: Technical Expert Group (TEG) Meetings and Electromobility Insights

The event kicked off with Technical Expert Group meetings that covered significant technical advancements. Key topics included functional safety and predictive maintenance as part of the Industry 4.0 agenda and discussions on the Asset Administration Shell/Digital Twin. These sessions laid the ground for common concepts of industrial communication and data exchange, reflecting both German and Chinese perspectives.

Later that day, the Electromobility Sub-Working Group gathered for its annual meeting, featuring expert insights from Ms. Zhou Libo (CEC) on vehicle-to-grid (V2G) standards, and Mr. Tan Yi (BYD) on Vehicle-to-Load (V2L) technology. The group also examined EV battery recycling and charging infrastructure, with contributions from Mr. Qin Chao (TELD) and Mr. Tongzhu Zhang (CATARC), outlining both German and Chinese approaches to electromobility.

The official dinner of the Sub-Working Groups headed by Ms. Hua SUN (SAMR/SAC), Dr. Thomas Zielke (BMWK) as well as Dr. Michael Stephan (DIN) concluded the first day.

### Day 2: Annual Meetings of the Sub-Working Groups Automated and Connected Driving and Industry 4.0

The second day featured a deep dive into Intelligent and Connected Vehicles (ICV). Opening remarks from Thomas Frisch (BMWK) and Wang Yu (SAMR) set the stage for productive discussions. The programme included:

Mr. Sun Hang (CATARC) sharing insights on China's progress in ICV standards. Thorsten Leonhard (CARIAD) and Richard Krüger (BMW) presenting the German perspective on the handling of ICV-related standards. Zhao Xin (HESAI) discussing advancements in automotive perception sensors.

Conversations later focused on the revision of ISO 26262 and ISO 21448, presented by Andreas Knapp (Mercedes-Benz) and Matthias Maihöfer (Schaeffler).

The Industry 4.0/Intelligent Manufacturing Sub-Working Group session, moderated by Ms. Nina Stock (BMWK), followed with in-depth discussions on IT security, network communication, and the Asset Administration Shell/Digital Twin, with speakers including Dr. Anja Simon (LNI 4.0) and Detlef Tenhagen (HARTING).

That evening, attendees enjoyed an official dinner on a Rhine cruise, fostering a unique atmosphere for informal dialogue and networking against the backdrop of the scenic Rhine.

### Day 3: The 12th Plenary Session - A Focus on Cooperation

The event culminated with the 12th Plenary Session of the SGSCC, a key platform for Sino-German dialogue on standardisation. The session, moderated by Dr. Thomas Zielke (BMWK), began with opening remarks from Dr. Thomas Zielke, SUN Hua (SAMR), LIU Jun (SAMR/SAC), Christoph Winterhalter (DIN), and Florian Spittler (DKE).

A keynote from Dr. Betty Xu (SESEC) provided an insightful overview of the EU's perspective on standardisation, emphasizing the role of cooperation in advancing global standards. This was followed by

updates on recent developments in standardisation policy in both countries, presented by Dr. Julia Barde (BMWK) and a Wang Yu from SAMR.

The morning session further highlighted the results from sub-working groups which were then formally acknowledged by a signing ceremony of the joint reports.

Following DIN, DKE and SAC presented the developments concerning standing SGSCC topics such as AI in medical devices or battery recycling and introduced new cooperation topics such as hydrogen or semiconductors. Thomas Frisch (BMWK) also delivered an update on decarbonisation in the automotive supply chain, emphasizing the critical role of standards in achieving sustainability goals.

The meeting concluded in the afternoon with closing remarks from Dr. Thomas Zielke (BMWK) and SUN Hua (SAMR/SAC), signaling the importance of continued collaboration and the development of harmonised international standards to support technological

innovation and sustainability.

#### Looking Forward: Strengthening the Sino-German Standardisation Partnership

The 12th Annual Sino-German Standardisation Cooperation Commission Meeting reaffirmed the deep partnership between Germany and China in shaping the future of global standards. The discussions and agreements forged during this event will continue to impact key sectors such as electromobility, intelligent vehicles, and Industry 4.0.

Looking ahead, it's clear that the collaboration between these two nations will be pivotal in addressing the challenges and opportunities of a rapidly evolving global landscape.

Source: GPQI website

[https://www.gpqi.org/news\\_en-details/12th-annual-sino-german-standardisation-cooperation-commission-meeting-a-milestone-in-cross-border-collaboration.html](https://www.gpqi.org/news_en-details/12th-annual-sino-german-standardisation-cooperation-commission-meeting-a-milestone-in-cross-border-collaboration.html)



## Digital Transition

### 3. New Mandatory Standards for Vehicle Cybersecurity, Software Updates, and Automated Driving Data Storage

# Mandatory Standards

At the end of August 2024, the Standardization Administration of China (SAC) issued three mandatory national standards for the automotive industry:

- *GB 44495-2024: Technical Requirements for Vehicle Cybersecurity*
- *GB 44496-2024: General Technical Requirements for Software Updates of Vehicles*
- *GB 44497-2024: Intelligent and Connected Vehicles — Data Storage System for Automated Driving*

These standards will take effect on January 1, 2026, and will become core technical requirements for automotive products entering the Chinese market.

#### **GB 44495-2024: Technical Requirements for Vehicle Cybersecurity**

With the rapid advancement of vehicle intelligence and connectivity, cybersecurity risks have become increasingly severe for vehicles. Cyberattacks can lead to the leakage of users' personal information or even the remote hacking of vehicle control systems, posing serious threats to the security of users' data, property, and lives. These attacks could also endanger societal and national security. Therefore, to address these concerns, China has established this mandatory standard to safeguard vehicle information security.

This standard outlines requirements for automotive cybersecurity management systems, basic cybersecurity measures, external connections, communication and data security, and vehicle type determinations. It also details the relevant inspection and testing methods. The standard applies to vehicles in categories M and N, as well as category O vehicles equipped with at least one electronic control unit.

#### **GB 44496-2024: General Technical Requirements for Software Updates of Vehicles**

Automotive software upgrades are profoundly

transforming the automotive industry, impacting everything from research and development to production and after-sales service. They enable key services such as firmware updates, feature optimization, and vulnerability patches, fueling innovation and development in the automotive sector. However, software updates also present challenges to traditional vehicle management systems and may introduce significant risks to product production consistency. Improper software upgrade procedures also pose serious safety concerns, as some models have experienced cases where users lost control of their vehicles, severely compromising safety and property.

Therefore, China established this mandatory standard to ensure user safety and regulatory compliance. The standard specifies requirements for managing automotive software updates, including vehicle requirements, type approval criteria, and instructions for user manuals. It also outlines the relevant test methods. The standard applies to M, N, and O category vehicles capable of software updates.

#### **GB 44497-2024: Intelligent and Connected Vehicles — Data Storage System for Automated Driving**

As intelligent connected vehicles with autonomous driving functions gradually become more mature, determining liability and analyzing the causes of traffic accidents has become a key concern for industry regulators, automotive companies, and consumers alike. To address this issue, intelligent connected vehicles with autonomous driving capabilities must be able to accurately and reliably record key data during operation, enabling scene reconstruction in the event of an accident. In this context, China developed this mandatory standard, aiming to provide data support for industry regulation and serve as a technical basis for determining liability and analyzing the causes of accidents involving autonomous vehicles.

This standard sets the technical requirements, testing methods, and type approval criteria for data recording

systems in intelligent and connected autonomous vehicles. It applies to M and N category vehicles equipped with such systems.

These three standards, while independently developed by China, were influenced by regulations R155, R156, and R157 issued by the United Nations World Forum for

Harmonization of Vehicle Regulations (UN WP29). As a result, automotive manufacturers in the EU should note the potential technical differences between these Chinese standards and those implemented in their own regions. It is advisable to prepare for the enforcement of these mandatory standards in advance.

## 4. China Launches Cybersecurity Week

### # Cybersecurity

On September 11, 2024, the opening ceremony of this year's China Cybersecurity Week was held in Guangzhou, marking the start of a week-long series of activities across the country, from Sept. 9 to 15. The ceremony was organized by the National Technical Committee 260 on Cybersecurity of the Standardization Administration of China (SAC/TC260), the China Cybersecurity Industry Alliance, and the China Electronics Standardization Institute. Over 150 representatives, including experts, researchers, and industry professionals, attended the event. Mr. Guo Tao, deputy head of the cybersecurity coordination bureau at the Cyberspace Administration of China (CAC), delivered the keynote address.

In his speech, Mr. Guo Tao outlined four key priorities:

- Alignment with legislation and response to emerging challenges: building a work mechanism that adapts to the evolving cybersecurity landscape, aligning standardization efforts with legislation, and addressing emerging challenges through comprehensive standardization planning.
- Supporting the contribution of standards to key areas/products: leveraging standards to enhance the cybersecurity of critical information infrastructure, product interconnectivity, data security, personal information protection, and artificial intelligence. The overarching goal is to drive industrial development in these areas through robust standardization efforts.
- Implementation and application: enhancing the feasibility and scientific basis of cybersecurity standards through pilot trials and active industry participation, ensuring their practical application and effectiveness across industries.
- International collaboration: encouraging industry experts to engage in international standardization and promoting Chinese standards globally. A priority for the near future is hosting the ISO/IEC JTC1/SC27 conference in the second half of 2025.

Additionally, the event saw the launch of the Data Security Standards Enhancement Program (DSEP), with Guangzhou's Nansha District designated as the first pilot zone. Ten organizations, including China Mobile, Huawei, and Alibaba Cloud, were announced as the first batch of pilot units. The program is designed to support high-quality digital and cybersecurity development, in line with the Data Security Law and Personal Information Protection Law. SAC/TC260 has classified all data security and personal information protection standards into three tiers:

- *Basic: Standards that directly support legal obligations and reflect baseline security requirements.*
- *Advanced: Standards that impose higher-level requirements.*
- *Excellent: The highest tier of standards.*

For more details on the framework, please see the figures below. Note that the official version differs slightly from the one showcased during the SAC/TC260 Cybersecurity Standard Week in 2024.

Finally, the event also unveiled the first batch of certified interoperable cybersecurity products from companies such as Huawei and Tianrongxin, showcasing the successful implementation of cybersecurity product interconnectivity standards in the industry.

In conclusion, the opening ceremony of the 2024 China Cybersecurity Week in Guangzhou set the tone for a

nationwide push to advance cybersecurity awareness and standardization. The event underscored the critical role of standards in addressing emerging cybersecurity challenges. Looking ahead, initiatives such as hosting the ISO/IEC JTC1/SC27 conference in 2025 will continue to promote the development and global recognition of Chinese cybersecurity standards at the international level.

