SESEC V

China Standardisation Newsletter

July – August 2025

Seconded European Standardisation Expert in China

(SESEC)

Index

Takeaways

Shanghai Cooperation Organization (SCO) Launched Standardization Cooperation Mechanism

On 8 July 2025, , China's State Administration for Market Regulation (SAMR) and the Federal Agency for Technical Regulation and Metrology of Russia (Rosstandart) initiated the first Shanghai Cooperation Organization (SCO) Standardization Cooperation Conference. The event established **SCO standardization cooperation mechanism**, deepening standardization collaboration in priority sectors, building a standardization information platform, and strengthening standardization capacity building.

EU-China Dialogue on Cross-Borde Data Flow in Brussels

On 17 July 2025, the second meeting of the EU-China Data Cross-Border Flow Exchange Mechanism was held in Brussels. The meeting was co-chaired by Wang Jingtao, Deputy Director of the Cyberspace Administration of China, and Sabine Weyand, Director-General for Trade of the European Commission. The meeting reviewed progress achieved since the mechanism's establishment, acknowledging its significant role in facilitating data cross-border flow between China and the EU. The two sides engaged in an in-depth, pragmatic, and constructive exchange on topics related to China-EU data cross-border flow.

China Approves "AI Plus" Action Plan to Drive Industrial Integration

On 31 July 2025, the State Council of China reviewed and approved the ***Opinions on Deeply Implementing the "Artificial Intelligence Plus"*** *Action Plan*. The meeting pointed out that, as AI technologies are evolving and iterating rapidly, it is necessary to thoroughly implement the "AI+" initiative, vigorously promote the **large-scale and commercialized application of AI**, and give full play to China's advantages of a complete industrial system, a vast market, and rich application scenarios.

Participation Statistics of Foreign Invested Enterprises in China's National Standardization Committees

On July 11, 2025, China's National Standardization Administration (SAC) released a statement on foreign invested enterprise (in China) participation in its national standardization technical committees. The statement indicated that, as of the end of June 2025, there were **3,333 representatives** from foreign invested enterprises serving as committee members, accounting for **5.4%** of the total membership. Moreover, foreign enterprise members are involved in **791 technical committees**, representing **58% of all committees**. However, compared with 2023 figures, there has been a slight decrease in both total membership and committee coverage.

China-ASEAN Standardization Forum Yields Fruitful Outcomes in AI

On August 27, 2025, the 2025 ASEAN-Oriented Standardization Cooperation Forum was held in Nanning, Guangxi Zhuang Autonomous Region, focusing on AI standardization as a pathway to strengthen the China-ASEAN community. The Forum was co-organized by the China-ASEAN Standardization Cooperation and Exchange Center (ASCEC) and the ASEAN Consultative Committee on Standards and Quality (ACCSQ).

MA-DPP Universal Framework 1.0 for "Digital Product Passport" Launched in Beijing

On July 18, 2025, China unveiled its independently developed world's first universal framework for Digital Product Passports, **MA-DPP Universal Framework 1.0.** This framework provides a unified and convenient global platform to support and facilitate the smooth and stable operation of global supply and industrial chains.

China's Blueprint for Digital Transformation in Machinery (2025-2030)

On August 1, 2025, the Ministry of Industry and Information Technology (MIIT) and other seven Chinese government departments jointly issued the ***Implementation Plan for the Digital Transformation of the Machinery Industry (2025-2030)***. This pivotal document outlines a detailed roadmap to accelerate the integration of digital intelligence technologies across this foundational sector.

CAC Releases China's Informatization Development Report (2024)

On July 30, 2025, the Cyberspace Administration of China (CAC) released the *National Informatization Development Report (2024)* (Hereinafter referred to the "Report"), reviewing and assessing informatization progress across

regions and sectors throughout the past year and illustrating key tasks for the 2025 year. New achievements in five dimensions are listed in the Report, including innovation-driven development, enabled growth, inclusive benefits, security enhancement, and open collaboration.

China Introduces Mandatory RoHS Standard GB 26572-2025

On August 1, 2025, ***GB 26572-2025 Requirements for restricted use of hazardous substances in electrical and electronic products***, China's first mandatory national standard in the restriction of hazardous substances (RoHS) for electrical and electronic products (Hereinafter referred as the Standard), was approved and released by the National Standardization Administration (SAC). This mandatory standard, proposed and administered by the Ministry of Industry and Information Technology (MIIT), was jointly developed by the China Electronics Standardization Institute in collaboration with over 60 institutions and enterprises, including electrical and electronic product manufacturers, certification and testing bodies, industry associations and research institutes. It is set to **take effect on August 1, 2027**.

China Advances its Carbon Market Framework

On August 25, 2025, the ***Opinions on Promoting Green and Low-carbon Transition and Strengthening the Development of the National Carbon Market*** was jointly issued by the Communist Party of China Central Committee's General Office and the State Council General Office in China. The Opinions provide a comprehensive strategic plan for the development of China's **National Carbon Emissions Trading Market** and the **National Voluntary Greenhouse Gas Emissions Reduction Trading Market** in the coming period. It aims to establish a more effective, dynamic, and internationally influential carbon market system, offering solid support for steadily and prudently advancing carbon peak and carbon neutrality goals.

SAC/TC 28 First Standards Week in July 2025

On July 15, 2025, the National Information Technology Standardization Technical Committee (SAC/TC28) launched its first "Standards Week" event of 2025. The opening event and plenary meeting were held in Beijing. The *"Information Technology Standardization Work Report"* was unveiled, reviewing global IT industry trends and reporting progress in standardization across critical areas such as hardware, software applications, electronics, emerging technologies, and future industries.

SAC/TC28/SC42 AI Standards Week in 2025

From July 8 to July 10, 2025, the Artificial Intelligence Subcommittee of the National Information Technology Standardization Technical Committee (SAC/TC28/SC42) convened its annual ***Artificial Intelligence Standards Week*** in Beijing. More than 600 representatives attended the meeting, including officials from relevant government departments, enterprises and public institutions, universities and research institutes, industry associations, and news media. The event commenced with two plenary meetings. One is from the **National Artificial Intelligence Standardization General Group,** while the other one is from SC42.

CEEIA Annual Standardization Meeting of 2025

On 23 and 24 July 2025, the Standardization Committee of China Electrical Equipment Industry Association (CEEIA) successfully held its 19th General Assembly in Shanghai. The event brought together more than 160 participants, including vice chairpersons, representatives from research institutes, member enterprises, and members of the CEEIA Standardization Committee.

SESEC Activities

1. [Closed] Upcoming SESEC Webinar 20: China AI Policies, Regulations and Standards as of 2025

#SESEC Webinar

Date: Tuesday, 23rd September 2025
Time: 10:00 am- 11:00 am CET time
Speaker: Dr. Betty Xu, Director of SESEC
Language: English
Stay ahead of China's rapidly evolving AI regulatory landscape with expert insights into the 2025 policy updates. This session delivers a comprehensive analysis of China's current AI standardization framework and strategic perspectives on the nation's next-phase AI development priorities, providing actionable intelligence for global stakeholders.

Key Takeaways:

- China AI policies and initiatives in 2025.
- Analysis on China's AI regulatory approach.
- Latest developments in China's AI standardization roadmap.
- Practical implications for foreign stakeholders navigating China's evolving compliance landscape.

If you wish to receive the webinar PPT, please contact SESEC Team via email: assistant@sesec.eu

2. [Open] Upcoming SESEC Webinar 21: China Energy Labelling 2025: Regulations and Standards

#SESEC Webinar

Date: Tuesday, 21st October 2025
Time: 10:00 am- 11:00 am CET time
Speaker: Dr. Betty Xu, Director of SESEC
Language: English
Join our upcoming webinar to explore China's latest energy labelling standards and regulatory updates as of 2025. This session will provide valuable insights into the evolving compliance requirements and their implications for manufacturers and exporters in the energy sector.

Key Takeaways:

- China Energy Labelling Regulation and Product Catalogue as of Oct 2025.
- Latest developments in China's energy labelling standards for 2025.
- Key compliance considerations for market access.
- Practical guidance for adapting to updated regulatory requirements.

Register now on Zoom:
https://us06web.zoom.us/webinar/register/WN_xNjqZp6RRxSge3GjkEpvxw

Horizontal Actions

3. Shanghai Cooperation Organization (SCO) Launched Standardization Cooperation Mechanism

#International Standardization

On the afternoon of July 8, the first Shanghai Cooperation Organization (SCO) Standardization Cooperation Conference, jointly initiated by China's State Administration for Market Regulation (SAMR) and the Federal Agency for Technical Regulation and Metrology of Russia (Rosstandart), was held in Qingdao, Shandong Province.

Mr. Deng Zhiyong, Vice Minister of SAMR, and Administrator of the National Standardization Administration (SAC), attended the meeting and delivered a speech. The conference brought together over 40 representatives from countries including Russia, Belarus, and Kazakhstan.

The event advanced discussions on establishing an **SCO standardization cooperation mechanism**, deepening standardization collaboration in priority sectors, building a standardization information platform, and strengthening standardization capacity building.

During the conference, the ***Qingdao Initiative on Strengthening Standardization Cooperation Among SCO National Standardization Bodies*** was formally adopted, officially launching the SCO Standardization Cooperation Mechanism. Five cooperation components were agreed upon during the meeting:

1. **Technical Standards Working Groups**
    - Task forces will be deployed in **key sectors**, including **artificial intelligence**, **low-altitude economy**, **green energy**, **digital economy**, **transportation**, and **logistics**.
2. **Standardization Information Platform**
    - A shared platform will be developed to facilitate information exchange among standardization bodies.
3. **Capacity Building**
    - Member states will receive support in strengthening standard-setting capabilities and aligning national standards to reduce technical trade barriers.
4. **Alignment of Standards**
    - Harmonizing technical standards across the SCO will facilitate smoother trade, reduce barriers, and enhance regional economic integration.
5. **Global Standard-Setting Influence**
    - Coordinated efforts aim to amplify SCO members' collective influence in international standardization fora and promote a more balanced global economic order.

According to the Department of Standards Innovation and Management of SAC (under SAMR), this is the first standardization cooperation mechanism under the SCO framework, and the first standardization cooperation initiative of its kind among member states. Several drivers underpin the launch of this mechanism:

- **Mutual Strategic Interests**
  The mechanism reflects the intensifying Sino-Russian coordination in economic, technological and institutional domains under the SCO framework.
- **Redressing Western-Dominated Norms**
  By collectively harmonizing standards, SCO members seek to reduce reliance on Western-dominated global institutions and establish autonomy in emerging sectors such as AI and low-altitude economy.
- **Economic Integration & Trade Facilitation**
  Standard alignment is intended to lower non-tariff barriers and improve trade efficiency within the SCO, particularly relevant amid global supply chain disruptions and geopolitical tensions.
- **Institutionalizing SCO's Role**
  SCO began as a regional bloc aimed at strengthening security through shared practices and joint efforts. This initiative extends the SCO's scope beyond security into structured economic

governance, strengthening its profile as a significant regional bloc.

SESEC recommends the European Stakeholders to keep following the activities of this SCO standardization cooperation and analyze the impact. Meanwhile, we will continue to report the updates and developments of this topic.

Source:
https://www.sac.gov.cn/xw/bzhyw/art/2025/art_eeb0065906b548439a15da781e4249e9.html

4. EU-China Dialogue on Cross-Border Data Flow in Brussels

#International Standardization

On 17 July 2025, the second meeting of the EU-China Data Cross-Border Flow Exchange Mechanism was held in Brussels. The meeting was co-chaired by Wang Jingtao, Deputy Director of the Cyberspace Administration of China, and Sabine Weyand, Director-General for Trade of the European Commission.

The EU-China Data Cross-Border Flow Exchange Mechanism was established in August 2024. It is designed to facilitate the international transfer of non-personal data for European companies while ensuring compliance with China's relevant laws and regulations on data security.

The meeting reviewed the positive progress achieved since the mechanism's establishment, acknowledging its significant role in facilitating data cross-border flow between China and the EU. The two sides engaged in an in-depth, pragmatic, and constructive exchange on topics related to China-EU data cross-border flow.

Building on the needs of enterprises from both sides, they reached broad consensus on adhering to the principle of two-way reciprocity to further leverage the mechanism's role and promote regulatory connectivity. Both parties agreed to establish a working group to conduct cooperation on data cross-border flow in the automotive sector between China and the EU.

The meeting was attended by responsible officials from the Cyberspace Administration of China, the Ministry of Industry and Information Technology, the Ministry of Commerce, the Mission of the People's Republic of China to the European Union, as well as the Directorate-General for Trade, the Directorate-General for Justice and Consumers, and the Directorate-General for Communications Networks, Content and Technology of the European Commission.

Source:

https://www.cac.gov.cn/2025-07/18/c_1754549064237501.htm

5. China-Japan-ROK Met for Standards Cooperation

#International Standardization

From July 21 to 23, the 23rd Northeast Asia Standards Cooperation Forum (NEASF) was held in Xi'an, China's Shaanxi Province. The meeting shared updates on the latest developments in standardization in China, Japan, and South Korea, and facilitated exchanges on deepening trilateral cooperation in this field. Representatives from the three countries jointly signed the *Resolution of the 23rd Northeast Asia Standards Cooperation Forum*.

At the same time, the Meeting of the Standing Committee on China-Japan-ROK Standards Cooperation, as well as bilateral meetings on standardization cooperation between China and Japan, China and South Korea, and Japan and South Korea, were also held. Participants held in-depth discussions on international standards cooperation in areas such as **quantum technology, smart cities, circular economy, sustainable electrified transportation, pet products, and humanoid robots**. They also explored ways to further strengthen the training of young international standardization experts and enhance collaboration under the APEC and PASC frameworks.

More than 120 representatives from the national standardization bodies and associations of China, Japan, and South Korea, along with the Shaanxi Provincial Administration for Market Regulation, as well as relevant research institutes and enterprises, attended the meeting.

Source:https://www.sac.gov.cn/xw/bzhyw/art/2025/art_31f2448fa2404a81a06d2845e56fdda6.html

6. China Approves "AI Plus" Action Plan to Drive Industrial Integration

#Policy Updates

On 31 July 2025, the State Council of China reviewed and approved the ***Opinions on Deeply Implementing the "Artificial Intelligence Plus"*** *Action Plan*.

Artificial intelligence (AI) is an important driving force in the new round of technological revolution and industrial transformation. As AI technologies continue to mature, the collaborative integration of AI with various industries is accelerating, and the concept of "AI Plus" has gained wide recognition. This year's government work report proposed to "continue advancing the 'AI Plus'(AI+) initiative, further combining digital technology with China's manufacturing strengths and market advantages."

The meeting pointed out that, as AI technologies are evolving and iterating rapidly, it is necessary to thoroughly implement the "AI+" initiative, vigorously promote the **large-scale and commercialized application of AI**, and give full play to China's advantages of a complete industrial system, a vast market, and rich application scenarios. This will accelerate the popularization and deep integration of AI across all fields of economic and social development, forming a virtuous cycle in which innovation drives application. In turn, application fuels innovation.

"Deeply implementing the 'AI+' initiative and promoting the broad and in-depth **integration of AI with various sectors** will help transform and upgrade traditional industries, open up new tracks for strategic emerging industries and future industries, empower high-quality development, and enable all people to share the dividends of AI development," said Xu Zhaoyuan, Deputy Director of the Department of Industrial Economy at the Development Research Center of the State Council.

Government departments and state-owned enterprises should strengthen their exemplary and leading roles, support the application of technologies through open scenarios, optimize the AI innovation ecosystem, enhance the supply of computing power, algorithms, and data, increase policy support, strengthen talent development, and build an open-source, open ecosystem to provide strong support for the growth of the industry… The meeting introduced multiple arrangements.

With the wide application of AI large models, generative AI, and other technologies across sectors, risks such as data bias and privacy leakage are also increasing. The meeting emphasized the need to improve security capabilities and accelerate the formation of a dynamic, agile, and multi-stakeholder collaborative governance framework for AI.

"The series of deployments made at the meeting are clear, pragmatic, and effective. They clarify the development path of the AI industry, precisely respond to market concerns, and release positive policy signals," Xu Zhaoyuan noted.

SESEC will make deep analyses into the standardization activity for this initiative.

Source:
https://www.gov.cn/zhengce/202507/content_7034734.htm

7. Participation Statistics of Foreign Invested Enterprises in China's National Standardization Committees

#Foreign Participation in China

On July 11, 2025, China's National Standardization Administration (SAC) released a statement on foreign invested enterprise (in China) participation in its national standardization technical committees. The statement indicated that, as of the end of June 2025, there were **3,333 representatives** from foreign invested enterprises serving as committee members, accounting for **5.4%** of the total membership.

According to the statement, the breadth and depth of foreign invested enterprise participation in China's standardization system have expanded with the implementation of the *National Standardization Development Outline*. Data shows that foreign enterprise members are involved in **791 technical committees**, representing **58% of all committees**, covering key sectors such as **information technology, integrated circuits, communications, automobiles, healthcare, electronics, household appliances,** and **food**. Foreign enterprise representatives have engaged in the preliminary research, project initiation, drafting, review,

and revision of Chinese standards.

