



SESEC VI

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Takeaways

SESEC Attends Sino-German Standardization Commission Meeting

On The 13th Annual Meeting of the Sino-German Standardization Cooperation Commission (SGSCC/DCKN) was successfully held in November 2025 in Qingdao, China, bringing together senior representatives and experts from standardization authorities, government bodies, technical organizations, industry associations and research institutes from both China and Germany. A total of 130 specialists participated in the meeting, including 53 delegates from Germany and 77 from China, demonstrating the strong commitment of both sides to advancing their long-standing partnership in standardization. SESEC was invited to attend the meeting, reflecting the project's recognised role in supporting international standardization dialogue and promoting closer cooperation between Europe and China.

Major Outcomes of China's International Standardization During 14th Five-Year Plan

On 4 November 2025, the Department of Standards Innovation and Management under the National Standardization Administration of China (SAC) released a press briefing summarizing China's international standardization achievements during the 14th Five-Year Plan (2020–2025). The data demonstrate China's expanding influence in global standard-setting, particularly across Africa and Southeast Asia. In this SESEC article, you will see six key outcomes from this period.

China Introduces Cybersecurity Labeling Scheme

On November 21, 2025, Cybersecurity Administration of China (CAC), together with the Ministry of Industry and Information Technology (MIIT), drafted a new China Cybersecurity Labeling Management Measures (hereafter referred to as the Measure), which aims to enhance the cybersecurity resilience of internet-connected products and safeguarding consumer rights. The Measure was released for public comments until December 6, 2025. According to the Measure, China Cybersecurity Label (CCL) means an information label that reflects the cybersecurity capability level of the product itself, applying to products with internet connectivity functions and subject to a catalog-based management system for specific products.

China Published Standards Development Framework for Low-Altitude Economy

On 28 November 2025, the 2025 Low-Altitude Equipment Industry Innovation and Development Conference was held in Ordos, Inner Mongolia. At the main forum of the conference, the China Electronics Standardization Institute (CESI) officially released the ***Development Framework for the Standard System of the Low-Altitude Equipment Industry (2025)*** (hereinafter referred to as the "Standard System Framework").

China Issued Plan for Digital Transformation of Automotive Industry

On December 29, 2025, the Ministry of Industry and Information Technology, the Ministry of Education, the State Administration for Market Regulation, and the National Data Administration jointly released the *Implementation Plan for the Digital Transformation of the Automotive Industry* (hereinafter referred to as the Implementation Plan).

China Released Research Report on Intelligent Manufacturing Standardization (2025)

On November 27, 2025, the World Smart Manufacturing Conference was held in Nanjing. Xin Guobin, Vice Minister of the Ministry of Industry and Information Technology, attended the opening ceremony and delivered a keynote speech. During the conference, the *Research Report on Standardization Development of Intelligent Manufacturing (2025)* (hereinafter referred to as the Research Report) was officially released. The report was led by the China Electronics Standardization Institute (CESI), with participation from leading enterprises such as Huawei and multiple research institutes.

China Enforces a Stricter EV Energy Consumption Standards from 2025

On January 1, 2026, China's landmark mandatory national standard for electric vehicle (EV) energy consumption comes into force. The standard, titled ***GB 36980.1 – 2025 Energy consumption limits for electric vehicles – Part1: Passenger cars***, was published on May 30, 2025 by the State Administration for Market Regulation (SAMR) and the National Standardization Administration (SAC) to replace the 2018 recommended version (GB/T 36980-2018) and

introduce stricter requirements. It aims to stimulate advancements in EV energy-saving technology, elevate overall vehicle efficiency, and phase out high-consumption models. This is how it will provide critical support for the industry's carbon peaking goals and align with national initiatives to promote vehicle trade-ins and foster high-quality development within the new energy vehicle (NEV) industry.

Mandatory Carbon Footprint Reporting for Traction Batteries in China Takes Effect

On December 31, 2025, the General Office of the Ministry of Industry and Information Technology (MIIT) released the *Notice on Carrying out Carbon Footprint Reporting for Automotive Traction Batteries* (hereafter "the Notice"). The Notice mandates carbon footprint reporting for all automotive traction batteries with a rated energy exceeding 2 kilowatt-hours (kWh) sold in the Chinese market, effective immediately upon the Notice's issuance. The **pilot phase (from notice release to December 31, 2026)** requires traction battery pack manufacturers to report carbon footprints for at least five typical models covering all chemical systems, supported by third-party verification reports. **Beginning January 1, 2027, normalized management** mandates carbon footprint accounting and third-party verification for all covered battery packs.

RISC-V Conference Highlights China's Push for Global Open Source Chip Leadership

On November 24, 2025, the **2025 RISC-V Industry Development Conference and RDSA International Summit** (hereafter referred to as the Conference) was held in Zhuhai, Guangdong, drawing nearly a thousand scientists, academicians, and industry leaders from across the world. The Conference was jointly hosted by institutions such as the RISC-V Ecosystem and Industry Committee under China Electronics Standardization Association (CESA) and RDSA Industry Alliance. Under the theme "Building Standards Together, Connecting Ecosystems," the Conference served as a pivotal platform for in-depth discussions on technological breakthroughs, ecosystem collaboration, and application deployment for RISC-V.



SESEC Activity

1. SESEC Attends Sino-German Standardization Commission Meeting #Standardization Cooperation

The 13th Annual Meeting of the Sino-German Standardization Cooperation Commission (SGSCC/DCKN) was successfully held in November 2025 in Qingdao, China, bringing together senior representatives and experts from standardization authorities, government bodies, technical organizations, industry associations and research institutes from both China and Germany. A total of 130 specialists participated in the meeting, including 53 delegates from Germany and 77 from China, demonstrating the strong commitment of both sides to advancing their long-standing partnership in standardization. SESEC was invited to attend the meeting, reflecting the project's recognised role in supporting international standardization dialogue and promoting closer cooperation between Europe and China.

The 2025 meeting took place against a special backdrop, as Germany celebrated 50 years of German standardization policy earlier in the year. This milestone highlighted the maturity of Germany's standardization system and underscored the depth and continuity of Sino-German cooperation, which has become one of the most stable and trusted bilateral partnerships in the global standardization landscape.

The plenary session opened with high-level remarks from both sides, reaffirming the strategic importance of standards in supporting innovation, industrial competitiveness, market access, and sustainable development.

A central topic of the meeting was the Digital Product Passport (DPP). During in-depth political and technical exchanges, the Chinese delegation expressed its fundamental support for the newly planned Joint Technical Committee (JTC) at ISO/IEC level dedicated to DPP. This sent a strong signal of shared ambition to advance DPP as an international standardization topic, supporting transparency, circular economy objectives, and sustainable supply chains.

Concrete progress was also reported in electromobility and battery recycling. The Sub-Working Group on Electromobility discussed charging technologies, bidirectional charging, communication, and safety. Updates were provided on "Boost Mode" discussions and on efforts to transfer ISO 21498 into a Chinese GB/T standard. A particularly notable outcome was the presentation of a newly jointly developed standard for battery discharge, aimed at significantly improving battery recyclability and supporting circular economy practices.

Within the Industry 4.0 Sub-Working Group, the seven Technical Expert Groups reported substantial progress, including the publication of three new Sino-German white papers on functional safety, industrial network communication (NetCom), and IT security for industrial applications. Future priorities will place stronger emphasis on industrial data spaces and industrial data.

The meeting also explored forward-looking topics such as the vision of an "All Electric Society" and the digitalization of Quality Infrastructure (QI), with a focus on modernizing conformity assessment, testing, and certification through digital solutions.

SESEC's participation aligns with its mission to support EU-China and international standardization cooperation, promote the European Standardization System, and facilitate technical exchanges in strategic areas. Concluding the meeting, both China and Germany reaffirmed their commitment to deepening cooperation, strengthening coordination in ISO and IEC, and jointly shaping the future of international standardization.



Horizontal Actions

2. Major Outcomes of China's International Standardization During 14th Five-Year Plan

#14th Five-Year Plan

On 4 November 2025, the Department of Standards Innovation and Management under the National Standardization Administration of China (SAC) released a press briefing summarizing China's international standardization achievements during the 14th Five-Year Plan (2020–2025). The data demonstrate China's expanding influence in global standard-setting, particularly across Africa and Southeast Asia. This article highlights six key outcomes from this period.

1. **Growing Leadership in International Standards Development:** China led the development of **1,079** international standards and promoted mutual recognition of over **500** standards with other countries during the 14th Five-Year Plan period (2020–2025), according to data from the State Administration for Market Regulation (SAMR).
2. **Wide Application of Chinese Standards in Overseas Projects:** Chinese standards have been widely applied in international infrastructure and agricultural projects. Notable examples include **eight major railway projects** such as the Jakarta-Bandung High-Speed Railway in Indonesia, a flagship Belt and Road initiative in Indonesia that extensively adopts Chinese technical standards with localized optimization. Under the China–Zambia Agricultural Standardization Cooperation Program, Zambian farmers increased marigold oil extraction rates by 15% using localized Chinese standards. More than 30 agricultural standards were jointly developed, significantly improving local agricultural productivity.
3. **Expanding Institutional Presence in International Standardization Bodies:** China has newly assumed **26 secretariats** in key fields such as high-end equipment and intelligent manufacturing, while Chinese experts now chair **30 more international technical committees** and convene **486 more working groups**. During the period, China submitted **880 new international standard proposals** and led the formulation of **532 international standards**, covering sectors including new energy vehicles, new power systems, and aerospace.
4. **Mutual Recognition Enhancing Trade Efficiency:** Mutual recognition of China's **GB/T 3287 Malleable Cast Iron Pipe Fittings** with **44 Belt and Road countries** has significantly boosted export efficiency to these markets.
5. **Strengthened SMEs' Participation:** In recent years, SAMR has actively promoted enterprise—especially SME—participation in international standardization. Through improved incentives, institutional support, and talent development, China aims to align international standardization with high-quality industrial growth.
6. **Leadership in Key Emerging Technology Standards:** Standardization has been crucial in supporting the internationalization of China's industries, particularly in photovoltaics, new energy vehicles, artificial intelligence, and robotics. China has led several international standards in emerging fields:
 - **IEC 62565-5-3:2025 Nanomanufacturing – Product specification – Part 5-3: Nano-enabled energy storage – Blank detail specification: silicon nanosized materials for the negative electrode of lithium-ion batteries.**
 - **IEC 63667-1 Carbon Footprint Product Category Rules for Photovoltaic Products – Part 1: Photovoltaic (PV) Modules.** (China's leadership in the first PV carbon footprint international standard)

In addition, China is leading international standardization in brain-computer interface technologies, including terminology and data format standards, and has developed the world's first international standard for eldercare robots, establishing key benchmarks for the industry.

China's international standardization strategy focuses on high-level institutional openness through four key channels: leveraging diplomatic and cooperation mechanisms such as the China–Russia Prime Ministers' Regular Meeting Commission; deepening national standardization agency cooperation via platforms like Shanghai Cooperation

Organization (SCO) and BRICS; advancing Belt and Road collaboration through 65 standardization cooperation agreements with 48 countries; and supporting standardization cooperation through free trade agreements.

Ms. Cao Lili from the China National Institute of Standardization (CNIS) highlighted that standard internationalization is central to institutional opening-up, connects domestic and global markets, and enhances China’s role in global governance. She outlined its three key dimensions: reducing technical trade barriers by aligning with international rules, deepening integration with partner economies to support value chains and the "dual circulation" strategy, and advancing a vision of shared global prosperity through consultation and cooperation.

Looking ahead to the 15th Five-Year Plan period, Chinese standards are expected to adopt a more open and inclusive approach—learning from global best practices, expanding institutional openness in standardization, accelerating the “soft connectivity” of rules and standards, and promoting mutually beneficial outcomes in international standardization cooperation.

Source: https://www.samr.gov.cn/bzcx/sjdt/gzdt/art/2025/art_ec15ada47725485f97b14842622d0316.html

3. China Introduces Cybersecurity Labeling Scheme

#China Cybersecurity Label

On November 21, 2025, Cybersecurity Administration of China (CAC), together with the Ministry of Industry and Information Technology (MIIT), drafted a new China Cybersecurity Labeling Management Measures (hereafter referred to as the Measure), which aims to enhance the cybersecurity resilience of internet-connected products and safeguarding consumer rights. The Measure was released for public comments until December 6, 2025. According to the Measure, China Cybersecurity Label (CCL) means an information label that reflects the cybersecurity capability level of the product itself, applying to products with internet connectivity functions and subject to a catalog-based management system for specific products.

Under the voluntary scheme, manufacturers of eligible products may apply for a CCL to indicate the device’s level of cybersecurity capability. The label will feature a star-based rating system:

- One star (Basic Level): Meets fundamental national standards, requiring the prohibition of weak/default passwords, vulnerability management, and regular software updates.
- Two stars (Enhanced Level): Reflects domestically advanced cybersecurity performance.
- Three stars (Leading Level): Represents internationally advanced capability, including resistance to high-level cyber-attacks through penetration testing.

A CCL will include key details including producer name, product model, cybersecurity level, validity period, testing lab name, standard/technical file number, and a QR code linking to test reports and compliance statements. The specific design of the label for each product category shall be defined in the corresponding implementation rules and may be appropriately adapted from the basic format according to the actual form of the product. The CCL basic format is shown below.



Manufacturers must conduct cybersecurity capability testing in accordance with implementation rules. Products

aiming for one- or two-star ratings may use in-house labs or accredited third-party testing agencies, while three-star products must undergo penetration testing by qualified third parties. According to the Measures, the China Electronics Standardization Institute (CESI) is tasked with setting up a Cybersecurity Label Filing Platform. After obtaining the necessary test reports, manufacturers will be required to submit their applications online through this platform.