**Distinguish general-purpose data processors from situation-based data processors**

For general data processors	For situation-based data processors
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## Reference framework for data security standards

Excellent Application Level	GB/T 37988-2019 Data security capability maturity model - lv.4	GB/T 42012-2022 Data security requirements for instant messaging services - excellent	GB/T 42014-2022 Data security requirements for online shopping services - excellent	GB/T 42016-2022 Data security requirements for online audio and video services - excellent
	GB/T 37973-2019 Big data security management guide	GB/T 42013-2022 Data security requirements for express logistics services - excellent	GB/T 42015-2022 Data security requirements for internet payment services - excellent	GB/T 42017-2022 Data security requirements for online ride-hailing services - excellent
	Technical implementation guideline of digital watermarking	GB/T 38477-2020 Government information sharing—Data security technology requirements	Public data opening security requirements	
	General framework for the confidential computing	GB/T 39725-2020 Guide for health data security	GB/T 42447-2023 Data security guidelines for telecom field	
Regular Application Level	GB/T 37988-2019 Data security capability maturity model - lv.3	GB/T 42012-2022 Data security requirements for instant messaging services - regular	GB/T 42014-2022 Data security requirements for online shopping services - regular	GB/T 42016-2022 Data security requirements for online audio and video services - regular
	GB/T 41479-2022 Network data processing security requirements	GB/T 42013-2022 Data security requirements for express logistics services - regular	GB/T 42015-2022 Data security requirements for internet payment services - regular	GB/T 42017-2022 Data security requirements for online ride-hailing services - regular
	GB/T 35274-2023 Security capability requirements for big data services	Technical method for risk monitoring of data application programming interface	Capacity requirements for assessment organization of data security	Technical requirements of second-hand electronic product information erasure
Basic Application Level	GB/T 43697-2024 Rules for data classification and grading	GB/T 42012-2022 Data security requirements for instant messaging services - basic	GB/T 42014-2022 Data security requirements for online shopping services - basic	GB/T 42016-2022 Data security requirements for online audio and video services - basic
	Requirements for data security protection	GB/T 42013-2022 Data security requirements for express logistics services - basic	GB/T 42015-2022 Data security requirements for internet payment services - basic	GB/T 42017-2022 Data security requirements for online ride-hailing services - basic
	GB/T 37988-2019 Data security capability maturity model - lv.2	GB/T 41871-2022 Security requirements for processing of motor vehicle data	Security requirements for government data processing	
	Risk assessment approaches for data security	GB/T 37932-2019 Security requirements for data transaction service		

**Distinguish general-purpose data processors from situation-based data processors**

For general data processors	For situation-based data processors
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## Reference framework for the application of personal information protection standards

3. Excellent Application Level	GB/T 41817-2022 Guidelines for personal information security engineering	GB/T 41574-2022 Code of practice for protection of personal information in public clouds	GB/T 43739-2024 Audit and management guide for personal information processing normativeness of mobile internet applications in App stores	Personal information processing management guide for mobile internet applications of smart mobile devices
	GB/T 42460-2023 Guide for evaluating the effectiveness of personal information de-identification	Requirements for large Internet companies internal personal information protection supervision agency	GB/T 41819-2022 Security requirements of face recognition data - Excellent	GB/T 41773-2022 Security requirements of gait recognition data - Excellent
	Technical requirements for personal information transfer	Guidance on social responsibility of data security and personal information protection	GB/T 41806-2022 Security requirements of genetic recognition data - Excellent	GB/T 41807-2022 Security requirements of voiceprint recognition data - Excellent
2. Regular Application Level	GB/T 42574-2023 Implementation guidelines for notices and consent in personal information processing	Personal information processing rules of internet platforms, products and services	GB/T 43435-2023 Security requirements for software development kit (SDK) in mobile internet applications (App)	
	GB/T 37964-2019 Guide for de-identifying personal information	Security requirements for automated decision making based on personal information	GB/T 43445-2023 Basic security requirements for pre-installed applications on smart mobile terminals	
	GB/T 39335-2020 Guidance for personal information security impact assessment	Security certification requirements for cross-border processing activity of personal information	GB/T 40660-2021 General requirements for biometric information protection - Regular	
	Personal Information Protection Compliance Audit Requirements	GB/T 42582-2023 Personal information security testing and evaluation specification in mobile internet applications (App)	GB/T 41773-2022 Security requirements of gait recognition data - Regular	
1. Basic Application Level	GB/T 41391-2022 Basic requirements for collecting personal information in mobile internet applications - Regular	GB/T 41819-2022 Information security technology—Security requirements of face recognition data - Regular	GB/T 41806-2022 Security requirements of genetic recognition data - Regular	GB/T 41807-2022 Security requirements of voiceprint recognition data - Regular
	GB/T 35273-2020 Personal information security specification	GB/T 40660-2021 General requirements for biometric information protection - Basic		
	Security requirements for processing of sensitive personal information	GB/T 41819-2022 Security requirements of face recognition data - basic	GB/T 41773-2022 Security requirements of gait recognition data - basic	

# 5. China Releases AI Safety Governance Framework

## # AI

On September 9, 2024, the National Technical Committee 260 on Cybersecurity (SAC/TC260) officially released the *Artificial Intelligence Safety Governance Framework* (hereinafter referred to as the Framework). This Framework serves as a comprehensive guide for establishing an all-encompassing, full-lifecycle governance system for AI development, ensuring its healthy growth and regulated application. The Framework aligns with China's approach toward AI, namely the "people-centered approach" and its vision of "AI for good". The Framework supports the implementation of the Global AI Governance Initiative proposed by China.

### Key Components of the AI Safety Governance Framework

The Framework is structured into four sections: governance principles, safety risks, technical measures, and safety guidelines.

- Governance Principles:** The Framework outlines four key principles for AI safety governance, namely: be inclusive and prudent; identify risks with agile governance; integrate technology and management for a coordinated response; and promote openness and cooperation for joint governance and shared benefits. These principles highlight collaboration, open governance, and shared responsibility, offering a holistic approach to AI safety.
- Safety Risks:**
  - **Inherent Safety Risks:** These stem from AI's inherent technological flaws, such as biases, poisoned training data, and data leakage.
  - **Safety Risks in AI Applications:** These result from improper or malicious use of AI, including its role in illegal activities, the amplification of "information cocoons", and the creation of fake news.
- Technical Measures:**
  - For internal risks related to models, data, and systems, the Framework suggests technical measures such as secure development, content identification, and responsible R&D systems. It also emphasizes comprehensive governance solutions, including supply chain security.
  - For application risks in areas like network security, ethics, and cognition, it proposes measures such as security safeguards, end-use tracking, and tiered management systems. Additionally, talent cultivation and classification of AI-related activities are essential to mitigating these risks.
- Safety Guidelines:** The Framework provides specific safety guidelines for various stakeholders, including model developers, service providers, and users in key sectors. These guidelines ensure that all parties involved in AI development and application adhere to standardized safety practices.

### The Role of Standardization

The development and implementation of AI safety standards are crucial to the Framework's success. This includes the creation of both a standard system and essential standards. According to an update presented by SAC/TC260 secretariat during the Cybersecurity Standard Week in June 2024, SAC/TC260 has initiated the drafting of a standard system for AI safety. While three rounds of public comments have been completed, the standard system remains in its preliminary stage. Therefore, SAC/TC260 encourages the industry to actively contribute and provide input to identify the most urgent standards.

In terms of essential standards, four standards are currently at the stage of public solicitation:

- *Basic security requirements for generative artificial intelligence services*
- *Generative artificial intelligence data annotation security specifications*
- *Security specifications for generative artificial intelligence pre-training and fine-tuning data.*
- *Labeling methods for content generated by artificial intelligence*

Additionally, research on AI safety standards in specific sectors such as finance, energy, telecommunications, transportation, and public services is on the agenda of Chinese standard development organizations. The aim is to ensure that AI applications across industries are secure and that risks are effectively mitigated.

In general, the Framework is designed as a neutral and highly adaptable tool that can be tailored to the needs of different nations and organizations. By offering a broad, actionable "toolbox", it positions itself as a practical guide for AI safety governance, making it well-suited for international adoption and collaboration. It is expected that, in the coming months, newly-developed Chinese standards largely will follow the basic elements presented in the Framework. At the same time, as China continues to develop AI-specific legislation, it is likely that this Framework will be referred to as a key resources.

For the English version of the Framework, please click [here](#) to download.

**Table of AI Safety and Security Risks to Technical Countermeasures and Comprehensive Governance Measures**

Safety risks			Technical countermeasures	Comprehensive governance measures
Inherent safety risks	Risks from models and algorithms	Risks of explainability	4.1.1 (a)	<ul style="list-style-type: none"> <li>• Advance research on AI explainability</li> <li>• Create a responsible AI R&amp;D and application system</li> </ul>
		Risks of bias and discrimination	4.1.1 (b)	
		Risks of robustness	4.1.1 (b)	
		Risks of stealing and tampering	4.1.1 (b)	
		Risks of unreliable output	4.1.1 (a) (b)	
	Risks of adversarial attack	4.1.1 (b)		
	Risks from data	Risks of illegal collection and use of data	4.1.2 (a)	<ul style="list-style-type: none"> <li>• Improve AI data security and personal information protection regulations</li> </ul>
		Risks of improper content and poisoning in training data	4.1.2 (b) (c) (d) (e) (f)	
		Risks of unregulated training data annotation	4.1.2 (e)	
		Risks of data leakage	4.1.2 (c) (d)	
Risks from AI systems	Risks of exploitation through defects and backdoors	4.1.3 (a) (b)	<ul style="list-style-type: none"> <li>• Strengthen AI supply chain security</li> <li>• Share information, and emergency response of AI safety risks and threats</li> </ul>	
	Risks of computing infrastructure security	4.1.3 (c)		
	Risks of supply chain security	4.1.3 (d)		
Safety risks in AI applications	Cyberspace risks	Risks of information and content safety	4.2.1 (a)	<ul style="list-style-type: none"> <li>• Implement a tiered and category-based management system for AI application</li> <li>• Establish a traceable management system for AI services</li> <li>• Increase efforts to train talent in AI safety and security</li> <li>• Establish and improve mechanisms for AI safety and security education, industry self-regulation, and social supervision</li> <li>• Promote international exchange and cooperation on AI safety governance</li> </ul>
		Risks of confusing facts, misleading users and bypassing authentication	4.2.1 (a)	
		Risks of information leakage due to improper usage	4.2.1 (b)	
		Risks of abuse for cyberattacks	4.2.1 (a)	
		Risks of security flaw transmission caused by model reuse	4.2.1 (a) (b)	
	Real-world risks	Inducing traditional economic and social security risks	4.2.2 (b)	
		Risks of using AI in illegal and criminal activities	4.2.2 (a) (b)	
		Risks of misuse of dual-use items and technologies	4.2.2 (a) (b)	
	Cognitive risks	Risks of amplifying the effects of "information cocoons"	4.2.3 (b)	
		Risks of usage in launching cognitive warfare	4.2.3 (a) (b) (c)	
	Ethical risks	Risks of exacerbating social discrimination and prejudice, and widening the intelligence divide	4.2.4 (a)	
		Risks of challenging traditional social order	4.2.4 (a) (b)	
Risks of AI becoming uncontrollable in the future		4.2.4 (b)		

