SESEC V
China Standardisation Newsletter

May - June 2024

Seconded European Standardisation Expert in China
(SESEC)

Index

Takeaways

Review of SESEC Webinar 13: China Green House Gas Emission Calculation Standards Webinar

On June 11, 2024, SESEC held the Webinar 13: China Green House Gas Emission Calculation Standards. During the webinar, Dr. Betty Xu, SESEC's director, provided a comprehensive overview of China's Greenhouse Gas (GHG) Emission Calculation Standards, highlighting their pivotal role in national climate strategies. Key national policies such as the Carbon Peak and Neutrality Target were emphasized as driving forces behind the development and implementation of these standards. These policies underscore China's commitment to reducing carbon emissions and achieving sustainability goals.

SAMR Seeks Public Feedback on the Revision of the Rules for Adopting International Standards

On May 9, 2024, China's State Administration for Market Regulation (SAMR) opened a public consultation on the revised *Administrative Measures for Adopting International Standards*. The deadline for submitting feedback is June 8, 2024. Compared to the old version issued in 2001, which is currently in force, the revised Administrative Measures introduce a number of key changes.

China's Recent Cooperation and Dialogue with Foreign Counterparts

From May to June 2024, China actively participated in various standardization cooperation initiatives and dialogues with international partners: SAC-AFNOR Standardization Cooperation Agreement, China-UK Urban Sustainable Development Roundtable, Ninth Working Group Meeting on the Standardization Cooperation of the Sino-French Business District for Sustainable Development, CQC and BSN Signed the Cooperation MoU, SAC and SA Signed the Cooperation MoU.

2024 Chilin IEC Conference

On June 25, the 2024 International Standardization (Chilin) Conference, themed "Empowering with Digital Intelligence, Synergizing Electric and Carbon, Driving Sustainable Development with International Standards," opened in Nanjing. The conference is a flagship standardization event developed by the IEC Promotion Center (Nanjing). It aims to provide an international platform for cooperation in standardization within the IEC platform, facilitate the influx of innovative ideas, and showcase the standardization achievements of Chinese enterprises to the international community.

China's New Round of Enterprise Standards "Front-runner" Selection

China has initiated a new phase of selecting enterprise standards leaders with the release of the *Announcement on Key Areas for Selecting Enterprise Standards "Front-runner" in 2024* by the State Administration for Market Regulation (SAMR) on June 20, 2024. This marks the official commencement of the selection and evaluation process. The Announcement outlines 146 priority fields across 57 sectors including agriculture, furniture manufacturing, textile industry, vehicle manufacturing, and insurance. These sectors are targeted to stimulate consumption, boost domestic demand, and foster sustainable and high-quality consumption practices. The selection process begins with governmental identification of priority areas, followed by the China National Institute of Standardization (CNIS) conducting appraisals and selections.

China's Latest Progress on National Standards for Generative AI Security

On April 28, 2024, the Secretariat of SAC/TC 260 Cybersecurity hosted an information session for industry actors on three national standards on generative artificial intelligence (AI) security, aimed at encouraging their participation in pilot trials. These standards are *Basic security requirements for generative artificial intelligence services, Cybersecurity technology - Generative artificial intelligence data annotation security specification, Cybersecurity technology - Security specification for generative artificial intelligence pre-training and fine-tuning data*.

China Establishes New Standardization Technical Committee for Data

On May 24, 2024, during the 7th Digital China Summit, the SAC announced the establishment of the National Data Standardization Technical Committee. This TC will be responsible for the formulation and revision of general standards in areas such as data infrastructure, data resources, data technology, data circulation, smart cities, and

digital transformation, as well as national standards in data infrastructure and data circulation-related security. It will mirror the work areas of ISO/IEC JTC 1 Subcommittee on Data Management and Interchange (ISO/IEC JTC 1/SC 32), ISO/IEC JTC 1 Working Group on Smart Cities (ISO/IEC JTC 1/WG 11), and ISO/IEC JTC 1 Subcommittee on Artificial Intelligence Data Group (ISO/IEC JTC 1/SC 42 WG 2).

China Unveils Action Plan for Developing Informatization Standards

China has unveiled a comprehensive action plan for its national informatization standards system on 29 May 2024, set to reshape the landscape of information technology and digital infrastructure in the following three years. Titled as "*Action plan for developing informatization standards (2024-2027)*", this ambitious plan aims to enhance the nation's capabilities in driving high-quality development through improved standards in information technology and digital infrastructure, supporting the nation's strategic goals of establishing a "cyber-power".

SAC/TC260 Cybersecurity Standard Week in 2024

From June 12 to 15, 2024, the first annual edition of the Standard Week organized by China's National Cybersecurity Standardization Technical Committee (hereinafter referred to as the SAC/TC260) was successfully held in Nanchang, Jiangxi province. The event encompassed a plenary meeting, 5 thematic forums, 2 training sessions, and working group meetings. The Standard Week is a major event in the field of cybersecurity, gathering numerous Chinese stakeholders to learn about the latest cybersecurity standardization topics and trends, and discuss specific cybersecurity standards. The attendees included SAC/TC260, governmental officials from Cyberspace Administration of China and the Ministry of Industry and Information Technology, as well as the industrial representatives in this field.