Notably, according to earlier statistics reported by China Central Television (CCTV), the state broadcast, citing data from SAC, foreign invested enterprises held **3,517 memberships** in technical committees as of the end of 2023, accounting for **6.0% of the total membership**. These representatives participated in **821 technical committees**, accounting for **61.4% of all committees**. Specifically, foreign members accounted for 9.1% of technical committee membership in the primary industry, 69.8% in the secondary industry, 18.5% in the tertiary industry, and 2.6% in the social and public service sectors. Compared with mid-2025 figures, there has been a slight decrease in both total membership and committee coverage, reflecting a rebalancing of participation that EU stakeholders may wish to monitor over time.

The 2025 SAC statement also highlighted the continued role of foreign enterprises in enhancing China's international standardization influences. It also noted that some foreign invested companies have observed improvements in China's standardization capabilities, inclusiveness, and receptiveness, with the standardization environment having reached a globally competitive level. The participation of foreign enterprises in technical committees has transitioned from initially providing technical advice to now encompassing deeper, more active involvement. By integrating international perspectives with local practices, these enterprises have contributed to greater global compatibility of Chinese standards while also obtaining institutional support for their ongoing operations in the Chinese market.

Read the original 2025 SAC statement (in Chinese) here: https://www.sac.gov.cn/xw/bzhyw/art/2025/art_94410c50d5704ce39e5b8c2833beb097.html

Read the original CCTV report (in Chinese) here: https://www.chinanews.com/cj/2024/03-27/10187859.shtml

8. China's MIIT Sets Seconded Half Year Agenda of 2025

#Government Updates

On 28 July, China's Ministry of Industry and Information Technology held an internal meeting to outline its agenda for the second half of 2025. The meeting identified 8 primary tasks, focusing on stabilizing industrial growth, securing critical supply chains, and strengthening technological self-reliance.

The agenda emphasizes digital transformation, green development, and cultivation of high-quality enterprises, while also promoting industrial innovation in emerging sectors such as **AI and AI-enabled industrial applications, humanoid robotics, IoT,** and **next-generation communications**.

MIIT will expand financial and policy support for innovative small and medium enterprises, accelerate reforms in industrial governance, and promote alignment between industrial policies, digital technologies, and sustainable practices.

Collectively, these measures seek to consolidate China's industrial competitiveness, reduce external dependencies, and build long-term resilience against global uncertainties.

Three standardization-related key points appeared in the task list.

1. Establish a carbon footprint accounting standards system for industrial products.
2. Elevate the quality of standards to phase out outdated production capacity.
3. Enhance the development of mandatory national standards system in the fields of industry and information technology.

The 8 primary tasks will be implemented in adherence to 4 key principles.

Four Principles:

- Strengthening resilience
- Creating value
- Ensuring security
- Enhancing governance

Eight Tasks:

1. **Implementing the Strategy to Expand Domestic Demand and Solidify the Foundation of the Industrial Economy**
   - Launch a new round of initiatives to stabilize growth in ten key industries (steel, non-ferrous metals, petrochemicals, chemicals, building materials, machinery, automotive, power equipment, light industry and electronics).
   - Give full play to the leading role of major industrial provinces.
   - Formulate an action plan to enhance the supply-demand alignment of consumer goods

and boost consumption.
- Accelerating the development and application of technologies such as **AI-powered terminals, ultra-high-definition video, smart wearables, and drones**.
- Promote the formulation of guidelines for financial support to new industrialization.
- Expand the implementation of the "Sci-Tech Industry Finance Integration" initiative.
- Intensify efforts to clear overdue payments to enterprises.
- Establish and improve a long-term supervision mechanism for charges imposed on enterprises.
- Ensure detailed implementation of policies aimed at supporting and relieving enterprises.
- Maintain the stable development of the tobacco industry.

2. **Intensify Efforts to Advance the High-Quality Development of Key Industrial Chains and Proactively Address Risks and Challenges**
   - Fully promote the autonomy and controllability of key industrial chains.
   - Strengthen the supply security of strategic mineral resources.
   - Continue to facilitate industrial transfer and docking activities.
   - Drive the optimization of the global layout for key industrial chains.
3. **Strengthening the Integrated Development of Technological and Industrial Innovation to Enhance Core Industrial Competitiveness**
   - Ensure the effective implementation of National Major Science and Technology Projects and Key National R&D Programs.
   - Enhance the development of technological innovation platforms.
   - Strengthen the cultivation of technology business incubators.
   - Launch initiatives to foster emerging industrial sectors and bolster new growth drivers.
   - Refine industrial policies for **humanoid robotics, the Internet of Things (IoT), high-end instrumentation, and related fields**.
   - Improve policy measures for innovating and developing service-oriented manufacturing.
   - Elevate the development standards of industrial design.
   - Vigorously promote industrial culture and deepen the integration of culture with industry.
   - Optimize the layout of the defense science and technology industry.
   - Drive high-quality development of national high-tech industrial development zones.
   - Advance the construction of the Harbin-Changchun-Shenyang-Dalian Industrial Technology Innovation Corridor.
4. **Deepen the Empowering Application of Digital Technologies and Promote the In-Depth Integration of Informatization and Industrialization**
   - Formulate implementation guidelines for enabling new industrialization with data factors and accelerating the digital transformation of industries.
   - Enhance policies supporting the high-quality development of **basic software and industrial software**.
   - Improve China's open-source ecosystem and establish **national-level open-source communities** for artificial intelligence.
   - Execute pilot programs for new technological transformation in manufacturing cities and digital transformation initiatives for SMEs across 100 cities.
   - Advance the "**AI + Manufacturing" initiative** to achieve substantive outcomes, strengthening foundational R&D and promoting application in key scenarios.
   - Deepen the application of industrial internet through tiered and categorized approaches and cultivate a batch of **industrial intelligent agents**.
5. **Advancing Green Development and Enhancing Industrial Energy Efficiency and Sustainability**
   - **Establish a carbon footprint accounting standards system for industrial products.**
   - Promote the development of **digital energy and carbon management centers**.
   - Advance the cultivation and development of "Zero-Waste Industrial Parks" and "Zero-Waste Enterprises."
   - Strengthen the management of **recycling and utilization of power batteries for new energy vehicles** and **lithium-ion batteries for electric bicycles**.
   - Implement the Green Factory Quality and Scale-Up Program and the Green and Low-Carbon Supply Chain Enhancement Initiative.
   - Reinforce workplace safety protocols.
   - Fully complete the relocation and technological transformation of hazardous chemicals producers.
6. **Promoting High-Quality Development in the Information and Communications Industry to Consolidate Competitive Advantages and Leadership**
   - Facilitate the widespread adoption and quality enhancement of **5G and gigabit optical networks**.
   - Continue to advance the "Signal Enhancement" special campaign.
   - Increase efforts to promote pilot programs for

10-gigabit optical networks.
- Systematically advance the **construction and layout of computing power centers**.
- Enhance the supply capacity of intelligent computing resources and improve resource utilization efficiency.
- Fully implement electronic licensing for telecommunications business operations.
- Optimize market access for satellite communication services.
- Establish national comprehensive regional emergency communication support centers.
- Implement practical and user-friendly information and communication service initiatives.
- Intensify efforts to prevent and combat telecom and online fraud.
- Strengthen radio regulation management.
- Ensure comprehensive support for radio security, communication services, and cybersecurity during major events.

7. **Improving the Tiered Cultivation System for High-Quality Enterprises and Enhance Enterprise Services**
   - Formulate policies to establish a mechanism for fostering the growth of specialized, refined, unique and innovative SMEs
   - Revise the management measures for the recognition of high-tech enterprises.
   - Explore the establishment of an active identification mechanism for high-quality enterprises.
   - Promote the creation of a mechanism enabling enterprises to enjoy preferential policies without application.
   - Effectively develop and utilize the China SME Service Network.
8. **Deepening Comprehensive Reforms and Enhancing Modernization of Industry Governance**
   - Accelerate the implementation of reform tasks.
   - Effectively carry out the formulation of the 15th Five-Year Plan.
   - Consolidate achievements from the comprehensive rectification of "internal competition" in the new energy vehicle industry.
   - Strengthen governance in key sectors such as **photovoltaics**.
   - **Elevate the quality of standards to phase out outdated production capacity.**
   - **Enhance the development of mandatory national standards system in the fields of industry and information technology.**
   - Strengthen the development of cadres and talent teams.
   - Optimize and strengthen national outstanding engineer practice bases.
   - Focus on building distinctive "Ideological and Political Education" programs with industrial and informational characteristics.
   - Promote the "Double First-Class" initiative in ministry-affiliated universities to new heights.

9. Some Key Standards Effective from July 2025 in China

#National Standards

Starting July 1 2025, a series of important national standards will come into effect in China, covering areas such as proton exchange membrane fuel cells, battery swapping stations for electric vehicles, vehicle selection for urban logistics and distribution, earth-moving machinery, structural safety and hazardous substance limits for furniture, hygiene requirements for disposable sanitary products, and energy efficiency requirements for copiers and multifunction printers.

1. Proton Exchange Membrane Fuel Cell Standards

Two recommended national standards set testing methods for key components of PEM fuel cells:

- **GB/T 20042.5—2024**: *Proton Exchange Membrane Fuel Cells – Part 5: Test Methods for Membrane Electrode Assembly*
- **GB/T 20042.7—2024**: *Proton Exchange Membrane Fuel Cells – Part 7: Test Methods for Carbon Paper Properties*

These promote comparability and evaluation of data across the industry, supporting high-quality development of fuel cell technologies.

2. EV Battery Swapping Station Standard

- **GB/T 29772—2024**: *General Requirements of Electric Vehicle Battery Swap Station*

Covers site selection, power supply, charging and swapping systems, monitoring, safety, and signage. The standard supports diversified swapping scenarios and vehicle types, promoting orderly industry development.

3. Vehicle Selection for Urban Logistics

- **GB/T 29912—2024**: *Technical Requirements for Lectotype of Urban Logistics Distribution Vehicle*

Applies to logistics vehicles with a gross weight between 1,500 kg and 12,000 kg (excluding dangerous goods vehicles). Aims to enhance transport efficiency, safety, and reduce emissions.

4. Electric Earth-Moving Machinery Series

Four standards for pure electric earth-moving machines:

- **GB/T 45049—2024**: *Earth-moving Machinery – Battery Electric Hydraulic Excavators – Test Methods*
- **GB/T 45050—2024**: *Earth-moving Machinery – Battery Electric Non-Road Wide-Body Dumpers – Test Methods*
- **GB/T 45052—2024**: *Earth-moving Machinery – Battery Electric Wheel Loaders – Test Methods*
- **GB/T 45054—2024**: *Earth-moving Machinery – Battery Electric Non-Road Mining Dumpers – Test Methods*

These standards enhance competitiveness in global markets and support China's equipment exports.

5. Furniture Safety and Hazardous Substance Limits

Two **mandatory** national standards:

- **GB 28008—2024**: *Technical Specifications for the Safety of Furniture Structure*
- **GB 18584—2024**: *Limits of Harmful Substances of Furniture*

They address general and product-specific safety, as well as limits and testing for hazardous substances, excluding children's furniture. Aim to improve safety and consumer protection.

6. Hygiene Requirements for Disposable Hygiene Products

- **GB 15979—2024**: *Hygienic Requirements for Disposable Sanitary Products* (mandatory)

Covers raw materials, production, packaging, storage, labelling, and testing. Ensures effective oversight of products like disposable wipes, tissues, diapers, etc.

7. Energy Efficiency of Copiers and MFPs

- **GB/T 18892—2024**: *Environmental Protection Requirements of Copying Machines – Energy Saving Requirements for Copiers and Multi-function Devices*

Targets A3 and smaller-format devices. Encourages greener office equipment and sustainable manufacturing.

8. Environmental Protection for Fax Machines

- **GB/T 22371—2024**: *Environmental Protection Requirements for Facsimile Machines and Multi-function Composite Facsimile Machines*

Applies to devices using electrostatic, inkjet, or thermal recording methods. Promotes environmental friendliness and technological advancement in the fax industry.

9. Port Operations Safety for Bulk Dangerous Goods

- **GB 16994.6—2024**: *Safety Requirements for Port Operation – Part 6: Solid Bulk Dangerous Cargo* (mandatory)

Covers handling, storage, transport, emergency response for IMO-classified goods (Class 4, 5.1 excluding ammonium nitrate, 8, 9). Improves port safety in hazardous goods management.

10. Data Exchange Between Logistics Information Service Providers

- **GB/T 45815—2025**: *Requirements of Data Interchange Among Logistics Information Service Providers (LISPs)*

Covers framework, data types, and message formats for international logistics data sharing (waterway, road, air, rail). Supports digital connectivity and secure data exchange across platforms.

11. Digital Fitting Standards

Two new standards for virtual fitting applications:

- **GB/T 45066—2024**: *Digital Fittings – Attributes of the Virtual Human Body – Vocabulary and Terminology*
- **GB/T 45068.1—2024**: *Digital Fittings – Performance Evaluation Protocol for Systems – Part 1: Virtual Human Body Representation*

They define key body features, measurement points, and visualization techniques. Aim to standardize the design, evaluation, and commercialization of digital fitting systems.

Source:
https://www.samr.gov.cn/xw/xwfbt/art/2025/art_6d884626cffe4d5580d8ce4a18b8e3b5.html

Here is the English translation of the table listing key national standards to be implemented in China starting mainly from **July 1, 2026** (with a few exceptions noted):

If you need the text of these standards in Chinese, please contact SESEC Team via email: assistant@sesec.eu

No.	Standard Number	Title	Replaces	Effective Date
1	GB 2536-2025	Fluids for Electrotechnical Applications—Unused Mineral Insulating Oils for Transformers and Switchgear	GB 2536-2011	2026-07-01
2	GB 5768.9-2025	Road Traffic Signs and Markings - Part 9：Traffic Accident Management Area	–	2026-01-01
3	GB 7300.306-2025	Feed Additive—Part 3: Minerals and Their Complexes (or Chelates)—Chromium nicotinate	–	2026-07-01
4	GB 7300.307-2025	Feed Additives—Part 3: Minerals and Their Complexes （or Chelates）—Zinc Glycinate Complex	–	2026-07-01
5	GB 7300.308-2025	Feed Additives—Part 3: Minerals and Their Complexes (or Chelates) —Zinc Threoninate Chelate	–	2026-07-01
6	GB 7300.404-2025	Feed Additives – Part 4: Enzyme Preparations – β-Mannanase	–	2026-07-01
7	GB 7300.405-2025	Feed Additives – Part 4: Enzyme Preparations – α-Galactosidase	–	2026-07-01
8	GB 7300.505-2025	Feed Additives – Part 5: Live Microorganisms – *Bacillus coagulans*	–	2026-07-01
9	GB 7300.803-2025	Feed Additives – Part 8: Preservatives, Mildew Preventives and Acidity Regulators – Ammonium Chloride	–	2026-07-01
10	GB 7300.804-2025	Feed Additives – Part 8: Preservatives, Mildew Preventives and Acidity Regulators – Benzoic Acid	–	2026-07-01
11	GB 7300.1301-2025	Feed Additives – Part 13: Others – Bile Acid	–	2026-07-01
12	GB 11121-2025	Gasoline Engine Oils	GB 11121-2006	2026-07-01
13	GB 11122-2025	Diesel Engine Oils	GB 11122-2006	2026-07-01
14	GB 16670-2025	Cabinet Gas Fire Extinguishing Equipment	GB 16670-2006	2026-07-01
15	GB 18351-2025	Ethanol Gasoline for Motor Vehicles	GB 18351-2017	2026-07-01
16	GB 18447-2025	Safety Technical Specifications for Tractors	GB 18447.1/.2/.3/.4-2008	2026-07-01

No.	Standard Number	Title	Replaces	Effective Date
17	GB 21256-2025	Norm of Energy Consumption per Unit Production of Main Individual-Process of Crude Steel Manufacturing Process	GB 21256-2013, GB 32050-2015	2026-07-01
18	GB 27999-2025	Fuel Consumption Evaluation Methods and Targets for Passenger Cars	GB 27999-2019	2026-01-01
19	GB 30000.30-2025	Specification for Classification and Labelling of Chemicals – Part 30: Desensitized Explosives	–	2026-07-01
20	GB 31420-2025	Requirements for Toxic, Hazardous and Restricted Substances in Personal Protective Equipment (PPE)	GB/T 31420-2015, GB/T 31419-2015, GB/T 31009-2020	2026-07-01
21	GB 32028-2025	Minimum Allowable Values of Energy Efficiency and Energy Efficiency Grades for Projectors	GB 32028-2015	2026-07-01
22	GB 39800.10-2025	Specification for the Provision of Personal Protective Equipment – Part 10: Machinery Industry	–	2026-07-01
23	GB 39800.11-2025	Specification for the Provision of Personal Protective Equipment – Part 11: Subway	–	2026-07-01
24	GB 39800.12-2025	Specification for the Provision of Personal Protective Equipment – Part 12: Construction	–	2026-07-01
25	GB 45841-2025	Limits and Measurement Methods for Exhaust Pollutants from Disel Locomotive and its Engines (China I)	–	2025-09-01
26	GB 45943-2025	Building Construction Machinery and Equipment – Common Safety Requirements	–	2026-07-01
27	GB 5768.2-2022	Road Traffic Signs and Markings – Part 2: Road Traffic Signs	GB 5768.2-2009	2026-01-01

10. China Releases Model Contracts to Standardize Data Trading and Transactions

#Data Governance

On July 4, 2025, China released the Model Contracts for Data Trading and Circulation to regulate its growing data market and create a standardized framework for data transactions. This initiative supports the national

strategy to strengthen data circulation security and harness data's value as a key factor of production.