## 6. China's Regulations on Network Data Security Management

### # Data

On September 30, 2024, China's State Council issued the *Regulations on Network Data Security Management 2024* (hereinafter referred to as the Regulations), which will take effect on January 1, 2025. As a critical part of China's cybersecurity and data protection framework, these Regulations provide detailed guidelines for implementing key laws, including the *Cybersecurity Law*, the *Data Security Law*, and the *Personal Information Protection Law* (PIPL). Reflecting four years of legislative work beginning in 2020, the final version of the Regulations marks a shift towards balancing data security with economic development. In contrast to the 2021 draft released for public consultation, the final version of the Regulations eases certain compliance requirements for data and personal information processors, signaling China's intent to reduce regulatory burdens on businesses. Comprising nine chapters and 64 articles, the Regulations address areas such as personal information protection, key data security, cross-border data transfer, and obligations for internet platform service providers. Key highlights for foreign stakeholders are summarized below.

**Key data.** Earlier drafts of the Regulations imposed extensive responsibilities on businesses, including requirements for approvals and registrations, which have been removed. This adjustment underscores the government's position that safeguarding key data is primarily a state responsibility, as the main objectives are to protect national security and public interests.

**Personal information protection.** The Regulations do not introduce major innovations but focus on refining and clarifying the PIPL, particularly in terms of notification, consent, and individual rights. A significant requirement is that companies processing personal data of more than 10 million individuals must meet additional compliance obligations outlined in Articles 30 and 32 on key data management. Importantly, this does not mean that large-scale personal data automatically qualifies as "key data." However, due to its sensitive nature, such data warrants increased oversight, making compliance

essential for businesses handling significant volumes of personal information.

**Cross-border Data Transfer.** The Regulations align with existing regulations on cross-border data flows, such as the *Provisions on Promoting and Regulating Cross-border Data Flows*. The national authority, in collaboration with relevant departments, establishes mechanisms for managing cross-border data transfers and developing associated policies. While personal data may be transferred abroad under certain conditions, data not identified or officially classified as key data by relevant regions or departments is exempt from security assessment.

**Compliance Considerations for Foreign Stakeholders.** While the Regulations offer positive signals regarding China's regulatory approach, foreign businesses operating in China should carefully analyze them and maintain open communication with authorities to ensure compliance. A notable challenge lies in the evolving regulatory environment, which is moving from results-based to process-based requirements. The Regulations now prescribe specific compliance measures, limiting the flexibility previously available to enterprises.

Furthermore, the national standard *20240405-T-469 Data Security Technology — Requirements for Data Security Protection* is still under development, alongside various industry-specific standards that provide guidance on data classification and management. Foreign stakeholders with a legal presence in China should closely monitor these developments and industry-specific guidelines issued by associations or regulatory bodies. Noteworthy examples include the *GB/T 42447-2023 Information Security Technology — Data Security Guidelines for the Telecom Sector and the Data Security Compliance Guidelines for the Industrial and Information Technology Sectors (Draft for Comment)*. Staying updated on these evolving standards will be essential for maintaining compliance and navigating China's complex regulatory landscape.

# 7. New Policy Promotes the Use of Public Data

## # Public Data

On September 21, 2024, the Central Committee of the Communist Party of China and the State Council issued the *Opinions on Accelerating the Development and Utilization of Public Data Resources*. The policy aims to remove institutional obstacles and systemic barriers to the circulation and use of public data, promoting its compliant and efficient use to strengthen, optimize and expand the digital economy, thereby building new national competitive advantages.

The document states that public data generated in the lawful performance of duties or provision of public services by party and government agencies, as well as by enterprises and institutions at all levels, are important fundamental strategic resources. It sets a target to establish basic rules and systems for developing and utilizing these public data resources by 2025 and to build a comprehensive public data system by 2030.

To achieve this goal, the document outlines 17 specific tasks, some of which may affect overseas stakeholders accessing public data resources, including:

**Promoting Public Data Accessibility:** Promote the openness of public data in a lawfully and in an orderly manner, and under the premise of maintaining national data security and safeguarding personal information and commercial secrets. Improve public data platforms, dynamically publish and update open directories, and enhance the completeness, accuracy, timeliness, and machine-readability of open data.

**Establishing a Price Mechanism:** Develop a price formation mechanism aligned with the characteristics of public data. Encourage free or conditionally free use of public data products and services for public welfare and governance. Apply government-guided pricing for essential public data products and services necessary for industrial and sectoral development.

**Encouraging Public Data Utilization:** Expand application scenarios to encourage businesses to develop products and provide services using public data, particularly in industries and sectors with high market demand and abundant data resources. Support enterprises and social organizations in using public data for developing public welfare products free of charge.

**Fostering a Thriving Data Industry Ecosystem:** Include the data industry in the *Industry Structure Adjustment Guidance Catalog* as a category for encouraged development. Support technical innovation and application in data collection, labeling, analysis, mining, circulation, usage, and security. Promote the development of diverse data products such as data models, verification, and evaluation indices.

**Strengthening Security Management:** Enhance data security and personal information protection by enhancing supervision and management throughout the entire process of data production, processing, usage, and product operations. Establish and improve systems for classification, risk assessment, monitoring, warning, and emergency response. Conduct security risk assessments and compliance reviews for public data utilization.

In addition to the above tasks, the document proposes measures such as exploring public data authorization mechanisms, improving resource management systems, creating a public data resource registration system, implementing an authorization disclosure mechanism, promoting regional data collaboration, researching and developing data infrastructure standards, increasing innovation incentives, encouraging pilot trials, and advancing government data sharing.

With the rapid growth of the digital economy, harnessing data's full value is critical for business growth and expansion. This policy is expected to improve access to and use of public data, thereby injecting new momentum into industrial development. However, the document does not clearly define the boundaries of public data; its future implementation will rely on further detailing in secondary regulations and standards. Additionally, the document requires security risk assessments and business compliance reviews for public data usage, introducing thresholds that may impact the actual use of data enterprises.

The National Data Administration has reportedly completed the drafting of two supporting policies, namely the *Interim Measures for Public Data Resource Registration Management* and the *Implementation Guidelines for Public Data Resource Authorization Operations*, which will soon be open for public consultation.

# 8.

## China Computer Federation Holds Standard Technology Conference in Suzhou

# Computer

The China Computer Federation (CCF) gathered more than 210 experts and scholars from universities, research institutes, and enterprises nationwide for the 2024 CCF Standard Technology Conference on August 10-11 in Suzhou, Jiangsu province.

To promote the development and implementation of standards in the field of computing, the conference serves as an innovative and interactive platform led by standards. Academicians and experts were invited to give keynote speeches, with roundtable discussion and themed sessions held for in-depth exchanges on frontier computing technology and its standardization.

The conference was addressed by Tang Weiqing, Secretary-General of CCF, Sun Ninghui, President of CCF and Academician of Chinese Academy of Engineering, and Gu Haidong, Member of the Standing Committee and Executive Deputy Mayor of Suzhou.

CCF has worked on association standards for nearly 3

years. It has established the standards system, work process, and the expert base, and initiated the research and development of many association standards. The conference is a chance to further promote CCF's standardization work, said Tang Weiqing.

In the intelligent era, standardization work is of great importance, and China can play a bigger role in certain aspects, according to Sun Ninghui. He hoped that the conference can promote the cooperation between CCF and experts at home and abroad to develop high quality computer standards.

Moreover, the standardization committee of CCF signed a Memorandum of Understanding with the Guangdong-Hong Kong-Macao Greater Bay Area Standard Innovation Alliance, and signed an agreement on strategic cooperation with the National Technical Standard Innovation Base (Intelligent Computing).

Source: *China Standardization Magazine*, issue 5, 2024

# 9.

## Latest Developments in China's AI Standards

# AI

On September 4, 2024, the National AI Standardization Committee (SAC/TC28/SC42) convened a week-long meeting in Qingdao, unveiling the latest progress in China's AI standardization efforts. Key updates include:

1. SAC/TC28/SC42 has initiated, developed, and advanced over 30 national standards and launched 34 sector standards. These standards address foundational resources like intelligent computing power chips and training datasets, as well as critical technologies like industrial vision and autonomous driving. The SC has also collaborated with relevant industry authorities to advance the development of standards for large models in sectors such as steel, government services, healthcare, and finance.
2. The national standard Artificial Intelligence - Performance Testing Methods for Server Systems is now in its final approval stage and is expected to be released soon.
3. To create a unified, standardized benchmark evaluation system for large models, SAC/TC28/SC42 has developed the national standard Artificial Intelligence - Large-Scale Models - Part 2: Evaluation Metrics and Methods, which has completed testing and validation and is now undergoing technical review.
4. To implement the Guidelines for Developing National Comprehensive Standardization System of Artificial Intelligence Industry (2024 Edition), which outlines tasks to empower new industrialization and industry applications, SAC/TC28/SC42 has drafted 12 AI sector standards in collaboration with leading organizations in industries such as steel, government services, mining, transportation, and healthcare. The standards include:
  - AI - Large Model Training Data Processing Workflow and Quality Evaluation Model
  - AI - Technical Specifications for High-Speed Imaging Analysis System
  - AI - Technical Specifications for Industrial Vision Model Training and Inference Platform
  - AI - Technical Specifications for Computer Vision-oriented Autonomous Learning System
  - AI - Technical Requirements for Visual Large Model System in Logistics Parks
  - AI - Technical Specifications for Deepfake Voice Identification System

- *AI - Testing Methods for Neural Network Model Compression Performance*
- *AI - Neural Network Model Conversion Guidelines*
- *Technical Requirements for AI Visual Data Automatic Labeling System*
- *AI - Technical Requirements for Large Models in Steel Industry*
- *AI - Technical Requirements for Knowledge Graph Construction in Steel Production Processes*
- *AI - Technical Requirements for Intelligent Decision-Making Data Processing and Model Construction in Steel Production and Smelting Process*

During the meeting, SAC/TC28/SC42 also established four working groups dedicated to AI application standards in the steel, logistics, communications, and construction industries.