CAC and MIIT will supervise labeling compliance. Violations – such as false claims, label misuse, or submission of fraudulent test reports – may lead to label revocation, public announcements, and a one-year ban from re-filing. Meanwhile, the accompanying draft catalog specifies the first product category to be covered: CSL 001 — 2025: Consumer Internet-Connected Cameras, which applies to devices purchased and used by individuals and families for audio-video capture and processing, excluding those used in public security fields. Notably, products already classified as critical network equipment or dedicated cybersecurity products under existing regulations will not be included in the labeling catalog. SESEC will keep monitoring the Measure’s final version.

Source: https://www.cac.gov.cn/2025-11/21/c_1765450099503494.htm.

4. English Translation of China’s Cybersecurity Labeling Management Measures (Draft for Comments)

#China Cybersecurity Label

On November 21, 2025, Cyberspace Administration of China (CAC), together with the Ministry of Industry and Information Technology (MIIT), released China’s Cybersecurity Labeling Management Measures (Draft for Comment) and the Catalogue of Products Subject to Cybersecurity Labeling (First Batch) (Draft for Comment).

The Measures establish a voluntary cybersecurity labeling system designed to enhance the security of internet-connected products and protect consumer rights and interests. Under this framework, products are graded (One-Star to Three-Star) based on their cybersecurity capabilities. Manufacturers participate by having their products tested, filing the results, and displaying the corresponding label. (More details can be found in our previous news coverage). The public comment phase for the draft Measures and the

accompanying Catalogue (First Batch) was closed on December 6, 2025.

To promote accurate international understanding of China’s latest cybersecurity regulatory policies and facilitate dialogue between industry and regulators worldwide, SESEC prepares and releases an English translation of the drafted Measures and the Catalogue (First Batch) on January 21, 2026. The translation covers all chapters of the Measures, including General Provisions, Label Implementation, Supervision and Administration, and Supplementary Provisions, as well as the Catalogue (First Batch).

Please note that the English translation of the Measures and the Catalogue (First Batch) are consolidated into a single document, as attached below.

[SESEC English Translation of China Cybersecurity Labeling Management Measures](#)

5. China Pushes for Unified National Market Regulation to Curb “Involutionary” Competition

#Unified National Market

From 10 to 11 December 2025, Chinese leadership announced plans to formulate a **Unified National Market Construction Regulation** in China’s annual Central Economic Work Conference, explicitly targeting the deepening rectification of “involutionary” competition, a term describing destructive, zero-sum rivalry within saturated markets across the economy.

This initiative represents a significant advancement in China’s multi-year strategy to dismantle local protectionist barriers and integrate its vast domestic market. It builds on a foundational policy document *Opinions on Accelerating the Construction of a Unified National Market* issued in April 2022 ([see our previous coverage](#)) and a series of subsequent rules on fair competition and market access such as *Regulation on*

Fair Competition Review, Opinions on Improving the Social Credit System, and Market Access Negative List (2025). The new Regulation is intended to provide a **stronger legal and institutional framework** to solidify these reforms.

Analysts frame the move as essential for shifting the economic growth model. “Involutionary” competition has become a major obstacle to building our “unified national market,” stated Jin Li, Vice President of the Southern University of Science and Technology. He explained that such competition traps enterprises in price wars and homogeneous marketing battles, draining resources that could be used for technological innovation and industrial upgrading.

Following the high-level policy announcement, concrete implementation steps were outlined by the National Development and Reform Commission (NDRC) in a late-December press conference. Li Chao, an NDRC spokesperson, described building the national unified market as both a **“tough battle and a protracted war,”** noting that its foundational framework has now been largely established. Moving forward, the NDRC will pursue a two-pronged approach to deepen reforms. On the **institutional** side, key priorities include **finalizing the aforementioned national market regulation**, publishing a specific negative list of local practices that

impede market unity, and introducing new guidelines to foster higher-quality investment promotion. Conversely, on the **enforcement** side, the focus will be on dismantling existing barriers, with a continued crackdown on issues like non-compliant local tax rebates and discriminatory practices in government tendering. To bolster these efforts, the NDRC will actively gather public reports on market obstruction and periodically publish typical cases, leveraging transparency and legal guarantee as key enforcement tools.

In conclusion, China’s unified national market strategy reshapes the landscape for foreign firms. Long-term, it promises fairer access, lower compliance costs, and competition based on innovation, not local protectionism. Short-term, firms must adapt swiftly to new national rules, as reliance on local advantages diminishes and competition with strengthened domestic rivals intensifies.

Source:

https://www.gov.cn/zhengce/202512/content_705099_1.htm

<https://finance.people.com.cn/n1/2025/1231/c1004-40636790.html>

6. China Held Second Plenary Meeting of ISO/IEC JTC1 in 2025

International Standardization

From 10 to 14 November 2025, the second plenary meeting of ISO/IEC JTC 1 in 2025 was held in Chengdu, China. More than 100 delegates from China, the United States, Canada, the United Kingdom, Australia, the Republic of Korea, France, Germany, Russia, Japan, and other countries attended the meeting. The Chinese delegation consisted of 29 experts from industry, academia, and research institutions, led by Fan Kefeng, Vice President of the China Electronics Standardization Institute (CESI).



During the plenary session, the Chinese delegation successfully fulfilled all its participation tasks. All accomplishments are listed below.

1. China promoted the establishment of JTC 1/AhG 11, the Ad Hoc Group on Neuromorphic Computing Systems, with Chinese expert Pan Gang serving as its convenor.
2. JTC 1 decided to publish 2 technology trend reports on Intelligent Unmanned Systems and Neuromorphic Computing Systems which are led by Chinese experts.
3. The revision project of the international standard *ISO/IEC 30145-3:2020 Information Technology – Smart City ICT Reference Framework – Part 3: Smart City Engineering Framework*, led by Chinese experts, was officially approved.
4. Chinese experts delivered reports in multiple capacities, including as Chair of JTC 1/SC 43 on Brain-Computer Interface, within JTC 1/WG 11 on Smart Cities,

within the Joint Working Group between JTC 1 and ISO/TC 268/SC 1 on Sustainable Development of Smart City Infrastructure, and as Convenor of JTC 1/AG 19 on the Coordination Advisory Group for Unmanned Aircraft Systems. At the same time, they also reported as liaison representatives to ISO/TC 20/SC 16 on Unmanned Aircraft Systems, JTC 3 on Quantum Technologies, ITU-T, and the IEC Systems Committee on Smart Manufacturing (IEC SyC SM).

5. China promoted the establishment of a liaison relationship between JTC 1 and JTC 4, with a Chinese expert serving as the liaison representative.

6. Chinese experts were successfully re-elected as conveners of the Smart Cities Working Group and the Coordination Advisory Group for Unmanned Aircraft Systems, and continued to serve as liaison representatives from JTC 1 to ITU-T, ISO/TC 20/SC 16 on Unmanned Aircraft Systems, JTC 3 on Quantum Technologies, and JTC 1/WG 11 in the trusted domain. At the same time, they were newly appointed as liaison representatives from JTC 1 to JTC 1/SC 38 in the trusted domain, as well as to JTC 1/SC 27/WG 4.

7. JTC 1 will convene a Workshop on Intelligent Unmanned Systems, inviting experts from relevant ISO

and IEC technical committees to discuss their future work areas. As an editor of the *Technology Trend Report on Intelligent Unmanned Systems*, Chinese expert Xu Dongmei will deliver a presentation at the workshop, further promoting the establishment of an organizational structure for intelligent unmanned systems.

8. Chinese expert Yu Yuntao, as Chair of JTC 1/SC 43 on Brain–Computer Interfaces, responded to questions raised by Japan, the United States, and the United Kingdom regarding the scope of work of the subcommittee. SC 43/AhG 10, the Ad Hoc Group on Scope Improvement, will work to clarify the scope of activities and effectively organize experts from various countries to participate in the work of the Brain–Computer Interface subcommittee.

According to the meeting resolution, the next JTC 1 plenary meeting will be held in São Paulo, Brazil, from 4 to 8 May 2026.

Source:

<https://mp.weixin.qq.com/s/n8EFikL5IdSBD9UNgc4RyA>

7. New National Standard to Guide Transformation of Technology to Standards

#Technology Transfer

On 5 October 2025, China released **GB/T 33450-2025 *Guideline for the transformation from scientific and technical achievement to standard*** which will come into effect on February 1, 2026. As researchers continue to face significant challenges in transforming advanced scientific and technological achievements into standards, this new national standard provides targeted solutions by clarifying **how to transform, what to transform, and how the transformation should be carried out**. It is expected to serve as a crucial bridge between the research laboratory and the production line, supporting China’s national strategy to develop new-quality productive forces.

On November 14, 2025, the Department of Standards and Innovation Management at the National Standards Administration of China (SAC) published an official interpretation of this new standard.

According to SAC, the standard highlights three main areas.

First, the standard clarifies the feasibility analysis for transforming scientific and technological achievements

into standards and proposes pathways and methods for promoting a standardized transformation process. It serves as a “transformation manual” for researchers.

Second, the standard includes a pathway for transforming scientific and technological achievements into international standards, providing technical support for incorporating China’s technological achievements into the international standardization system and helping China shift from an “active participant” to a “major contributor” in international standardization.

Third, the standard establishes an evaluation indicator system for standards derived from scientific and technological achievements, enabling clear judgments on whether such achievements are suitable for transformation into standards and analyzing which categories of standards they fit. In addition, it refines the handling of patents involved in standards and sets requirements for the disclosure of information and licensing declarations on standard-essential patents, filling a previous technical gap in transforming advanced technological achievements into standards.

Currently, the trend of synchronizing standard development with scientific and technological innovation has become increasingly evident. Standardization work is gradually becoming embedded in all stages of scientific and technological activities, providing important support for enabling technological achievements to enter the market quickly and enhancing industrial competitiveness. SAMR will continue to improve the coordinated development mechanism between standardization and scientific and

technological innovation, accelerate the development of standards in key and emerging fields such as **artificial intelligence**, **brain-computer interfaces**, **quantum information**, and **high-end equipment**, and provide technical support toward a more independent innovation capability and achieving the goals of new-quality productive forces.

Source:

https://www.samr.gov.cn/bzcx/sjdt/gzdt/art/2025/art_06b833b98fe048aa8c4bdabdb30eaca7.html

8.

China Issued Opinions on Promoting “AI+Civil Aviation”

#AI + Initiative

On December 5th, 2025, the Civil Aviation Administration of China (CAAC) issued *the Opinions on Promoting High-Quality Development of Artificial Intelligence + Civil Aviation* (hereinafter referred to as the opinions). The opinions are developed in line with the “[AI+ Initiative](#)” issued by the State Council and the “[AI+ Transport](#)” issued by the Ministry of Transport, and sets out general goals, principles and requirements to integrate AI deeply in Civil Aviation industry with 42 application scenarios identified.

The opinions set 2 two major goals:

- By 2027, Chinese Civil Aviation industry should have successfully integrated AI in areas of safety, operations, travel, logistics, supervision, planning and construction. Construction of core and supporting elements for AI in civil aviation industry will begin to show results.
- By 2030, AI should have integrated more deeply and extensively across all areas of civil aviation, followed by gradual improvement of AI governance system and safety and security assurance system for civil aviation industry. AI will become a powerful engine driving the high-quality development of civil aviation.

The opinions also outline 8 general principles: Innovation “Driven, Safe and Controllable, Demand-Oriented, Scenario-Empowered, Key Breakthrough, Systematic Planning, Collaborative Advancement.”

The opinions sort out 42 application scenarios for “AI + Civil Aviation” revolving around 6 key areas - safety operations, travel, logistics, regulation and planning and construction. The document proposes an intelligent application framework covering **safety risk warning**, **operational optimization**, **passenger convenience services**, **logistics efficiency improvement**, and **precision decision-making in regulatory oversight**. These application scenarios are considered to have high potential for widespread adoption. The appendix section of the opinion’s details further guidance for implementation for each scenario.

The opinions emphasize the need to strengthen the supply of essential elements for the high-quality development of “AI + Civil Aviation.” This includes enhancing the foundational support capabilities of AI in civil aviation through the construction of **high-quality datasets**, the development of **infrastructure platforms**, and research on **large industrial models and algorithms**.

Notably, the opinions call for strengthening the standardization of high-quality datasets to foster robust and integrated collaboration across the supply chain. This addresses the common bottleneck in industrial AI application which is data fragmentation. Effective AI requires unified data to ensure smooth operation and deliver accurate analysis and decisions. To resolve this, the opinions advocate a full-lifecycle approach for which the industry should develop standards covering data collection, governance, annotation, and application. These standards will strengthen activities such as data cleaning, annotation and quality assessment. This will not only consolidate the industry’s capabilities to build high-quality datasets but also accelerate progress towards more value-added AI application.

Furthermore, the opinions stressed a practical and value-driven approach to developing high-quality datasets, tailored to real-world scenarios. Key business scenarios highlighted include passenger travel, flight operations, air cargo logistics, airspace resource management, and integrated transportation coordination optimization. Efforts

should focus on building the necessary corpora - such as text, image, and video databases - along with knowledge base to support industry-scale AI models. This will boost the supply of industry-specific data products and services. In addition, the opinions mention a need to accelerate the development of application norms and sector standards for AI with civil aviation. The goal is to establish a comprehensive AI standards system that addresses data governance, algorithm interfaces, application performance, testing and certification. Pilot programs will be launched in the later stage to test out the feasibility of these standards.

China's AI+ Civil Aviation strategy represents a systematic state-coordinated effort to harness AI as a catalyst for industrial modernization. By combining clear phased objectives with a strong emphasis on data standardization and scenario-based implementation, the plan seeks to transform aviation operations, enhance safety, and drive efficiency at scale. For foreign stakeholders, this reflects not only China's ambition to lead in aviation AI but also underscores the growing importance of interoperable standards and cross-border collaboration in an increasingly digital and data-driven aviation ecosystem.