Issued by the National Data Administration (NDA) and other departments, the newly released model contracts standardize data trading rules while preserving party autonomy. They clarify stakeholder rights and duties to facilitate lawful and efficient data flows.

The contracts cover four key scenarios:

- **Data Provision Contracts:**

  Governing the transfer of data rights.

- **Data Entrusted Processing Service Contracts:**

  Regulating entrusted data handling.

- **Data Fusion and Development Contracts:**

  Facilitating collaborative data innovation.

- **Data Intermediary Service Contracts:**

  Standardizing brokerage services.

Each contract includes essential clauses on data description, quality, delivery, security, and confidentiality, alongside scenario-specific provisions for issues like data verification, intellectual property, and profit distribution.

Key Features in Model Contracts

1. Country's First Contract-based Data Ownership Registration: Introduces clauses to formally record data rights through agreements, aligning with **China's Tripartite Data Rights Separation Model** to provide legal clarity and mitigate disputes.

2. Comprehensive Data Quality Assurance: Establishes comprehensive control measures, including inspection periods and liability for defects, with specific mandates for accuracy and completeness in data fusion projects.

3. New Model Contracts to Standardize Data Trading and Circulation Practices: Translates data laws into enforceable contract terms, setting clear standards for quality, ownership verification, secure delivery, and strict anonymization of sensitive information.

The Model Contracts create a structured framework for data transactions by clarifying rights, standards, and compliance. This mitigates risks related to data integrity and privacy, fostering more efficient and secure data trading. By establishing a stable and transparent legal environment, the contracts reduce transaction costs and open new avenues for data valorization, particularly for compliance-focused foreign enterprises in China.

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

11. China, Laos Forge New Power Standardization Partnership

#International Standardization

On August 27, 2025, the **China-Laos Power Standards Cooperation Committee** was officially established at the 2025 ASEAN-oriented Standardization Cooperation Forum held in Nanning, Guangxi Province, marking a significant step in institutionalizing standardization collaboration between the two countries. As the first intergovernmental standardization body in China's power sector, it is expected to provide new momentum for grid interconnection and energy cooperation between the two sides. The launch event was attended by representatives from Laos's Ministry of Industry and Commerce, China's State Administration for Market Regulation (SAMR), the National Energy Administration (NEA), the China Electricity Council (CEC), China Southern Power Grid (CSG), and Electricite Du Laos (EDL).

The Chinese secretariat of the newly established China-Laos Power Standards Cooperation Committee will be hosted by China Southern Power Grid Company. The committee is designed to pool resources from power enterprises of both nations to drive practical cooperation in four key areas:

- **First, it will create a platform for mutually beneficial collaboration**. This involves enabling joint research, development, and implementation of standards by committee members to elevate the standardization of power technology and equipment between the two countries.
- **Second, it will deepen the alignment and mutual recognition of standard systems**. Efforts will focus on formulating and revising key standards, accelerating mutual recognition in critical fields such as renewable energy grid integration, operation and maintenance, power transmission and transformation equipment, and real-time power flow

simulation. This will provide the necessary standardization foundation for two-way electricity trading.

- **Third, the committee aims to enhance the quality of standard development**. This will be achieved by establishing joint expert working groups to conduct needs analysis and draft new standards, with the goal of publishing a suite of technical standards that will lead regional advancements in power equipment, engineering construction, grid operation, and power supply services.
- **Finally, it will strengthen standardization capacity building.** Initiatives under consideration include establishing joint research laboratories, developing pilot projects for standard implementation, and organizing promotional campaigns to enhance the overall standardization capabilities of both parties.

Following the inauguration was the first plenary session of the committee, during which Members reviewed and adopted the Charter of the China-Laos Power Standards Cooperation Committee and the Rules of Procedure for the Secretariat, formalizing its organizational structure and operational mechanisms. Meanwhile, the meeting launched the development of seven priority standards, including:

- *Basic Terminology for Lao Power Engineering*
- *Technical Guidelines for Lightning Protection of Overhead Transmission Lines in Laos*
- *Technical Guidelines for Cross-Border Power Grid Interconnection in Laos*
- *Technical Guidelines for Dispatching Automation Systems in Laos*
- *Guidelines for Reliability Evaluation Indicators of Power Transmission and Transformation Facilities in Laos*
- *Specifications for Monitoring Information and Alarm Settings of Dispatching Automation Master Stations in Laos*

The development of these initial standards will be closely tied to key projects, including the 500kV China-Laos grid interconnection, the aid-funded project for Laos's dispatching automation system, and initiatives to enhance power supply reliability in Laos. This project-driven approach to standardization is designed to help Laotian power enterprises unify technical terminology, standardize the construction of cross-border interconnection projects, improve the level of dispatching automation, and enhance power supply reliability. Ultimately, it aims to provide crucial technical support for the sustainable development of Laos's power industry.

Moving forward, under the guidance of the competent authorities of both China and Laos, CSG will fully execute its duties as the secretariat. Leveraging its technical expertise, talent pool, and brand strength, the secretariat will pool top technical resources from the power sectors of both nations to organize and assist Chinese and Laotian power enterprises and research institutions in developing standards and facilitating academic exchange. A key priority will be to accelerate the batch-base standard establishment and development, using high-quality standardization to lead the high-quality development of the China-Laos power sector.

Source: https://mp.weixin.qq.com/s/-qP4OHDUvubcwkUajegozA

12. China-ASEAN Standardization Forum Yields Fruitful Outcomes in AI

#International Standardization

On August 27, 2025, the 2025 ASEAN-Oriented Standardization Cooperation Forum (hereinafter referred to as the "Forum") was held in Nanning, Guangxi Province, focusing on AI standardization as a pathway to strengthen the China-ASEAN community. The Forum was co-organized by the China-ASEAN Standardization Cooperation and Exchange Center (ASCEC) and the ASEAN Consultative Committee on Standards and Quality (ACCSQ), including participation from United Nations Industrial Development Organization (UNIDO), IEC, the ASEAN Secretariat, and the ASEAN-China Centre. The attendee includes Mr. Bai Qingyuan, Vice Minister of China's State Administration for Market Regulation (SAMR), the Ambassador of Brunei to China, Secretaries of State from Cambodia's Ministry of Industry, Science, Technology & Innovation and Ministry of Post and Telecommunications, and Myanmar's Ministry of Science and Technology.

The event yielded 19 concrete outcomes spanning government-to-government, technical, and industry-

level cooperation. Key results include:

- The establishment of a China-Cambodia AI Standardization Working Group and a China-Laos Power Standards Committee;
- The issuance of the *Nanning Initiative on Standards Supporting Sustainable AI Development* and the *China-ASEAN AI + Healthcare Standardization Cooperation Initiative*;
- Five agreements between Chinese and Vietnamese, Laotian, Burmese, and Cambodian technical institutions covering metrology and inspection;
- The formation of three industry alliances focused on AI applications in agriculture, manufacturing, and metrics carbon peaking and neutrality;
- Joint research on two automotive standards, second-round exchange of electric vehicle standard lists and a plan for talent development in auto standardization.

Notably, the Forum was integrated into the China-ASEAN FTA 3.0 framework, signaling high-level political endorsement. In addition, the forum emphasized practical cooperation, featuring parallel sessions on automotive standards, metrology, and conformity assessment, as well as live demonstrations of AI applications in cross-border e-commerce, healthcare, and cultural tourism. AI-powered simultaneous interpretation and real-time bilingual subtitles were used throughout.

This event underscores China's deepening standardization collaboration with ASEAN in emerging technologies, with Guangxi serving as a strategic node. The outcomes of the Forum indicate that foreign enterprises should note potential changes in market access rules: regional normative systems centered on Chinese technical standards are taking shape in key fields such as artificial intelligence and electric vehicles. This may reduce the applicability of existing international standards in Southeast Asian markets, increase compliance costs and supply chain adaptation pressures, while also creating opportunities to participate in standard-setting processes through engagement with industry alliances.

Source:

1. https://mp.weixin.qq.com/s/jHdJGFO-X4ug2UUOwJabQQ
2. https://mp.weixin.qq.com/s/O0YdvjaTzMS0q7050DD6Jw

Digital Transition

13. MA-DPP Universal Framework 1.0 for "Digital Product Passport" Launched in Beijing

#DPP

On July 18, 2025, the **Symposium on International Cooperation for Digital Product Passport (DPP) and International Standards for Entire Lifecycle Management** was held in Beijing. At the event, China unveiled its independently developed world's first universal framework for Digital Product Passports, **MA-DPP Universal Framework 1.0.** This framework provides a unified and convenient global platform to support and facilitate the smooth and stable operation of global supply and industrial chains.

A DPP is akin to a human passport—it serves as a digital record of a product's unique identity and its full lifecycle information, enabling proof of origin, authenticity, and sustainability levels in cross-border trade.

As data elements create greater value in industrial settings, the boundaries of manufacturing are being redrawn, global supply chains are undergoing rapid transformation, and trade rules are growing increasingly volatile. In this context, building a globally connected, agile digital supply chain system has emerged as a focal topic in global supply chain collaboration and technical governance. According to Chen Hongjun, former Deputy Director-General of the Standards and Technology Management Department of the State Administration for Market Regulation (SAMR) and former Deputy Director of the Standardization Administration of China (SAC), the core value of DPPs lies in their role as a digital record spanning a product's entire lifecycle—from design, production, and distribution to usage, recycling, and reuse.

The event marked the official launch of several innovative achievements in DPPs and entire lifecycle information management, including the **MA-DPP Universal Framework 1.0, the Steel Industry DPP Public Service Platform, and the MA-DPP Ecosystem Partnership Program**.

Specifically, the MA-DPP Universal Framework 1.0 is independently developed by the **Zhongguancun Industry & Information Research Institute of Two-dimensional Code Technology (ZIIOT)**. With the core mission of building a trusted, open, and shared entire lifecycle data chain infrastructure, it provides a foundational standards framework, technical framework, and public service framework to enable global DPP stakeholders—including product owners, technology developers, end-users, and regulators—to co-create standardized, interoperable, and trustworthy DPP solutions. By delivering unified DPP foundational services and public goods, the framework will support the smooth and resilient operation of global supply and industrial chains.

Moreover, the **Steel Industry DPP Public Service Platform**, one of the flagship achievements unveiled at this release, provides comprehensive end-to-end solutions to facilitate Chinese steelmakers' sustainable global expansion. This comes as the steel sector emerges among the first industries targeted by the EU's DPP implementation initiative.

The symposium also featured several strategic signings. **ZIIOT and Siemens (China) agreed to collaborate on battery passport and carbon footprint solutions based on the MA-DPP Universal Framework 1.0**, aiding Chinese companies in green globalization. Additionally, The Unified Identification Code Registration Management Center (UTC) of ZIIOT and Tianjin CRRC Leasing Co., Ltd. have entered a cooperation to establish a secondary node for the MA Identification System in the equipment manufacturing sector. This initiative will provide industry-wide unified identification registration and resolution services, accelerating the digital transformation and high-quality development of China's equipment manufacturing industry.

The event was co-hosted by **ZIIOT and the IEC 63538 Working Group (Lifecycle-events**), with co-organizers including the China Beijing Green Exchange, China Quality Certification Center, China Association for Standardization, Global Code-Chain Technology Cooperation Center, and UTC.

SESEC team is working on this and tried to identify more detailed information for these initiatives. For technical details, please refer to the Introduction to MA Identification System and MA-DPP from ZIIOT.

Source:https://www.peopleapp.com/column/30049766 091-500006395561

14. China's Blueprint for Digital Transformation in Machinery (2025-2030)

#Intelligent Manufacturing

On August 1, 2025, the Ministry of Industry and Information Technology (MIIT) and other seven Chinese government departments jointly issued the ***Implementation Plan for the Digital Transformation of the Machinery Industry (2025-2030)*** (Hereinafter referred to as the "Plan"). This pivotal document outlines a detailed roadmap to accelerate the integration of digital intelligence technologies across this foundational sector.

The machinery industry, a vital component of China's economy and national security, is characterized by its extensive reach, complex supply chains, and diverse production models. Its digital transformation is critical not only for the sector's own advancement but also for enabling broader industrial modernization. Building on earlier initiatives such as the "14th Five-year Plan for Smart Manufacturing", the new Plan addresses the urgent need to accelerate and deepen the adoption of digital technologies across the industry. Despite progress in areas like smart factory development, varying levels of digital maturity among sub-sectors and the rapid rise of AI call for more coordinated and comprehensive guidance.

The Plan advocates a holistic approach to implementing the new development philosophy and advancing new industrialization, with a focus on the following aspects:

- **Main Direction:** Smart manufacturing is identified as the primary focus, aiming to achieve quality development, cost reduction, efficiency gains, and value chain reshaping.
- **Core Strategy:** Deep integration with next-generation information technologies, emphasizing intelligent products, digitalized production, and smart services.
- **Operation Principle:** Promote innovation and controllable security, adopting scenario-based applications and problem-oriented approaches to address practical industry challenges.
- **Key Measures:** Develop smart equipment, build smart factories, and expand service digitalization.
- **Long-term Goal:** Establish a high-end, intelligent, and green machinery sector to support China's industrial modernization.

The Plan outlines a two-stage roadmap:

- By 2027, digital-intelligent technologies will be widely adopted across R&D, production, operations, and maintenance, significantly enhancing digital design, smart manufacturing, and supply chain capabilities.
- By 2030, the sector will achieve substantial overall advancement in digitalization and intelligence.

The specific targets are listed as follows:

2027 Targets:

- 50% of enterprises reach Smart Manufacturing Capability Maturity Model (SMCMM) Level 2 or above.
- Establish no fewer than 200 Excellence-Level smart factories.
- Cultivate qualified system solution providers and develop at least 200 scenario-based solutions.

2030 Targets:

- Complete one round of digital transformation in most major enterprises.
- Achieve data connectivity and collaboration across key industry chains.
- Achieve deep integration of AI technologies in leading enterprises.
- 60% of enterprises reach SMCMM Level 2 or above.
- Build over 500 Excellence-Level smart factories.
- Establish a secure and controllable supply system for equipment and services.

The Plan addresses two key objectives: the sector's own digital transformation and enabling other industries' transition. It deploys 12 key tasks through

"Four Major Actions" that focus on three core domains: smart equipment, smart manufacturing, and smart services. The details are as below:

- **Smart Equipment Innovation Action:**

  Develop generic technologies and key components, drive innovation in complete machine integration, and accelerate application of smart equipment

- **Smart Manufacturing Expansion Action:**

  Advance enterprise digital-intelligent transformation, enable digital transformation across supply and industrial chains, and guide the region's comprehensive digital transformation

- **Smart Service Enhancement Action:**

  Upgrade equipment service capabilities, cultivate smart service scenarios, and leverage equipment data value

- **Foundation Strengthening Action:**

  Improve digital transformation standards, advance digital infrastructure, and enhance network and data security

MIIT will coordinate with competent departments to implement four safeguard measures:

- **Organizational Coordination:**

  Strengthen inter-agency and central-local coordination and mobilize industry and academic resources.

- **Public Service Enhancement:**

  Upgrade testing, certification, and evaluation capabilities and improve smart manufacturing data platforms and assessment systems.

- **Talent Development:**

  Expand training programs for engineers and technicians through national initiatives and skills campaigns.

- **Global Cooperation:**

  Leverage international alliances to promote Chinese standards and equipment and attract foreign investment in smart factories and R&D centers.

The Plan signifies a critical step in China's journey towards advanced manufacturing and solidifying the machinery industry's role as a cornerstone of its industrial modernization efforts. Additionally, the Plan outlines clear opportunities and challenges for foreign enterprises. It offers major market potential in smart equipment, core components, and system solutions for technologically advanced firms, while promoting international cooperation in standards development and R&D investment. However, heightened emphasis on "secure and controllable" supply chains will intensify local competition. Tighter regulations on data flows and cybersecurity will require stronger compliance and faster adaptation of local operations. Hence, foreign enterprises with leading technology and deep localization will be best positioned to compete. SESEC will continue to monitor the implementation progress of this Plan and provide timely updates and analysis on its development.