Looking ahead, SAC/TC28/SC42 outlined plans to strengthen the development and promotion of standards for AI hardware and software, large model evaluation, and AI applications in critical sectors such as steel, telecommunications, construction, healthcare, logistics, power, coal, and petrochemicals.

## 10. China's Action in Regulating AI-Generated Content

# AI

On September 14, 2024, the Cyberspace Administration of China (CAC) released the *Draft Regulations on Labeling AI-Generated Content* (referred to as the Labeling Regulations) for public consultation, along with a related mandatory national standard titled *Cybersecurity Technology — Labeling Method for Content Generated by Artificial Intelligence* (referred to as the Labeling Standard). These drafts are designed to further regulate the labeling of AI-generated content to protect national security, public interests, and the legitimate rights of citizens, organizations, and other entities.

### Risks and Challenges in Governing AI-Generated Content

The rapid development and widespread application of generative AI technologies have boosted content creation efficiency but introduced new risks and challenges. As AI-generated content becomes increasingly realistic, it can be difficult for the public to distinguish between real and fabricated content, raising concerns about the spread of misinformation, deepfakes, and malicious applications. For instance, AI can create harmful content that damages individuals' reputations or be used in scams involving AI-driven face-swapping technology. These issues not only infringe on citizens' rights and disrupt social order but could also threaten national security. Effective governance of AI-generated content has therefore become an urgent priority.

In recent years, China's *Regulations on the Management of Deep Synthesis of Internet Information Services* (hereinafter referred to as the Deep Synthesis Regulations) have already required providers of deep synthesis services to label the generated content. At the same time, the *Interim Measures for the Management of Generative AI Services* emphasize the labeling obligations of generative AI service providers. The Labeling Regulations and Labeling Standard further refine these requirements, aiming to address regulatory gaps in this emerging area.

### Key Provisions of the Labeling Regulations and Standards

The central focus of the Labeling Regulations and Labeling Standard is to clarify the obligations for labeling AI-generated content, covering types of labels, labeling methods, and the roles and responsibilities of various stakeholders.

1. **Explicit and implicit labeling types:** The Labeling Regulations differentiate between explicit and implicit labeling. Explicit labeling involves adding easily visible labels, such as text, sound, or graphics, on the interface where AI-generated content appears. This approach aims to inform users directly that the content is not human-created, thus reducing potential confusion. Implicit labeling involves embedding labels in the data file itself, which is less noticeable to users but can be extracted through technical means to ensure traceability.

2. **Detailed labeling guidelines for various content types:** The Labeling Standard provides detailed guidelines for labeling different types of content, including text, images, audio, video, and interactive interfaces. These guidelines cover aspects such as form, placement, size, and color of labels, with examples to enhance practical implementation. For example, in addition to the five prominent labeling application scenarios mentioned in the Deep Synthesis Regulations, the Labeling Standard also covers emerging AI applications like text-to-image and text-to-video generation.
3. **Establishment of a comprehensive responsibility system:** The Labeling Regulations lay out a full chain of accountability for labeling AI-generated content, specifying the responsibilities of various parties. Service providers must label AI-generated content both explicitly on the interface and implicitly as metadata within the content file. Users are required to declare and label AI-generated content when uploading it. Online content platforms are responsible for verifying that AI-generated content includes appropriate implicit labels, displaying prominent labels around such content, and reminding users to declare any AI-generated content upon publishing. Platforms distributing internet applications, such as app stores, are responsible for verifying that service providers include labeling functionality in their applications.
4. **Balancing regulation with innovation:** The Labeling Regulations focus on applying only necessary regulatory obligations to service providers. In other words, it is mandatory for service providers to apply explicit labels only in scenarios where there is a high risk of public confusion. The Labeling Regulations avoid "one-size-fits-all" restrictions, allowing service providers to offer AI-generated content without explicit labeling at a user's request, provided there is a clear user agreement outlining labeling responsibilities and content usage.

These new measures reflect China's approach to addressing the governance challenges associated with AI-generated content. By establishing comprehensive requirements, the Labeling Regulations and Labeling Standard aim to support a transparent and secure digital environment while accommodating the growth and innovation of AI technologies.

The comment solicitation for Labeling Regulations concluded on October 14, 2024, while that for the Labeling Standard ended on November 13, 2024. According to feedback collected by the European Union Chamber of Commerce from European companies, certain areas of the Labeling Standard could benefit from further clarification, particularly regarding the scope of the term "AI-generated and synthetic content." For example, how should content that is partially AI-generated and partially original be labeled? Additionally, in the attribute section for implicit metadata identification, it would be helpful to provide guidelines for synthetic content providers and content dissemination platforms on how to categorize content as definite, possible, or suspected.

## 11. China's Data Standardization System

### # Data

On October 8, 2024, six key Chinese authorities, namely the National Development and Reform Commission, the National Data Bureau, 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 *National Data Standard System Construction Guidelines* (hereafter referred to as the Guidelines). The Guidelines align with China's broader ambition to unlock the economic and strategic value of data, as articulated in the *Opinions on Building Basic Systems for Data to Better Give Full Play to the Role of Data Resources* (known as the Twenty Data Measures). Establishing a cohesive data standardization framework is part of a series of recent initiatives by China, which includes forming the dedicated technical committee SAC/TC 609, creating a trusted data space, and soliciting public input on data-related terminology. The ultimate objective of these standards is to establish a consensus-based framework to support data circulation and utilization.

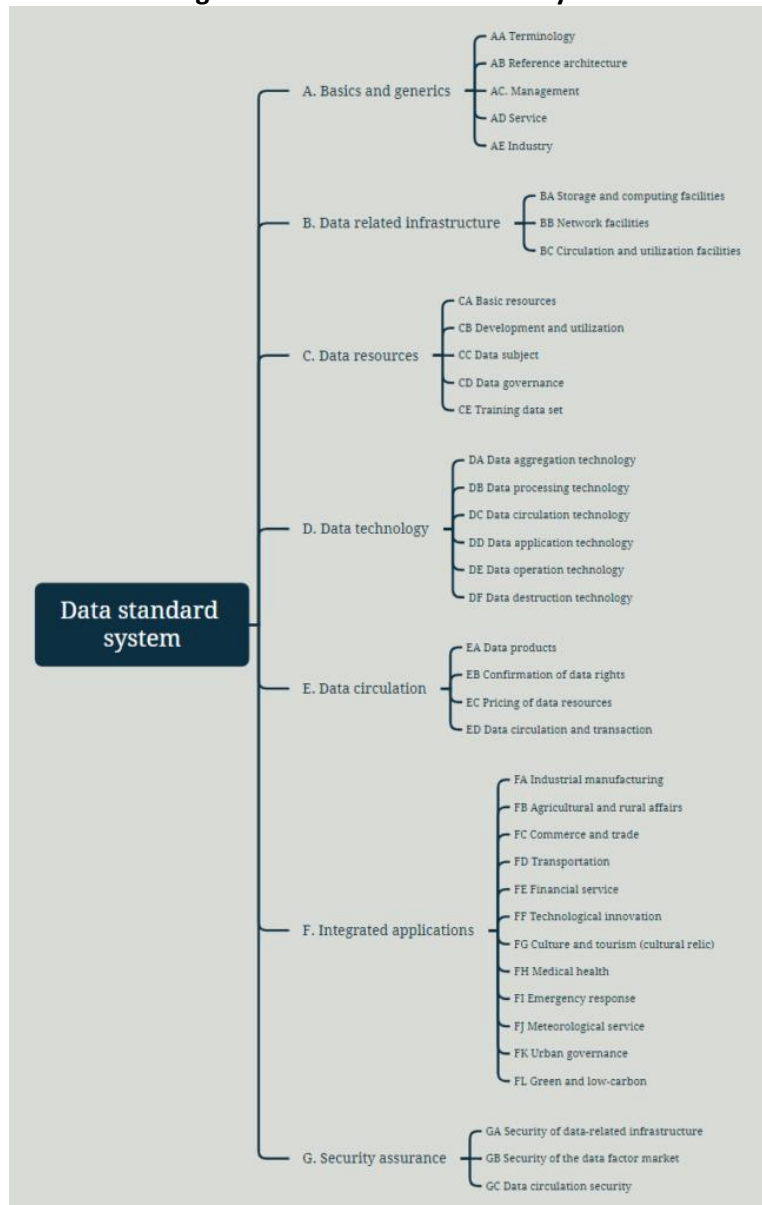
Over the past few years, China has made significant progress in data standardization, introducing more than 80 national standards covering foundational, technological, application, and security aspects of data. Despite these advancements, a gap persists between industry needs and the current standardization landscape, underscoring the need for a unified standardization system in the data sector. The newly proposed standard system follows a three-tiered structure, with the first two tiers illustrated in the accompanying figure. These tiers encompass areas like fundamentals and general requirements, data-related infrastructure, data resources, data technology, data

circulation, integrated applications, and security assurance.

The Guidelines outline a quantitative target: by the end of 2026, China aims to develop or revise over 30 national standards focused on areas such as data circulation and utilization infrastructure, data management, data services, training datasets, authorized public data operations, data rights confirmation, data resource valuation, and enterprise data exchange models. Additionally, a series of standard application demonstration cases will be developed, and a platform for standard verification and application services is planned. Across industries, China seeks to cultivate third-party standardization service providers capable of data management assessment, data evaluation, data service capability assessment, and evaluating authorized public data operations.

Looking forward, China will prioritize developing and revising standards, conducting pilot trials, demonstrating standard application, and fostering a skilled workforce in data standardization. Notably, China intends to continue enhancing its international engagement by participating actively in global standardization activities. For foreign stakeholders, this data standard system can serve as a practical tool to navigate and monitor China's evolving standardization landscape in the data sector.

**Figure: China's Data Standard System**



# 12. China's National Data Bureau Inception: Key Updates and Initiatives

## in October

#Data

October 2024 marked one year since China inaugurated the National Data Bureau (NDB), overseen by the National Development and Reform Commission (NDRC). The NDB focuses on building core data infrastructure, facilitating data integration and sharing, and advancing the digital economy and the "Digital China" strategy. Below is a summary of the NDB's key activities in October 2024, relevant for foreign stakeholders.

### Call for Comments: Interim Measures on Public Data Resource Registration

On October 12, 2024, the NDRC and the NDB jointly released the ***Interim Measures on Public Data Resource Registration (Draft for Comments)*** (hereinafter referred to as the Draft), inviting public feedback. Public data resources are defined as data generated by governmental agencies and public entities/enterprises during public service provision. These datasets are characterized by their large volume, public nature, and stringent security requirements. The Draft provides clarity on the critical questions of "who to register, what to register, and how to register" public data, detailing the registration's scope, requirements, and procedures.