Source: https://www.gov.cn/lianbo/bumen/202512/content_7050377.htm

9. China's Draft of New Regulations for Human-Like AI Services

#Artificial Intelligence

On 27 December 2025, the Cyberspace Administration of China (CAC) launched a Call for Comments on the *Interim Measures for Administration of Interactive Services of Human-Like AI* (hereinafter referred to as the Interim Measures). The comment period will remain open until 26 January 2026. The Interim Measures seek to balance technological innovation with risk prevention, ensuring AI development remains aligned with human well-being and does not become a tool that alienates human emotion or distorts cognition.

As defined in the draft, **Human-Like AI service providers refer to organizations or individuals offering anthropomorphic interactive services using artificial intelligence technologies.** Specifically, any entity that develops and make available to the public in China – via text, images, audio, or video – products or services capable of providing emotional support, digital companionship, or other forms of human-like interpersonal interaction shall be subject to these regulations.

The draft Interim Measures largely build upon China's existing governance framework, with many of their systems in line with existing laws and regulations.

(1) Algorithm filing and transparency obligations

Expanding upon the *Provisions on the Administration of Algorithmic Recommendations for Network Information Services (2022)*, the Interim Measures require service providers to file their algorithms and undergo an annual written review conducted by provincial cyberspace administrations. Moreover, application distribution platforms (e.g., app stores) are obliged to verify service providers' safety assessments and filing status as part of their management responsibilities.

(2) Content security and labeling obligations

The interim measures follow the practices established in the *Provisions on the Administration of Deep Synthesis of Internet-based Information Services (2022)* and the *Interim Measures for the Administration of Generative Artificial Intelligence Services (2023)*. Service providers must clearly disclose that users are interacting with AI, not a natural person. They must issue dynamic reminders—such as through pop-ups—during signs of over-reliance, addiction, initial use, or re-login. As primary content safety overseers, providers are also required to embed safety measures throughout the design and operation process, conduct safety assessments, and take actions—including service restrictions or termination—in cases of significant risk, while reporting such incidents to relevant authorities.

(3) Data security and personal information protection

The interim measures strictly adhere to the *Cybersecurity Law*, *the Data Security Law*, and *the Personal Information Protection Law*. Providers must implement data security measures—including encryption, audits, and access controls—to protect user interaction data and allow its deletion. They are also prohibited from using user interaction

data or sensitive personal information for model training.

To address the unique risks of human-like interactive services, the Interim Measures introduce several targeted governance mechanisms.

(1) Human-Like Interaction Labeling Mechanism

Providers must persistently display prominent labels (e.g., “This service is powered by AI and does not possess human emotions or consciousness”) to remind users they are interacting with artificial intelligence. This requirement, similar to the *Interim Measures for the Management of Generative Artificial Intelligence Services*, aims to prevent user cognitive confusion and help establish appropriate psychological expectations.

(2) User Psychological Protection Mechanism

To address emotional dependency and mental health risks, the Interim Measures require providers to implement psychological well-being protections. This includes anti-addiction features, such as dynamic pop-up reminders for sessions exceeding 2 hours, and psychological crisis intervention mechanisms to identify users expressing extreme emotions. In such cases, human agents must take over and direct users to professional support channels.

(3) Special Group Protection Mechanism

The Interim Measures mandate special protections for vulnerable groups such as minors and the elderly. For minors, time limits must be set and access to inappropriate content restricted. For the elderly, providers should guide them to set emergency contacts and promptly notify these contacts if risks to life, health, or property are detected, while also providing access to professional assistance channels. This reflects a clear protective emphasis on safeguarding vulnerable users’ rights.

Once the Interim Measures are promulgated, service providers will likely need to comply with the existing mandatory standards ***GB 45438-2025 Cybersecurity technology - Labeling method for content generated by artificial intelligence*** to fulfill their Human-Like AI Labeling obligations.

SESEC anticipates that although not yet confirmed by authorities, national standards will follow to operationalize these mechanisms. Given past regulatory trends and the complexity of defining quantified thresholds for Human-Like AI in the Interim Measures, such supplementary standards are expected to provide essential compliance guidance.

Source: https://www.cac.gov.cn/2025-12/27/c_1768571207311996.htm



Digital Transition

10. 16th Sino-German Intelligent Manufacturing/Industry 4.0 Standardization Meeting in 2025

#Sino-German

On 12 November 2025, the 16th Sino-German Intelligent Manufacturing / Industry 4.0 Standardization Working Group Meeting was successfully held in Qingdao, Shandong Province. Distinguished guests included **Liu Dashan**, Director of the Information Technology and Automation Standards Division under the Department of Standards and Technology Management, State Administration for Market Regulation (SAMR); **Zhao Fengjie**, Director of the Intelligent Manufacturing Division of the Equipment Industry Department I, the Ministry of Industry and Information Technology (MIIT); **Boris Böhme**, representative of the Industry 4.0 Digitalization Division at the German Federal Ministry for Economic Affairs and Energy (BMWE); and **Marvin Böll**, Head of SCI 4.0 at the German Association for Electrical, Electronic & Information Technologies (VDE/DKE). More than 80 representatives from the Sino-German Standardization Committees, enterprises, research institutes, and other organizations attended the meeting.



In the opening remarks, Liu Dashan stated that China and Germany should leverage standardization to strengthen foundation of industrial development, promote industrial optimization and upgrading, guide the rapid development of new business models and new forms of industry, and enhance the stability of industrial and supply chains, thereby continuously deepening bilateral cooperation.

In the German side's opening speech, Boris Böhme noted that Sino-German cooperation has become an important driving force for global intelligent manufacturing standardization and expressed

Germany's willingness to continue expanding the dimension of cooperation.

Zhuo Lan, Director of the IoT Research Center of the China Electronics Standardization Institute (CESI), and Marvin Böll, Project Leader of SCI 4.0 at VDE/DKE, delivered joint remarks in their capacity as convenors of the technical task groups. They comprehensively introduced the achievements and future technical implementation directions of key standardization efforts under each task group, focusing on critical technologies such as network communications, information security, digital twins/asset administration shells, and artificial intelligence applications.

The task groups reported progress in AI applications, automated manufacturing, digital twins/asset management, and condition monitoring, providing technical input for standards development. Among them, **Dieter Wegner**, Vice President of DKE and Industry 4.0 Spokesperson of the German Electrical and Electronic Manufacturers' Association (ZVEI), delivered a presentation on the *Digital Product Passport 4.0*, elaborating on its value in full life-cycle product management and proposing proposals for Sino-German standard coordination. **Li Ruiqi** from CESI discussed standardization trends for industrial large models in smart manufacturing, outlining key pathways for the standard system and offering directions for bilateral cooperation.

During the meeting, each technical task group collectively released multiple cooperation outcomes and provided key briefings. The Network Communications Task Group, jointly presented by **Duan Shihui** from the China Academy of Information and Communications Technology (CAICT) and **Dr. Dominik Rohrmus** from the (German) Labs Network Industrie 4.0 (LNI 4.0), released the *Roadmap: Technical Expert Group Network Communication*. The Information Security Task Group, jointly presented by **Zhao Zitong** from CESI and **Dr. Karl Waedt** from Framatome GmbH, released the *Sino-German White Paper on Security Grading For Industrie 4.0 and Intelligent Manufacturing*. The Functional Safety Task Group, presented by **Xiong Wenze** from the China Instrumentation Industry

General Technical and Economic Research Institute and **Peter Sieber** from HIMA (Shanghai) Industrial Automation Co., Ltd., jointly released the *White Paper on Digitalization of Functional Safety for Industrie 4.0 and Intelligent Manufacturing*.

In closing, both sides jointly summarized the outcomes of the meeting. On the Chinese side, Director Zhao Fengjie proposed to further innovate communication mechanisms, identify demands from diverse manufacturing scenarios, and facilitate the

implementation of new technologies and standards. She also stressed the importance of enhancing standardisation cooperation and contributing research outcomes to international standardisation organisations. German representatives affirmed the progress, committed to advancing practical standards alignment, and expressed willingness to deepen and explore cooperation in AI, functional safety, industrial data, data spaces, and digital product passports.

Source: <https://www.cesi.cn/202511/11426.html>

11. China Published Standards Development Framework for Low-Altitude Equipment

#Low-Altitude Economy

On 28 November 2025, the 2025 Low-Altitude Equipment Industry Innovation and Development Conference was held in Ordos, Inner Mongolia. At the main forum of the conference, the China Electronics Standardization Institute (CESI) officially released the **Development Framework for the Standard System of the Low-Altitude Equipment Industry (2025)** (hereinafter referred to as the “Standard System Framework”).

During the release session, Luo Faming, Secretary of the Commission for Discipline Inspection of CESI, pointed out that China’s low-altitude equipment industry is currently developing rapidly; however, the development of standards for low-altitude equipment has lagged behind. There is still a lack of coordinated and unified top-level design for the standard system.

As the secretariat unit of the Standardization Working Committee for the Low-Altitude Equipment Industry, CESI, together with 39 industry, academia, research, and application-oriented organizations—including the Equipment Industry Development Center of the Ministry of Industry and Information Technology, the China Aeronautical Radio Electronics Research Institute, and the China Academy of Civil Aviation Science and Technology—jointly compiled the *Standard System Framework*, providing systematic guidance to promote the high-quality development of standardization work for the low-altitude equipment industry.

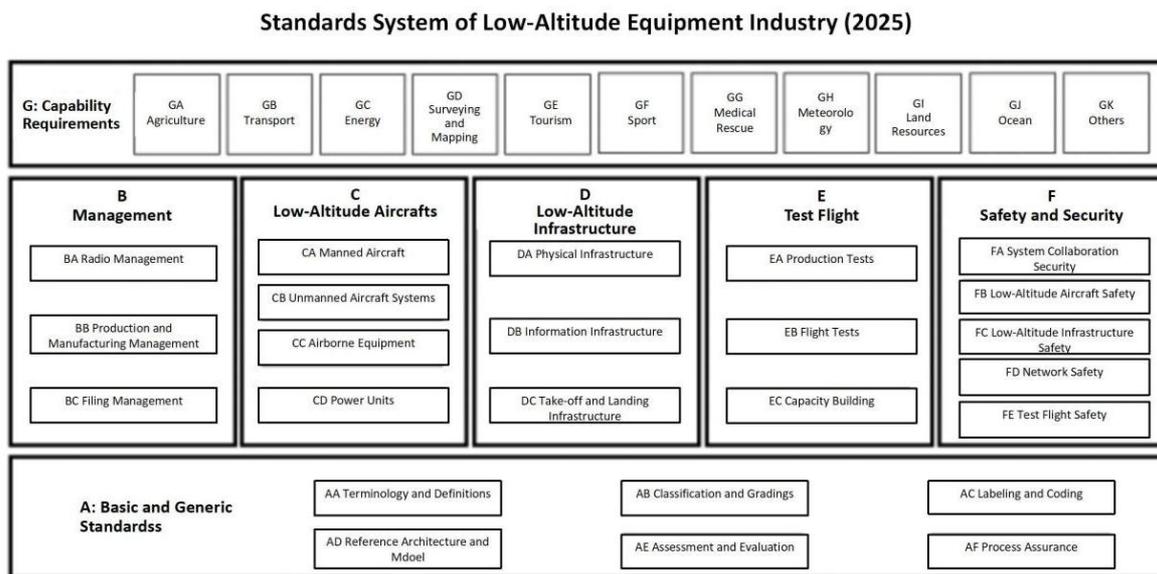


Figure from *Development Framework for the Standard System of the Low-Altitude Equipment Industry (2025)*, unofficially translated by SESEC.

The *Standard System Framework* proposes a standards system architecture for the low-altitude equipment industry consisting of **three major levels and seven components**. It is supported at the foundation by basic and generic

standards, takes management, technology, and safety standards as the core content, and applies capability requirement standards as the means of implementation. It comprehensively covers all stages of low-altitude equipment, including research and design, engineering and manufacturing, testing and flight trials, operation and maintenance support, and personnel training.

Moving forward, the Standardization Working Committee will continue to improve the top-level design of standardization work for the low-altitude equipment industry, identify urgent standardization needs of the industry, and use high-quality standardization to support the development of the low-altitude equipment industrial system, thereby promoting the safe, digitalized, intelligent, and cluster-based development of the low-altitude equipment industry.

Download the document here for reference: <https://bitly.cx/J35yy>

12. Global AI Standards Development Report Released in China in 2025

#Artificial Intelligence

On 9 November 2025, the **Global Artificial Intelligence Standards Development Report** (hereinafter referred to as “the Report”) was officially released at the 2025 World Internet Conference Wuzhen Summit.

Under the umbrella of *Standards Promotion Initiative* established by the AI committee under the World Internet Conference, this report was an outcome of a collaborative effort between the China Academy of Information and Communication Technology (CAICT) and International AI Governance Association (IAGA). President of IAGA, John Higgins, presented the main findings and forward-looking recommendations of this joint research effort.

Grounded in a comprehensive view of global AI standardization, the Report systematically analyzes the current state and emerging trends in the development of global AI standards, examines key obstacles and challenges, and proposes concrete recommendations for advancing responsible AI standards.