Another Step of MIIT to Manage Industrial Data Security

Recently, China's Ministry of Industry and Information Technology (MIIT) rolled out the Implementation Rules for Data Security Risk Assessment in the Industry and Information Technology Sectors (Trial) (referred to as the Rules), effective from June 1, 2024. The document aims to standardize mandatory data security risk assessments concerning key and core data within these sectors.

China's Standardization WG on Artificial Intelligence Chip Calls for Nomination of Experts

In order to accelerate the standardization process of China's integrated circuits industry, the National Integrated Circuits Standardization Technical Committee (SAC/TC599) is calling for the nomination of experts to join its subordinated artificial intelligence chip working group (WG AIC).

Mandatory Standard Draft Revised at China RoHS Working Meeting

On May 28, 2024, SAC/TC297/SC3 organized a working meeting in Shenyang, Liaoning province, to discuss the draft of the national mandatory standard project for China RoHS, officially titled Requirements for certain restricted substances in electrical and electronic products (hereinafter referred to as "the Standard Draft"). Approximately 60 experts participated in the meeting. During the event, the leader of the China Electronics Standardization Institute (CESI), which hosts the SC's secretariat, emphasized the importance of the strategic direction indicated by the Ministry of Industry and Information Technology (MIIT). According to the speakers, the key focus areas highlighted by the top regulators include: enhancing the applicability and efficacy of the standard; aligning with relevant international standards; and bolstering the production and quality of environmentally friendly products.

Updates of China's WG on Recovery of Traction Battery Used in Electric Vehicle Activities

To encourage the industry to further participate in the standardization work of recovery of traction batteries used in electric vehicles, the Sub-technical Committee on Electric Vehicles of the Road Vehicle Technical Committees (SAC/TC114/SC27) plans to hold a series of activities to commemorate the 10th anniversary of the establishment of the Working Group on Recovery of Traction Batter Used in Electric Vehicle (hereinafter referred to as the Working Group) and expands the working group membership.

China Calls for Comment on Initiating Seven Energy Efficiency Standards

On June 17, 2024, the Standardization Administration of China (SAC) published seven compulsory standards proposals on minimum allowable values of energy efficiency and energy efficiency grades for public comments on official initiation. All these 7 standard proposals are raised by SAC who will then mandate SAC/TC20 (Energy

Fundamentals and Management) to carry out the rest of the development work. Meanwhile, the China National Institute of Standardization will be in charge of translating these standards to English once it is finished, which means that both Chinese and English versions of the standards will be available.

China Established Carbon Footprint Accounting System for Lithium Battery Standards

China recently unveiled its new carbon footprint accounting system tailored specifically for lithium batteries. This system, officially referred to as "the Accounting System," was introduced on June 13 and aims to assist enterprises in accurately assessing carbon reduction opportunities across all stages of a product's lifecycle. It also seeks to guide businesses towards adopting energy-saving and carbon reduction technologies. Under the guidance of the Ministry of Industry and Information Technology (MIIT), the Accounting System was developed in collaboration with over 100 entities including prominent Chinese universities, key lithium battery manufacturers, and relevant industry associations. This initiative marks China's inaugural subsector-specific carbon footprint accounting system.

China's Implementation Plan for Carbon Footprint Management

On June 4, 15 national ministries of China, including the Ministry of Ecology and Environment (MEE) and the National Development and Reform Commission (NDRC) etc., jointly issued the Implementation Plan for Constructing Carbon Footprint Management (hereinafter referred to as "the Implementation Plan"). And in early June, the MEE responded to the press to provide further explanation on this document, demonstrating its significance.

China Rolls Out 2024 Automotive Standardization Working Points

On June 21, 2024, the Ministry of Industry and Information Technology (MIIT) rolled out the *Automotive Standardization Working Points (2024)* (hereinafter referred to as the Working Points). The Working Points encompass five major sections, including the standard systems, standardization in emerging and key areas, generic and safety standards, international standardization, and working mechanism optimization.

SESEC and Supported Events

1. Review of SESEC Webinar 13: China Green House Gas Emission Calculation Standards Webinar

#Standardization Event

On June 11, 2024, SESEC held the Webinar 13: China Green House Gas Emission Calculation Standards. During the webinar, Dr. Betty Xu, SESEC's director, provided a comprehensive overview of China's Greenhouse Gas (GHG) Emission Calculation Standards, highlighting their pivotal role in national climate strategies. Key national policies such as the Carbon Peak and Neutrality Target were emphasized as driving forces behind the development and implementation of these standards. These policies underscore China's commitment to reducing carbon emissions and achieving sustainability goals.