The draft is a response to, the ***Opinions on Accelerating the Development and Utilization of Public Data Resources*** (the Opinions) issued on October 9, 2024, generating significant public interest. For the details, please see the 7th article of this newsletter, with the title of "New Policy Promotes the Use of Public Data". The Opinions underscore the necessity of data sharing frameworks to unlock the economic and societal value of public data. Through the implementation of a resource registration system, China aims to catalog public data comprehensively, enabling its authorized use while ensuring traceability. Non-authorized data can also be registered voluntarily to facilitate discovery of high-value data and support data-driven innovation. Public consultation on the draft ended on November 11, 2024.

### Call for Comments: Trusted Data Spaces Development Action Plan (2024-2028)

On October 18, 2024, the National Data Bureau released the ***Trusted Data Spaces Development Action Plan (2024 – 2028)*** for public comments. Trusted Data Spaces are infrastructures and ecosystems that enable

secure and regulated data sharing and utilization, based on consensus rules and multi-stakeholder participation. These spaces are critical for supporting China's unified data market and the digital economy.

The plan outlines three core capabilities for trusted data spaces: **(i) trusted governance of data, (ii) resource exchange mechanisms, and (iii) value creation from data**. To achieve these capabilities, China will focus on cultivating five primary types of trusted data spaces: corporate, sectoral, urban, individual, and cross-border. These spaces will ensure compliance and efficient data circulation, fostering data-driven applications and innovations. The plan, which was open for comments until October 27, 2024, also includes a glossary of terminology and the Trusted Data Space Development Guide (1.0 version).

### Call for Comments: Glossary of Data Terminology

On October 21, 2024, the National Data Bureau issued the Glossary of Data Terminology for public feedback. This glossary, which is open for comments until November 20, 2024, includes 41 terms aimed at standardizing language within China's data sector. Key terms include foundational concepts such as "raw data" and "data asset," major national initiatives like the "Eastern Data and Western Computing" project and "National Computing Power Network," and key data-related technologies like "blockchain," "privacy computing," and "federated learning."

### Establishment of the National Technical Committee on Data (SAC/TC609)

On October 28, 2024, China held the inaugural meeting of the National Technical Committee on Data (SAC/TC609) in Beijing. The technical committee includes 98 members representing a diverse array of organizations and will act as the primary body for developing data-related standards in China. SAC/TC609 will mirror several international standards bodies, including ISO/IEC JTC1/SC32 (Data management and interchange), ISO/IEC JTC1/SC42/WG2 (Data), ISO/IEC JTC1/WG11 (Smart Cities), and IEC/SyC Smart Cities (Electrotechnical aspects of Smart Cities).

The scope of SAC/TC609 includes foundational standards for data resources, technology, circulation,

smart cities, data infrastructure, and security in data utilization. The technical committee will play a pivotal role in harmonizing China's domestic standards with international norms, facilitating smoother data exchanges globally.

In conclusion, the National Data Bureau's recent initiatives highlight China's strategic efforts to build

robust data governance systems, enhance data sharing, and strengthen standardization. By introducing foundational policies, frameworks, and terminologies, China aims to foster a thriving data economy while advancing its position in the global digital infrastructure landscape. These efforts provide greater clarity for both domestic and international stakeholders, offering opportunities for engagement and collaboration in China's evolving data ecosystem.

# 13. China Releases National Recommended Standard on Security of Office Devices

# Office Devices

On September, 29, 2024, China officially released the national recommended standard *GB/T 29244-2024 Cybersecurity technology — Security specifications for office devices* (hereinafter referred to as the Standard). According to the Standard, an office device refers to the equipment with one or more functions such as printing, scanning, faxing, and copying. This Standard specifies the security function requirements, security assurance requirements, and evaluation methods for office devices. It applies to the procurement, testing and evaluation, maintenance and management, security design, delivery, and operation of office devices.

The initial draft of the standard, which had been previously circulated, included provisions that limited the participation of foreign suppliers in government procurement in China, introduced politically sensitive elements, and mandated the use of China's Trusted Cryptography Module (TCM). Consequently, the initial draft proposal raised significant concerns among overseas office device manufacturers. Following rounds of discussions and revisions, the revised draft of the Standard has become more feasible for foreign suppliers, with most discriminatory provisions removed. The following is a summary of the key adjustments addressing the initial concerns:

1. The provisions that would have excluded foreign office devices providers from government procurement have been removed.
2. Politically sensitive elements, such as the requirement stating that "third-party technologies supply disruption shall not occur due to political or diplomatic factors", have been deleted.
3. The application of TCM and compliance with

related standard GB/T 29829-2022 Information security technology — Functionality and interface specification of cryptographic support platform for trusted computing, has been made optional.

The first two concerns were addressed in the draft for comments released in 2023. Since then, therefore, subsequent discussions primarily focused on the necessity and feasibility of mandatory TCM application. At present, mainstream foreign IT manufacturers and standard organizations have established a technical specification system centered on the Trusted Platform Module (TPM). However, for security concerns, China established a trusted computing cryptography group in 2006, aiming to develop a trusted computing technology system with independent intellectual property rights. In December 2007, China issued the *Functionality and interface specification of cryptographic support platform for trusted computing*, the predecessor of GB/T 29829-2022. Since then, China's Trusted infrastructure Module has been defined as TCM. In 2023, foreign office devices suppliers opposed the mandatory compliance with GB/T 29829, arguing that it would impose excessive costs by requiring replacement of TPM with TCM in medium- and high-level office devices. As the final version of the Standard makes TCM application optional, this major concern has been addressed.

In a summary, the newly published standard *GB/T 29244-2024 Cybersecurity technology — Security specifications for office devices*, removed the negative clauses against overseas' manufacturers and therefore can be accepted and implemented without technical barriers to trade.

# 14. China Leads the IEEE Standard Development for Digital Product Passport

# DPP

On September 26, 2024, the IEEE Standards Association officially approved the project proposal for *IEEE SA P3828 Standard for Digital Product Passport - Reference Architecture and Technical Requirements*. This initiative, led by the China Academy of Information and Communications Technology (CAICT), aims to establish

a standardized global framework for digital product passports (DPPs). The project development will be overseen by Chi Cheng, chair of the standard's working group and a member of CAICT's Industrial Internet and Internet of Things Institute. To support the initiative, CAICT invited worldwide experts to contribute to the project; the channels for submitting feedback closed on

October 30, 2024.

The concept of DPP has gained significant traction, particularly within the European Union, where regulations such as the Ecodesign for Sustainable Products Regulation (ESPR) and the Battery Regulation mandate specific DPP requirements. These regulations emphasize product-specific, electronically accessible datasets that track the green, low-carbon lifecycle of products. However, from China's perspective, the lack of unified international standards for DPPs has hindered interoperability, presenting a challenge for stakeholders globally.

The IEEE SA P3828 standard, proposed by CAICT, therefore, aims to bridge this gap by providing comprehensive guidelines for developing robust and interoperable DPP systems worldwide. It claimed to focus on core technical specifications, including metrics, technical benchmarks, and management requirements. Key areas of the standard will encompass system

management, functionality, interconnectivity, as well as reliability and security. The standard is designed to serve as a foundational framework for various organizations, industries, and economic operators to develop efficient and trustworthy DPP systems.

China believes that the implementation of IEEE SA P3828 will enhance the transparency and sustainability of global supply chains. By offering a standardized, interoperable reference framework, the standard will facilitate the collection, management, and tracking of product information across a product's entire lifecycle, from design and production to transportation, usage, and recycling. This will ultimately promote resource efficiency while fostering the simultaneous advancement of digitalization and sustainability.

European stakeholders are encouraged to monitor the progress of IEEE SA P3828 and compare its development with the EU's parallel efforts in this area.

## 15. China Releases General Requirements for Vehicle Data

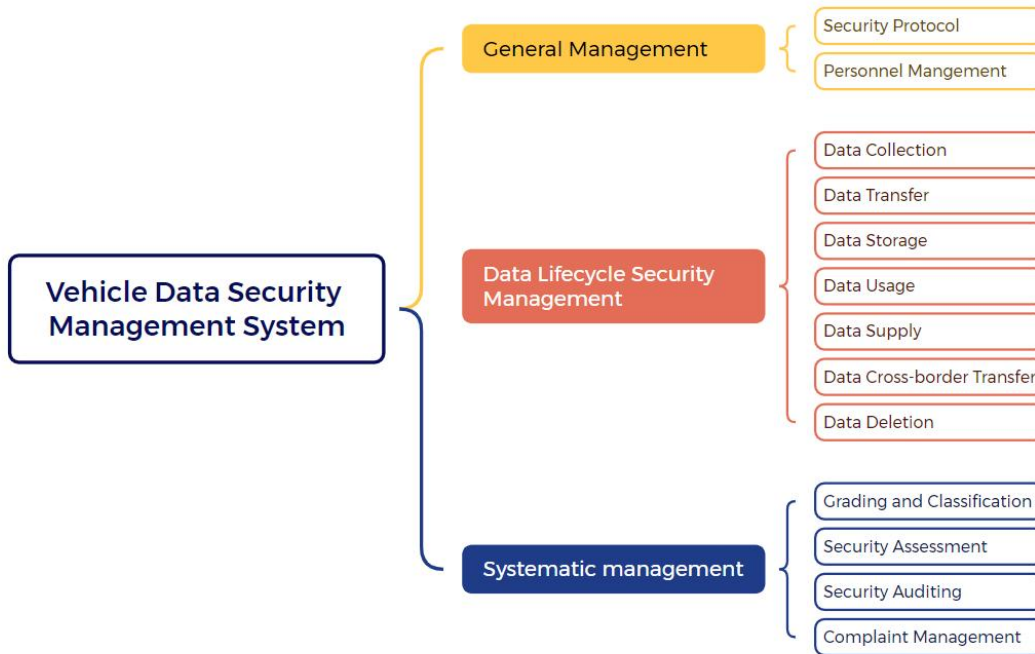
# Vehicle Data

On August 23, 2024, the National Technical Committee of Auto Standardization (SAC/TC114) released *GB/T 44464-2024 General Requirements of Vehicle Data* (hereinafter referred to as the General Requirements). This recommended national standard specifies the general requirements for data generated and collected during the research, design, and manufacturing of vehicles, including personal information protection, key data protection, audit assessment, experimental requirements, and corresponding test methods. The release of this standard aims to support data security and compliance for intelligent connected vehicles.