The Report underscores that global cooperation is crucial to establishing an inclusive and sustainable AI standards system, requiring coordinated efforts among international organizations, governments, industry, and research bodies to jointly address challenges and advance responsible AI standards. The Report also identifies four key challenges in global AI standards development: accelerated technological iteration amid lagging standardization, increased complexity of industrial chains, divergent governance concepts hindering consensus, and limited participation by Global South countries due to practical disparities. To address

these challenges, the Report emphasizes that advancing global AI standards requires systematic global collaboration and outlines four key directions:

1. International organizations should coordinate to build a common foundation for AI standards.
2. Governments should strengthen planning to enhance standards interoperability and mutual recognition.
3. Industry should focus on technological collaboration to accelerate standards adoption and implementation.
4. Research institutions should advance foundational research to support frontier exploration and talent development.

Advancing global AI standardization is vital for promoting the technology’s sound development and safety governance. As a milestone reference, the Global Artificial Intelligence Standards Development Report provides a systematic overview of current trends and future directions, offering valuable insights for policymakers, industry, and academia to foster collaboration. Its release is expected to advance responsible AI principles and support an open, inclusive, and sustainable global AI standards ecosystem.

The Report was published in Chinese language at the 2025 World Internet Conference. For readers who are keen to get a copy, click here to download: [World Internet Conference – Global AI standards development report – Chinese](#)

13. China Issued Plan for Digital Transformation of Automotive Industry

#Automotive

On December 29, 2025, the Ministry of Industry and Information Technology, the Ministry of Education, the State Administration for Market Regulation, and the National Data Administration jointly released the *Implementation Plan for the Digital Transformation of the Automotive Industry* (hereinafter referred to as the Implementation Plan).

As a cornerstone of China's economy, the automotive sector - with its complex supply chains and broad economic impact - represents a key focus in the digital transformation of the manufacturing industry and high-quality development. The Implementation Plan has been formulated to advance the strategic objectives outlined in China's *15th Five-Year Plan (2026 - 2030)* and to implement the *Action Plan for the Digital Transformation of Manufacturing Industry* issued in 2024.

According to the Implementation Plan, China's automotive industry, especially in smart vehicle manufacturing, faces three major digital transformation hurdles: insufficient top-level design, underutilized data as a production factor, and slow digital progress among small and medium-sized parts suppliers. By unlocking data value and advancing AI-automotive integration, China aims to systematically overcome these hurdles. The Implementation Plan outlines two-phase development goals:

By 2027

Digital intelligence technologies will be deeply integrated and applied in the R&D, production, supply, sales, and service links of enterprises, significantly enhancing the maturity of intelligent manufacturing and production efficiency of enterprises, and gradually improving the industry supply and public service systems. The Implementation Plan sets out detailed, quantified targets to illustrate this goal:

- The maturity level of intelligent manufacturing capabilities of leading vehicle enterprises will be raised by one grade.
- The digitalization level of parts and components enterprises will be significantly enhanced.
- The popularization rate of R&D design tools will exceed 95%, and the rate of numerical control in key processes will exceed 70%.
- The industry's overall labor productivity will increase by 10% compared to 2025, and the product R&D cycle and delivery cycle will be

shortened by 20%.

- A replicable and scalable intelligent factory model will be created, and over 20 industry intelligent manufacturing system solution providers will be cultivated.
- A **digital transformation and intelligent manufacturing standards system**, technology supply system, and talent training system that are in line with the industry's characteristics and internationally advanced will be formed.

By 2030

The industry will achieve a high level of digital intelligence, with deep integration into core operations, coordinated development among enterprises of all sizes, and an optimized supplier system. A matching digital public service framework will be established, significantly enhancing overall support and safeguards. To achieve these objectives, the Implementation Plan proposes six major actions:

1. Diagnosis and Evaluation and Improvement Action
2. Digital Transformation Empowerment Action for Small and Medium-sized Auto Parts Enterprises.
3. Typical Scenarios and Artificial Intelligence Application Demonstration Action
4. Ladder Cultivation and Matrix Construction Action for Industry Players
5. **Standards System Improvement and Interconnection Assurance Action**,
6. **Key Technology R&D and Basic Capability Enhancement Action**

Notably, two actions have mentioned the importance of standards. Under **Action No. 5**, the Implementation Plan sets following 6 specific tasks:

(1) Strengthen the Construction of Standard Systems and Develop Key Standards.

- Improve the **standard system** for industry digital transformation and intelligent upgrading to achieve full coverage across all stages of the industrial chain.
- Promote the development of **foundational standards**, such as scenario guidelines, data elements, AI applications, and talent competency

evaluations.

- Accelerate the formulation of **urgently needed standards** for digital collaborative design, intelligent production services, and smart supply chain management.

(2) Ensure Data Interoperability through Standardization.

- In accordance with the *Guidelines for the Development of the National Intelligent Manufacturing Standards System* and *Guidelines for the Construction of National Data Standards Systems*, fully align with the development of relevant national standard systems.
- Prioritize the formulation of **key data standards** with industry-specific characteristics to ensure interconnectivity between internal and external systems within the industrial chain and secure data flow.
- Enhance the automotive industry's **data classification and categorization guidelines** to fully realize the value of automotive data elements.

Additionally, **Action 6** emphasizes upgrading data security mechanisms while fostering innovation. The plan stresses the urgent need to improve the automotive industry's data security management system and standards. To achieve this, automotive-specific standards related to data governance - identification, cataloging, tiered protection, and risk assessment will be developing.

The proposed standardization framework addresses China's automotive sector challenges by establishing a unified technical foundation to enable supply-chain coordination. It focuses on unlocking data value through interoperability standards, breaking data silos. It also accelerates SME digital transformation via replicable standards for smart manufacturing and data governance, lowering integration barriers, optimizing the ecosystem, and enhancing industry-wide efficiency.

If you need more detailed information about the Implementation Plan, please feel free to contact SESEC via email(assistant@sesec.eu).

Source:

https://www.gov.cn/zhengce/zhengceku/202512/content_7053271.htm

14. China Released Research Report on Intelligent Manufacturing Standardization (2025)

#Intelligent Manufacturing

On November 27, 2025, the World Smart Manufacturing Conference was held in Nanjing. Xin Guobin, Vice Minister of the Ministry of Industry and Information Technology, attended the opening ceremony and delivered a keynote speech. During the conference, the *Research Report on Standardization Development of Intelligent Manufacturing (2025)* (hereinafter referred to as the Research Report) was officially released. The report was led by the China Electronics Standardization Institute (CESI), with participation from leading enterprises such as Huawei and multiple research institutes.

The report is organized into five comprehensive chapters and provides an in-depth analysis of global trends in intelligent manufacturing standardization. It systematically summarizes China's achievements in standardization over recent decades and examines the practical pathways adopted by leading enterprises.

Chapter 1 analyzes global trends in intelligent manufacturing standardization, identifying AI, Digital Twins, and Data Spaces as key competitive technologies among major economies. It notes a strategic shift in international bodies from foundational framework-building to cross-organizational collaboration for breakthroughs, and details the current ISO/IEC JTC 1 landscape, including the priorities and contributions of its key working groups.

Chapter 2 reviews the three development stages of intelligent manufacturing standardization in China. The process began with a top-level design phase from 2015 to 2017, followed by an interconnectivity-focused phase from 2018 to 2023. Since 2024, the emphasis has shifted toward creating tangible value by addressing specific challenges in enterprises' digital and intelligent transformation, thereby delivering measurable economic benefits. Today, China's intelligent manufacturing standardization framework has evolved into a well-structured system with a distinctive development model.

Chapters 3 and 4 present a series of enterprise case studies on intelligent manufacturing transformation, each detailing the technical solutions adopted. Through these practices, Chinese enterprises have developed scenario-oriented standards clusters that are used to verify the practical feasibility of standards and identify areas for further improvement.

The report concludes by highlighting three key standardization challenges: limited industry application scenarios, a mismatch between standard development and technological iteration, and the need to strengthen international influence. In response, it proposes four recommendations: innovating the standard supply system through open, agile, and collaborative approaches; developing verifiable implementation pathways to overcome application barriers; fostering the industrial ecosystem to drive endogenous enterprise innovation and tool development; and enhancing international influence to promote the global adoption of Chinese solutions.

According to the Research Report, **China has taken the lead in developing 52 international standards and 480 national standards in the field of intelligent manufacturing**, achieving breakthroughs in areas such as large-scale personalized customization and industrial process control systems. As the standardization framework evolves, China's intelligent manufacturing sector is shifting from exporting products to exporting technological systems and industrial ecosystems.

Looking ahead, China will continue to strengthen its intelligent manufacturing standardization system, systematically advance standard development, and leverage standardization innovation to drive technological breakthroughs and industrial upgrading.

Source: <https://mp.weixin.qq.com/s/2Ph8YvQn9S-9MnbKPB-caQ>

15. China Released New Mandatory National Standard of Data Security

#Data Security

On December 2, 2025, the National Standardization Administration of China (SAC) released a new mandatory national standard, **GB 46864-2025 Data security technology - Technical requirements for information sanitization of electronic products**. The standard will take effect on **1 January 2027**.

The standard specifies the basic requirements, functional requirements, and procedural requirements for information sanitization (or erasure) of electronic products. It applies to electronic products with **non-volatile storage media** that are manufactured and sold within China.

Additionally, it applies to electronic product **manufacturers, third parties** engaged in developing information erasure functions for electronic products, and **recycling operators** performing information erasure on second-hand electronic products. This document does not apply to electronic products used for processing national secrets; such products shall be handled in accordance with the relevant national confidentiality regulations.

The core objectives of the standard centers on thorough data erasure, aiming to protect users' personal information. The scope of data or information erasure includes files, applications, and system settings, while excluding cloud backups or pre-installed data. Two erasure methods are stipulated - data overwrite and block erase. Electronic product manufacturers are required to provide built-in information erasure function to users. If built-in erasure functions are not feasible, the manufacturers must either provide external erasure tools, recommend specific third-party tools, or offer free information erasure service. Users must be clearly informed of the scope, method, and potential impacts of information erasure, and erasure operations shall only be performed with users' informed consent.

Similar requirements are imposed on recycling operators. Second-hand electronic products may only be sold or transported out of the China after undergoing qualified information erasure in compliance with the provisions of this standard. Recycling operators are required to document the information erasure operations and results for second-hand electronic products, with such records being retained for a minimum of 3 years. Furthermore, they must establish management systems and basic measures for information erasure, designate responsible personnel, formulate relevant management systems and operating procedures, and provide technical support for inquiries and traceability related to the erasure status.

This standard was proposed by the Cyberspace Administration of China (CAC) to implement *Action Plan for Promoting Large-Scale Equipment Renewal and Consumer Goods Trade-Ins*. SAC/TC260(Cybersecurity) was responsible for its drafting. Upon entry into force, CAC will assume jurisdiction over the implementation and enforcement of this mandatory standard. If you need more information about this mandatory standard, please feel free to contact us via email at any time (assistant@sesec.eu).

Source: https://www.cac.gov.cn/2025-12/13/c_1767269721368254.htm

16. Call for Comments on China’s Data Security Protection Standard

#Data Security

On October 31, 2025, the National Technical Committee 260 on Cybersecurity of SAC (TC260) released a **recommended** national standard draft titled **Data Security Technology - Requirements for Data Security Protection** (hereafter referred to as the Draft), which is open for public comments **until December 30**. The Draft sets forth principles, objectives and a framework for data security protection, specifying general requirements as well as specific requirements for safeguarding key data and core data. It applies to guiding various sectors, regions, departments and data processors in implementing data classification and grading for protection purposes. It may also serve as a reference for competent (regulatory) authorities and third-party assessment bodies in supervising, managing and evaluating data security.

In accordance with the **GB/T 43697-2024 Data security technology — Rules for data classification and grading**, the Draft categorizes data into three levels including general, key, and core data based on factors such as importance, precision, scale, and security risks. Corresponding data security protection measures shall be adopted for each level of data: general data shall be protected as needed while fulfilling legal obligations, key data shall be subject to enhanced protection, and core data shall be managed under strict controls. Meanwhile, the **Data Security Protection Framework** is formulated as below.

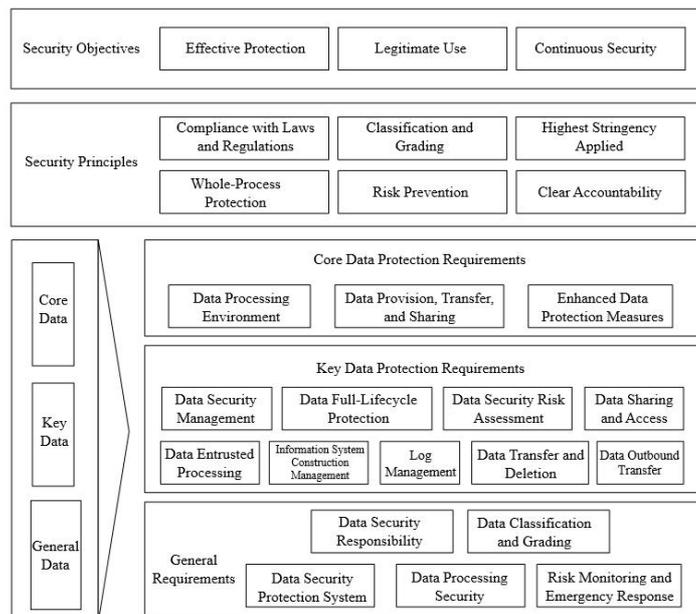


Figure 1. Data Security Protection Framework

In terms of security protection requirements, general data must fulfill statutory obligations first, then implement need-based protection measures tailored to data security risks by referencing the general requirements, while its free flow is encouraged under the premise of security and compliance. Key data security protection extends beyond general requirements, mandating a dedicated management body, lifecycle technical controls like encryption, compliance with Level 3 or above cybersecurity protection for storage systems, annual risk assessments and reporting, strict oversight of sharing and outsourcing, and operational log retention for one to three years. Moreover, processors of key data must store domestically collected or generated data within China and declare a security assessment for any necessary overseas transfer.