Source:

1. https://www.miit.gov.cn/zwgk/zcjd/art/2025/art_e6260412044344eba74a1b620c1803a1.html
2. https://www.miit.gov.cn/zwgk/zcwj/wjfb/tz/art/2025/art_5669b7e2b4084b7094abb00e7271b7ca.html
3. https://www.miit.gov.cn/zwgk/zcjd/art/2025/art_452390716a2a40359001515385f6bf07.html

15. CAC Releases China's Informatization Development Report (2024)

Informatization

On July 30, 2025, the Cyberspace Administration of China (CAC) released the National Informatization Development Report (2024) (hereinafter the "Report"), reviewing progress across regions and sectors and outlining tasks for 2025. The Report highlights five dimensions: innovation-driven development, enabled growth, inclusive benefits, security enhancement, and open collaboration.

Major Advancements of Informatization in 2024

• Enhanced Innovation Capabilities

Breakthroughs were made in core IT fields. OpenHarmOS exceeded 1 billion installations, generative AI served 600 million users, and blockchain advanced in logistics, trade, and energy. Quantum information and digital twins progressed, while the digital industry hit 35 trillion yuan. AI, IoT, and data governance standards were introduced. Digital literacy

surpassed 60% of adults, and 227 undergraduate programs strengthened the talent pipeline.

• **Stronger Enabling Role**
Infrastructure expanded with 4.25 million 5G/5G-A base stations and 71% penetration. Cellular IoT reached 2.656 billion connections; gigabit fiber served 207 million users. Data output rose 25% to 41.06 ZB. Smart manufacturing adoption exceeded 80% in R&D tools, with automation at 65%. Green transition advanced through 246 national green data centers. Online retail sales reached 15.23 trillion yuan.

• **Expanded Digital Inclusion**
Internet users totaled 1.108 billion (78.6%). Online medical services reached 418 million people, while 1.07 billion e-social security cards enabled 17 billion service requests. Elderly care platforms gained traction, and online audiovisual services covered 98.4% of users. China ranked 35th in the UN E-Government Index, up six places since 2022.

• **Reinforced Security Foundation**
New frameworks included Internet Government Application Security Regulations and AI Security Governance 1.0, alongside 36 national standards. Cross-border data flow rules yielded 285 security assessments and 1,071 registered contracts. Enforcement addressed 90,000 complaints and investigated 119,000+ cyber cases, strengthening compliance.

• **Broader Openness Achievements**
China hosted the Wuzhen Summit, launched the Global Data Mobility Cooperation Initiative, and promoted the Global Digital Compact. Engagement included the WTO E-Commerce Agreement, CPTTP and DEPA processes, EU data exchanges, and a Sino-German MoU. Cross-border e-commerce rose 14% to 2.71 trillion yuan.

The Report outlined key tasks in 2025 which are:
• Boost tech self-reliance and industry growth
• Drive productivity via IT empowerment
• Expand equitable digital access
• Support sustainable development
• Deepen global cyberspace cooperation

The Report points to wider opportunities for foreign enterprises, with expanded access to high-tech markets, integration into China's innovation ecosystem, and a standardized, open business environment. SESEC will continue monitoring developments.

Source:

1. https://www.cac.gov.cn/2025-07/30/c_1755590223034507.htm
2. https://www.cac.gov.cn/2025-07/30/c_1755590248681603.htm

16. CAC Experts: China's Informatization and AI Roadmap for the Next Five Years

Informatization Development

On July 30, 2025, the Cyberspace Administration of China (CAC) released the National Information Development Report (2024), reviewing progress in informatization and setting priorities for 2025. Experts emphasized how the findings connect with the upcoming 15th Five-Year Plan (2026–2030), broader economic policy, and the AI-driven transition.

In 2024, China achieved notable progress across five areas. Innovation advanced with breakthroughs in semiconductors, operating systems, large AI models, and blockchain. The digital economy's core industries accounted for 10% of GDP, and digital literacy among adults rose above 60%. Empowerment was supported by a stronger 5G and gigabit broadband network, national computing power facilities, expanding data markets, and growing integration of digital with green development. Inclusiveness improved through wider access to telemedicine, smart education, e-government services, and digital culture. Security was reinforced with new AI governance rules, cross-border data protection, and over 150 cyberspace regulations. At the same time, openness expanded through WTO e-commerce talks, global digital governance initiatives, and Silk Road E-commerce partnerships with 33 countries.

Artificial intelligence has become the central engine of this transformation. By the end of 2024, China had registered 302 generative AI services with more than 600 million users, supported by national computing power reaching 493 EFLOPS. Through the "AI+" initiative, AI is reshaping agriculture, manufacturing, services, and governance, while also improving healthcare, education, and elderly care.

Looking forward, the 15th Five-Year Plan sets five directions: strengthening technological self-reliance in AI, quantum, semiconductors, and software; expanding infrastructure and digital–green integration; improving

people-oriented digital services; reinforcing systemic security through stronger regulation and rule of law; and deepening global cooperation through the Digital Silk Road and broader partnerships.

Together, these measures reflect China's dual-track strategy of consolidating informatization while accelerating intelligentization through AI. By 2030, China aims to achieve technological self-reliance, embed AI across all sectors, and shape global digital governance.

Source:

1. https://www.cac.gov.cn/2025-08/02/c_1755875296442582.htm
2. https://www.cac.gov.cn/2025-08/03/c_1755948727822002.htm
3. https://www.cac.gov.cn/2025-08/03/c_1755948727915460.htm

17. TC609 Advances China's New National Data Standards

Data Standardization

On August 22, 2025, the third plenary meeting of the WG1 General Working Group of the National Technical Committee 609 on Data of Standardization Administration of China (SAC/TC609) was held in Beijing. The meeting was attended by the head and members of the WG1 General Working Group, TC609's secretariat, and representatives from other standard working groups.

During the meeting, CESI, TC609's secretariat, briefed the WG1 General Working Group on the progress of the first batch of national standards in the data field, the technical documents developed by the TC609, and the overall collection of demands for the second batch of national standards in this field for 2025.

The first batch of proposed national standards in the data field covers areas such as basic data terminology, data products, public data services, comprehensive digital transformation, high-quality datasets, data services, anonymization of data circulation, data infrastructure, and the national integrated computing network. The technical documents developed by TC609 involve areas including data infrastructure, trusted data spaces, the national integrated computing network, and high-quality datasets.

Moreover, the representatives from WG2 (Data Governance), WG3 (Data Circulation and Utilization), WG4 (Comprehensive Digital Transformation), WG5 (Data Technology), and WG6 (Data Infrastructure) presented their specific requirements for the second batch of national standards in the data field for 2025. As to the second batch, the WG1 General Working Group conducted a critical review of the proposed standards, focusing on aspects such as standard naming, scope of standardization, intended regulatory content, problems to be addressed, positioning within the standards framework, and alignment with existing standards. This process helped clarify the direction and priorities for China 2025 data standardization work. Going forward, the secretariat will revise and finalize the demand list for the second batch of 2025 national data standards based on the feedback from the WG1 General Working Group, and will publish it promptly, facilitating the formal application process for these proposed standards.

SAC/TC609 was established by the National Data Administration (NDA), which also provides its operational guidance. Its scope of responsibility covers fundamental and general standards in areas such as data resources, data technology, data circulation, smart cities, and digital transformation, as well as standards for data infrastructure supporting data circulation and utilization, and security standards ensuring safe data exchange. The committee mirrors multiple international standardization bodies, including ISO/IEC JTC1/WG11, IEC/SyC Smart Cities, ISO/IEC JTC1/SC42/WG2, and ISO/IEC JTC1/SC32. Its secretariat is hosted by the China Electronics Standardization Institute (CESI).

Source: https://www.tc609.org.cn/tc609/gzzdt/20250 8/c03a5a0067f04415808e17b51c0a3bca.shtml

18. China Advances Cybersecurity with Several New Standards and Revisions

Cybersecurity Standardization

In August 2025, National Technical Committee 260 (SAC/TC260) on Cybersecurity of Standardization Administration of China released a series of announcements, collectively showcasing the latest achievements and planning directions in China's cybersecurity standardization efforts. The updates include the official release of an international standard led by China, the approval of seven national cybersecurity standards, the solicitation of public comments on two major standard system frameworks, and the initiation of revision projects for multiple existing national standards in key areas. These developments mark a systematic, multi-faceted acceleration in the construction of China's cybersecurity standard system.

Firstly, the China-led international standard ***ISO/IEC 27553-2: 2025 Information security, cybersecurity and privacy protection — Security and privacy requirements for authentication using biometrics on mobile devices Part 2: Remote modes*** was officially released in July 9, 2025. Initiated in September 2022, this standard defines a general architecture for remote biometric authentication on mobile devices, analyzes associated security threats, and specifies security requirements for biometric systems, mobile devices, and servers. It can also provide technical guidance for relevant industries, helping them enhance the security capabilities of biometric chip manufacturers, mobile device makers, software developers, and service providers.

Meanwhile, seven national cybersecurity standards were approved and released on August 1, 2025 and set to implement on February 1, 2026, providing specifications for foundational security and cutting-edge applications. These standards can be categorized into three major types:

- **Fundamental Cryptographic Infrastructure:**
  - *GB/T 19714-2025 Cybersecurity technology—Public key infrastructure—Certificate management protocol*
  - *GB/T 19771-2025 Cybersecurity technology—Public key infrastructure—Specification for minimum interoperability for PKI components*
  - *GB/T 20520-2025 Cybersecurity technology—Public key infrastructure—Specification for time stamp*
- **Security Management Practices:**
  - *GB/T 31722-2025 Cybersecurity technology—Guidance on managing information security risks*
  - *GB/T 45940-2025 Cybersecurity technology—Implementation guide of cybersecurity operation and maintenance*
- **Emerging Technology Security:**
  - *GB/T 34942-2025 Cybersecurity technology—The assessment method for security capability of cloud computing service*
  - *GB/T 45958-2025 Cybersecurity technology—Security framework for artificial intelligence computing platform*

Beyond individual standards, TC260 is advancing systematic development to support laws and regulations such as *Cybersecurity Law*, *Data Security Law*, *Personal Information Protection Law*, and *Regulations on Network Data Security Management*, while establishing a robust standard system for data security and personal information protection. In this context, TC260's Secretariat drafted the ***National Data Security Standard System (2025 Edition) (Draft for Comment)*** and the ***National Personal Information Protection Standard System (2025 Edition) (Draft for Comment)***, which were open for public comment until August 29, 2025. These frameworks aim to leverage the foundational, normative, and guiding role of standards in key tasks, industrial development, and risk prevention.

Furthermore, for the purpose of continuously improving the standard framework, TC260 initiated the revision of four national standards in key domains and is **openly soliciting participating entities**. These revisions focus on critical areas related to national security and socioeconomic development and the relevant details about the solicitation are shown in the table below.

Details for Recruiting Standard Development Organizations

Standard Name	Original Standard	Application Deadline	Lead Organization
Cybersecurity technology- Security management fundamental requirements for industrial control systems	*GB/T 36323-2018 Information security technology—Security management fundamental requirements for industrial control systems*	August 31, 2025	China Electronics Standardization Institute
Cybersecurity technology—Security requirements for cryptographic modules	*GB/T 37092-2018 Information security technology—Security requirements for cryptographic modules*	September 12, 2025	University of Chinese Academy of Sciences
Cybersecurity technology — Cryptographic device application interface specification	*GB/T 36322-2018 Information security technology—Cryptographic device application interface specifications*	August 25, 2025	China Telecom Quantum Information Technology Group Co., Ltd.
Cybersecurity technology—Trusted computing specification—Trusted support platform for server	*GB/T 36639-2018 Information security technology—Trusted computing specification—Trusted support platform for server*	August 21, 2025	Inspur Electronic Information Industry Co., Ltd.
Note: Interested organizations must submit the official sealed Work Participation Application Form to the respective Lead Organization by the specified deadline.			

This series of updates from TC260 clearly demonstrates the comprehensive advancement of China's cybersecurity standardization work, combining high-level leadership with foundational support, systematic planning with focused breakthroughs.

Sources:

1. https://www.tc260.org.cn/front/postDetail.html?id=20250815161732
2. https://www.tc260.org.cn/front/postDetail.html?id=20250819144942
3. https://www.tc260.org.cn/front/postDetail.html?id=20250819145026
4. https://www.tc260.org.cn/front/postDetail.html?id=20250731172556
5. https://www.tc260.org.cn/front/postDetail.html?id=20250813151206
6. https://www.tc260.org.cn/front/postDetail.html?id=20250813151601
7. https://www.tc260.org.cn/front/postDetail.html?id=20250804155822

19. China Releases Data Industry Map (2025)

Data

On August 28, 2025, The ***Data Industry Map (2025)*** was unveiled at the "Data Sector Innovation and Development Exchange Event" during the 2025 China International Big Data Industry Expo. It was jointly compiled by several institutions, including the National Institute of Data Development (NIDD), Beijing Jiaotong University, Renmin University of China, Tsinghua University, the Institutes of Science and Development of the Chinese Academy of Sciences. The event was organized by the Data Resources Department of the National Data Administration (NDA) and co-hosted by the NIDD, China Mobile Communications Group, and Taiji Computer Corporation. It attracted over 400 participants from government agencies, enterprises, universities, and think tanks.

As a systematic research initiative, the *Data Industry Map (2025)* provides a comprehensive overview of the latest developments and future trends in China's data industry. It highlights progress in key areas such as resource supply, technological advancement, application penetration, and security enhancement, serving as an authoritative reference for digital transformation across various sectors. Specifically, the *Data Industry Map (2025)* catalogs 2,220 enterprises categorized into six segments:

- Data Resource Enterprises (436), identified as major drivers of data supply growth;
- Data Technology Enterprises (474), showing improvements in both quantity and quality;
- Data Application Enterprises (531), reflecting a

trend toward resource concentration and strong players;

- Data Service Enterprises (430), acting as pioneers in building the data factor market;
- Data Infrastructure Enterprises (195), transitioning from scale expansion to capability enhancement;
- Data Security Enterprises (154), shifting from passive defense to proactive security strategies.

The release of the *Data Industry Map (2025)* clarifies investment and innovation priorities in China's data industry across domains such as resource supply, technology advancement, application, and security enhancement, offering clear strategic guidance for foreign enterprises planning their presence in the Chinese market. Moreover, it signals that as China's data factor market moves toward greater standardization and sophistication, new cooperation opportunities may emerge alongside more stringent compliance requirements. Foreign stakeholders should closely monitor subsequent supporting policies and evolving industry standards.

Source:

1. https://xbitly.com/dTzKu
2. https://mp.weixin.qq.com/s/ZW5JrdWVWP-SB63bOmn5zA

20. China Boosts AI Foundation with New Dataset Development Guidelines

AI Development

On August 28, 2025, the ***Guidelines for High-Quality Dataset Development*** (hereinafter referred to as the "Guidelines") was officially released. Under the guidance of the National Data Administration (NDA), the Guidelines was jointly compiled by the China Academy of Information and Communications Technology (CAICT), the National Institute of Data Development (NIDD), the China Electronics Standardization Institute (CESI), the State Information Center, the Innovation-Driven Development Center of the National Development and Reform Commission (NDRC), and the China Center for Information Development (CCID).

The Guidelines provide a reference pathway for high-quality dataset development, covering background, application requirements, methodologies, frameworks, and strategies. Its purpose is to guide enterprises in building high-quality datasets to support AI development. The pathway consists of one methodological framework and one integrated operational system, analyzing models, processes, technologies, and evaluation methods to deliver clear, actionable practices.

The methodological framework includes three elements: **(1) six processes** (requirement, planning, collection, preprocessing, labeling, validation), **(2) five technologies** (collection, transformation, cleaning, feature selection, labeling), and **(3) one quality system** (implementation, metrics, management).

The integrated operational system is built on three pillars: systematic planning (indexes, inventories, standards), engineering implementation (development, delivery, maintenance, scaling), and operational management (governance, cost control, quality, ecosystem collaboration).

In summary, the Guidelines advocate for a systematic planning of high-quality dataset development, infrastructure-based solutions to facilitate data circulation and utilization, and an ecosystem-oriented environment to ensure sustainable growth. The goal is to establish a comprehensive framework that covers the entire lifecycle and interconnects all phases of high-quality dataset construction. NDA will continue to guide various stakeholders to actively participate in the development of high-quality datasets, enhance the quality of data supply, and strengthen the foundation for artificial intelligence advancement.

Source: https://xbitly.com/NzDlT

21. China Published Trusted Data Space Standardization Research Report

Data Standardization

On August 29, 2025, the ***Research Report on Trusted Data Space Standardization (2025 Edition)*** (hereinafter referred to as the "Report") was officially released at the Data Standardization Exchange

Event during the 2025 China International Big Data Industry Expo. The Report was compiled in line with the requirements outlined in policy documents such as the *National Data Infrastructure Development Guidelines* and the *Action Plan for the Development of Trusted Data Spaces (2024–2028)*. It aims to construct a standardized system for trusted data spaces, assisting in regulating and promoting efficient data circulation and trustworthy use. The compilation work was guided by the National Data Administration (NDA) and organized by the Secretariat of SAC TC609 on Data of Standardization Administration of China, with the participation of institutions including the China Electronics Standardization Institute (CESI), Huawei Technologies Co., Ltd., the National Institute of Data Development (NIDD), and Peking University.