The General Requirements apply to vehicles with data processing functions and their data processors. The key requirements are summarized below:

### 1. Vehicle Data Security Management System

The General Requirements stipulate that data processors should establish a security management system for vehicle data (please see the figure below) and specifies the contents of this management system.



## 2. Personal Information Protection Requirements

Chapter 5 of the General Requirements outlines the general provisions for personal information protection, detailing specific requirements for obtaining individual consent, and the collection, storage, usage, transfer, and deletion of information. The primary goal is to minimize the impacts on individuals' rights and interests while ensuring that data processing activities are legally justified and reasonably necessary. Notably, direct cross-border transfer of personal information from vehicles is prohibited, except when such transfers result from user or driver actions, such as visiting foreign websites, using communication software to send information abroad, or downloading third-party applications that may transfer personal information abroad.

## 3. Key Data Protection Requirements

The General Requirements specify that, when handling key data, vehicles must set parameters for cameras, radar, and other equipment according to the precision needs of functional services. At least one function shall meet the highest precision standard, while other functions must be justified. Data storage, usage, and transfer must comply with *GB 44495-2024 Technical requirements for vehicle cybersecurity to prevent unauthorized access*. Deleted data must be

irrecoverable, and cross-border data transfers must strictly adhere to relevant legal requirements.

## 4. Audit, Assessment, and Testing Requirements

The standard mandates that data processors meet conformity assessment requirements and conduct personal data anonymization and key data processing tests according to Appendix B and D of the General Requirements. It also recommends performing anonymization error rate tests per Appendix C to further optimize data processing.

In conclusion, the *GB/T 44464-2024 General Requirements of Vehicle Data* provides a framework for addressing the key aspects of data security and compliance in intelligent connected vehicles. The standard outlines the necessary steps for establishing a vehicle data security management system, safeguarding personal information, and protecting key data. It also sets guidelines for data handling, storage, and transfer, ensuring that data processing activities align with legal requirements. Additionally, the standard includes provisions for audit, assessment, and testing to ensure adherence to the outlined requirements. This framework serves as a reference for stakeholders involved in vehicle data processing and management.



## Green Transition

### 16. China Releases Guidelines for Product Carbon Footprint Accounting

# Carbon Footprint Accounting

At the end of August, the State Administration for Market Regulation (SAMR) officially approved and released the *GB/T 24067-2024 Greenhouse Gas — Product Carbon Footprint—Quantification Requirements and Guidelines*, led by the Ministry of Ecology and Environment (MEE).

This standard is a foundational component of the *Implementation Plan for Establishing a Carbon Footprint Management System*, jointly issued by 15 ministries, and of the *Action Plan for Strengthening the Carbon Peak and Carbon Neutrality Standards and Measurement System (2024–2025)*. It provides guidance for various industries to develop specific product carbon footprint accounting standards. These standards will underpin China's product carbon footprint management system, supporting the country in achieving its carbon peak and carbon neutrality goals.

The GB/T 24067-2024 is an adaptation of the international standard ISO 14067 with modifications. On the one hand, it aligns with the internationally recognized lifecycle assessment standards (ISO 14040:2006 and ISO 14044:2006), specifying the scope,

principles, and methods for quantifying product carbon footprints. The standard outlines four stages in the quantification process: defining the goal and scope, lifecycle inventory analysis, lifecycle impact assessment, and interpreting the lifecycle results. On the other hand, the standard introduces a reference framework for developing specific product carbon footprint standards, and proposes methods for calculating product carbon footprints. It also covers requirements for validation reviews, product carbon footprint declarations, and the framework for specific product carbon footprint standards to guide and ensure effective implementation.

MEE will now collaborate with relevant departments to systematically promote the implementation and application of this standard. Following the principles of systematic advancement, prioritization based on urgency, and open collaboration, they will expedite the initiation and development of carbon footprint accounting standards for basic energy, upstream raw materials, and key export products with urgent needs, gradually enhancing the carbon footprint management standard system.

# 17. Major Changes Coming to the Mandatory Energy Efficiency Standard for Microcomputers

# Mandatory Energy Efficiency Standard

From September 14 to 28, 2024, the National Technical Committee for Energy Fundamentals and Management Standardization (SAC/TC20) solicited public comments on the mandatory national standard *Minimum Allowable Values of Energy Efficiency and Energy Grades for Microcomputers (Draft for Review)*.

The draft outlines energy efficiency grades, minimum energy performance standards, and testing methods for desktop microcomputers, all-in-one desktop microcomputers (referred to as all-in-one computers), and portable computers (collectively referred to as microcomputers). It applies to general-use microcomputers, but excludes the following types: a) Tablet computers, desktop/rack-mounted workstations, and microcomputers for industrial applications; b) Microcomputers with two or more independent display units; c) Microcomputers with a rated power supply output exceeding 500W; d) Portable computers and all-in-one computers with display screens smaller than 294.6 mm (11.6 inches).

This standard represents a significant revision of the 2012 version. Key changes include the explicit exclusion of tablet computers and a reduction in the maximum rated power supply output from 750W to 500W. The classification of microcomputers has also been updated: previously based on CPU cores, memory size, and GPU performance, the new classification now uses the product of the number of CPU cores and CPU clock frequency. Accordingly, the energy efficiency grade indicators for each category have been adjusted. In addition, the new standard revises the methods for calculating typical energy consumption and conducting testing methods for microcomputers.

Another notable difference from the previous version is the inclusion of a clear one-year transition period in the new standard. While it remains uncertain whether overseas manufacturers will face challenges in adapting, the defined transition period enhances transparency and provides clarity similar to technical regulations in Europe.

Next, TC20 will review the feedback received on the draft and prepare the final version for approval. Given the significant changes compared to the 2012 version, the new standard could have a substantial impact on overseas manufacturers and products. Therefore, it is important for relevant overseas stakeholders to closely follow the development of this standard and engage with TC20 to prepare for future regulatory challenges.

# 18. Mandatory Safety Standards for Lithium Batteries in Electronic and Electrical Equipment

# Lithium Battery

From September 19 to October 18, 2024, the Ministry of Industry and Information Technology (MIIT) sought public comments on a number of proposed mandatory national safety standards for lithium-ion batteries and battery packs used in electronic and electrical equipment. The proposed standards include:

- *GB 31241.1: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 1: General Requirements*
- *GB 31241.3: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 3: Electric Tools*
- *GB 31241.4: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 4: Toys*
- *GB 31241.5: Safety of Lithium-Ion Cells and Batteries Used in Electronic and Electrical Equipment - Part 5: Household Electric Appliances*

The Chinese government's *Opinions on Deepening Reform of the Management System for the Electronics and Electrical Equipment Industry*, issued in 2022, explicitly mandated that lithium-ion batteries and battery packs used in electronic and electrical products, as well as mobile power supplies, be included in the scope of the China Compulsory certification (CCC). To implement this policy, the State Administration for Market Regulation (SAMR)

incorporated lithium-ion batteries and battery packs used in portable electronic products into the CCC system in March 2023.

To promote compulsory certification of lithium-ion batteries and battery packs used in other electronic and electrical equipment and comply with the *Standardization Law of China* by streamlining mandatory standards, MIIT and the Standardization Administration of China (SAC) plan to integrate existing and upcoming safety standards for lithium-ion batteries and battery packs into a series of mandatory national standards. These include:

- *Part 1: GB 31241.1 (already proposed), covering common and general requirements.*
- *Part 2: A revision of the existing mandatory standard GB 31241-2022 Lithium-ion Cells and Batteries Used in Portable Electronic Equipment - Safety Technical Specification.*
- *Part 3: GB 31241.3 (already proposed), a conversion of the sector standard SJ/T 11808-2022 Lithium-ion Cells and Batteries Used in Electric Tools - Safety Technical Specifications.*
- *Part 4: GB 31241.4 (already proposed), a conversion of the sector standard SJ/T 11815-2022 Lithium-Ion Cells and Batteries Used in Toys - Safety Technical Specification.*
- *Part 5: GB 31241.5 (already proposed), a conversion of the sector standard SJ/T 11778-2021 Lithium-Ion Cells and Batteries Used in Portable Household Electrical Appliances - Safety Requirements.*
- *Part 6: A future plan to convert SJ/T 11796-2022 General Specification for Lithium-Ion Cells and Batteries Used in Electronic Cigarettes into a mandatory national standard, pending SAC approval.*

Following the public comment period, these standards are expected to move swiftly into the formal drafting phase. As they will set the minimum requirements for products entering the Chinese market, overseas stakeholders are encouraged to actively monitor the progress of these standards and provide feedback to mitigate future compliance risks.

## 19. China Seeks Comments for Green Product Certification Management

### # Green Product

On October 9, 2024, the State Administration for Market Regulation of China (SAMR) released a draft of the *Administrative Measures for Green Product Certification and Labeling Management Measures* (hereinafter referred to as the Draft for Comments) to solicit public opinions. The deadline for submitting opinions is October 23, 2024.

In May 2019, SAMR issued the *Administrative Measures for the Use of the Green Product Labeling* (hereinafter referred to as "the Administrative Measures"), which have been in effect since June 1, 2019. As of now, China has nearly 100 institutions accredited for green product certification, issuing a total of over 30,000 valid certificates. However, with the continuous advancement of the economy and related sectors, the current Administrative Measures cannot meet the needs of green product certification activities and the unified use of green product identification. Therefore, SAMR decided to revise them.

Specifically, the purposes of revising the Administrative Measures are:

- To support a series of recent national green transition requirements, including but not limited to the Action Plan for Carbon Peak before 2030 (issued by the State Council in October 2021) and the Opinions on Deepening the Reform of the Electronic and Electrical Sector Management System (issued by the State Council in September 2022).
- To establish and implement a unified green product certification and labeling system in China.

The Draft comprises a total of 7 chapters and 45 articles, stipulating the management procedures for the green product certification and identification system. It also standardizes the management process, clarifies the responsibilities of each regulatory body in various aspects of the certification system, such as certification implementation, certificates, green product labeling, supervision, and management. Additionally, it outlines the legal

responsibilities that each participant should bear in violation of the Administrative Measures.

The Draft defines specific classifications for green product certification:

- Full green product certification: refers to the conformity assessment conducted by a certification body to determine whether a product meets all required green attributes.
- Itemized green product certification: refers to the conformity assessment conducted by a certification body to determine whether a product meets some of the required green attributes.