Key standardization policies discussed included methodologies for GHG calculation across various sectors, aiming for accuracy and comparability in emission reporting. Special emphasis was placed on the role of Standard Development Organizations (SDOs) in formulating and updating these standards. The webinar detailed collaborative efforts among SDOs and governmental bodies to ensure robust frameworks that align with international practices while addressing China's specific challenges and priorities.

The webinar draw the conclusions that China 's GHG and carbon emission accounting standard system will no doubt continue to grow and cover more sectors. Standard revisions present stricter technical specification comparing with previous version. Different "systems" remain further clarified and optimized to coordinate and unify for actual practice, especially considering wider coverage of sectors and stakeholders. The slides of the webinar can be found in the Annex.

Horizontal Actions

2. SAMR Seeks Public Feedback on the Revision of the Administrative Measures for Adopting International Standards

#International Standards

On May 9, 2024, China's State Administration for Market Regulation (SAMR) opened a public consultation on the revised *Administrative Measures for Adopting International Standards*. The deadline for submitting feedback is June 8, 2024. Compared to the old version issued in 2001, which is currently in force, the revised Administrative Measures introduce a number of key changes, summarized below:

Category	2001 Version	Draft Version
Chinese Standards Involved	National standards, sector standards, local standards, and enterprise standards	National standards, sector standards*
International Standards adopted	ISO, IEC, ITU standards, and 40 other international organization standards recognized by ISO**	ISO, IEC, ITU standards***
Adoption Principles	Priority given to universally applicable foundational standards and test method standards from international sources	Priority given to international standards in line with national conditions. Projects for adopting international standards that have passed the project assessment stage should be prioritized
Degree of Adoption	IDT, MOD, NEQ	IDT, MOD
Development Period	None	When adopting international standards currently in force, the timeline from planning to submission for approval for national standard projects should not exceed twelve months
Promotional Measures	For national key projects, priority should be given to purchasing products that adopt international standards when acquiring raw materials, equipment, and spare parts	Administrative departments for standardization at the county level or higher, and other relevant administrative departments, should facilitate local producers, operators, users, consumers, and public interest parties in their jurisdictions or sectors to participate in the formulation and implementation of the adopted international standards

*Sector standards that need to adopt international standards will proceed according to the *Administrative Measures for Sector Standards*, which require compliance with the copyright policies of relevant international organizations, approved by the China member bodies of the international standards organizations.

**ISO no longer recognizes and publishes other standardization organizations.

***When there is a need to adopt an international standard, but these three international standards organizations have not developed any standards or the developed standards are not applicable, national standards can be formulated based on the standards published by other international and foreign organizations, following their intellectual property policies.

Additionally, the draft emphasizes compliance with the intellectual property policies of international standards organizations (stipulated in Articles 4, 11, 16, and 18 the principles, initiation, approval, and publication of national standard projects) proposes measures for the assessment and feedback of the adopted international standards.

The draft reflects China's efforts to revise and refine the mechanisms and management models for adopting international standards to adapt to the current state of affairs and future goals of the standardization management system. It shows the ambition to further expand and accelerate the adoption of international standards. If, in the future, additional revisions can be made to strengthen measures to promote the implementation of international standards, this initiative would benefit even further. Moreover, the draft does not include other types of standards, reflecting China's stance against encouraging the adoption of international standards by local, association, or enterprise standards.

3. China's Recent Cooperation and Dialogue with Foreign Counterparts

Cooperation and Dialogue

From May to June 2024, China actively participated in various standardization cooperation initiatives and dialogue with international partners. Below is a concise overview of these engagements.

SAC-AFNOR Standardization Cooperation Agreement

From May 5 to 7, 2024, during President Xi Jinping's visit to France, China's State Administration for Market Regulation (Standardization Administration of China -SAC) and the French National Standardization Agency (AFNOR) signed the *SAC-AFNOR Standardization Cooperation Agreement*. This agreement will promote mutually beneficial cooperation in the field of standardization between China and France, strengthen cooperation mechanisms, deepen communication in the shaping of the international standard system, pave the way for the joint development of international standards in key and emerging technology areas, and contribute to continuous exchanges and mutual learning between the two sides in the field of standardization.

China-UK Urban Sustainable Development Roundtable

On May 14, 2024, the China National Institute of Standardization (hereinafter referred to as the Institute) and the British Embassy in China jointly hosted the China-UK Urban Sustainable Development Roundtable in Beijing. More than 60 representatives from 27 top-notch enterprises and authoritative institutions in the field of urban sustainable development, from both countries, attended the conference. The conference aimed to consolidate the achievements of China-UK cooperation on international standardization in the field of urban sustainable development, share more practical experiences in promoting the implementation of the United Nations Sustainable Development Agenda in cities from both countries, and explore bilateral cooperation intentions in the research and development, application, and related services of urban sustainable development standards.