The Report researches the domestic and international development status and trends of trusted data spaces, current standardization landscape, standard system construction, and considerations for future standardization work. More specifically, the report examines trusted data space developments in the EU, U.S., and Japan, covering policy, legal environment, current status, technical architecture, core capabilities, and key stakeholders, while also identifying international good practices and trends. The analysis then turns to China's technical and application progress, underscoring the urgent need for standardization. China's standardization efforts in this area remain at an early stage and face three major gaps: the absence of a national standard system, including overarching and key standards; a shortage of sector and local standards, hindering implementation; and poorly managed group standards, with many unpublished and unreviewed standards causing inconsistency and confusion.

In this context, guided by the *National Data Standard System Construction Guidelines*, the Report proposes a standards framework of trusted data spaces aligned with future development trends. It positions the standards framework under "Data Infrastructure – Circulation and Utilization Facilities" and defines six types of standards: general, functional technical, business operational, security assurance, capability assessment, and application service. The framework leverages existing data infrastructure standards and clarifies priority areas—basic, technical, operational, security, evaluation, and service—to strengthen compatibility, interoperability, and security in data flows. It will help avoid conceptual ambiguity and support interoperable, well-regulated development and management of trusted data spaces.

For foreign stakeholders, this report signifies that China is accelerating the establishment of a standardized system for trusted data spaces, indicating that future data-related operations in China must strictly comply with the country's regulatory requirements in areas such as data circulation, security, and interoperability. Foreign enterprises should actively monitor and adapt to these standards to mitigate compliance risks, enhance the efficiency of data collaboration, and capitalize on potential market opportunities and technological cooperation arising from the standardization process.

Source: https://xbitly.com/NZMCd

22. China Pushes for Electronics Manufacturing Growth and Stability

Electrical and Electronics Standardization

On August 22, 2025, the Ministry of Industry and Information (MIIT) and the State Administration for Market Regulation (SAMR) jointly issued the ***Electronic Information Manufacturing Industry Stability and Growth Action Plan (2025–2026)***. The plan outlines 2 main targets, 16 measures across 3 key domains to strengthen competitiveness of China's global electronics supply chain and boost technological self-reliance.

The 2 main targets include:

From 2025 to 2026, achieve 7% average annual growth in value-added output for large-scale computer, communication, and electronic equipment manufacturing. Lithium batteries, photovoltaics (PV), and components, and the broader sector aims for over 5% annual revenue growth.

By 2026, the sector is expected to remain China's largest by revenue and export share. Server industry is projected to exceed 400 billion yuan, and 75-inch and larger TVs are targeted to surpass 40% domestic market penetration, alongside a shift toward smarter, higher-end PCs and mobile phones.

The Plan promotes high-end development of electronics and enhanced supply capacity, focusing on key segments and application scenarios. It encourages innovation in AI-powered terminals, integration of AI agents with hardware, and intelligent grading standards for AI devices.

The policy also addresses inefficient competition in PV and lithium battery sectors, opposing low-cost dumping and guiding rational local planning. **Quality management for PV modules and stronger manufacturing standards are emphasized**.

The Plan also calls for boosting domestic demand consumption of electronics. It will support R&D in wearables for healthcare, transport, and education, and advances AI servers, efficient storage, and intelligent cloud services for fields like autonomous driving and biomedicine.

A Beidou-based precision spatio-temporal information service system will be integrated with intelligent and connected vehicles and low-altitude economy.

Lastly, the Plan pushes for equipment upgrades and major projects to achieve high-end, intelligent, and green development. It prioritizes advanced computing, new displays, servers, communication equipment, and smart hardware, emphasizing R&D in CPUs, high-performance AI servers, and hardware-software coordination, including compatibility tests for AI chips and large models. The policy also calls for forward-looking deployment of new infrastructure, improved management of existing facilities, and enhanced compatibility adaption for servers, chips, and key modules.

Overall, the Plan signals China's intensified policy drive toward high-end, intelligent, and green electronics manufacturing. Foreign firms should prepare for **stricter local standards**, **greater supply chain localization**, and **heightened competition**, though opportunities remain in areas like AI computing and low-altitude economy electronics,

Source:

https://www.miit.gov.cn/zwgk/zcwj/wjfb/tz/art/2025/art_e8e780ef457343699aaa9943a8a158b9.html

23. SAC/TC609 Public Consultation for Six Data-Related Technical Documents

Data Standardization

On 11 August 2025, the National Technical Committee on Data Standardization (SAC/TC609) opened a public consultation on 3 technical documents on data infrastructure and 3 technical documents on trusted data space. These 6 technical documents are developed to support the *Guidelines for Construction of National Data Infrastructure* (released on 1 Jan 2025) and the *Action Plan on Developing Trusted Data Space (2024–2028)*, and to facilitate the planning, construction, operation, and management of data infrastructure and trusted data spaces across regions, industries, sectors, and enterprises.

The 6 technical documents and their scopes are presented below:

- ***TC609-6-2025-XX Data infrastructure – Technical requirements for Regional/Sectoral Functional Nodes***

This document specifies the interrelationships, functional architecture, and technical requirements for regional/industry functional nodes in areas such as product and resource management, identification management, operations management, and monitoring & analysis. It is applicable to guiding qualified provincial authorities, industry regulators, and leading enterprises in constructing regional/industry functional nodes based on standardized architecture.

Furthermore, this document supports the development of multi-tiered data infrastructure—including regional, municipal, industrial, corporate, and individual-level systems—supported by technological frameworks such as data markets, trusted data spaces, the Internet of Data, data components, privacy-preserving computation, and blockchain.

- ***TC609-6-2025-XX Data infrastructure – Access management***

This document specifies the technical, managerial, security, and compliance requirements for integrating business nodes and access connectors into regional/industry functional nodes during the construction of data infrastructure.

It is applicable to guide the access management practices of regional/industry functional nodes, as well as supporting the integration of business nodes and access connectors into the data infrastructure ecosystem.

- ***TC609-6-2025-XX Data infrastructure – General requirements for security capability***

This document specifies general security capability requirements for data infrastructure. Based on the

functional architecture of data infrastructure and incorporating the security assurance layer, it outlines security capability requirements for components within the data circulation and utilization layer, computing power layer, and network facility layer.

This document is applicable to all stages of data infrastructure, including planning, construction, operation, and evaluation. It aims to provide comprehensive security guidance to stakeholders involved in data infrastructure, ensuring confidentiality, integrity, availability, and overall security of data.

- ***TC609-6-2025-XX Trustworthy data space – Technical requirements for digital contract***

This document specifies the structural, content-related, technical, and security requirements for digital contracts, and describes their business processes, interfaces, and data dictionaries.

It is applicable to the design and development of digital contracts, and provides technical guidance for the construction, operation, and evaluation of related systems.

- ***TC609-6-2025-XX Trustworthy data space – Technical requirements for usage control***

This document specifies the technical requirements for usage control in trusted data spaces, including functional requirements, interface specifications, and security requirements. It applies to the design and development of data usage control functions within trusted data spaces, and serves as a reference for the construction, operation, and evaluation of data usage control modules in trusted data space service platforms and connected connector.

- ***TC609-6-2025-XX Trustworthy data space – Specification for technical capability evaluation***

This document specifies requirements for capability evaluation of trusted data space technology and applies to technical selection and third-party evaluation for trusted data space.

SESEC will continue to monitor the development of these 6 technical documents and provide timely updates once their final versions are officially released.

Source:
https://www.nda.gov.cn/sjj/zwgk/tzgg/0812/20250812174151139709497_pc.html

24. China Officially Released "AI+" Action Plan

AI Development

On 21 August 2025, the State Council of China released the *Opinions on Deeply Implementing the "Artificial Intelligence Plus" Action Plan* (the "Action Plan"), approved on 31 July 2025. The plan sets phased development goals, identifies priority sectors, and provides a roadmap for integrating AI into China's economic, social, and governance systems.

Brief Summary

The Action Plan sets three phased goals:

- **By 2027**: Over 70% adoption of next-generation AI applications such as **intelligent terminals** and **agents**. AI-driven industries will see accelerated growth.
- **By 2030**: Adoption will exceed 90%, intelligent economy will be a key economic growth driver.
- **By 2035**: fully transform into an intelligent economy and society.

Six Major Actions

1. **"AI+" Scientific Technology**
   AI will be used to drive breakthroughs in scientific discovery and new research paradigms, especially in social sciences to analyze human behavior, society, and policy.
2. **"AI+" Industrial Development**
   AI will encompass full industrial cycles and evolve new business models. For example, AI will be used to support **agriculture** in the areas of breeding, farm equipment, and management. In addition, the service industry like **finance**, **logistics**, **law** and **trade** will also undergo AI transitions.
3. **"AI+" Consumer Goods Industry**
   AI will transform consumption through new scenarios such as personalized and experiential services. The development emphasizes **intelligent and connected vehicles**, **AI smartphones and computers**, **wearables**, **smart homes**, and **robots**, building a collaborative ecosystem between humans and machines.
4. **"AI+" Public Welfare**

AI vocational training will be provided, alongside integration of AI into **education and healthcare** and **public services** to improve people's livelihood.

5. **"AI+" Governance Capability**
   AI will expand into e-government and rural services, especially in eco-environment and disaster management.
6. **"AI+" Global Cooperation**
   China plans to lead in **building a global AI ecosystem**, starting from collaboration in **computing, data, and talent**. The country will also emphasize **open-source development** and reducing the global AI divide under an UN-centered governance framework, particularly for developing countries.

Eight Essential Infrastructure Capabilities
The Action Plan identifies eight key foundations to support implementation:

- **Fundamental AI Models**: Improve theory, training methods, and evaluation.
- **Data Supply**: Build high-quality datasets, clarify copyright rules, and expand synthetic data industries.
- **Computing Power**: Develop AI chips, expand clusters, and ensure efficient and green computing.
- **Application Environment**: Build testing bases, improve standards, and strengthen IP protection.
- **Open-Source Ecosystem**: Support global communities and internationally recognized platforms.
- **Talent Development**: Enhance AI education, promote interdisciplinary programs, and attract top talent.
- **Policy & Regulation**: Provide financial support, strengthen risk management, and **advance AI-related laws and ethics**.
- **Security**: Establish safeguards, early warning systems, and emergency response mechanisms for AI risks.

Source:

1. https://www.gov.cn/zhengce/content/202508/content_7037861.htm
2. https://www.gov.cn/zhengce/202508/content_7037929.htm
3. https://www.gov.cn/zhengce/202508/content_7038092.htm

25. China Outlines New Steps to Boost Domestic Demand and AI Adoption

AI Development

On 29 August 2025, the National Development and Reform Commission (NDRC) held a press conference following the State Council's released the ***Opinions of Deeply Implementing the "Artificial Intelligence Plus" Action Plan*** (also known as "AI+" initiative). NDRC spokesperson detailed the authority's planned response to this new initiative and its strategy for addressing domestic economic issues.

China is facing multiple urgent economic issues. NDRC will utilize AI+ Initiative to address these issues through increasing domestic demand, rejuvenating consumption, optimizing international trade, and promoting dual circulation of goods and services.

Mr. Zhang Kailin, Deputy Director of the NDRC High-Tech Department, reported three work areas in the foreseeable future:

1. **Supporting policies.** Develop implementation plans for key industries under the 6 major actions of the initiative. Introduce policy guidelines on areas such as **safety governance** and **international cooperation**. **Speed up setting industry-specific standards by national, sector and association levels.**
2. **Major projects.** Subsidize computing power and application test base. Carry out joint projects for major strategic scenarios and explore new subsidy methods for AI consumer products.
3. **Demonstration and guidance.** Encourage enterprises and research institutes to collaborate to identify high-value scenarios and exemplary application cases. Support local

governments and institutions to explore new models in supply-demand matching, resource integration, and performance incentives.

Since 2024, an increasing number of AI industry application standards have been launched, accompanied by the rapid establishment of related working groups. The introduction of the AI+ initiative, together with NDRC's response, confirms beliefs that there will be a substantial increase in standards connecting AI with consumer goods, manufacturing, and other key sectors. SESEC will continue to closely monitor these developments and provide timely updates on the latest progress.

Source: https://www.gov.cn/zhengce/202508/content_7038283.htm

26. CCSA/TC602 and MIIT/TC01 Deepen Collaboration for AI Standards and its Application

AI Development

From July 17 to July 18, 2025, the Artificial Intelligence Technology and Standards Promotion Committee of the China Communications Standards Association (CCSA/TC602) held its 2025 third quarter meeting week. Meanwhile, the Artificial Intelligence Standardization Technical Committee under the Ministry of Industry and Information Technology, MIIT TC01, also held its 2025 Standard Week. Mr. Wen Ku, Chairman of the China Communications Standards Association, was invited to attend and deliver a speech.

Mr. Wen stated that CCSA/TC602 and MIIT/TC01 have established a close and coordinated cooperation mechanism in the field of artificial intelligence, achieving coordinated preliminary review of standards and a clear division of responsibilities. On this basis, he proposed that both TCs should build a "three-in-one promotion framework: using standards as the anchor to improve the indicator system, using networks as the foundation to consolidate underlying support, and using ecosystems as wings to promote collaborative innovation," thereby promoting deep integration of standards and industrial applications. The effective collaboration between CCSA/TC602 and MIIT/TC1 not only leverages the former's resource advantages in cross-industry ecosystem construction but also relies on the latter's precise grasp of the needs of professional fields. In the future, it will still be necessary to jointly promote the development of China's artificial intelligence standardization work by accelerating the implementation of core standards, strengthening coordinated pilot demonstrations, and improving international cooperation.

As a standards promotion committee established under the authoritative standardization body in the domestic communications field, CCSA/TC602, since its founding in March 2018, has always focused on artificial intelligence innovative technologies and security governance, conducting pre-research on standards and ecosystem construction in multiple industries such as **telecommunications**, **finance**, and **automobiles**, and building an efficient coordination platform. MIIT/TC1, as the first specialized standardization technical committee of the Ministry of Industry and Information Technology, since its establishment in December 2024, has aimed at promoting high-quality development and undertaken important responsibilities for the **formulation and revision of sector standards**.

During this "Standards Week" event, both sides carried out business cooperation, jointly organized frontier technology seminars, conducted standard demand research, promoted pilot demonstration application and promotion, and deeply advanced a series of collaborative achievements, forming a closed-loop ecosystem of "innovation–standards–implementation."

In the future, both sides will take this Standards Week event as an opportunity to further promote consensus on cooperation, rely on their respective resource advantages, and jointly carry out artificial intelligence-related technical seminars, industry salons, industrial exchanges, and other activities. They will cooperate on **research, formulation, promotion, implementation, internationalization of standards related to artificial intelligence technology and applications**, as well as **standardization talent training**, jointly **promoting technological innovation research** in the field of artificial intelligence, **construction of the standard system**, **empowerment of industry applications**, with standards as the guide, helping enterprises improve product and service quality, and promoting the standardized and high-quality development of the artificial intelligence industry.

Source: https://mp.weixin.qq.com/s/UNSi8AvPfe-gdLt1GgTUDw

Green Transition

27. China Launches Pilot Certification Program for Product Carbon Footprint Labeling

Product Carbon Footprint

On July 9, 2025, the State Administration for Market Regulation (SAMR), the Ministry of Ecology and Environment (MEE), and the Ministry of Industry and Information Technology (MIIT) jointly issued a notice clarifying **the first batch of the pilot certification catalog for product carbon footprint labeling in China**. The catalog covers **17 product categories**, including lithium batteries, photovoltaic modules, steel products, textile products, room air conditioners (see more details in the table below).

According to the first *Knowledge Compendium on the Pilot Program for Product Carbon Footprint Labeling and Certification* issued by SAMR in April 2025, participation in the product carbon footprint labeling pilot is **voluntary**. Priority is given to enterprises that demonstrate strong willingness, technical capability, and a solid foundation in carbon accounting.

Pilot Certification Catalog for Product Carbon Footprint Labeling (First Batch)

No.	Pilot Products	Certification Catalog
1	Lithium Batteries	Consumer Lithium – ion Batteries
2		Small - power Lithium – ion Batteries
3		Large - power Lithium – ion Batteries
4		Energy - storage Lithium – ion Batteries
5	Photovoltaic Products	Photovoltaic Modules
6	Steel (including Crude Steel)	Blast Furnace - Converter Long – process Steel Products
7		Electric Furnace Short – process Steel Products
8		Ferroalloys
9	Textiles (including Cashmere Products)	Textile Products
10	Electrical Appliances (Air Conditioners)	Room Air Conditioners
11	Electrical Appliances (Computers)	Desktop Microcomputers
12	Electrical Appliances (Laptops)	Portable Computers
13	Electrical Appliances (Motors)	Small - power Motors
14	Tires	Tires
15	Electrolytic Aluminum	Electrolytic Aluminum
16	Cement	Cement
17	Wood Products	Artificial Boards and Wooden Floors

The release of this catalog marks a critical step in transitioning **China's product carbon labeling certification system** from a policy framework to practical implementation. To advance the pilot program, the SAMR subsequently convened **a deployment meeting** in Beijing on July 23, 2025. The program supports China's green transition goals and follows the principle of "**unified catalog, standards, rules, and labeling**." According to the meeting, implementation rules of specialized certification will be developed to provide lifecycle carbon footprint guidelines for enterprises and certification bodies. In addition, SAMR urged strengthened interdepartmental coordination, strict quality control in certification processes, and practical technical support for enterprises. By focusing on specific subdivided products and coordinating with subsequent product-specific certification implementation rules to be issued, China will establish a full-lifecycle product carbon footprint labeling certification framework.