Similarly, the security protection requirements for core data are further strengthened beyond those for key data.

Storage and processing systems must comply with Cybersecurity Level 4 protection or critical information infrastructure security requirements. Transfers exceeding 30% of annual cumulative volume to other entities require risk assessment organized by the National Data Security Coordination Office. Priority shall be given to commercial cryptography, secure and trusted products/services, and third-party risk assessments. Key logs related to security incidents must be retained for at least three years, and national security background checks are mandatory for personnel in critical positions.

To summarize, the Draft poses multiple implications for foreign enterprises in China. It introduces stricter data classification, requiring enhanced local storage and outbound assessment for key/core data. Compliance costs will rise due to demands for stronger encryption, logging, and system protection. Data transfer procedures will be more regulated, and personnel in sensitive roles may face national security screenings. Foreign firms must review their data assets and adapt compliance strategies accordingly.

Source: <https://www.tc260.org.cn/portal/suggestion-detail/20251031084754>

17. SAC/TC28/SC38 Speeds Up Cloud Standards for Industry Development

Cloud Computing

From October 30 to 31, 2025, the **third Cloud Computing Standards Week of 2025** was held and hosted by the Subcommittee on Cloud Computing and Distributed Platforms (TC28/SC38), bringing together over 60 standards experts to discuss the "*Cloud Computing Comprehensive Standardization System Construction Guideline (2025 Edition)*" (see more details in our [previous coverage](#)) and advance multiple standardization projects.

During the standards week, a dedicated discussion on cloud computing standardization needs was organized. Moreover, participating experts held in-depth discussions on implementing the tasks outlined in the 2025 Guideline, covering key areas such as cloud-native technologies, cloud operating systems, inter-cloud and hybrid cloud systems, AI and intelligent computing integration, green development, international standards coordination, and industry-specific application standards. Following this, TC28/SC38 will organize targeted discussions on standardization requirements in key fields, clarify standardization plans, and ensure the effective implementation of standardization efforts.

The standards week also facilitated progress on several in-progress standards, including:

- Information technology-Cloud computing - Application management requirement with platform as a service (PaaS)
- Information technology—Cloud computing—General operational requirements of cloud service
- Cloud computing data center basic requirement
- Information technology — Cloud computing —

Maturity assessment of intelligent computing cloud service capability

- Information technology — Cloud computing — Resilience testing for cloud-native systems
- Information technology — Cloud computing — Capability requirements for disaster recovery cloud services

Building on the outcomes of this meeting, TC28/SC38 announced its next steps: accelerating the development of high-priority and urgently needed standards, continually refining its internal standardization management processes, and enhancing the overall capability for standards development and revision. These efforts aim to provide stronger support for the healthy and orderly development of the cloud computing sector. Notably, the standards week followed the broader 2025 Cloud Industry and Standards Application Conference held on October 29, which witnessed the release of the *2025 Enterprise AI-on-Cloud Industry Ecological Map* and the launch of the industry-wide "*Cloud Standards Empowerment*" initiative.

As China advances its own standards in areas like cloud-native and AI-integrated computing, foreign providers must adapt their products and strategies to comply. The newly released ecosystem map and "Cloud Standards Empowerment" initiative indicate a more integrated domestic market, requiring foreign companies to actively engage through collaboration or innovation. SESEC will keep monitoring the relevant development.

Source:

<https://mp.weixin.qq.com/s/05FYRLRbyle7aqvzidRR3w>

18. SAC/TC609 Data Standardization Signed MoU with International Data Space Association

International Cooperation

On December 17, 2025, under the guidance of the National Data Administration, a signing ceremony for the Memorandum of Understanding (MoU) between the National Technical Committee for Data Standardization (SAC/TC609) and the International Data Space Association (IDSA) was held in Beijing. The event was hosted by the Secretariat of TC609.

Attendees of the ceremony included Fan Kefeng, Vice President of the Secretariat of the National Data Standardization Committee and the China Electronics Standardization Institute, and Lars Nagel, Chief Executive Officer of the International Data Space Association (IDSA).

During the meeting, Fan Kefeng, on behalf of the Secretariat of TC609, and Lars Nagel, on behalf of IDSA, signed the MoU and held friendly consultations on the detailed rules for subsequent cooperation. Lars Nagel stated that he was very pleased to establish cooperative relations with the TC609, hoping that both parties would work together to build a data space standard ecosystem, provide global solutions, and unlock data value. Fan Kefeng noted that data space implies data opening, utilization, and sharing, and expressed the hope that both parties would strengthen exchanges in areas such as data circulation, standard application, and data space implementation to achieve co-creation of data value.



Moving forward, the Secretariat of TC609 will continue to promote cooperation and exchanges with IDSA, conduct collaborative research on data space standards and other related fields, and actively advance international cooperation in the field of data standards.

About SAC/TC609

SAC/TC609, the National Data Standardization Technical Committee, was approved by the National Standardization Administration (SAC) and established in 2024 under the National Data Administration. Its secretariat is hosted by the China Electronics Standardization Institute, and it comprises 98 enterprise experts. The committee is responsible for developing foundational and general national standards in data resources, technologies, circulation, smart cities, and digital transformation. This includes standards for data infrastructure to support circulation and utilization, as well as security standards for safe data flow and application. The committee mirrors international standardization organizations, including ISO/IEC JTC1/SC32, ISO/IEC JTC1/WG11, ISO/IEC JTC1/SC42/WG2, and IEC/SyC Smart Cities.

About IDSA

International Data Spaces Association (IDSA) is on a mission to create the future of the global, digital economy. Its 140+ member companies and institutions have created the International Data Spaces standards: a secure system of sovereign and trusted data sharing in which all participants can realize the full value of their data. IDSA enables new smart services and innovative business processes to work across companies and industries, while ensuring that the control of data remains in the hands of data providers. ([visit IDSA here](#))

Source: https://mp.weixin.qq.com/s/OnJ-zWdH9cs_RbiDSySj1A

19. SAC/TC609 Data 2nd Standards Week in 2025

Data Standardization

On 3 November 2025, the National Data Standardization Technical Committee (TC609) held its second “Standards Week” of the year. The plenary was attended and addressed by Mr. **Liu Lihong**, Administrator of the National Data Administration (NDA), and Mr. **Wang Yuhuan**, Deputy Director-General of the Department of Standards Technology and Management of the National Standardization Administration (SAC). The meeting was chaired by Mr. **Xia Bing**, Vice Administrator of the NDA, and Mr. **Liu Xiangang**, Vice President of the China Electronics Standardization Institute (CESI).

Representatives from the following 12 governmental institutions attended the event, such as Cyberspace Administration of China (CAC), National Development and Reform Commission (NDRC). Members of TC609, experts from relevant industries, representatives of standardization organizations, and officials from the national data system also participated in the event.

In his keynote speech, Mr. **Liu Lihong** noted that since TC609's establishment, China's data standardization system has strengthened significantly: standards are developing faster, pilot programs are expanding, and international cooperation is deepening, which all aligns with advancing the market-oriented reform of data as a production factor.

Data from the National Data Administration and SAMR show China released over 120 data-related national standards during the 14th Five-Year Plan. These standards have been applied in key areas including **AI, new infrastructure, and data trading and circulation**, underpinning high-quality digital economy growth.

Mr. Liu emphasized, moving forward, TC609 should work on four priorities: **improving multi-level mechanisms for data standardization, optimizing data standards supply through diverse channels, strengthening multi-dimensional verification and implementation of data standards, and deepening international cooperation on data standards from multiple angles.**

Additionally, TC609 officially established six industry application groups covering **natural resources, ecological environment, traditional Chinese medicine, media, disease control, and pharmaceuticals** to further strengthen coordination between national and sectoral data standardization efforts. From 4 to 7 November, the various working groups conducted intensive discussions on 72 standards and 27 technical documents over a four-day period.

Over the past year, TC609 has actively implemented the requirements set out in the [National Data Standards System Construction Guidelines](#). Its standardization work has been carried out across eight key areas (More details of the relevant standards-setting landscape can be found in [the news coverage from our website](#)).

On top of that, TC609 experts have successfully undertaken convenor roles of **ISO/IEC JTC1/SC42 WG2 Data** and maintained collaborative relationships with CEN-CENELEC JTC25, International Data Space Association (IDSA), GAIA-X, Catena-X and ETSI TC DATA.

Moving forward, TC 609 will continue to advance data standardization in line with the key priorities of the 15th Five-Year Plan. Next, TC609 will speed up the development of technical documents and the *Research Report on Data Standardization for the Low-Altitude Economy*, move them into the call for comment stage, and carry out pilot testing to ensure the technical content is practical and reliable. More organizations will be invited to participate in drafting work.

Last but not least, all working groups will follow action plans set during the standards week, strengthen cooperation and resource sharing, accelerate the development of international standard proposals, and further increase China's participation and contribution to international standardization.

Source:

<https://www.tc609.org.cn/tc609/sjxw/202511/56e9b2f7058c44b6a2fe0bd62564bdb7.shtml>

20. SAC/SC42(Artificial Intelligence) Second Standards Week of 2025

Artificial Intelligence

From December 24 to 26, 2025, the Artificial Intelligence Subcommittee under the National Information Technology Technical Committee (SAC/TC28/SC42 or SAC/SC42) convened its second Standards Week of the year. The event

brought together over 400 representatives from government, industry, and academia to share the latest progress in AI technologies and participate in working group meetings for standards development. The three-day program included a General Assembly, a Plenary Meeting, and 12 working group's standards discussions.

At the General Assembly, keynote remarks were provided by Mr. Du Guangda, Deputy Director-General of the Science and Technology Department of MIIT, and a comprehensive SC42 standardization report was presented by Mr. Fan Kefeng, Vice President of CESI.

During the Plenary Meeting, Mr. Yang Lei, Deputy Director of the Research Center of Information Technology at CESI, delivered an additional standardization report for SC42, and representatives from individual working groups presented their progress.

In his opening address, Mr. Du outlined MIIT's focus on strengthening supply through "**intelligent industrialization**" and promoting empowerment via "**industrial intelligence**." He also highlighted MIIT's ongoing efforts to cultivate a supportive ecosystem and announced that the ministry will continue to prioritize problem-solving, innovation, and scenario-driven applications while advancing standards that are "rapid, superior, and robust" to underpin the AI+ initiative and industrial high-quality development.

Both Mr. Fan and Mr. Yang provided an in-depth analysis of China's current AI development landscape and outlined SC42's strategic priorities for 2026. The insights from their presentations have been consolidated by SESEC in the attached report below to avoid redundancy.

The SESEC Report on SAC/SC42 Second Standards Week is **attached to Annex**.

In addition to the plenary sessions, SESEC observed and documented the standards discussions held across several key SC42 working groups. A detailed account of these discussions is also included in the attached SESEC report.

The meeting served to comprehensively summarize the subcommittee's recent achievements and systematically review the progress and next steps of each working group. Moving forward, SC42 will continue to serve as a collaborative platform, uniting stakeholders to systematically advance standards in areas such as AI chips, software-hardware adaptation, intelligent agents, and AI-enabled applications. SC42 will also launch a new round of standards project solicitations, conduct pre-research, and promote standards through training and pilot applications to ensure their effective implementation and support the high-quality growth of China's AI industry.

21. MIIT/TC01 AI Convened Second Plenary Meeting of 2025

Artificial Intelligence

On 31st December 2025, the Artificial Intelligence Standardization Technical Committee of the Ministry of Industry and Information Technology (MIIT/TC01) convened its second plenary meeting of 2025 in Beijing. The event gathered over 500 participants, including distinguished guests: Xie Shaofeng, Chief Engineer of MIIT; Zheng Zhiming, Chairman of MIIT/TC01 and Academician of the Chinese Academy of Sciences; Wen Ku, Advisor of MIIT/TC01 and Chairman of the China Communications Standards Association (CCSA).

Xie Shaofeng, Chief Engineer of MIIT, stressed that the MIIT/TC01 must clarify its new tasks in the current context. He emphasized the need to leverage standards to drive technological progress, accelerate the development of next-generation products, enhance enterprise intelligence, and expedite the formation of a strong industrial ecosystem. He urged rigorous implementation of all tasks in accordance with the overarching requirements of standardization work - "fast, superior, and strong" - and for improving standardization activities, including preliminary research, project initiation, drafting, release, promotion, implementation, and evaluation.

The goal is to rapidly transform MIIT/TC01 into a leading standardization organization that drives technological innovation, regulates industrial development, supports national strategies, and exerts significant international influence, thereby transforming standardization outcomes into a powerful engine for the high-quality development of

China's AI industry.

Wei Kai, Secretary-General of MIIT/TC01, reported on the committee's work in 2025. Since its establishment one year ago, MIIT/TC01 has made rapid progress in institutional development, attracting over 800 member organizations, establishing 8 working groups, and developing standards guidelines covering 11 key areas, including large model evaluation, hardware-software co-design, and AI engineering.

As of December 30, 2025, 88 standards have passed working group review, 52 are pending ministry approval, 18 are under research, and 22 are awaiting final approval. The committee has also forged close collaborations with industry and information technology authorities in Beijing, Guangdong, Sichuan, and other regions. Looking ahead, the MIIT/TC01 will accelerate standards development to better meet real-world industrial needs, establish standards application demonstration zones, deepen pragmatic cooperation in standardization, build public service platforms, and enhance the intelligent management of standards.

Wang Yuntao, Director of the MIIT/TC01 Secretariat Office, released and interpreted the *Research Report on Artificial Intelligence Standardization Development (2025)*. The report systematically reviews the current status and challenges of AI standardization, forecasts future industry trends, and proposes key directions and implementation pathways for standardization work. It serves as an important decision-making reference and practical guide for standardized and high-quality development of China's AI industry.