Ninth Working Group Meeting on the Standardization Cooperation of the Sino-French Business District for Sustainable Development

On May 15, 2024, the Ninth Working Group Meeting on the Standardization Cooperation of the Sino-French Business District for Sustainable Development was successfully held in Beijing. The meeting was co-hosted by the China National Institute of Standardization (hereinafter referred to as the Institute) and the French Standardization Association (AFNOR). Six French representatives, including Mr. Bernard GINDROZ, Chairman of ISO/TC 268, as well as 16 Chinese representatives from relevant institutes and enterprises, attended the meeting. The meeting reviewed the cooperation process and achievements between China and France in the standardization of business districts. Specifically, Mr. Dong Shanfeng, a registered expert of ISO/TC 268, introduced relevant work ideas on behalf of the Chinese side, and proposed to continue promoting the work of the international alliance for sustainable development

of business districts. Mr. Jean-Charles LARDIC, an officer from the City of Marseille, introduced the progress of sustainable development in the city of Marseille, and the ideas for standardization work in port cities. Mr. Meng Fanqi, a registered expert of ISO/TC 268, introduced the framework and ideas for China and France to cooperate and propose new international standards this year. Through this working group meeting, China and France have reached a new consensus on the standardization cooperation for sustainable development in business districts, outlining a new blueprint for future cooperation

CQC and BSN Signed the Cooperation MoU

On June 7, 2024, the China Quality Certification Center (CQC) and the National Standardization Agency of Indonesia (BSN) signed the *Memorandum of Understanding on Standardization and Conformity Assessment Cooperation* in Beijing. The bilateral parties held discussions on specific cooperation items with the attendance of Mr. Donny Purnomo, Executive Secretary at the BSN, and Liu Jiang, Deputy Director of CQC.

According to the agreement, the bilateral parties will actively carry out cooperation in the field of standardization and conformity assessment, strengthen exchanges in standards and conformity assessment systems between the two countries, promote mutual recognition of voluntary standards and certification results, jointly carry out learning and training activities, further improve product quality, and jointly promote trade facilitation and sound development of bilateral economy and trade.

SAC and SA Signed the Cooperation MoU

In June 2024, officials from China's State Administration for Market Regulation (SAMR) signed the *Memorandum of Understanding on Cooperation between the Standardization Administration of China and Standards Australia*. This document, together with the other three MoUs (regarding food safety regulation, competition, and metrology), are incorporated in the joint outcome statement of the Chinese and Australian Premier during China's Premier, Mr. Li Qiang's visit to Australia from June 15 to 18.

The SAMR is committed to implementing the consensus reached during Li's visit by promoting exchanges and cooperation in food safety, competition, standards, and measurement between China and Australia, and contributing to deepening mutually beneficial cooperation between China and Australia.

4. China Celebrates the 2024 World Accreditation Day

Accreditation

On June 6, the Certification and Accreditation Administration of China (CNCA), under the State Administration for Market Regulation (SAMR), celebrated the 2024 World Accreditation Day in Xiong'an New Area, in Hebei province. The theme of the event was "Certification, Accreditation, Inspection, and Testing: Innovation, Cooperation, Future". At the same time, the China Certification and Accreditation Conference was inaugurated during the event, aiming to become an international exchange and cooperation platform for conformity assessment with Chinese characteristics, specifically enhancing the service level, social influence, and international acceptance of China's certification, accreditation, inspection, and testing.

CNCA Administrator Pu Chun led dozens of CNCA officials at the conference. Representatives from international organizations, including the International Accreditation Forum (IAF), United Nations Industrial Development Organization (UNIDO), International Electrotechnical Commission Conformity Assessment Board (IEC/CAB), International Organization for Standardization Conformity Assessment Committee (ISO/CASCO), TIC Council, and the American Chamber of Commerce, also attended the event in person or online and delivered speeches.

During the event, SAMR/CNCA released the *Quality Certification Activity Index*, *China Soft Connectivity Development Index*, *Statistics on the evelopment of certification, accreditation, inspection, and testing, as well as exemplary cases of international mutual recognition cooperation for "small and beautiful" quality certification, high-quality development of the quality certification service industry, and innovation-driven economic and social development facilitated by inspection and testing*.

The China National Accreditation Service for Conformity Assessment (CNAS) released *Achievements in high-quality development of accreditation services*. While the China Certification and Accreditation Association and

the TIC Council jointly issued an initiative titled Compliance Lays the Foundation, Cooperation Creates the Future, which calls for i) standing firmly by the rules of compliance, ii) accelerating development through innovation, iii) openness and equality, iv) strengthen communication and cooperation in the global certification and accreditation practices.

The event also featured signing ceremonies for the "CCC Exemption Linkage Mechanism in Beijing-Tianjin-Hebei, Yangtze River Delta, and Heilongjiang-Jilin-Liaoning", "High-Standard High-Quality Construction of Xiong'an New Area by Inspection and Testing Certification Agencies", and the "Low-Carbon Cooperation between Saihanba Ecological Development Group and Certification Agencies".