Background: China's Progressive Rollout of Carbon Footprint Labeling Certification

Earlier regulatory developments:

- **August 2024:** SAMR, along with other departments, launched a **three-year pilot program** for carbon footprint labeling and certification. The initiative covers **eight key tasks**: establishing a working mechanism, improving data quality, ensuring data security, enhancing management, strengthening quality control, innovating policies, evaluating outcomes, and expanding applications. Designated certification bodies conduct certification under unified rules during implementation, with provincial authorities supporting policy refinement and execution. **Upon completion, provincial departments submit summary reports, and the SAMR evaluates results to promote successful practices**.
- **December 2024:** The Secretariat of the National Certification and Accreditation Administration of China (CNCA) unveiled **26 approved certification bodies for product carbon footprint labeling certification**, including the China Quality Certification Center (CQC), formally initiating the certification system's development.
- **January 2025:** SMAR and other departments released **a list of selected pilot participants for product carbon footprint labeling and certification**, covering **25 provinces and municipalities** including Beijing, Tianjin, Hebei and Shanxi. Specific products have been

assigned to each participating region based on local industrial characteristics. The pilot program prioritizes products with strong market demand, high export pressure, significant emission reduction potential and robust data availability, such as lithium batteries, photovoltaic products, electronics, tires and electrolytic aluminum. It aims to accumulate practical experience for nationwide implementation of carbon footprint labeling certification.

- **March 2025:** CNCA issued **first general implementation rules for product carbon footprint labeling certification**, which lays the groundwork for nationwide adoption by defining the certification scope, modes, procedures and label design. (Click here to see our earlier coverage for more details)

Going forward, SAMR will expedite the **Pilot Certification Program** to develop replicable best practices, reinforcing China's carbon labeling certification system and carbon footprint management framework. This effort underscores the country's commitment to green institutional innovation and global climate governance leadership. For foreign stakeholders, the release of the catalog signifies both higher compliance requirements and potential increases in operational costs, but it also presents significant opportunities to enhance market competitiveness and brand image. SESEC will keep tracking its advancement and share the most recent developments.

Source:

1. https://www.samr.gov.cn/xw/zj/art/2025/art_9693e7262d8f494c8a7b644122cf4b3b.html
2. https://www.samr.gov.cn/xw/zj/art/2025/art_98c5baffaf5a43bb8073827e93c55f24.html
3. https://www.samr.gov.cn/zw/zfxxgk/fdzdgknr/rzjgs/art/2024/art_b2119112323f4e02bb93de3cb48619a2.html
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6. https://www.samr.gov.cn/zw/zfxxgk/fdzdgknr/rzjgs/art/2025/art_7a0ac3998d06423bba72720b03c6af82.html

28. China Updates New Energy Efficiency Standards for Refrigerator and Indoor LED Lighting

Energy Efficiency

In July 2025, China is taking decisive steps to enhance energy efficiency across consumer products, with two significant standardization developments: the implementation of upgraded mandatory standards for household refrigerators and a newly drafted update to indoor LED lighting efficiency requirements. These initiatives reinforce China's commitment to sustainable development and carbon neutrality goals.

Refrigerator Energy Efficiency Standard Upgraded

On July 2, 2025, China has officially released *GB 12021.2 – 2025*, the updated mandatory standard for household refrigerators titled *Maximum allowable values of energy consumption and energy efficiency grade for household refrigerating appliance*, which will **take effect on June 1, 2026.** The new mandatory standard replaces GB 12021.2 – 2015 and introduces stricter requirements for the Chinese refrigerator market. Key advancements include:

- **Expanded Coverage:** Now covers compressor-driven refrigerators and semiconductor cooling devices (≤60L capacity)
- **Revised 5-tier energy efficiency rating system:** Grade 1 (highest efficiency, international leading level), Grade 2 (highly recommended efficiency level), Grades 3-4 (average market performance), and Grade 5 (minimum market entry threshold)

The standard raises the energy consumption index by 30-40% compared to the previous version and adds requirements for the response capability to smart grid signals to guide the intelligent and green development of refrigerators. With over 500 million refrigerators in use and annual sales exceeding 60 million units, the update supports China's energy conservation goals and equipment upgrade policies. Additionally, the United Nations Environment Program has expressed interest in referencing China's new refrigerator standard for global policy development.

Draft Standard for Indoor LED Lighting Under Public Consultation

The National Technical Committee for Energy

Fundamentals and Management (SAC/TC20) has released a revised draft of *GB 30255–2019 Minimum Allowable Values of Energy Efficiency and Energy Efficiency Grades for Indoor LED Lighting Products*, open for public comment until **September 15, 2025**. This update to the 2019 standard introduces several key technical improvements:

- **Expanded Scope:** Now includes LED high bay luminaire and double-ended LED lamps.
- **Revised Definitions:** Added definitions for LED filament lamps, LED high bay luminaire, minimum allowable values of energy efficiency for LED product, standby power of LED product, and network standby power of LED product.
- **Stricter Efficiency Rules:** Updated energy efficiency grades for indoor LED products, with new adjustments for dimmable & tunable-color-temperature lights.
- **Updated Color & Power Requirements:** Introduced color tolerance requirements for rated Correlated Color Temperature (CCT) boundary points, updated Color Rendering Index (CRI) requirements, including efficiency corrections for high-CRI products, and added new standby & network standby power limits
- **Testing Upgrades**: Introduced new procedures for measuring standby and network standby power and updated testing protocols for adjustable lighting products

In conclusion, these dual initiatives demonstrate China's comprehensive approach to energy efficiency regulation, combining rigorous domestic standards with international cooperation to drive global sustainability efforts. China's 2025 energy efficiency standards for refrigerators and LED lighting present both challenges and opportunities for foreign firms. Stricter requirements increase short-term compliance costs but create long-term advantages. Companies aligning with these standards can leverage smart features, health benefits, and green subsidies to gain market position while supporting China's carbon neutrality goals. SESEC will continue to track the development of energy efficiency and circulate the latest information.

Source:

1. https://www.cnis.ac.cn/bydt/bzyjzq/gbyjzq/20250 7/t20250711_61269.html
2. https://www.cnis.ac.cn/bydt/zhxw/202507/t20250 703_61218.html

29. China Introduces Mandatory RoHS Standard GB 26572-2025

RoHS Standard

On August 1, 2025, ***GB 26572-2025 Requirements for restricted use of hazardous substances in electrical and electronic products***, China's first mandatory national standard in the restriction of hazardous substances (RoHS) for electrical and electronic products (Hereinafter referred as the Standard), was approved and released by the National Standardization Administration (SAC). This mandatory standard, proposed and administered by the Ministry of Industry and Information Technology (MIIT), was jointly developed by the China Electronics Standardization Institute in collaboration with over 60 institutions and enterprises, including electrical and electronic product manufacturers, certification and testing bodies, industry associations and research institutes. It is set to **take effect on August 1, 2027**.

As the first mandatory national standard in China's RoHS control field, the Standard aligns with European and international requirements in terms of restricted substance categories, limit values, and testing methods. It applies to electrical and electronic products produced, sold, or imported within China, consistent with the *Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products (Hereinafter referred as the Management Methods)*. According to the Standard, electrical and electronic products fall into two categories:

- **Class I**: Those listed in the official ***Compliance Management Catalog for the Restriction of Hazardous Substances in Electrical and Electronic Products*** must meet mandatory substance restriction limits and carry a compulsory label.
- **Class II**: Products not included in the catalog are encouraged to comply with the limits but are still required to be labeled.

Currently, the first batch of the *Compliance Management Catalog for the Restriction of Hazardous Substances in Electrical and Electronic Product* includes 12 product types: **refrigerators, air conditioners, washing machines, water heaters, monitors, televisions, printers, copiers, fax machines, microcomputers, mobile phones, and telephones**.

The Management Methods specifies a comprehensive "Compliance Catalog + Conformity Assessment + Post-market Supervision" mechanism, where products listed in the catalog must meet restricted substance limits through state-backed certification or self-declaration while results are published on the official China RoHS platform for public oversight, with post-market monitoring by MIIT, State Administration for Market Regulation (SAMR), and customs authorities.

Notably, the Standard mandates strict limits on 10 toxic chemicals in electrical and electronic products, including four heavy metals (**lead, mercury, cadmium, and hexavalent chromium**), and six persistent organic pollutants such as **polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), and four types of phthalates**. More details about the types and limit values of hazardous substances in each homogeneous material of the product are shown in the table below, while the content of hazardous substances in electrical and electronic products is tested according to the national standard *Determination of certain substances in electrical and electronic products* (GB/T 39560 series) (identical to IEC 62321).

The List and Limit Values of Restricted Hazardous Substances in Electrical and Electronic Products

Type	Abbreviation	CAS No.[1]	Limit Value/ (Mass Fraction)
Lead	Pb	7439 - 92 - 1	≤0.1%
Mercury	Hg	7439 - 97 - 6	≤0.1%
Cadmium	Cd	7440 - 43 - 9	≤0.01%
Hexavalent Chromium	Cr (VI) or Cr^{6+}	18540 - 29 - 9	≤0.1%
Polybrominated Biphenyls	PBBs	----	≤0.1%
Polybrominated Diphenyl Ethers	PBDEs	----	≤0.1%
Dibutyl Phthalate	DBP	84 - 74 - 2	≤0.1%
Diisobutyl Phthalate	DIBP	84 - 69 - 5	≤0.1%
Butyl Benzyl Phthalate	BBP	85 - 68 - 7	≤0.1%
Bis(2-ethylhexyl) Phthalate	DEHP	117 - 81 - 7	≤0.1%
[1]CAS No.: Registration number assigned to chemical substances by the Chemical Abstracts Service (CAS) of the United States.			

Furthermore, China RoHS labeling requirements mandate that producers or importers of electrical and electronic products shall apply labels indicating the presence of hazardous substances, as illustrated below. It is worthed mentioning that products may only bear **Label I** if all homogeneous materials comply with hazardous substance limits; otherwise **Label II** must be applied, accompanied by a hazardous substance information table (also see the table below). Moreover, Label I or II must be visibly marked on the product or in its documentation, with the hazardous substance information table included, provided in formats such as manuals, electronic files, or packaging. Additionally, technical documentation supporting the accuracy of the hazardous substance information table shall be retained for at least three years after product discontinuation, with all records required to be authentic, valid, and traceable.

Label Illustration

 **Label I**	1. The product contains no hazardous substances and is environmentally friendly.
	2. The letter **"e"** stands for *electrical and electronic products* and *environmental protection*, symbolizing eco-friendly products.
	3. The encircling arrows indicate the product is recyclable.
 **Label II**	1. The product contains hazardous substances but can be safely used within its Environmental Protection Use Period (EPUP).
	2. The number in the centre indicates the EPUP in years (e.g., "10" for 10 years).
	3. The encircling arrows indicate the product is recyclable.

Format of Hazardous Substance Information Table for Electrical and Electronic Products

Component Name	Hazardous Substances			
Component 1	Substance 1	Substance 2	…	Substance n
Component 2				
…				
Component n				
Note 1: ○: indicates that the content of the hazardous substance in all homogeneous materials of this component does not exceed the limits specified in the national standard. ×: Indicates that the content of the hazardous substance exceeds the limits in at least one homogeneous material of this component. Note 2: Components not listed in this table are deemed to comply fully with the national standard limits for hazardous substances.				

The Standard, published on 1 August 2025 and effective from 1 August 2027, includes **a two-year transition period and a one-year grace period for products made or imported before the effective date**. Its implementation strengthens China's RoHS framework by filing regulatory gaps, while enforcing environmental safeguards, promoting green industry transformation, and enhancing global influence for Chinese standards and products. For foreign stakeholders, it is advised to:

- Conduct product testing and supply chain screening in advance.
- Optimize product design and promote the use of environmentally friendly material alternatives.
- Stay updated on standard implementation guidelines and subsequent catalog updates to adjust compliance strategies promptly.

Sources:

1. https://www.miit.gov.cn/xwfb/gxdt/sjdt/art/2025/art_9b6f355b9a174c0fb0691d775ad4e160.html
2. https://www.miit.gov.cn/zwgk/zcjd/art/2025/art_265e4c3c3d884d57bf510165470bc611.html

30. CNCA Tightens Certification for Lithium-ion Batteries & Power Banks

Battery

On July 28, 2025, the National Certification and Accreditation Administration (CNCA) released the ***Implementing Rules for Compulsory Product Certification: Power Banks, Lithium-ion Batteries and Battery Packs (Trial)*** (CNCA-C09-02: 2025) (Hereinafter referred to as the Implementation Rules), aiming to strengthen the management of compulsory product certification for these products.

The Implementation Rules, which **take effect on August 15, 2025**, replace the previous certification framework under the *Implementation Rules for Compulsory Product Certification: Electronic Products and Safety Accessories* (CNCA-C09-01: 2023). The old rules no longer apply to power banks, lithium-ion batteries, and battery packs. Moreover, designated certification bodies must develop and file detailed implementation guidelines with the CNCA before issuing certifications under the new framework.

Notably, existing valid compulsory product certification certificates remain in effect and will transition naturally through certificate renewal, product change, and standard updates.

The Implementation Rules aim to fortify safety baselines and curb cut-throat price competition through institutional innovation, driving the sector's transition from scale expansion to quality-and-efficiency development. **The updated content of the Implementation Rules includes four dimensions.**

- Enterprises are classified into four dynamic tiers – A (Excellent), B (Good), C (Fair), and D (High-risk) – based on factory audits, sampling data, and credit records, with adjustments allowing gradual upgrades and gradual or cross-tier downgrades. Moreover, Tier A requires one annual routine inspection, while Tier D mandates four full unannounced inspections yearly.
- A comprehensive oversight mechanism is established by adopting an end-to-end management model encompassing type testing, initial factory inspection, and post-certification supervision, while incorporating randomized production line sampling with mandatory video

documentation. Enterprises classified as Tier C or D face doubled inspection frequency and are subject to fully unannounced surprise audits.

- A safety baseline for extreme scenarios is built by introducing crush, thermal abuse, and impact tests using a 30mm diameter steel ball at 150J energy requiring 5-minite non-ignition performance and implementing post-300-cycle short-circuit tests with mandatory GB 31241 – compliant cells and prohibited inferior electrolytes.
- Fourthly, a traceability system enforces permanent product marking (prohibiting removable labels) with unique certification codes. From November 1, 2025, 950°C – resistant steel engraving enables full supply chain tracing from cells to modules and end products, allowing consumers to verify complete production history through QR code scanning.

The sector's landscape is undergoing profound restructuring as the revised Implementation Rules comes into the picture. Compliance costs will rise structurally. This will contribute to the expanded advantages of technologically advanced enterprises and the continuous optimization of the market ecosystem.

Foreign enterprises should proactively engage with accredited certification bodies to implement new compliance procedures, while conducting full product and supply chain reviews against updated safety tests and **GB 31241 standards**. In addition, it is necessary to establish robust quality systems to achieve Tier A/B classification that will reduce regulatory burdens. Ultimately, foreign stakeholders should strategically feature CCC certification in marketing communications to turn compliance into competitive advantage, demonstrating safety and quality leadership in the Chinese market.

Sources:

1. https://www.cnca.gov.cn/zwxx/gg/2025/art/2025/art_915c12eceb7a4ad1a848e9598844e911.html
2. https://mp.weixin.qq.com/s/lmg1FVvvhTScj-vy_areVQ

31. China Advances China's Carbon Market Framework

Carbon Market

On August 25, 2025, the ***Opinions on Promoting Green and Low-carbon Transition and Strengthening the Development of the National Carbon Market*** (hereinafter referred to as the "Opinions") was jointly issued by the Communist Party of China Central Committee's General Office and the State Council General Office in China. The Opinions provide a comprehensive strategic plan for the development of China's **National Carbon Emissions Trading Market** (hereinafter referred to as the "national carbon market") and the **National Voluntary Greenhouse Gas Emissions Reduction Trading Market** (hereinafter referred to as the "voluntary **Greenhouse Gas** market"). It aims to establish an effective, dynamic, and internationally influential carbon market system, supporting carbon peak and carbon neutrality goals.

The core objectives are clearly outlined in the Opinions:

- **By 2027**, the national carbon market will cover all major emitting industries in the industrial sector, while the voluntary carbon market will achieve full coverage across key sectors.
- **By 2030**, the national carbon market will be fully developed based on total quota control with a mix of free and paid allowance, alongside a credible voluntary market with unified methodologies and international recognition. A carbon pricing mechanism with significant emission reductions, a robust regulatory framework and rational price levels will be established.

To achieve the objectives, the Opinions set out key measures:

Orderly expansion of coverage for national carbon market: include more industries and greenhouse gases based on sectoral development and decarbonization contributions.