The meeting also released several key standardization tools:

- The Global AI Standards Database, containing over 840 international and 200 domestic standards.
- The Global AI Terminology Database, featuring over 1,200 terms from published national, sector, and international standards; and
- The Standards Review AI Agent—an assistant for standard drafting. This agent conducts comprehensive "health checks" on draft standards, helps intelligently identify missing elements, automatically generates rectification reports, and promotes the use of AI in standard revision.

Additionally, MIIT/TC01 announced a soon-to-be-published sector standard **2024-1328 T-YD Artificial Intelligence—Key Technologies—Benchmark Testing Methods for Embodied Intelligence**. This standard has been finalized for approval and has also been successfully initiated as an international standard within ITU-T SG21. Building on this sector standard and leveraging the Embodied Intelligence Testing Laboratory, the AI Institute of CAICT organized the first round of the Trustworthy AI—Embodied Intelligence Benchmark (**EAI Bench**). The initial testing covered 9 real-world scenarios and 7 ontology types, with 6 enterprises completing the evaluation.

At the end of the plenary session, the 8 working groups of MIIT/TC01 each reported on their work summaries for 2025 and work plans for 2026.

In summary, while MIIT/TC01 is a newly established Sector Standardization body under MIIT, it has moved swiftly to align with industrial and market trends in AI standardization, demonstrating clear ambition to become a leading and internationally influential force. However, China's national AI standardization landscape already includes SAC/SC42 under SAMR, which has developed a comprehensive national standards system, published 80+ national and sector standards, and built substantial influence within ISO/IEC JTC1/SC42. This suggests the potential for increasingly dynamic interaction—and possibly competition—between MIIT/TC01 and SAC/SC42 in shaping China's AI standardization future. SESEC will continue to monitor the evolution of MIIT/TC01 and provide timely updates.

Source: https://mp.weixin.qq.com/s/HL3_X6FvDLd7wn3mEpNFZQ



Green Transition

22. China Releases Trial Measures on Data Security Management in the Energy Sector

#Energy Data Security

On December 8, 2025, the National Energy Administration (NEA) issued the ***Measures on Data Security Management in the Energy Sector (Trial)*** (hereinafter referred to as the Measures), which are set to **take effect on July 1, 2026** and will be **valid for a period of five years**. This regulatory framework represents a significant step in implementing China's overarching *Data Security Law* within the critical energy sector, aiming to standardize data processing activities, strengthen security management, mitigate risks, promote data utilization, and safeguard national security and development interests.

The Measures define “energy sector data” as information from activities including energy planning, production, transportation, consumption, and research, while noting that city gas, heating, and gas station data fall under other relevant authorities. An “energy data processor” is defined as any entity within the sector that engages in processing activities, encompassing the collection, storage, use, processing, transmission, provision, disclosure, or deletion of such data. A cornerstone of the Measures is the establishment of a **three-tier data classification system: General, Key, and Core Data**. Key Data is defined as information which, if leaked, tampered with, or destroyed, could directly harm national security, economic operations, social stability, or public health and safety. Core Data is a subset of Key Data whose illegal use or sharing could directly impact political security. General Data encompasses all energy sector data not classified as Key or Core.

Moreover, the Measures provide a **three-level governance structure**:

- **NEA**: Holds overarching supervisory authority, formulates data classification standards, and approves the national Key Data catalogues.

- **Provincial Energy Authorities**: Conduct supervision within their regions, compile and update local Key Data catalogues, and manage incident reporting and emergency response.
- **Energy Data Processors**: Bear primary security responsibility. Key duties include identifying and cataloging their Key Data, reporting to local authorities, and establishing internal data security management systems.

For processors of Key and Core data, the Measures stipulate several critical obligations:

- **Annual Assessment**: Must perform at least one yearly risk assessment of data processing activities, address issues and report findings.
- **Technical Measures**: Must apply safeguards like encryption and authentication throughout the data lifecycle.
- **Access Management**: Must enforce strict, least-privilege access controls.
- **Data Transfers**: Overseas transfers of Key Data require a mandatory data export security assessment. Sharing Core Data with other entities may trigger NEA risk assessments, particularly for significant volumes.
- **Incident Handling**: Must promptly remediate flaws and report security incidents.

The *Measures* establish the core regulatory framework for energy sector data security. Technical classification standards will follow to aid implementation. Foreign-invested firms shall now prepare for compliance with new cataloging, assessment, and protection mandates.

Source:

https://www.gov.cn/zhengce/zhengceku/202512/content_7051044.htm

https://www.gov.cn/zhengce/202512/content_7051046.htm

23. China Enforces a Stricter EV Energy Consumption Standard from 2026

#EV Energy Consumption

On January 1, 2026, China's landmark mandatory national standard for electric vehicle (EV) energy consumption **comes into force**. The standard, titled **GB 36980.1 – 2025 Energy consumption limits for electric vehicles – Part1: Passenger cars**, was published on May 30, 2025 by the State Administration for Market Regulation (SAMR) and the National Standardization Administration (SAC) to replace the 2018 recommended version (GB/T 36980-2018) and introduce stricter requirements. It aims to stimulate advancements in EV energy-saving technology, elevate overall vehicle efficiency, and phase out high-consumption models. This is how it will provide critical support for the industry's carbon peaking goals and align with national initiatives to promote vehicle trade-ins and foster high-quality development within the new energy vehicle (NEV) industry.

Specifically, the standard applies to all pure electric M1-class passenger vehicles with a maximum design total mass not exceeding 3,500 kg. Moreover, it formally mandates type-approval application and verification procedures, energy consumption limits, production consistency checks, and "same-type" vehicle determination rules, bringing a more rigorous and enforceable management regime. Notably, the standard sets energy consumption limits tailored to vehicle weight, based on a comprehensive assessment of current EV energy use, the potential for energy-saving technologies, cost considerations, and the performance of specialized vehicle models. Compared to the previous recommended standard, **the limits are tightened by approximately 11%**. Additionally, the standard introduces differentiated requirements that account for variations in energy consumption due to different usage patterns and technical characteristics,

effectively addressing the need for diversified vehicle development while providing clear guidance for future R&D and application of energy-saving technologies.

Following the implementation of the new standard, manufacturers will need to undertake necessary technical upgrades for newly produced vehicles. For instance, a vehicle weighing around **two tonnes** will be subject to a limit of no more than **15.1 kWh per 100 kilometers**. Following such upgrades, EVs are expected to achieve an **average range increase of about 7%** without any change in battery capacity, leading to a tangible improvement in the driving experience for end-users. The phased implementation allows new vehicle models seeking type approval to comply from the effective date, while models already approved have a transition period of 25 months (from January 1, 2028) to adapt.

This standard will operate in synergy with other key standards such as **GB 27999 Fuel consumption evaluation methods and targets for passenger cars** and **GB 19578 Fuel consumption limits for passenger cars**, to jointly form the regulatory framework for passenger vehicle energy efficiency management leading up to 2030. For foreign stakeholders, the mandatory standard necessitates technical upgrades to meet stricter limits but also signals a shift toward efficiency-driven competition. Proactive adaptation can transform compliance into a long-term competitive advantage within China's decarbonizing automotive market.

Source:

https://www.sac.gov.cn/xw/bzhdt/art/2025/art_634edaa0dfc94955af0ba2f2965cef2c.html

https://wap.miit.gov.cn/jgsj/zbys/qcgy/art/2025/art_942c05f7e7254ccdab2d974bbf0ed687.html

24. Mandatory Carbon Footprint Reporting for Traction Batteries in China Takes Effects

#Carbon Footprint Reporting #Traction Batteries

On December 31, 2025, the General Office of the Ministry of Industry and Information Technology (MIIT) released the *Notice on Carrying out Carbon Footprint Reporting for Automotive Traction Batteries* (hereafter "the Notice"). The Notice mandates carbon footprint reporting for all automotive traction batteries with a rated energy exceeding 2 kilowatt-hours (kWh) sold in the Chinese market, effective immediately upon the Notice's issuance. The **pilot phase (from notice release to December 31, 2026)** requires traction battery pack manufacturers to report carbon footprints for at least five typical models covering all chemical systems, supported by third-party verification reports. **Beginning**

January 1, 2027, normalized management mandates carbon footprint accounting and third-party verification for all covered battery packs.

Obligated reporting entities encompass not only manufacturers and importers of traction batteries but also road vehicle producers who assemble their own batteries for use in vehicles. Companies must register on a designated information platform and follow a sequential submission process. This involves presenting data quality control measures, providing product activity data, performing a self-calculation using the platform's background database, and ultimately uploading a final report that has been verified by an independent third-party institution.

Carbon footprint calculations must follow a full lifecycle methodology, where total emissions from material acquisition, production manufacturing, distribution and transportation, and recycling and reuse are divided by the battery's total energy output over its service life. Cycle life must be determined through testing per **GB/T 31484 Cycle life requirements and test methods for traction battery of electric vehicle** (2015 version, including amendments), while green power certificates and regional grid factors may be applied for accuracy.

Meeting these requirements requires broad industry collaboration. Upstream suppliers provide necessary data, third-party bodies conduct verification, and research institutions support the background database development. The Notice also encourages enterprises to establish digital carbon management platforms and green supply chains, with plans to integrate carbon footprint results into automobile consumption policies, government procurement standards, and zero-carbon factory assessments, while aligning domestic rules with international systems.

Foreign stakeholders involved in producing or using traction batteries for the Chinese market should promptly begin compliance benchmark to evaluate gaps between their current carbon footprint data and China's calculation rules. This includes identifying key data deficiencies, establishing local data management capabilities and ensuring their supply chain, especially within China, can provide compliant and traceable carbon activity data.

Source: https://www.gov.cn/zhengce/zhengceku/202512/content_7053525.htm

https://www.gov.cn/zhengce/202512/content_7053539.htm

https://www.miit.gov.cn/zwgk/zcjd/art/2025/art_d77c11b8780f4bc69b853b646cd97b01.html

25. MIIT Convenes High-Level Meeting to Advance “Dual-Carbon” Agenda

#Dual-Carbon

On December 5, 2025, the Leading Working Group on Carbon Peaking and Carbon Neutrality under China's Ministry of Industry and Information Technology (MIIT) convened a high-level meeting in Beijing. Senior ministry officials attended to review progress and deliberate on key tasks for the upcoming period.

Since China announced its timeline for achieving carbon peaking and carbon neutrality—widely referred to as the “dual carbon” goals—in 2021, these objectives have been a central pillar of national strategy. The meeting highlighted the critical role of the industrial and information technology sectors, noting that industry is not only essential for emission reduction but also serves as a key provider of technologies and equipment necessary to realize the final goals. Significant progress was recognized during the 14th Five-year Plan period, including the formation of a comprehensive and integrated new energy industrial chain, the widespread adoption of green and low-carbon technologies, and substantial reductions in energy consumption across relevant sectors.

Looking ahead to the coming year, the meeting outlined priority tasks. In the area of policy formulation, key efforts will include drafting the **Planning for Industrial Green and Low-carbon Development in the 15th Five-year Plan Period** and advancing the implementation of existing high-level policy documents. These include the **Action Plans for Green and Low-carbon Development in Manufacturing Sectors (2025-2027)**, issued by the State Council in May 2025, and the **Implementation Plan for Carbon Peaking in Industrial Sectors**, jointly released by MIIT and two other national ministries in July 2022.

Regarding working principles for 2026, the meeting emphasized that MIIT's dual-carbon efforts must strengthen top-level planning while ensuring effective implementation. It also called for improving the sectoral work system and enhancing management mechanisms. Key technical and operational priorities include accelerating the upgrading of

technical equipment in critical industries, bolstering the supply of technologies, standards, and testing methods for carbon peaking and neutrality, and promoting comprehensive industrial resource utilization. Furthermore, innovative initiatives such as building zero-carbon factories and calculating product carbon footprints will be pursued, alongside tapping into the potential of emerging technologies like artificial intelligence. Enhanced coordination both within MIIT and across other ministries was underscored as vital to pooling resources and building synergistic momentum.

For foreign stakeholders, the meeting provides a valuable outline of MIIT's strategic direction on green and low-carbon affairs. The key takeaways serve as a useful reference for understanding and anticipating related policies and planning initiatives expected in 2026.

Source: https://wap.miit.gov.cn/xwfb/bldhd/art/2025/art_c787ce7c5a904c4cb7b8057444a9d3dd.html

26. China Unveils Roadmap for National Product Carbon Footprint Factor Database

#Product Carbon Footprint

On December 5, 2025, China's Ministry of Ecology and Environment (MEE), in collaboration with six other national ministries, released the *Working Guideline on the Construction of Product Carbon Footprint Factor Database*, as a significant step to strengthen its climate governance framework. This document, referred to as "the Working Guideline," aims to systematically advance the development of a foundational database for product carbon footprint factors. It provides clear direction for local governments, industries, research institutions, enterprises, and other social entities to engage in related data development and database initiatives.

The Working Guideline establishes explicit phased objectives for this national project. The primary goal is to establish a preliminary product carbon footprint factor database by 2027. This effort is set to culminate by 2030 with the basic completion of a comprehensive database characterized by wide coverage, high data quality, and substantial international influence.

To ensure the database's robustness and practicality, the Working Guideline elaborates on detailed approaches and measures across multiple critical dimensions. These include clarifying the overarching construction methodology and establishing a mechanism for sharing and integrating data. It further standardizes the research and development process for factor determination, specifies requirements for data sources and regular updates, and institutes a framework for data quality evaluation. The document also emphasizes strengthening data security protections and

defines the database's fundamental composition and architecture. Importantly, it seeks to unify the naming, classification, and coding systems for factor data while encouraging the innovative application of cutting-edge technologies in database construction.