5. 2024 Chilin IEC Conference: Driving Sustainability through Global Standardization Collaboration and Innovation

Standardization Event

On June 25, the 2024 International Standardization (Chilin) Conference, themed "Empowering with Digital Intelligence, Synergizing Electric and Carbon, Driving Sustainable Development with International Standards," opened in Nanjing. The conference is a flagship standardization event developed by the IEC Promotion Center (Nanjing). It aims to provide an international platform for cooperation in standardization within the IEC platform, facilitate the influx of innovative ideas, and showcase the standardization achievements of Chinese enterprises to the international community.

Internationally, Florian Spiteller, Head of External Relations & Support at DKE, discussed Germany's "All Electric Society" strategy; Christian Marian, DKE & CENELEC Project Manager International, introduced the IEC Global Relevance Toolbox; IEC Vice President and Chairman of the Standardization Management Board, Vimal Mahendru, introduced IEC's work on sustainability; David Nix, IEC Digital Transformation Officer, presented on IEC's smart standards and digital transformation; Xiaoman Yan, Director of Sustainability at BSI Greater China, delivered a speech titled "Sustainability Development Policy System and Its Impact on Chinese Enterprises"; and Marie-Elisabeth d'Ornano, Global Certification Director at LCIE Bureau Veritas, gave a presentation on "Current Status and Trends of Carbon Footprint Certification."

On the Chinese side, Yinbiao Shu, former IEC President and President of the Chinese Society for Electrical Engineering, introduced methods for constructing product carbon footprint standards and certification systems based on time and zone-specific electric carbon factor analysis; Zhang Gang, Deputy Director of the China Standardization Expert Committee, explained the role of standards in promoting the development of new quality productivity; and several experts from the corporate sector shared their practices in energy transition.

At the conference, the IEC awarded China the secretariat of the IEC Sustainable Electrification Transport Systems Committee and established the "IEC International Standards Training Base." The IEC International Standards Promotion Center (Nanjing) signed strategic cooperation agreements with the German Commission for Electrical, Electronic & Information Technologies (DKE) and the British Standards Institution (BSI) to jointly promote the formulation and implementation of international standards in the low-carbon field, strengthen standardization practices in product carbon footprints, and advance the vision of a low-carbon, fully electrified interconnected society. The IEC and the Standardization Administration of China (SAC) released a cooperation declaration to support the IEC International Standards Promotion Center (Nanjing) in carrying out related work to promote international standardization development.

The conference also saw the release of the *White Paper on Future Grid Intelligent Sensing Technology*, organized by China and co-developed by experts from China, Germany, the United States, Canada, and other countries. This white paper explores the development trends and technical routes of the digital grid, covering key areas such as power generation, transmission, transformation, distribution, consumption, and carbon emissions. It provides a standard layout for the application of micro-intelligent sensing technology in these fields and constructs an international standard framework for future digital grid sensing technology.

6. Second China Standardization Conference Held in Quzhou, Zhejiang

#Standardization Event

Quzhou, Zhejiang, May 24 — The Second China Standardization Conference, hosted by the China Association for Standardization, convened from May 22 to 24 in Quzhou, Zhejiang. The event attracted over 1,300 standardization professionals and enterprise representatives from both domestic and international fields. More than ten renowned experts and scholars shared insights on the layout and policy direction for national standardization development, highlighting achievements and practices in standards digitalization, quality productivity, green and low-carbon initiatives, artificial intelligence, and association standards development. Discussions emphasized the fundamental and leading role of standardization in supporting economic and social development.

Keynote speakers at the conference included:

- Zhao Xiangeng, Academician of the Chinese Academy of Engineering, discussed "Several Thoughts on Association Standards."
- Fu Wenbiao, First Inspector of the Standards Innovation Department of SAC, addressed "Expanding the Level of Openness of China's Standardization and Making Positive Contributions to High-Quality Development."
- Shu Yinbiao, former President of IEC, spoke on "International Standards Supporting the Development of New Quality Productivity."
- Zhang Xiaogang, former President of ISO, presented "The Development Trend of Standards Digitalization."
- Zhang Gang, a member of the National Manufacturing Power Construction Strategy Advisory Committee, covered "Standardization: The Engine of New Quality Productivity Development."
- Wang Haizhou, Academician of the Chinese Academy of Engineering, highlighted "The Quality Foundation Support for Promoting High-Quality Development of New Quality Productivity."
- Zhang Jianwei, foreign academician of the Chinese Academy of Engineering and Academician of the German Academy of Science and Engineering, discussed "Modular Construction and Innovation Implementation of General Artificial Intelligence."
- Luo Fangping, President of CNIS, focused on "Standards Enhance Consumption Upgrading and Promote High-Quality Economic Development."