Improved carbon emissions quota management: shift from intensity-based to total quota control, prioritizing sectors with stable emissions by 2027—while steadily raising the share of paid allocation.

Developing the voluntary Greenhouse Gas market: focus on building a sound methodology system—prioritizing sectors with high social and ecological benefits—and strengthening full-chain project management for integrity and transparency. It also promotes wider use of China Certified Emission Reductions (CCERs), encouraging their adoption by government, enterprises, and organizations for carbon neutrality and low-carbon practices.

Boosting carbon market activity:

1. Diversify financial products by introducing carbon-linked services like pledge and repurchase agreements to help firms manage carbon assets and improve pricing mechanisms.
2. Broaden participation by allowing financial institutions and, in time, non-compliance entities and individuals to trade.
3. Strengthen oversight through standardized policy communication, price monitoring, and strict enforcement against market abuse, while enhancing supervision of carbon finance to prevent systemic risks.

According to the Opinions, a systematic framework will be put in place to strengthen carbon market capacity by modernizing management and digital infrastructure, reinforcing emissions MRV with standardized protocols and automated monitoring, applying advanced technologies such as big data, blockchain, and IoT for end-to-end supervision, tightening oversight of technical service providers, and improving transparency through expanded disclosure and credit-based supervision.

Three supporting measures will ensure effective market development: strengthening organizational structures with national coordination, improving the legal and policy framework through legislation, enforcement, and linkages with green power and certificates, and deepening international cooperation by engaging in global governance, standard recognition, and experience sharing.

The Ministry of Ecology and Environment (MEE) emphasized that the carbon market aims to reduce emissions, drive low-carbon technology innovation, and promote coordinated planning.

In conclusion, China's carbon initiatives demonstrate its commitment to systemic decarbonization and alignment with global carbon pricing. For foreign stakeholders, expansion and financial innovation create new opportunities for carbon assets and voluntary emission reductions, while covered sectors face stricter accounting rules and higher compliance costs. Companies must strengthen carbon management and understand differences with the EU on emission calculation. SESEC will continue to monitor developments.

Source:
https://www.gov.cn/zhengce/202508/content_7037717.htm

Others

32. CEEIA Annual Standardization Meeting of 2025

#Chinese Standardization Committee

On 23 and 24 July 2025, the Standardization Committee of China Electrical Equipment Industry Association (CEEIA) successfully held its 19th General Assembly in Shanghai. The event brought together more than 160 participants, including vice chairpersons, representatives from research institutes, member enterprises, and members of the CEEIA Standardization Committee.

The Assembly served as a pivotal platform for reviewing past achievements and shaping the future of standardization in the electrical equipment industry. A key highlight was the release of two significant documents: the *CEEIA 2024 Work Report* and the *Research Report on the Standard System for Electrical Equipment in the New Power System*.

Mr. Wu Xiaodong, Chairman of the CEEIA Steering Committee for Standards, presented the Work Report on behalf of the CEEIA Council. The report summarized the association's standardization accomplishments throughout 2024 and laid out clear strategic tasks for 2025, emphasizing adaptation to new technological and regulatory conditions.

The newly published Research Report provides a comprehensive framework for developing a coordinated standard system that supports the construction of a clean, low-carbon, safe, and efficient new-type power system. It covers the entire energy chain—power generation, grid transmission, load consumption, and energy storage—and aims to enhance the reliability and stability of the national electricity supply. Furthermore, the report proposes a forward-looking standardization roadmap to help the industry adapt to evolving technologies and business models.

Looking ahead, CEEIA will deepen the integration of standardization with scientific research and industrial upgrading. Key initiatives include accelerating standard development for new power systems and digital transformation, actively engaging in international standardization—particularly in clean energy and carbon reduction technologies—and modernizing the association's standard management processes through digital tools and improved committee coordination.

CEEIA also plans to strengthen the application and promotion of standards through demonstration projects and support the upgrading of mature association standards to national standards, providing robust support for high-quality development across the electrical equipment industry.

SESEC has compiled a report on CEEIA Annual Standardization Meeting 2025, which can be found in Annex.

33. SAC/TC28 First Standards Week in July 2025

#Chinese Standardization Committee

On July 15 2025, the National Information Technology Standardization Technical Committee (SAC/TC28) launched its first "Standards Week" event of 2025. The opening event and plenary meeting were held in Beijing. Mr. Xiong Jijun, Vice Minister of Industry and Information Technology, Mr. Wang Yuhuan, Deputy Director of the Standards Technical Management Department of the State Administration for Market Regulation, attended the meeting and delivered speeches.

Attendees also included, Wang Yanqing, Deputy Chair of SAC/TC28 and Director General of the Department of Information Technology Development at the Ministry of Industry and Information Technology, Xu Wenli, Deputy Chair of SAC/TC28 and Deputy Director General of the Department of Electronic Information, Yao Jia, Deputy Director General of the Department of Science and Technology, along with other leaders and experts. Mr. Yang Xudong, President of the China Electronics Standardization Institute (CESI), also attended, while Mr. Fan Kefeng, Secretary-General of SAC/TC28 and Vice President of CESI, presided over the meeting.

Mr. Xiong Jijun, Vice Minister of MIIT, acknowledged the achievements of information technology standardization from 2020 to 2025. He put forward five proposals:

1. Plan and lay the groundwork for key development areas in next-generation information technology.
2. Establish a system for regularly updating standards. Improve the overall standards framework to ensure cohesion.
3. Accelerate the development of crucial standards in high-demand areas like **advanced computing, critical software/hardware, digital transformation,** and **AI**.
4. Promote the effective implementation of standards for **critical software/hardware, advanced computing, AI,** and **text encoding** to create a stable foundation.
5. Deepen involvement in international standardization efforts to help Chinese technology, products, and solutions expand globally.

Mr. Wang Yuhuan from SAMR, emphasized that advancing IT standardization is vital for nurturing new industrial advantages, driving integration of IT with various sectors, and supporting both domestic and international openness. He called on SAC/TC28 to closely track IT frontiers, strengthen foresight research in AI and brain-computer interfaces, promptly transform innovations into standards, deepen international collaboration, and boldly explore breakthroughs.

Mr. Yang Xudong, President of CESI, presented the *"Information Technology Standardization Work Report"*, reviewing global IT industry trends and reporting progress in standardization across critical areas such as hardware, software applications, electronics, emerging technologies, and future industries. SAC/TC28 has overseen over 1,600 national standards and contributed to more than 100 international standards. Looking ahead, it will continue to refine the system, deepen cooperation, and optimize organizational mechanisms to support high-quality IT development with high standards.

Over the past five years, SAC/TC28 has demonstrated substantial achievements through publishing 338 national and sector standards while initiating 395 new projects. The committee has strengthened China's international leadership in standardization by establishing the first international subcommittee on brain-computer interfaces and significantly increasing China's contribution to international standards development.

SESEC has compiled TC28's evolution, key statistics and standards update from this Work Report, which can be found in Annex.

In addition, the National Digital Transformation Standards Service Platform (dtmmep.cn) was unveiled. Beyond showcasing standards, it enables enterprises to self-assess digital transformation maturity online (nearly 1,400 enterprises have participated), while also certifying 70 high-quality service providers.

Furthermore, CESI and HiSilicon jointly released a roadmap for the next-generation General Purpose Multimedia Interface (GPMI) standard. HiSilicon is a Chinese fabless semiconductor design firm owned by Huawei. With just one cable, GPMI meets all wired interconnection needs and is the only domestic interface technology recognized by international ecosystems. Covering key products such as set-top boxes, computers, displays, TVs, and projectors, GPMI is being advanced as an international standard, with GPMI 2.0 development already underway.

From July 15 to 18, SAC/TC28's "Standards Week" hosted thematic seminars on software and digital transformation, storage, extended reality and digital humans, computing devices, educational large models, open source, IT services, AI terminals, operating systems, databases, unmanned systems, and IT talent development. Leaders from relevant departments, SAC/TC28 members, subcommittees, working groups, and representatives from industry, academia, and research institutions participated.

34. SAC/TC28/SC42 AI Standards Week in 2025

#Chinese Standardization Committee

From July 8 to July 10, 2025, the Artificial Intelligence Subcommittee of the National Information Technology Standardization Technical Committee (SAC/TC28/SC42) convened its annual *Artificial Intelligence Standards*

Week in Beijing. More than 600 representatives attended the meeting, including officials from relevant government departments, enterprises and public institutions, universities and research institutes, industry associations, and news media. The event commenced with two plenary meetings. One is from the National Artificial Intelligence Standardization General Group, while the other one is from SC42.

The National Artificial Intelligence Standardization General Group was established in 2018 under the State Council's notice, *Issuing the Development Plan on the New Generation of Artificial Intelligence (2017)*. It is responsible for the overarching coordination and top-level planning of artificial intelligence standardization, including:

- Formulating the planning, policies, and layout of the national AI standards system.
- Coordinating the attribution of technical content in standards to the relevant committees.
- Establishing a conversion mechanism between basic standards and industry application standards.

The Expert Advisory Group serves as a "think tank" for the Overall Working Group, providing strategic direction, policy recommendations, and assessments of development trends, and has played a pivotal role in shaping China's AI standards system.

On behalf of the General Group, Mr. Yang Xudong, President of the China Electronics Standardization Institute (CESI) presented the 'National Artificial Intelligence Standardization Work Report '. The report systematically reviewed important phased achievements in China's AI standardization efforts, introduced progress in areas including the standard system framework, development of key standards, standard verification and application, and international standardization cooperation. It also clarified future standardization work deployments in critical fields such as computing power benchmarks, large model evaluation benchmarks, large model selection and application guidelines, intelligent agent protocols, embodied intelligence, and AI safety governance.

According to the work report, China has published 27 national standards in AI, with 20 more in development, and 3 standard pre-research projects underway. In addition, 25 sector standards for AI have been published; 127 sector standards are in development, and 45 standard pre-research projects are ongoing.

Building on this foundation, the General Group will prioritize the standards development and relevant research in five key technical areas: AI computing power benchmark, large model evaluation system, guidelines for large model selection and application, embodied intelligence, and agent protocols.

The working meeting concluded with a comprehensive review of China's AI standardization progress and the establishment of key development priorities.

The agenda then proceeded to the SC42 Plenary Meeting, where representatives from all 17 working groups presented status reports covering 43 published standards and 87 standards in active development, detailing their respective technical scopes and implementation timelines.

The subsequent sessions on 9 and 10 July were dedicated to working group discussions, with participation from approximately 2,000 industry experts and subcommittee members.

SESEC has compiled SAC/SC42's key statistics and standards update from the Standards Week, which can be found in Annex.

35. CEN-CENELEC JTC21 Involved in 2025 World Artificial Intelligence Conference (WAIC)

#Standardization Event in China

On July 26, 2025, the World Artificial Intelligence Conference (WAIC) International Cooperation Forum on Artificial Intelligence Standardization was successfully held in Shanghai. This forum was hosted by the UN Industrial Development Organization (UNIDO) Global Industrial AI Alliance Center of Excellence, co-organized by the China Electronics Standardization Institute (CESI) and the Shanghai Artificial Intelligence Research Institute and attracted more than 200 experts and representatives from the global AI field.

Mr. Shan Zhongde, Vice Minister of MIIT reiterated China's high attention to AI standardization work in his speech, emphasizing the need to promote standard development through a "fast, high-quality, and strong"

system, build an open, transparent, and inclusive international AI standard system, and advance the healthy development of AI on a safe, controllable, and trustworthy track.

Mr. Xiao Han, Director-General of the Department of Standards Innovation and Management at the National Standardization Administration (SAC) pointed out that AI is reshaping global industry and social structures, emphasizing the need to accelerate the release of key standards, promote coordinated development of standards and technological innovation, and strengthen international alignment.

Zhang Ying, Deputy Secretary-General of the Shanghai Municipal Government and Director of the Shanghai Economic and Information Technology Commission, emphasized the strategic value of standardization in promoting AI scenario innovation and regional coordination, stating that Shanghai will strengthen institutional support and ecosystem construction, and deepen pilot testing of standards.

During the meeting, ISO President Cao Chenghuan and ITU-T Deputy Director Bilel Jamoussi delivered keynote speeches, introducing the latest progress in international AI standards and affirming China's active contribution to international standardization cooperation.

The forum also released several important outcome documents, such as guidelines on AI ethics, governance practices, and industrial applications. At the same time, CESI, together with more than 70 enterprises, launched the "Joint Initiative on Shared Agent Protocols," promoting agent interoperability and ecosystem co-construction.

At the forum, Dr. Sebastian Hallensleben, Chair of CEN-CENELEC JTC 21 and Co-Chair of the OECD ONE.AI Risk and Accountability Working Group, delivered a keynote speech introducing the latest developments in the European AI standards system.

Dr. Hallensleben noted that although the EU AI Act sets high-level legal requirements, its technical implementation relies on coordination standards developed by JTC 21. These standards provide compliance pathways and legal certainty for the development of high-risk AI systems. He explained the structure of JTC 21, its cooperation mechanisms with ISO/IEC JTC 1 SC 42 and ETSI and emphasized that JTC 21 has over 1,000 experts from more than 25 countries, reflecting high inclusiveness and international collaboration.

In addition, he explained why ISO/IEC 42001 is not directly suitable for EU compliance, as its risk model and regulatory focus differ from Europe's. Therefore, localized standards that meet EU legal requirements while referencing international standards need to be developed.

Dr. Hallensleben's speech demonstrated Europe's active leading role in AI standardization and its deep involvement in building a trustworthy and sustainable global AI ecosystem.

He emphasized that standards have a dual function—on the one hand as visible technical documents, and on the other as consensus results formed through broad consultation among stakeholders. This consensus is an important source of standards' legitimacy.

At the conclusion of his speech, Dr. Hallensleben proposed the broader concept of an AI governance ecosystem, pointing out that AI governance relies not only on laws, regulations, and coordination standards but also on codes of conduct and initiatives such as the "AI Trust Alliance." These mechanisms jointly aim to promote the construction of a trustworthy, competitive, and innovation-supporting AI system globally.

This forum fully demonstrated China's active participation and leading role in global AI standardization and emphasized the importance of international cooperation in achieving safe, inclusive, and sustainable AI development. Dr. Hallensleben's participation highlighted Europe's leadership in building a trustworthy AI ecosystem and its commitment to guiding global norm-setting in the digital era.

36. From Follower to Rule-Maker: China's Growing Role in Global Automotive Standardization

#International Standardization

On July 7, 2025, the international standard *"Road Vehicles — Test Scenario Evaluation and Test Case Generation for Automated Driving Systems"*, led by China, was officially published. This is just one example of

China's leading role on international standards in Automotive and Autonomous Driving sectors.

According to China Automotive Technology & Research Center Co., Ltd. (CATARC), China's international automotive standardization efforts have evolved from merely adopting international standards to actively participating in international standard development and global rule-making.

In recent years, with the deep integration of emerging technologies such as artificial intelligence, big data, and 5G into the automotive industry, and as Chinese automakers accelerate their global expansion—with technology, products, capital, and supply chains going abroad—the demand for standardization in the automotive sector has grown increasingly urgent.

"China's automotive industry has entered a new development stage, and it is imperative to develop and implement international standards in relevant fields and strengthen international cooperation in standardization," said An Tiecheng, Party Secretary and Chairman of CATARC.

On one hand, technological advances in fields such as new energy vehicles and intelligent connected vehicles have created opportunities for China to transition from a *standard follower* to a *rule leader*. As the boundaries between automotive and related industries blur, product development and launch cycles have shortened, and the pace of innovation has accelerated. Synchronizing technology and standards—or even deploying standards ahead of technologies—is becoming a new development trend.

On the other hand, the deepening of the Belt and Road Initiative (BRI) has created broad space for alignment between Chinese and international automotive standards. In recent years, CATARC has actively built bridges for standard connectivity with BRI countries. For example:

- It established a China-Uzbekistan expert group on electric vehicle standardization and has organized 9 training sessions covering 38 EV standards.
- It supported China in becoming a member of the Moroccan Electric Vehicle Standards Technical Committee, sharing China's standardization experience.
- It has continuously hosted the *"International Young Engineers Exchange Program on Automotive Standardization"*, creating a global platform for cultivating young talent in automotive standards.

To date, China has led the release or development of nearly 50 international standards across fields such as electric vehicles, intelligent connected vehicles, and crash safety. It has spearheaded the development of international specifications for vehicle-to-vehicle (V2V) communication, global carbon footprint accounting methods, and contributed to more than 10 international regulations including the *Global Technical Regulations (GTR) on Electric Vehicle Safety*. The "China Approach" is increasingly serving as a key reference in global technical governance.

CATARC, in partnership with leading industry players, has established the **China Automotive Standards Internationalization Center (Geneva)**—the first permanent overseas institution dedicated to standardization in China—marking the gradual formation of a robust international platform.

Chairman An emphasized that improving the level of internationalization in automotive standards will help Chinese automakers integrate into the evolving global automotive industry landscape. However, challenges remain: Chinese companies are still in the early stages of exploring overseas markets, and they face compliance risks as well as limited experience and capabilities in leveraging international rules and local resources for standardization work.