For foreign stakeholders, this Working Guideline represents another concrete action in China's ongoing specification of its management systems for greenhouse gas (GHG) emission control, reduction, and carbon footprint tracking. It follows earlier key initiatives such as the establishment of the **National Greenhouse Gas Emission Factor Database** (<https://data.ncsc.org.cn/factories/index>) and the issuance of the *Working Guidelines of Formulating Standards on Product Carbon Footprint Accounting* in January 2025. This progression underscores the country's sustained determination to achieve its Dual Carbon goals of peaking carbon emissions by 2030 and reaching carbon neutrality by 2060.

A notable aspect of the Working Guideline is its design for multi-stakeholder collaboration. It actively encourages various entities to contribute data to the national database. Submitted data that meets relevant standards may be incorporated as reference material or help inform future working goals and requirements, fostering a collaborative ecosystem for data development.

Source:

https://wap.miit.gov.cn/xwfb/gxdt/sjdt/art/2025/art_18b3ddb893034d07bdf32e6bb8da13b7.html



Others

27. SAMR Released New Mandatory National Standard for Civil Unmanned Aircraft

Civil Unmanned Aircraft

On December 2, 2025, the National Standardization Administration of China released a new mandatory national standards **GB 46860-2025 Unique product identification code for civil unmanned aircraft**. The standard was led by the National Technical Committee of Information Technology (SAC/TC28). It will come to effect on 1 January 2027, and the Ministry of Industry and Information Technology will assume jurisdiction over implementation and enforcement of this mandatory standard.

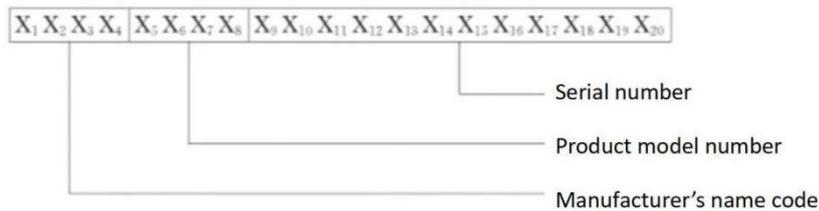
This standard specifies the **coding rules, registration and filing, product packaging marking, marking on the aircraft body surface, storage and security**, as well as **reporting and broadcasting requirements** for the unique product identification code of civil unmanned aircraft systems. It is applicable to the full-lifecycle management of micro, light, small, medium and large civil unmanned aircraft systems.

It is not applicable to model aircraft and self-powered flight toys.

Regarding the design of the unique identification code, the standard distinguishes between two types of stakeholders for civil unmanned air crafts:

(1) Civil Unmanned Aircraft made by manufacturers:

The unique product identification code shall consist of 3 parts: the manufacturer's name code, product model number, and serial number, for a total length of 20 characters. The structure of the unique product identification code is shown in the following figure.

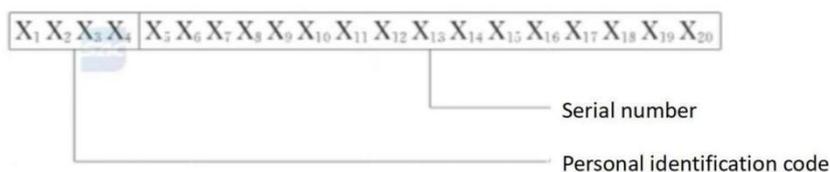


Source: GB 46860-2025 Unique product identification code for civil unmanned aircraft

Figure 1. Unique Identification Code for Unmanned Aircraft made by Manufacturer

(2) Civil Unmanned Aircraft assembled or spliced by individuals:

The unique product identification code for such civil unmanned aircraft shall consist of 2 parts: the individual identification code and the serial number, for a total length of 20 characters. The structure of the unique product identification code is shown in the following figure.



Source: GB 46860-2025 Unique product identification code for civil unmanned aircraft

Figure 2. Unique Identification Code for Unmanned Aircraft assembled or spliced by individuals

With respect to the registration and filing, the standard sets out the obligations that producers, importers, original

manufacturers, and entrusted manufacturers should fulfill, together with the corresponding procedures and requirements. (Note: In this context, 'producers' refer to individuals who assemble and splice civil unmanned aircraft.) Concerning product packaging, the standard stipulates that all 20 characters of the unique product identification code on the outer packaging label of the product must be legible to the naked eye and accompanied by a barcode or QR code readable by a unique product identification code reader. From the date of implementation of this standard, for civil unmanned aircraft that **have been sold and are in use**, a 36-month transition period is provided to meet the requirements of this document.

The introduction of this standard gives every civil unmanned aircraft operating within China's territory its own electronic "ID card". This enables unified management and full lifecycle traceability, improves the efficiency of safety supervision, standardizes market order, safeguards air traffic and public safety, and holds great significance for promoting the healthy, orderly and high-quality development of the civil unmanned aircraft industry.

If you need more information about this mandatory standard, please feel free to contact us at any time **via email** (assistant@sesec.eu).

Source: <https://www.cesi.cn/202512/11448.html>

28. SAC/TC114 (Auto) Renewed its Committee Membership

#Auto Standardization

On December 10th, 2025, the Ministry of Industry and Information Technology (MIIT) released a new membership list of SAC/TC114, the National Technical Committee of Auto Standardization. SAC/TC114, with its secretariat at China Automotive Technology and Research Center (CATARC). The TC has undergone five terms; each term lasted five year and will soon enter its 6th term.

The new term will be chaired by Mr. Wang Weiming, Director-General of the Equipment Industry Department I at MIIT, and co-chaired by 5 deputy directors-general. They are Mr. Qi Yaozhong from the Traffic Management Bureau of Ministry of Public Security (MPS), Mr. He Ming from Department of Science and Technology at the Ministry of Transport (MoT); Mr. Zhang Haolong from the Ministry of Ecology and Environment (MEE); Mr. Wu Xiangqian from the General Administration of Customs. Mr. An Tiesheng who is the CEO and senior engineer Of CATARC is the vice chair and secretary general of SAC TC 114.

The new committee consists of 78 members, including 15 government representatives from MIIT, SAMR, MPS, MoT and other essential authorities, 11 from research centers and academia, 8 from vehicle testing and inspection centers, and 44 enterprise members who are leading automakers, parts and components

manufacturers, battery manufacturers, and autonomous driving service providers across the vehicle manufacturing supply chain. Among the 44 enterprises, FAW Toyota and SAIC Volkswagen are the only 2 foreign members.

Furthermore, the new committee has included several leading local companies from high-growth sectors, with new entrants from electric vehicles (e.g., XiaoMi, Leapmotor), robotics (e.g., Horizon Robotics), and AI technology (e.g., iFlytek). The committee's restructure signals a strategic shift toward domestic technological sovereignty. It has streamlined government and academic seats while expanding enterprise membership, notably dropping Hyundai and adding prominent Chinese EV and AI firms. This move aligns standardization directly with fostering China's indigenous innovation in next-generation automotive technologies.

SESEC has translated the full membership roster. You can download the list here:

[SACTC114 6th Committee Roster\(2026-2030\)](#)

Source:

https://wap.miit.gov.cn/jgsj/kjs/jscx/bzgf/art/2025/art_bf439eb0081d4b8abb73e703aebf9f4b.html

29. HiPi Forum Unveils Milestone Chiplet Interconnection Standards

#Semiconductor

On December 20, 2025, the 4th **HiPi Chiplet Forum** themed “**Exploring Chip Frontiers, Driving New Intelligence,**” was successfully convened in Beijing. Organized by the Zhongguancun High-Performance Chip Interconnection Technology Alliance (HiPi Alliance), the main forum attracted over 600 participants, including academicians, industry leaders, and representatives from across the integrated circuit (IC) supply chain. Senior Chinese officials from the Ministry of Industry and Information Technology (MIIT), the Beijing Municipal Commission of Development and Reform, and the Beijing Economic-Technological Development Area (BDA) delivered opening remarks. The discussions of the forum centered on **Chiplet frontier technologies, standardization progress, industrial application, and ecosystem development.**

A key focus was the formal release and promotion launch of a national standard series on Chiplet interconnection. Guided by the National Technical Committee for Standardization of Integrated Circuits (SAC/TC599), the HiPi Alliance led the development of the ***GB/T 46280-2025 Specification for chiplet interconnection interface***, including ***Part 1: General Principles, Part 2: Protocol layer technical requirements, Part 3: Data link layer technical requirements, Part 4: Physical layer technical requirements based on 2D package, and Part 5: Physical layer technical requirements based on 2.5D package.***

Officially published in August 2025, these standards are described as a “milestone breakthrough” in China’s Chiplet standardization efforts. The launching ceremony marked the official kick-off for their widespread implementation, with representatives from drafting and

implementing organizations like the HiPi Alliance, China Electronics Standardization Institute (CESI), HiSilicon, China Mobile Research Institute (CMRI), and several key domestic firms in attendance.

At the forum, technical presentations highlighted China’s research and development priorities. Academician Luo Yi from Tsinghua University advocated for photonic-electronic heterogeneous integration, using silicon photonics and co-packaged optics to address AI computing’s power and thermal challenges. Academician Liu Sheng stated that integrating vacuum interconnection with Chiplet technology will advance chip reliability to parts-per-billion (ppb) levels, boosting innovation in China’s IC sector. Zhang Xin from the Semiconductor Manufacturing International Corporation (SMIC) called for deeper “trinity” collaboration between manufacturing, design, and services to build a self-reliant Chiplet ecosystem.

In his address, Wu Huaqiang, Vice President of Tsinghua University, outlined the HiPi Alliance’s role in fostering Chiplet industry collaboration. He presented the alliance’s roadmap for association standards spanning from interface specifications to testing, design, and materials, along with its plans for their upgrade to national standards. Additionally, he highlighted 3D IC technology—which enhances bandwidth, reduces latency and power consumption, and minimizes chip area through vertical stacking—as a key trend for high-performance chips. Going forward, the HiPi Alliance will continue to strengthen standardization and ecosystem development to drive innovation in China’s IC industry.

Source:

<https://mp.weixin.qq.com/s/EJjL2StLuLHKlqaEulJgBg>

30. China Establishes Additive Manufacturing Data & Design Subcommittee

#Additive Manufacturing

On November 18, 2025, the inaugural meeting of the **Subcommittee for Data and Design under the National Technical Committee for Additive Manufacturing (TC562/SC3)** was held in Yantai, Shandong Province, marking a significant step in standardizing the core foundational areas of China’s additive manufacturing (AM) industry. The event gathered officials from the Ministry of Industry and Information Technology (MIIT), the State Administration for Market Regulation, the National Standardization Administration (SAC), TC562 representatives, and leading industry experts. The inaugural meeting, hosted by Li Haibin (Deputy Secretary-General of TC562), featured a report by Subcommittee Chairman Professor Shi Yusheng on the preparation and forming technologies of AM-specific materials, followed by a presentation from Professor Guo Chunhuan of Harbin Engineering University on the progress

of a standard cultivation project for post-processing metal powder bed fusion.

Later, the subcommittee's Secretary-General Lv Zhongli presided over its first plenary session. Li Haibin reported that China's AM industry is developing rapidly, with equipment production rising 40.5% year-on-year in the first three quarters of this year, consistently outperforming the national industrial average. Exports in 2024 reached 9.371 billion yuan, up 32.6% year-on-year, spanning 158 countries and regions. He described standards as a "firm benchmark" for the market and a "strategic move" for innovation. The industry has recorded 84 national and 21 sector standards to date. As the critical link between digital models and physical entities, data and design are key to driving high-quality development, with 12 related standards already published, providing a solid foundation for the subcommittee's establishment. Li also emphasized the need for the subcommittee to focus on pressing industrial demands and key standards, strengthen international standardization capabilities to overcome core technological bottlenecks, and engage diverse stakeholders in building a comprehensive standards framework.

China's AM standards system currently faces multiple challenges, including lagging foundational standards, inadequate standardization of cutting-edge innovation methods, limited international integration, and insufficient convergence with digitalization. The establishment of TC562/SC3 is a direct response to these issues. By integrating expert expertise and developing a core standards system for data, models, and processes, it will address national strategic and industrial needs, foster an open and collaborative smart manufacturing ecosystem, and thereby facilitate the industry's evolution from isolated breakthroughs to global leadership.

For foreign enterprises, it is crucial to engage early in China's standard-setting processes through industry associations or joint labs, align technical pathways with local requirements, and adapt products to support domestic data formats and certification systems. Exploring R&D partnerships with local universities and leading companies, while closely monitoring evolving regulations on data cross-border flow and security certification for the AM industry, will enable a strategic shift from technology export to ecosystem co-creation.

Source: <https://mp.weixin.qq.com/s/f2Mether9PE0YogCybsvCA>

31. RISC-V Conference Highlights China's Push for Global Open-Source Chip Leadership

RISC-V Development

On November 24, 2025, the **2025 RISC-V Industry Development Conference and RDSA International Summit** (hereafter referred to as the Conference) was held in Zhuhai, Guangdong, drawing nearly a thousand scientists, academicians, and industry leaders from across the world. The Conference was jointly hosted by institutions such as the RISC-V Ecosystem and Industry Committee under China Electronics Standardization Association (CESA) and RDSA Industry Alliance. Under the theme "Building Standards Together, Connecting Ecosystems," the Conference served as a pivotal platform for in-depth discussions on technological breakthroughs, ecosystem collaboration, and application deployment for RISC-V.

In his opening address, Mr. Xiong Jijun, Vice Minister of the Ministry of Industry and Information Technology (MIIT), highlighted RISC-V as a key pathway for China to achieve high-level self-reliance in critical areas like AI chips and high-performance processors. He stressed its strategic role in strengthening China's digital economy foundation and enhancing global competitiveness. Mr. Xiong added that MIIT will step up top-level planning and policy support to drive breakthroughs in RISC-V standardization, R&D, application, and global collaboration—fostering an independent open-source ecosystem and injecting new momentum into worldwide computing innovation.