In conjunction with the main conference, the ESG (Environmental, Social, and Governance) sub-conference shed light on China's efforts in standardizing ESG-related fields. Key highlights included:

Environmental Management and Carbon Emission: China has developed over a hundred national standards in ESG, covering environmental management, carbon emission management, energy and water conservation, resource recycling, social responsibility, supply chain management, compliance management, and green finance.

Association Standards: According to the National Association Standard Information Platform, 62 ESG association standards have been released, covering ESG information disclosure, evaluation, reporting, requirements for institutions and personnel, and management systems across various industries. However, challenges such as lack of industry-specific differentiation, overlap, redundancy, and conflicts among standards persist.

Development of the ESG Standards System: China is advancing an ESG standards system following the "1+N" model, where "1" represents government standards providing principles and frameworks, and "N" denotes association standards addressing information disclosure, management, and performance evaluation needs.

Overall, the conference underscored China's vigorous efforts to promote sustainable and high-quality development through standards. By addressing key areas such as environmental management, carbon emission reduction, digitalization of standards, and the creation of association standards, China is demonstrating a strong commitment to leveraging standardization as a foundational and leading tool in driving economic and social progress.

7. China's New Round of Enterprise Standards "Front-runner" Selection

Enterprise

China has initiated a new phase of selecting enterprise standards leaders with the release of the *Announcement on Key Areas for Selecting Enterprise Standards "Front-runner"* in 2024 by the State Administration for Market Regulation (SAMR) on June 20, 2024. This marks the official commencement of the selection and evaluation process. The Announcement outlines 146 priority fields across 57 sectors including agriculture, furniture manufacturing, textile industry, vehicle manufacturing, and insurance. These sectors are targeted to stimulate consumption, boost domestic demand, and foster sustainable and high-quality consumption practices. The selection process begins with governmental identification of priority areas, followed by the China National Institute of Standardization (CNIS) conducting appraisals and selections. Key activities following the Announcement include:

On June 25, 2024, the CNIS organized a training session to develop the appraisal scheme for the 2024 enterprise standard "front-runners". The session covered background information, requirements for evaluation plan preparation, detailed interpretation of the Announcement, introduction of the *Enterprise Standard "Front-runner"Work Guide (Draft for comment)*, overview of the enterprise standard "Front-runner" management information platform, and discussions on application deadlines for appraisal schemes.

On June 27, 2024, the CNIS issued a call for appraisal institutes and schemes for the Enterprise Standards "Front-runner" in 2024, specifying scope, conditions, approach, and contact details in preparation for the selection process.

On June 28, 2024, the CNIS released the *Enterprise Standard "Front-runner" Work Guide (trial) (Draft for comment)*, which updates the previous Implementation Plan (Trial) from 2018. Alongside editorial adjustments, the Work Guide clarifies the role of government authorities, particularly the SAMR, in identifying key areas and guiding the CNIS.

Background information:

In accordance with the China Standardization Law revised in 2017, enterprises are required to disclose the standards they implement, whether national, recommended, association, or enterprise standards. The SAMR, along with other ministries, launched the Enterprise Standard "Front-runner" Project in 2018 to recognize enterprises that adhere to top-tier product and service standards, particularly enterprise and association standards, as national and sector standards often do not reflect industry-leading practices. This initiative aims to nurture enterprises committed to high-quality development and innovation through the adoption of advanced standards.

Digital Transition

8. CCSA Develops Standard for Identifying Key Industrial Data

Industrial Data

The China Communications Standards Association (CCSA) has completed the draft for approval of the sector standard *Guidelines for the Identification of Key Data in Industrial Fields* (hereinafter referred to as the "Guidelines"). It is currently soliciting public comments on the draft.

The Guidelines outline the basic principles, processes, and considerations for industrial data processors to identify key data in the industrial fields. It aims to i) guide industrial data processors in identifying key data within the industry, and ii) serve as a reference for regulatory authorities to establish catalogs of key data in the industrial fields.

The standard divides the process of identifying key data in the industrial field into three stages: identification, internal approval, and catalog filing. The identification stage aims to form a preliminary list of key data, the internal approval stage aims to confirm the list of key data; whereas the catalog filing stage aims to form the final catalog of key data through the approval of regulatory authorities.

More specifically, during the initial identification stage, the standard proposes defining whether data is considered as key data based on six dimensions, which include: relevance to State secrets, relevance to national security, relevance to the safety of industry development, relevance to export control of industrial items, relevance to industry-specific features, and other important data. Under these six dimensions, the document details dozens of criteria for identifying key data, stating that data meeting any one of these criteria qualifies as key data.

However, some of the identification criteria listed in the document may pose challenges to businesses regarding their trade secrets and the cross-border transfer of data. Here are some examples of what has been classified as key data in the draft: design and production data of high-end medical devices; design data, algorithms, and software/hardware architectures of major computing equipment; AI control programs, algorithms, source codes, training model data, and data mining analysis data; components, software, and equipment that can affect supply chain security, as well as information on industry supply and demand, price trends, and the distribution of suppliers and users; personal information collected, generated, and stored by industrial data processors that affects more than 1 million people, personal information of a group with certain characteristics exceeding 100,000 people, or sensitive personal information of more than 100,000 people.