To accelerate the development of a standardization system that promotes and supports high-quality global development of the automotive industry, CATARC will focus on its strengths in areas such as new energy vehicles, intelligent connected vehicles, and carbon footprint systems. It aims to deepen technical research, actively participate in international coordination, and enhance China's contributions globally.

Efforts will be made to:

- Prioritize the development of international standards in intelligent and new energy vehicles;
- Systematically and efficiently promote domestic standard system building;
- Coordinate harmonization with international standards and regulations;
- Engage in international rule-making and commentary on foreign regulations.

China will also fully utilize trade negotiations, bilateral cooperation, and other mechanisms to carry out

targeted experience sharing, technical training, and talent exchanges. Focused collaboration will be pursued in key regions and technical areas, such as ASEAN, Central Asia, and Africa, to enhance automotive standard connectivity and support the global expansion of China's automotive industry.

Source: https://mp.weixin.qq.com/s/91h9jvDuEIrPB4Q47FVHhw

37. China International Medical Device Regulatory Forum Kicks Off in Suzhou

#Standardization Event in China

On August 26, the **15th China International Medical Device Regulatory Forum** was held in Suzhou, Jiangsu Province, bringing together global leaders from regulatory agencies, international organizations, industry associations, academic institutions and leading enterprises to explore pathways for innovation and regulation in the medical device sectors. Guided by the National Medical Products Administration (NMPA), and supported by the Jiangsu Provincial People's Government, the three-day conference is hosted by the Suzhou Municipal People's Government.

The conference focuses on international medical device innovation trends, cutting-edge technological challenges, and key regulatory issues, while sharing updates on global regulatory changes, China's evaluation and approval policies, technical rules, industrial development, and international cooperation in this sector. Through this effort, it aims to foster dialogue between regulators and industry experts to enhance innovation across the entire industry chain, strengthen full-lifecycle supervision, and promote high-quality development of the medical device sector. The conference consists of a plenary session and six sub-forums, the latter cover various topics including **medical device innovation**, **clinical evaluation**, **medical device product R&D**, **post-market quality safety and compliance**, **cybersecurity and data security**, and **high-end medical equipment**.

Xu Jinghe, Deputy Commissioner of the NMPA, stated that key areas of medical device innovation such as surgical robots, advanced medical imaging, AI-powered medical devices, and new biomaterials have been an emphasis within the NMPA for vigorously supporting high-end R&D and innovation. In 2025, **52 innovative products** have been approved, bringing the total number to **367** so far. Moving forward, the NMPA will fully implement the State Council's ***Guidelines on Deepening Drug and Medical Device Regulatory Reform to Promote High-Quality Development of The Pharmaceutical Industry***. The administration will strengthen review support for innovative and clinically urgent products, optimize communication mechanisms, and facilitate the translation of cutting-edge technologies from lab to clinic. It will also deepen international regulatory coordination and mutual recognition, encourage global high-quality medical devices to be launched first in China, and establish the country as an internationally influential hub for medical device innovation and application—ultimately benefiting public health in China and worldwide.

This conference has established a high-level platform for China-global regulatory dialogue and created significant opportunity for deepened cooperation. Based on this platform, China will advance the modernization of its medical device regulatory system and drive high-quality growth in its pharmaceutical industry.

For foreign-funded medical device enterprise, the conference sends a strong positive policy signal, underscoring China's commitment to not only welcoming foreign investment but also actively improving market access, enhancing regulatory transparency and predictability, and facilitating investment processes. These efforts collectively create a more favorable business environment in China, delivering expanded market opportunities, a more level competitive playing field, and clearer long-term growth prospects. SESEC will keep reporting as more information comes to light.

Source:

1. https://mp.weixin.qq.com/s/qTh8iHItwxlUtQS96jAVsA
2. https://www.ccfdie.org/cn/ggtz/webinfo/2025/06/1744578166414089.htm
3. https://www.suzhou.gov.cn/szsrmzf/szyw/202508/57103771b739473ab2dbeacc587c445f.shtml

38. SAC/TC20/SC6 Reconvenes for New Term

Chinese Standardization Committee

On August 19, 2025, the inaugural meeting of the second-term Subcommittee on **New Energy and Renewable Energy** (SAC/TC20/SC6) under the National Technical Committee 20 on Energy Fundamentals and Management was successfully convened in Beijing. **The new term subcommittee is chaired by Zhang Yiguo from the China Renewable Energy Engineering Institute (CREEI), with China National Institute of Standardization (CNIS) as the secretariat.**

SAC/TC20/SC6 was established in 2003 under the authorization of the National Standardization Administration (SAC), which also provides ongoing operational guidance. It mirrors to ISO/TC180 (Solar Energy) and plays a vital role in advancing China's renewable energy technology, regulating market practices, promoting high-quality industrial development, and supporting national energy strategies and the "Dual Carbon" goals.

During the meeting, participating experts analyzed the development trends of new and renewable energy and emerging standardization needs. As a result, the new subcommittee will support national dual-carbon goal and construct a new energy system via facilitating policy implementation and industrial growth, while deepening international cooperation and mutual recognition. The subcommittee will leverage standards to drive high-quality sectoral development.

Source: https://www.cnis.ac.cn/bydt/zhxw/202508/t20250821_61527.html

39. SAC/TC114 Public Consultation for Two ICV National Standards

Auto Standardization

On 1 Aug 2025, the Subcommittee of Intelligent and Connected Vehicles under the National Technical Committee of Auto Standardization (SAC/TC114/SC34) opened a public consultation for two ICV-related voluntary national standards:

- ***20243207-T-339 Technical specification for digital key system of vehicles***
- ***20243203-T-339 Intelligent and connected vehicles – Data security management system specification***.

1. ***20243207-T-339 Technical specification for digital key system of vehicles***

- **What is the standard about?**

This standard stipulates technical requirements and test methods for digital key system of vehicles. A digital key of vehicles refers to a digital credential managed by a digital key system of vehicles, stored on a physical device, and authorized by the primary user. Here, the primary user is one who holds authorization permission for vehicle usage. The physical device is typically a smart mobile terminal or wearable device, such as a smartphone, smartwatch, or smart band.

The digital key system of vehicles consists of the physical device, an application, an in-vehicle digital key module, and a server system. It uses wireless communication technology to enable information exchange between the authorized device and the vehicle, allowing functions such as locking/unlocking the doors and starting the vehicle.

- **Why is the standard needed?**

Currently, the digital vehicle key industry chain faces issues such as inconsistent terminology and a lack of standardized testing protocols. These challenges not only increase the difficulty of coordination among automakers, system integrators, and other upstream and downstream players, but also hinder the large-scale adoption of digital car key technology. Furthermore, they negatively impact the user experience.

The development of this document aims to:

- Ensure the stable performance of digital vehicle key-related products by providing enterprises with clear development and testing guidelines.
- Help improve product quality and promote the high-quality development of China's digital car key industry.

According to TC114/SC34, there is no international standard present that specifically applies to functional requirements, performance evaluation, and test methods for digital key system of vehicles. Therefore, this standard has not adopted any international or foreign standards.

2. ***20243203-T-339 Intelligent and connected vehicles – Data security management system specification***

- **What is the standard about?**

This standard will apply to vehicle data processors. The

standard stipulates the requirements for organizational vehicle data security management, the management of relevant parties' vehicle data security activities, full lifecycle management of vehicle data, monitoring and handling of vehicle data security, engineering of vehicle data security, and vehicle data security risk assessment. It also describes the corresponding verification methods.

- **Why is the standard needed?**

This standard aims to promote the automotive industry to establish and improve the data security management system for intelligent and connected vehicles. By adhering to its requirements for secure product development and data security management, enterprises can enhance their overall data security capabilities, elevate the data security and governance level of the entire automotive sector, and provide managerial solutions to address data security challenges in intelligent and connected vehicles.

The development and implementation of this standard will provide technical support for safe development to automotive manufacturers, suppliers, and service providers, guiding them in meeting industry data security requirements for vehicles and related products. It is essential for strengthening data security management across domestic automakers, suppliers, and service providers, assisting them in complying with domestic and international regulatory requirements, and enhancing the market competitiveness of their products.

In 2024, TC114 published a voluntary national standard ***GB/T 44464-2024 General requirements for vehicle data***. This standard established a framework for automotive data security management systems.

20243203-T-339 Intelligent and connected vehicles – Data security management system specification will build upon the requirements from ***GB/T 44464-2024***, by providing detailed specifications for the establishment and operation of data security management systems specific to intelligent and connected vehicles.

This standard does not adopt or modify any international standards. However, the formulation of this standard has referred to 7 international standards.

SESEC will continue to monitor the development progress of these two standards and provide timely updates once the standards are officially released.

Source: http://zxd.catarc.org.cn/zxd/portal/detail/zqyj/681

40. MIIT Opinions on Optimizing Business Access of Satellite Communications Industry

China's Satellite Communications

On 27 August 2025, the Ministry of Industry and Information Technology released an announcement on *the* ***Guiding Opinions of Optimizing Business Access to Promote the Development of Satellite Communications Industry***. The document sets out general requirements, 6 major directions and 19 key measures. Through these opinions, MIIT seeks to publicize its strategic roadmap to promote opening of satellite communication services, boost the high-quality growth of satellite communication industry, stimulate innovation in commercial space, develop new-quality productive forces, and support manufacturing, cyberspace, and digital development.

General Requirements

Strengthen top-level design and policy coordination, balance development and security, ensure stability while progressing; establish new systems before dismantling old ones; apply targeted policies, and promote integrated development.

Prioritize improved business access to unlock the full potential of China's satellite communication industry, expand applications, grow the technology sector, enhance resources, and improve governance. Build a regulated, coordinated, win-win system that consolidates advantages and secures China's global role.

By 2030, management systems, policies, and regulations will be improved. The business environment will be better, innovation will increase, and infrastructure, supply, standards, and international cooperation will advance. Direct-to-cell satellite services will exceed 10 million users. Satellite communications will be integrated into the national framework to support high-quality economic and social development.

Major Direction 1. Orderly Expansion of Market Access

- **Support the faster development of Low-Earth Orbit (LEO) Satellite Internet**
  Speed up building satellite internet systems and services. Promote high-quality development. Carry out commercial trials for LEO satellite communications at the right time. Drive innovation across the industry. Achieve global broadband coverage. Provide high-speed services and expand application scenarios.

- **Support terminal devices connecting directly to satellites**
  Encourage telecom operators and satellite enterprises to jointly build and share resources. Explore application potential of high-orbit satellites such as Tiantong and Beidou and promote direct satellite connections for mobile phones and other terminals. Provide satellite-based voice and SMS services and encourage operators to use LEO satellite internet to expand into high-speed data services, promoting integration with terrestrial networks.
- **Support new satellite communication services**
  Carry out commercial trials of satellite IoT, support qualified enterprises to use LEO satellite constellations to provide IoT connections in the sky, at sea, and in remote areas. Explore new satellite communication services. Further open the sector to private enterprises and encourage them to use satellite resources legally through leasing, value-added services, or agency operations. Make better use of existing satellites, expand service types, and grow the market.

Major Direction 2. Continuous Expansion of Application Scenarios

- **Promote emergency communication applications**
  Promote the use of satellite communications in emergencies, give priority to national emergency needs. Use Tiantong, High Throughput Satellites, Beidou short message, Satellite Internet, and IoT to provide coordinated and efficient support. Strengthen applications in disaster response such as floods, fires, earthquakes, and typhoons, as well as in production safety, field work, and search and rescue.
- **Advance digital inclusion services**
  Encourage the use of High Throughput and LEO satellites to provide network access in remote, border, and complex areas. Improve coverage, lower costs. Support universal telecom services. Promote digital products. Enhance digital inclusion. Promote fairness and improve public welfare.
- **Strengthen innovation in integrated applications**
  Encourage applications of satellite communications in industries such as manufacturing, farming, transport, energy, and city management. Promote integration with the industrial internet, internet of vehicles, airborne communications, low-altitude smart networks, and computing networks. Promote direct satellite connections for cars, ships, and planes, and develop large-scale applications. Promote interconnection between Beidou short messages and public networks to improve services and grow the Beidou ecosystem.

Major Direction 3. Fostering and Expanding the Industrial Ecosystem

- **Accelerate breakthroughs in core technologies**
  Continue R&D on core satellite communication technologies and products. Improve supply of basic components, chips, and terminals, enhance technical performance. Reduce costs and keep upgrading technology. Promote integration with 5G/6G, AI, and other ICTs, and accelerate non-terrestrial network (NTN) development.
- **Build an open and shared standards system**
  Work together to build a shared, integrated standards system for satellite communications. Create and improve national and industry standards for technology, products, and construction. Encourage leading enterprises to promote standard unification and compatibility. Support system openness and sharing and take part in international standard bodies such as ITU and 3GPP.
- **Build a mutually beneficial ecosystem**
  Use China's strengths in terrestrial mobile communication to drive satellite industry growth. Encourage resource sharing and cooperation between satellites and ground facilities. Promote industry clusters. Set up industry organizations. Create cooperation platforms, and foster an open, collaborative, and mutually beneficial ecosystem.

Major Direction 4. Optimizing Telecom Resource Supply

- **Scientific planning of numbering resources**
  Track industry trends, plan dedicated number ranges for satellite terminals, and support satellite internet and IoT. Promote "no SIM change, no number change" models for phones, better use existing numbers, and support direct-to-cell satellite services. Help enterprises apply for international numbering to expand global markets.
- **Promote innovative management of spectrum and orbital resources**
  Guide enterprises to actively participate in the development and revision of international rules for satellite radio frequencies. Conduct the declaration, coordination, and registration of

frequency and orbital resource use. Using the features of LEO constellations. Innovate the management of satellite frequency and orbital resources. Issue space station licenses and frequency usage permits in bulk. Enable efficient construction and rapid development of China's LEO constellations.

Major Direction 5. Strengthening Satellite Communications Regulation

- **Strengthen business supervision**
  Further improve licensing and equipment approval, safeguard fair competition, and build a unified market. Improve service capacity, enhance user experience, and protect consumer rights. Refine telecom categories, study new business models, and provide institutional support for openness. Improve supervision and establish full-chain regulations.
- **Promote interconnection of infrastructure**
  Improve network layout, create gateway station management measures, guide enterprises to build compliant stations, and strengthen supervision. Build space–earth interconnection centers to meet security and interconnection needs. Improve international connections, coordinate undersea cables and satellite internet, and create integrated land–sea–space international channels to reduce risks.
- **Build strong cybersecurity and data protection**
  Guide enterprises to fulfill security responsibilities and include security measures in system design, construction, and operation. Ensure network security, data protection, critical infrastructure protection, and personal information security. Improve real-name management and strengthen fraud prevention measures.
- **Ensure radio security**
  Strengthen the standardized management of space stations and satellite earth stations. Enhance the monitoring of satellite radio signals and enforcement against interference. Eliminate harmful disruptions. Ensure the orderly operation of satellite radio services and maintain the order of airwaves.

Major Direction 6. Enhancing Synergy and Coordination

- **Strengthen organizational coordination**
  Improve leadership and coordination and improve working mechanism. Strengthen interdepartmental cooperation for the opening of satellite communication services. Clarify responsibilities and address major issues quickly. Focus on priorities while ensuring steady and effective progress.
- **Strengthen financial support**
  Use multiple funding sources to support research and breakthroughs in satellite communication. Enhance self-reliance in key technologies. Maximize the leading roles of industry funds such as *the Manufacturing Transformation and Upgrade Fund* to guide investment. Attract private capital to sponsor key enterprises in the satellite communication sector. Encourage local governments to set up special funds for satellite communications.
- **Strengthen publicity and promotion**
  Increase awareness of policies and regulations related to the opening of satellite communication services. Explain policies clearly and guide public opinion to motivate stakeholders. Summarize and share best practices and successful cases and create a positive atmosphere for satellite communications development.
- **Strengthen international cooperation**
  Support enterprises in global exchanges and cooperation. Improve global service capacity and optimize market presence. Explore the integration of satellite communication cooperation into frameworks such as the Belt and Road Initiative, BRICS, and Asia-Pacific organizations. Encourage China's satellite communication services to expand globally.

The MIIT Opinions mark a **paradigm shift** in China's satellite communications landscape, from a **state-dominated, closed regime** to a **regulated yet open innovation ecosystem**. With impacts on **industry liberalization, infrastructure development, global competition, and digital inclusion**, the document sets the stage for China to become a **major global player** in space-based communication technologies. However, success will depend on the **execution quality, standard harmonization, stakeholder coordination**, and **ability to attract sustained capital and talent**.

Source: https://www.miit.gov.cn/zwgk/zcwj/wjfb/yj/art/2025/art_84617e8497d84a3d8b8b3ef847f648d2.html

Annex 1 - SESEC V Report – SAC/TC28/SC42 Plenary Meeting
Annex 2 - SESEC V Report – SAC/TC28 Plenary Meeting

Annex 3 - SESEC V Report – CEEIA Plenary Meeting
Annex 4 - SESEC V Translation – CESI National AI Standardization Work Report

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
SGCC	State Grid Corporation of China	国家电网
TC	Technical Committee for Standard Development	标准化技术委员会