A landmark achievement of the Conference was the official release of the **RISC-V Industrial Ecosystem Standards System** (See the Figure 1), a collaborative effort by key institutions including the China Electronics Standardization Institute (CESI) and China Industrial Control Systems Cyber Emergency Response Team (CIC-CERT). Signifying a major step in global collaboration, Mr. Zhang Hongtu, Chairman of CESA, signed a Memorandum of Cooperation with the Brazil Semiconductor Industry Association. This pact aims to build a vital bridge for interconnecting open-source ecosystems worldwide.

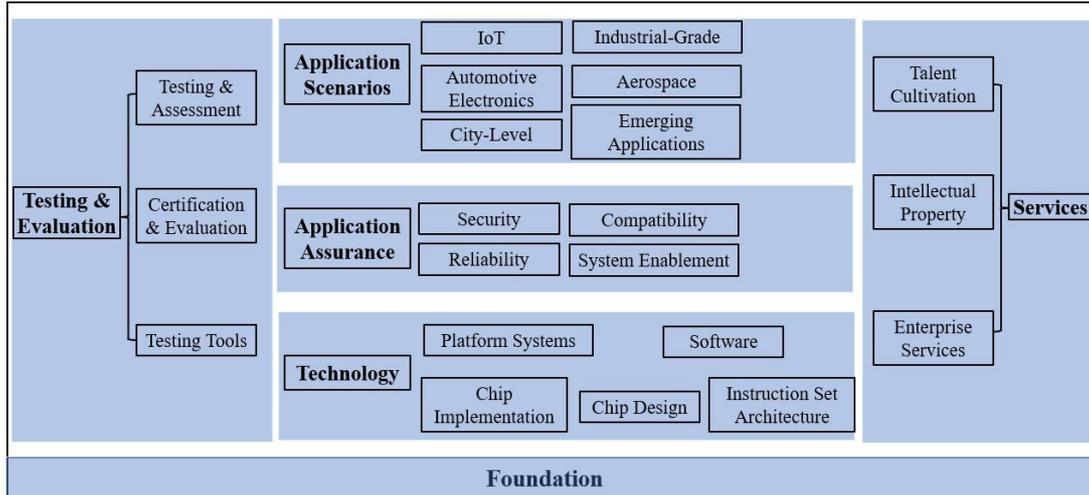


Figure1 RISC-V Industry Ecosystem Standards System

The momentum continued on November 25 with the Global Cooperation Special Forum (Macau), where discussions centered on “International Cooperation and Talent Cultivation,” and new opportunities of global cooperation in the RISC-V sector. A significant highlight was the inauguration of the Greater Bay Area RISC-V Ecological Development Center’s DSA Development Laboratory in Macau, which marks a new phase of synergistic collaboration between Zhuhai and Macau in technology R&D and resource sharing. The successful conclusion of the Conference not only showcased China’s remarkable progress in the RISC-V domain but also stood as a significant milestone for global collaborative development within the open-source chip ecosystem.

In conclusion, the Conference signifies a pivotal acceleration in China’s systemic and standardized development of the RISC-V ecosystem. For foreign stakeholders, it offers clearer pathways for collaboration and market integration, particularly within standard-setting processes. Conversely, the maturation of a China-led ecosystem will amplify competitive pressures across technology architecture, talent acquisition, and market dynamics.

Source: <https://www.cesa.cn/detail?paId=234&nblD=1038>

32. Safety Standards Drafted for Power Banks and Toy Batteries, and Revised for EVs in China

#Mandatory Standards Revision

In November 2025, China advanced **three mandatory national standard drafts** toward final approval and also progressed the translation of two foundational safety standards into English, as part of efforts to enhance both domestic consumer safety and international regulatory alignment. The three new standards, covering portable power banks, lithium-ion batteries used in children’s toys, and a revised safety requirement for electric vehicles (EVs), aim to address growing safety risks in these rapidly evolving sectors. The **Safety technical specification for power bank** and the **Safety of lithium ion cells and batteries used in electronic and electrical equipment —Part 4: toys** are open for public comments from **November 12 to December 11, 2025**. Meanwhile the revised **GB 18384 Electric vehicles safety requirements** and the two translation drafts for **GB 19517-2023 National technical specification for the safety of electric equipments** and **GB 1002-2024 Single phase plugs and socket-outlets for household and similar purposes Types, basic parameters and dimensions** were open for feedback from **November 1 to November 7, 2025**.

Specifically, the mandatory national standard on power bank introduces stricter safety test requirements, such as thermal abuse and overcharge testing. It applies to power banks with an AC 220V or DC ≤250V input, excluding

automotive jump starters, while specifying type-test items for both battery cells and finished power banks, including key safety tests like overcharge, crush, nail penetration, and aging lithium plating. A 12-month transition period is proposed post-publication, after which it will be enforced under relevant regulations and notified to the WTOTBT Secretariat. Moreover, the standard on lithium-ion batteries used in children's toys specifies corresponding safety requirements and test methods. Its scope is applicable to lithium-ion cells and batteries for toys with a maximum output voltage not exceeding 24 V DC, and also applies to similar lithium-ion cells and batteries for children's and infant products. Notably, it is stipulated that second-life batteries shall not be used in toy products; battery packs shall be equipped with appropriate protection circuits to activate protective measures when voltage, current, or temperature abnormalities occur in the cell or battery pack, ensuring operation within specified parameters and preventing further hazards.

In addition, the revised standard on EVs, set to replace the current 2020 version, aims to address evolving challenges in the EV sector. It introduces new vehicle undercarriage protection test, enhances electrical and functional safety requirements, and refines testing and verification methods. It is recommended that the standard be implemented on July 1, 2026, applying immediately to newly applied vehicle type approvals, while taking effect from the 13th month after implementation for already approved vehicle types. Regarding the English version of the *GB 19517-2023* and *GB 1002-2024*, the purpose is to provide official foreign-language references to facilitate international trade and compliance in terms of low-voltage electrical equipment and single phase plugs and socket-outlets.

The new mandatory standards will significantly impact foreign enterprises by raising compliance costs, tightening adaptation timelines, and elevating technical barriers—such as banning second-life batteries in toys. While English translations improve regulatory transparency, foreign firms must actively engage in China's standard-setting process to maintain competitiveness.

Source: https://wap.miit.gov.cn/jgsj/kjs/jscx/bzgf/art/2025/art_9251d4edd5774370940628dc93fd8729.html

https://wap.miit.gov.cn/jgsj/kjs/jscx/bzgf/art/2025/art_745387c2edf7400085950e1d54c364aa.html

33. SAC/TC79/SC7 on Electromagnetic Compatibility Convened 2025 Plenary Meeting

#Electromagnetic Compatibility

On 14 November 2025, the Subcommittee on Electromagnetic Compatibility of Information Technology Equipment, Multimedia Equipment and Receivers under the National Technical Committee on Radio Interference Standardization (SAC/TC79/SC7) held its the Second Plenary Meeting. The meeting was jointly chaired by Xiang Daocai, Chairman of the SAC/TC79/SC7, and Vice Chairmen Lin Jingping and Zhu Wenli. A total of 61 participants, including committee members, experts, and enterprise representatives from across the country, attended the meeting, among whom 53 were official members and their representatives, and 8 were observers.

Li Huanran, Secretary-General of the SAC/TC79/SC7, delivered the 2025 Annual Work Report, which systematically reviewed the achievements made by the Subcommittee over the past year in areas such as standards development, international standards tracking, and technical exchanges, and clearly identified the key priorities for the next stage of work.

During the special presentation session, Cui Qiang, Secretary-General of SAC/TC79/SC1 Measurement and Statistical Methods for Radio Interference, introduced the recent progress of the standardization work of the joint CISPR working group between SC1 and SC7. Chen Hao, Secretary of SC7, gave an in-depth briefing on "Developments in IEC/CISPR International Standards," providing detailed insights into the latest progress of the CISPR standards system, its strategic planning for the next 3 to 5 years, as well as recommendations on the direction of standardization work during the "15th Five-Year Plan" period.

The technical exchange session was highly engaging, with a number of industry experts sharing cutting-edge research results and practical experience. Experts from vivo, the Secretariat of SAC/TC246 Electromagnetic Compatibility Standardization, Rohde & Schwarz (R&S), the National Institute of Metrology of China, the Jiangsu Electronic Information Product Quality Supervision & Inspection Institute, ZTE, and Skyworth Digital, among others, conducted in-depth discussions on topics including the classification of harmonic emission limits for tablet computers, the latest

standards developments within IEC/TC77, EMI testing challenges in the millimeter-wave era, metrological calibration of integrated circuit measurement equipment, EMC testing cases for multimedia equipment, the impact of the electrostatic discharge (ESD) gun's own radiation on test results and interference assessment, and the impact of network cable configurations in anechoic chambers on measurement results. These discussions generated strong interest and wide resonance among participants.

The meeting focused on international standards development and domestic industry needs, reaching multiple consensuses on improving the SAC/TC79/SC7 standards system. First, it agreed to closely follow international progress—especially the upcoming releases of CISPR 32 Edition 3.0 and CISPR 35 Edition 2.0 in 2026—and establish corresponding domestic working groups in advance to facilitate timely adoption as national standards. Second, it decided to enhance the standards system through tiered and categorized approaches, prioritizing areas such as radiated emission testing for outdoor multimedia equipment, EMC standards for AI and multi-module devices, EMC testing for external power supplies and charging equipment, and audio-video cables. Third, defining short-term priority tasks: these include establishing domestic working groups for CISPR 32 and CISPR 35, initiating the national standard transformation of CISPR TR 29, advancing independent standards development in areas such as external power supplies and outdoor displays, carrying out research on the impact of HDMI and other cables on EMI, and promoting international standard proposals on emission limits for MME equipment in the 18–40 GHz frequency band.

The meeting deepened the members' understanding of international standardization trends and also clarified the technical roadmap of SAC/TC79/SC7 for the upcoming 15th Five-Year Plan period.

Moving forward, SAC/TC79/SC7 will accelerate the implementation of key tasks, continuously enhancing China's standardization capacity and international influence in the field of electromagnetic compatibility for information technology equipment, multimedia equipment, and receivers.

Source: <https://www.cesi.cn/202511/11418.html>

34. China Establishes IC Equipment Working Group to Drive Industry Standardization

#Semiconductor

On November 14, 2025, the inaugural meeting of the **Integrated Circuit (IC) Specialized Equipment and Components Working Group under the National Technical Committee on Integrated Circuit (SAC/TC599/WG8)** was successfully convened in Beijing. The WG8 covers 50 member units encompassing leading manufacturers, end-users, and research institutes in the domestic IC equipment and component sector. The event was attended by Mr. Yang Xudong, Director of the Electronic Information Department at the Ministry of Industry and Information Technology (MIIT), Mr. Luo Faming, Secretary of the Commission for Discipline Inspection at the China Electronics Standardization Institute (CESI), along with over 90 representatives from member units.

Director Yang Xudong highlighted the working group's establishment as a pivotal step to systematically advance standardization across the IC industry chain, laying a solid foundation for core-tech breakthroughs and greater adoption of domestic equipment and components. He urged leveraging standardization to overcome bottlenecks, improve the industrial ecosystem, and drive high-quality growth. Secretary Luo Faming underscored that IC equipment and components are fundamental to the industry, directly determining domestic production capacity, resilience, and innovation. He called the working group essential for boosting domestic production and achieving self-reliance—a necessary move to strengthen China's semiconductor industry and ensure its long-term, healthy development.

In the latter session, representatives delivered keynote reports on the development of the industry standard *Quality Management System for Semiconductor Equipment and Components*, the *Role of Standardized Component Performance Evaluation in Promoting the Microelectronics Industry's Normative Development*, and an interpretation of the *Guidelines for Safety Management System Construction of Semiconductor Manufacturing Equipment Products*. On the same day, over 70 representatives from the WG8 and relevant drafting units participated in a standards seminar, discussing six drafted standards including:

- *Quality Management System for Semiconductor Equipment and Components*

- *Semiconductor Equipment – Magnetron Sputtering Equipment for Integrated Circuit Manufacturing*
- *Semiconductor Manufacturing Equipment – Measurement Method for RF Power Supply Output Power*
- *Semiconductor Equipment – Test Methods for Wet Processing Equipment for Integrated Circuit Manufacturing*
- *Semiconductor Equipment – Test Methods for Chemical Mechanical Polishing (CMP) Equipment for Integrated Circuit Manufacturing*
- *Semiconductor Equipment – Test Methods for Physical Vapor Deposition (PVD) Equipment for Integrated Circuit Manufacturing*

Drawing on their practical industry experience, participating experts provided numerous constructive suggestions and reached a series of consensus on the draft standards. This has laid a solid foundation for improving the standardization system, overcoming technical bottlenecks, and enhancing the quality and competitiveness of the industrial chain. For foreign firms, this means both the challenges of intensified domestic competition and rising compliance costs, as well as opportunities to participate in the building of a new standards system and deepen local cooperation.

Source:

<https://mp.weixin.qq.com/s/4YMrIpFy2pJcgVPJb-4Knw>

<https://mp.weixin.qq.com/s/OwzxPpLSN2LiAGBRL73wvQ>

Annex 1 SESEC VI Report - SAC/SC42 Second Standards Week 2025

Annex 2 SESEC VI Translation - SAC/TC609 Data Standardization Report

Annex 3 SESEC VI Translation - Standardization Report on Low-Altitude Economy

Annex 4 SESEC VI Translation - Draft for Comment of China Cybersecurity Labeling Management Measures

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

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