Other key elements include:

- Standardizing the green product label: it lists the basic label pattern for green product certification and three label patterns under different conformity assessment methods, including those for full green product certification, itemized green product certification, and green product self-declaration.
- Effective monitoring for potential greenwashing: it requires that certification bodies shall, in accordance with the provisions of the certification implementation rules, adopt an appropriate and reasonable manner and frequency to implement effective post-certification supervision on certified products and their manufacturers to ensure that the certified products continue to meet the certification requirements. For certified products and their manufacturers that cannot continue to meet the certification requirements, the certification body shall, according to the relevant circumstances and the provisions of the certification implementation rules, suspend or revoke the certification and announce it to the public.
- Punishment scenarios: acts such as forgery, alteration, fraudulent use, trading, and transfer of green product certification certificates, green product labels, and other illegal activities in certification shall be punished in accordance with relevant laws and regulations.

## 20. China Publishes PV Standard System

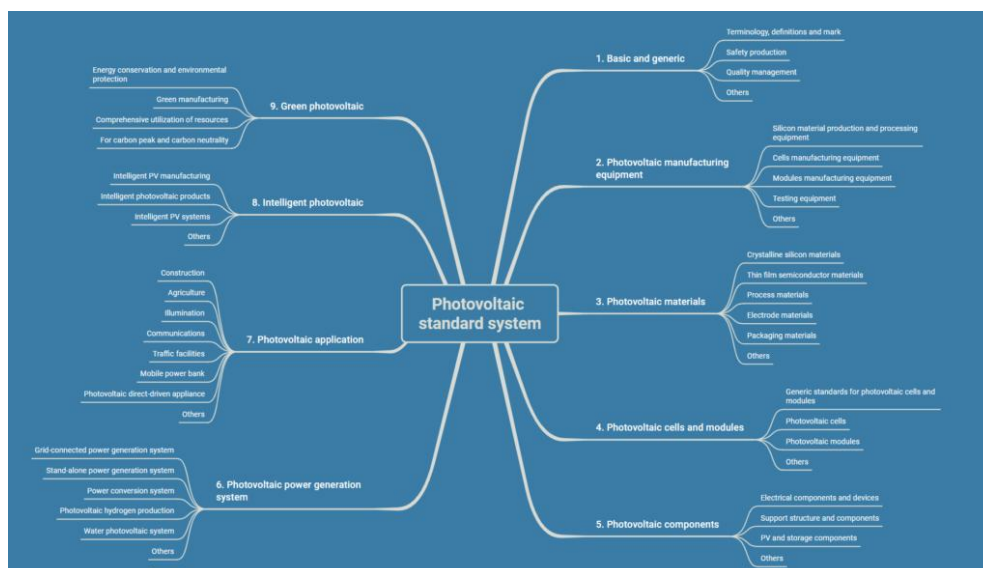
### # PV

On September 25, 2024, the Ministry of Industry and Information Technology of China (MIIT) provided further clarification on the *Guidelines for the Construction of the Standard System of the Photovoltaic Industry* (hereinafter referred to as "the Guidelines"), which is a key standardization document for the photovoltaic (PV) sector.

The Guidelines serve as an important supporting document for the Implementation Plan for the Leading Engineering of Standardization in New Industries (2023-2035), which was issued in August 2024. A public consultation round was held in December 2023 regarding a draft titled the Comprehensive Technical Standardization System for the Solar Photovoltaic Industry (hereinafter referred to as "the Draft").

The Guidelines consist of five chapters covering the following main contents:

- **Objective:** Promote the high-end, intelligent, green, and integrated development of the photovoltaic industry. Strengthen the top-level design of standards; enhance the coordination of standards across the entire industry chain; increase the supply of advanced standards; improve the effectiveness of standard implementation; and promote the internationalization of standards to drive the high-quality development of the photovoltaic industry.
- **General goals:** By 2026, the linkage between standards and industrial scientific and technological innovation will continue to improve. More than 60 new national and sector-specific standards will be developed to achieve complete coverage of basic general standards and key standards in the photovoltaic industry. Social groups will be encouraged to develop advanced association standards. Chinese enterprises and institutions will be supported in participating in the formulation of over 20 international standards, promoting the globalization of the photovoltaic sector.
- **Framework and key fields for constructing the standard system:**



- **Implementation support:** Standardization research institutes are encouraged to cultivate and attract high-level talent and enhance professional training. Sector associations and standardization technical organizations are urged to guide and assist enterprises in meeting the standard system requirements in areas such as R&D, design, production, management, and testing.

In comparison to the Draft released at the end of 2023, the Guidelines adjust the overall objective to a longer timeframe (extending from 2025 to 2026) and set a higher quantitative target (increasing the total planned standards from 40 to 60). The finalized Guidelines also revise the framework of the standard system and the specific content under each category outlined in the accompanying diagram.

## 21. China Initiates Product Carbon Footprint Certification Pilot Program

### # Carbon Footprint Certification

On September 9, 2024, the State Administration for Market Regulation (SAMR), the Ministry of Ecology and Environment (MEE), the National Development and Reform Commission (NDRC), and the Ministry of Industry and Information Technology (MIIT) jointly issued the *Notice on Launching a Pilot Program for Product Carbon Footprint Labeling Certification*. The notice outlines a pilot program aimed at implementing product carbon footprint labeling certification in qualified regions and mature industries.

The primary goal of this pilot is to develop a unified, reliable system for product carbon footprint labeling and certification, which draws on practical experience while ensuring data security. It aims to establish replicable and scalable best practices, supporting carbon peaking and carbon neutrality goals, and fostering a comprehensive green transformation of economic and social development.

The pilot will focus on products which have high market demand, face strong foreign trade exposure, contribute significantly to emission reduction, have robust data collection capabilities, and show clear impacts across the supply chain. Specifically, targeted products include lithium batteries, photovoltaic products, steel, textiles, electronics, tires, cement, electrolytic aluminum, urea, phosphate fertilizers, and wood products.

The pilot program's main tasks are as follows:

- **Establishing a Working Framework:** Develop a comprehensive working mechanism for product carbon footprint labeling certification, clarifying objectives, tasks, measures, responsible entities, and timeline to ensure a smooth process.
- **Improving Data Quality:** Define data collection methods and quality control measures, enhance the application of carbon measurement in quantifying product carbon footprints, and improve the reliability and timeliness of

data. Companies will be guided in building skills for measuring, monitoring, and calculating product carbon footprint data.

- **Ensuring Data Security:** In line with relevant data security regulations, improve product carbon footprint data security levels, strengthen the management of product carbon footprint data flows in key foreign trade industries, and ensure a secure and reliable data exchange environment.
- **Enhancing Management Capabilities:** Improve pilot enterprises' capabilities in managing product carbon footprints, by benchmarking against international and domestic standards, identifying areas of improvement in production and distribution, strengthening energy-saving and carbon reduction management, and encouraging upstream and downstream companies to enhance carbon footprint management. The aim is to facilitate an overall green, low-carbon transition of the supply chain.
- **Strengthening Quality Control:** Provide continuous guidance to certified enterprises to maintain the credibility of certifications, strictly combating any fraudulent carbon footprint labeling, and publicly disclosing administrative penalties and other relevant information through the National Enterprise Credit Information Publicity System.
- **Innovating Policy Mechanisms:** Implement policies suited to the pilot industries, encourage green finance by using product carbon footprint certification results as criteria, promote international recognition of product carbon footprint labels, and integrate product carbon footprint certification efforts within broader carbon neutrality and environmental initiatives, such as the "Beautiful China" initiative.
- **Enhancing Evaluation of Outcomes:** Develop scientific evaluation methods based on the pilot program's implementation, conduct multidimensional assessments of its effectiveness—including quality, economic, social, and ecological benefits—and summarize successful practices to provide useful references for future work.
- **Expanding Application Scenarios:** Expand government procurement of low-carbon-footprint products, promote the application of product carbon footprint labeling in consumer goods, use media to enhance public awareness, encourage companies to actively display carbon labels, and motivate consumers to choose products with lower carbon footprints.

The document invites interested provincial-level market regulators to identify eligible pilot products and submit the "Product Carbon Footprint Labeling Certification Pilot Application Form" along with a work plan. SAMR, MEE, NDRC, and MIIT will conduct technical evaluations of the application materials and announce the selected pilot products.

Following the document's release, the National Certification and Accreditation Administration (CNCA) began selecting institutions to participate in the product carbon footprint labeling certification pilot. Applicants must meet certain criteria, including: i) having at least ten full-time certification personnel with expertise in the field, ii) completion of at least 50 product carbon footprint evaluation projects, and iii) experience in national or provincial-level research projects or in developing national or sector standards related to product carbon footprint accounting.

As the EU begins to require, in some regulations (such as the Battery Regulation), product carbon footprints as market entry requirements, China is accelerating the construction of its own product carbon footprint certification system. It is expected that these certification systems, once mature, could become essential for market entry. Currently, China has already initiated the development of multiple national standards for product carbon footprints across industries such as electronics, furniture, plastics, synthetic fibers, lighting, internal combustion engines, and electric vehicle charging equipment. These standards are likely to be referenced in future carbon footprint certification systems. Therefore, it is recommended that EU companies actively monitor and participate in the development of these standards to stay informed about China's product carbon footprint accounting rules, and prepare for future certification.

## 22. China Issues Working Plan to Enhance Carbon Emission Accounting System

# Accounting System

On October 8, 2024, the National Development and Reform Commission (NDRC), the Ministry of Ecology and Environment (MEE), along with six other national ministries, jointly released the *Work Plan for Improving the Statistical Accounting System for Carbon Emissions* (hereinafter referred to as the Working Plan). In recent years,

China has ramped up efforts to issue high-level plans and policy documents aimed at driving green transitions and carbon reduction. Optimizing the carbon emissions accounting system is a core aspect of achieving these goals and has been emphasized in various national policies. The newly issued Working Plan further allocates specific tasks to realize the objectives outlined in these foundational policies.

The Working Plan aims to boost the quality and timeliness of carbon emissions data, supporting the 15th Five-Year Plan in managing carbon emissions dual control and expediting a green development transformation. The Working Plan outlines two key phases:

- By 2025. The focus will be placed on consolidating the carbon emission data base, comprehensively improve all aspects of carbon emission accounting system of regions, sectors, enterprises and products.
- From 2026 to 2030. The focus will be placed on comprehensively improving the level of carbon emission accounting capacity, constructing and completing a systematic carbon emission statistical accounting mechanism and all relevant aspects.

The Working Plan identifies several primary missions, including local carbon assessment, industrial carbon management, enterprise carbon management, project-level carbon evaluation, and product carbon footprint analysis. These initiatives aim to strengthen accounting systems and standards across regional, industrial, enterprise, project, and product levels. In the next steps, the NDRC will lead the implementation of the Working Plan, coordinating among stakeholders, guiding regional-level implementation plans, and ensuring relevant departments contribute effectively to the mission's goals. This coordinated approach aims to support China's transition towards green development and sustainable carbon management.