In China, processors of key data need to fulfill a series of compliance obligations, such as conducting regular risk assessments and submitting a security assessment to China's cybersecurity authorities before cross-border transfer activities may begin. Given the extensive scope of this standard, once it becomes referenced by legislation in the future, it will significantly increase the compliance burden on businesses. It is recommended that relevant European stakeholders actively provide feedback on the draft Guidelines.

9. China's Latest Progress on National Standards for Generative AI Security

#Generative AI

On April 28, 2024, the Secretariat of SAC/TC 260 Cybersecurity hosted an information session for industry actors on three national standards on generative artificial intelligence (AI) security, aimed at encouraging their participation in pilot trials. Below are introductions to each of the standards:

GB/T XXXXX-XXXX Basic security requirements for generative artificial intelligence services

This standard represents an upgrade from its preceding technical document, which was released on March 4, 2024. The Basic Requirements delineate the security requirements applicable to generative AI service providers, encompassing requirements of training data security, model security, and overall security measures. Notably, these requirements complement the Interim *Measures for the Management of Generative Artificial Intelligence Services* (hereinafter referred to as the "Interim Measures"), providing a framework for security assessment as outlined in Article 17 of the Interim Measures. Furthermore, when undergoing algorithm filing procedures, generative AI service providers must conduct security assessment in line with the Basic Requirements, subsequently submitting assessment reports to the appropriate regulatory authority.

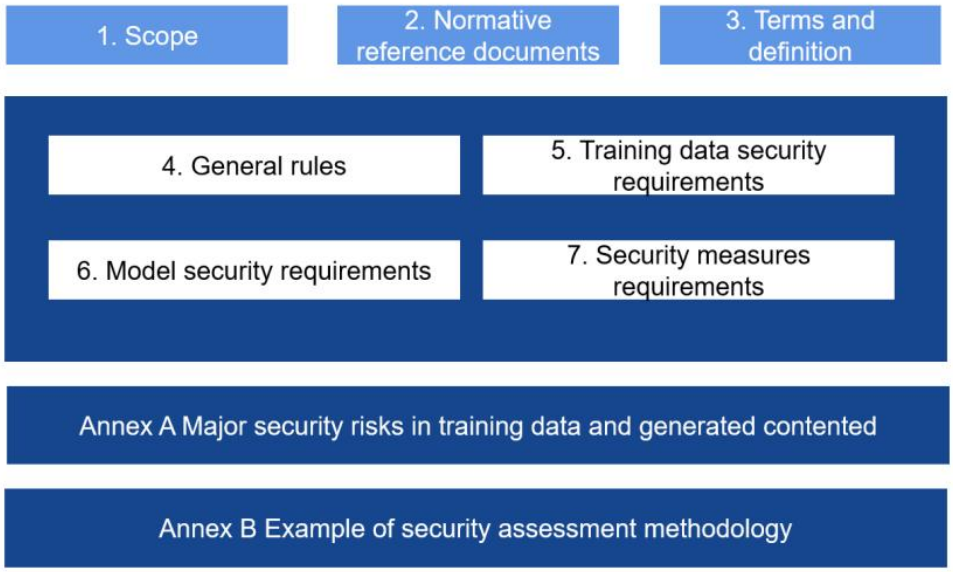


Figure 1. Chapter and Framework of the National Standard of Basic Security for Generative Artificial Intelligence Service

During the meeting, the Secretariat updated participants on recent developments regarding the drafting process, highlighting the most significant changes in the latest draft. While the draft for public comments (published on May 23, 2024) do not present major changes, pilot trials are scheduled to proceed, relying on enterprise self-assessment and guidance from the technical support group. The latter will coordinate training sessions, facilitate Q&A sessions, and provide additional support as needed.

GB/T XXXXX-XXXX Cybersecurity technology - Generative artificial intelligence data annotation security specification

With the rise of generative AI, China has prioritized the security and reliability of AI-generated content, recognizing the pivotal role of data annotation in shaping output quality. Aligning with the annotation provisions outlined in the Interim Measures for the Management of Generative Artificial Intelligence Services (Articles 8 and 19), the standard delineates actionable measures for annotation service providers. Specifically, it defines security requirements for generative AI data annotation, as depicted in Figure 2. Currently open for public comment until June 2, 2024, the standard draws upon GB/T 42755-2023 Artificial Intelligence - Code of Practice for Data Labeling of Machine Learning in establishing its foundational processes.

Moreover, the lead drafter unveiled future revision plans (though not imminent), including:

1. Expanding the standard's applicability, from annotators to dataset creators.
2. Clarifying the standard's relationship with the other two national generative AI standards.
3. Introducing requirements regarding the sourcing of data.
4. Enhancing verification methodologies and adjusting them to align with the expanded scope of application.