## 23. China's Actions in Traction Battery Standardization

### # Traction Battery

On October 24, 2024, China's State Administration for Market Regulation (SAMR) unveiled its response to a proposal from a National People's Congress delegate on promoting the development of the traction battery recycling industry. The response highlights China's standardization efforts and plans for the future, and specifically the commitment of SAMR and the National Standardization Administration (SAC) of advancing standardization in support of the industry. The following text is the translation of the response.

#### Standardization statistics in China

Currently, nearly 30 national and sector standards have been issued, covering various aspects of traction batteries, including safety, electrical performance, durability, interchangeability, and recycling.

#### Development of recycling standards

SAMR has approved and issued a series of national standards, including

- *GB/T 38698 Recovery of traction battery used in electric vehicles—Management specification*
- *GB/T 34015 Recovery of traction battery used in electric vehicles—Echelon use, and*
- *GB/T 33598 Recovery of traction battery used in electric vehicles—Recycling.*

These standards establish a comprehensive technical framework for the recycling of traction batteries, covering various application scenarios such as recycling management, echelon utilization, and recovery. More specifically, the standards provide guidelines for constructing recycling networks, setting requirements for echelon utilization, testing residual energy, and establishing disassembly protocols to support responsible recycling, echelon utilization, and recovery of retired traction batteries.

#### Research on carbon footprint standards

In collaboration with the National Development and Reform Commission, the Ministry of Industry and Information Technology, and the Ministry of Ecology and Environment, SAMR and SAC have issued the ***Guidelines for Carbon Peaking and Carbon Neutrality Standards System Construction***. This document outlines the framework for achieving carbon peaking and neutrality, identifying priority areas for standardization. A national general group has been

established to guide the development, application, and internationalization of standards in these areas. Additionally, technical organizations under the group's guidance are conducting preliminary research on carbon footprint standards for traction batteries to support carbon peaking and neutrality goals.

### **Next steps**

SAMR and SAC will work with the Ministry of Industry and Information Technology and the National Energy Administration to accelerate the development and implementation of standards for traction batter recycling, carbon footprint assessment, and recovery materials. The specific focus will include:

- Recycling of traction battery for vehicles: Developing standards to guide the design of new batteries for echelon utilization and conducting preliminary research on safety requirements for traction batter recycling, in-use battery testing, and echelon utilization.
- Carbon footprint: Strengthening the formulation and revision of national standards for the carbon footprint of traction batteries.
- Development of the Measures for Administration of Recycling and Utilization of New Energy Vehicle Traction Batteries.



## Others

# 24. Landscape of Standard Essential Patents in China

# SEP

On September 27, 2024, the China National Institute of Standardization (CNIS) released the *Development Report on Standard Essential Patents 2024* (hereinafter referred to as the Report). The Report outlines the rule-based framework and practices surrounding standard essential patent (SEPs) in major international organizations (e.g., WIPO, ISO, IEC and ITU) and key economies (Europe, China, the US, UK, Japan, and South Korea). To assist foreign stakeholders in understanding the SEP landscape in China, SESEC has summarized the information in the Report as follows.

### Statistics of SEPs in China

**Government-issued standards:** The incorporation of patents is relatively uncommon in China's government-issued standards, including national, sector, and local standards. As of December 31, 2023, China had 44,499 national standards (comprising mandatory standards, recommended standards, and guiding documents); among these, only 144 (0.32%) involved patents, covering 661 patents in total. Among these, 464 are inventions (70.2%), 19 are utility models (2.87%), and 95 are in the process of patent application (14.37%); 83 lack specific patent information.

**Market-driven standards:** Market-driven standards in China mainly consist of association and enterprise standards. According to the National Association Standards Information Platform, as of December 31, 2023, a total of 8,445 organizations were registered as association standard development organizations; these had published a total of 74,240 association standards, of which 4,409 (approximately 6% of the total) involved patents. Furthermore, 938 of these association standard development organizations developed association standards that included patents, representing 11% of all group standards developers.

### Rule-based framework for disclosure and licensing commitment

In June 2023, China's State Administration for Market Regulation (SAMR) released the Draft Anti-Monopoly Guidelines on Standard Essential Patents (SEPs) (hereinafter referred to as the Draft), soliciting public feedback. Articles 5 and 6 of the Draft address SEP information disclosure and licensing commitments.

Once implemented, these Draft will complement existing frameworks, including: the *Interim Provisions on National Standards Involving Patents, GB/T 20003.1-2014 Special procedures for the development of standards—Part 1: Standard related to patents*, and *GB/T 1.1-2020 Directives for standardization—Part 1: Rules for the structure and drafting of standardizing documents*.

Additionally, *GB/Z 43194-2023 Disposal guidelines for patents related to association standards* (effective since September 2023) further clarifies patent information disclosure for association standards in alignment with the *Management Regulations for Association Standards, GB/T 20004.1-2016 Social organization standardization—Part 1: Guidelines for good practice*, and *GB/T 20004.2-2018 Social organization standardization—Part 2: Guidelines for evaluation of good practice*.

### Regulations and practical guidelines for licensing negotiations

**Government Regulations:** Article 7 of the Draft introduces China's framework for SEP licensing negotiations, emphasizing good-faith negotiation as a cornerstone of fair, reasonable, and non-discriminatory (FRAND) principles. The guidelines propose a structured four-step process to guide SEP holders and implementers during licensing negotiations.

**Practical guidelines:** In addition to these government regulations, industry-led initiatives are shaping licensing practices. Of particular relevance, in September 2022, the China Automotive Technology and Research Center and the China Academy of Information and Communications Technology jointly released the *Automotive Standard Essential Patent Licensing Guide*, providing useful tips and principles for automotive-specific SEP licensing. Furthermore, in April 2024, under the guidance of the Beijing Municipal Intellectual Property Office, the *Operating Guidelines for Standard Essential Patent Licensing* were published, providing a comprehensive framework for SEP licensing principles, negotiation steps, and determination of royalty rates.

### **Legal basis for dispute resolution**

China's *Patent Law*, *Anti-Monopoly Law*, and *Standardization Law* serve as the legal foundations for addressing disputes related to SEP infringement, monopoly practices, and other conflicts. Key articles in these laws guide judicial and administrative bodies in resolving such cases.

By establishing clear guidelines for good-faith negotiations and FRAND-based licensing, China aims to balance the protection of patent rights with accessibility, benefiting both SEP holders and implementers. This structured framework provides foreign stakeholders with critical insights into SEP management in China, encouraging informed participation in the country's evolving standards environment.

**Annex 1 - Landscape of Key Chinese Stakeholders in the Field of Standardization**

**Annex 2 - China Standardization strategy - 3 Years Implementation**

## Introduction of SESEC Project



The Seconded European Standardisation Expert in China (SESEC) is a visibility project co-financed by the European Commission (EC), the European Free Trade Association (EFTA) secretariat and the three European Standardisation Organizations (CEN, CENELEC and ETSI). Since 2006, there has been four SESEC projects in China, SESEC I (2006-2009), SESEC II (2009- 2012), SESEC III (2014-2017), SESEC IV (2018- 2022) and SESEC V (2022-2025). Dr. Betty XU is nominated as the SESEC expert and will spend the next 36 months on promoting EU-China standardisation information exchange and EU-China standardisation cooperation.

The SESEC project supports the strategic objectives of the European Union, EFTA and the European Standardisation Organizations (ESOs). The purpose of SESEC project is to:

- Promote European and international standards in China;

- Improve contacts with different levels of the Chinese administration, industry and standardisation bodies;
- Improve the visibility and understanding of the European Standardisation System (ESS) in China;
- Gather regulatory and standardisation intelligence.

The following areas have been identified as sectorial project priorities by the SESEC project partners: Internet of Things (IoT) & Machine-to-Machine(M2M) communication, communication networks & services, cybersecurity & digital identity, Smart Cities (including transport, power grids & metering), electrical & electronic products, general product safety, medical devices, cosmetics, energy management & environmental protection (including eco-design & labeling, as well as environmental performance of buildings).

### SESEC V China Standardisation and Technical Regulation Bimonthly Newsletter

SESEC V China Standardisation and Technical Regulation Bimonthly Newsletter is the gathering of China regulatory and standardisation intelligence. Most information of the Monthly Newsletter was summarized from China news media or websites. Some of them were the first-hand information from TC meetings, forums/workshops, or meetings/dialogues with China government authorities in certain areas.

### In this Bimonthly Newsletter

In this Bimonthly Newsletter, some news articles were abstracted from Chinese government organizations. All new published standards, implementation or management regulations and notice are summarized; original document and English version are available.

## Abbreviations

<b>SAMR</b>	State Administration for Market Regulation	国家市场监管总局
<b>CAS</b>	China Association	中国标准化协会
<b>CCC</b>	China Compulsory Certification	中国强制认证
<b>CCSA</b>	China Communication Standardization Association	中国通信标准化协会
<b>CEC</b>	China Electricity Council	中国电力企业联合会
<b>CEEIA</b>	China Electrical Equipment Industrial Association	中国电器工业协会
<b>CELC</b>	China Energy Labeling Center	中国能效标识中心
<b>CESI</b>	China Electronic Standardization Institute	中国电子标准化研究所
<b>CMDSA</b>	Center for Medical Device Standardization Administration	医疗器械标准管理中心
<b>CNCA</b>	Certification and Accreditation Administration of China	中国国家认证认可监督管理委员会
<b>CNIS</b>	China National Institute of Standardization	中国国家标准化研究院
<b>CNREC</b>	China National Renewable Energy Center	中国国家可再生能源中心
<b>EPPEI</b>	Electric Power Planning and Engineering Institute	电力规划设计总院
<b>IEC</b>	International Electrotechnical Commission	国际电工委员会
<b>ITEI</b>	Instrumentation Technology and Economy Institute	机械工业仪器仪表综合技术与经济研究所
<b>MEE</b>	Ministry of Ecology and Environment	中国生态环境部
<b>MIIT</b>	Ministry of Industry and Information Technology of People's Republic of China	中国工业和信息化部
<b>MoH</b>	Ministry of Health	卫生部
<b>MoHURD</b>	Ministry of Housing and Urban-Rural Development	住房与建设部
<b>MOT</b>	Ministry of Transport	中国交通运输部
<b>MOST</b>	Ministry of Science and Technology	中国科学技术部
<b>NDRC</b>	National development and reform commission People's Republic of China	中国国家发改委
<b>NIFDC</b>	National Institute of Food and Drug Control	中国食品药品检定研究院
<b>SAC</b>	Standardization Administration of China	国家标准化管理委员
<b>SGCC</b>	State Grid Corporation of China	国家电网
<b>TC</b>	Technical Committee for Standard Development	标准化技术委员会