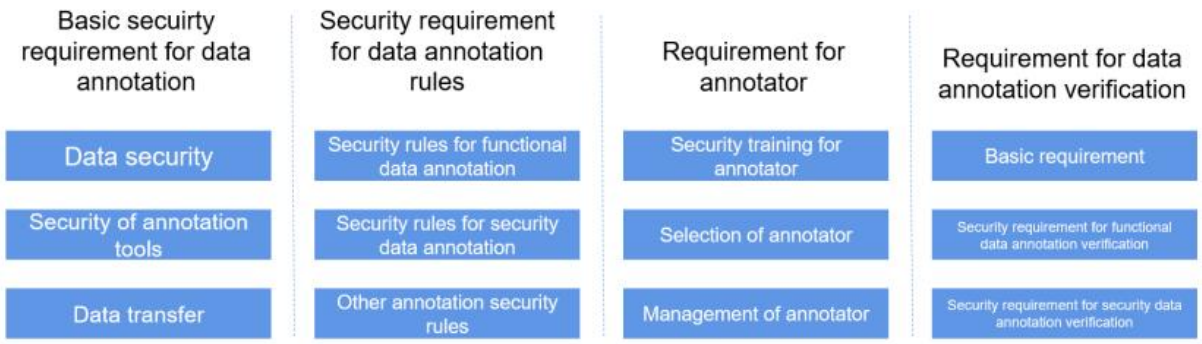


Figure 2 Security Framework for Generative AI Data Annotation

GB/T XXXXX-XXXX Cybersecurity technology - Security specification for generative artificial intelligence pre-training and fine-tuning data

Similar to the other two standards, this standard aligns with the data training requirements outlined in the Interim Measures for the Management of Generative Artificial Intelligence Services (Article 7). By addressing "data general security" and "data processing security", it delineates security protection requirements for data processing involved in pre-training and fine-tuning for developers of generative AI services. This aims to mitigate security threats like data poisoning and malicious prompts. Open for public comment until June 2, 2024, the standard aims to safeguard the security of generative AI services, mitigate risks to intellectual property rights and personal information, and foster healthy competition in the generative AI sector.

Figure 3 Framework for Pre-training and Fine-tuning Data Security for Generative AI

In summary, the three national standards reflect TC260's commitment to bolstering the implementation of the Interim Measures for the Management of Generative Artificial Intelligence Services. While the Basic Requirements cover the entire model lifecycle, the other two standards focus solely on model design and development; the distinction between the latter two lies in their emphasis: one on data processing, and the other on the annotation process. Pilot trials for implementing all three standards are underway, expected to unveil operational challenges that will inform future upgrades and revisions.

10. China Establishes New Standardization Technical Committee for Data

#Data

On May 24, 2024, during the 7th Digital China Summit, the SAC announced the establishment of the National Data Standardization Technical Committee.

This TC will be responsible for the formulation and revision of general standards in areas such as data infrastructure, data resources, data technology, data circulation, smart cities, and digital transformation, as well as national standards in data infrastructure and data circulation-related security. It will mirror the work areas of ISO/IEC JTC 1 Subcommittee on Data Management and Interchange (ISO/IEC JTC 1/SC 32), ISO/IEC JTC 1 Working Group on Smart Cities (ISO/IEC JTC 1/WG 11), and ISO/IEC JTC 1 Subcommittee on Artificial Intelligence Data Group (ISO/IEC JTC 1/SC 42 WG 2).

The secretariat of this TC will be undertaken by the China Electronics Standardization Institute (CESI), with the National Data Bureau responsible for daily management and business guidance.

Currently, China has other standardization technical committees in the data standardization field, such as TC159/SC4 (industrial data), TC260/WG8 (data security), and several technical organizations for data standardization in specific fields like satellites and aircraft. How the new standardization technical committee will further define its scope of work and coordinate with existing standardization technical organizations will be disclosed in further announcements from the committee.

11. China Unveils Action Plan for Developing Informatization Standards

Informatization

China has unveiled a comprehensive action plan for its national informatization standards system on 29 May 2024, set to reshape the landscape of information technology and digital infrastructure in the following three years. Titled as "*Action plan for developing informatization standards (2024-2027)*", this ambitious plan aims to enhance the nation's capabilities in driving high-quality development through improved standards in information technology and digital infrastructure, supporting the nation's strategic goals of establishing a "cyber-power".

The plan proposes that, by 2027, a number of high-quality informatization standards will be released, and a professional, vocational, and internationalized team of standardization talents will be formed; the quality of standards will be significantly improved, and the effectiveness of implementation will be markedly enhanced; the role of informatization standards in leading technological innovation and driving economic and social development will be fully realized, and their contribution and influence on international standards will be significantly increased.

To realize these targets, the plan highlights the following key tasks.

Improving the standards system: annual key points for informatization standards work will be formulated, with the focus on the implementation of major national informatization development strategic plans. The work priorities of relevant informatization standardization technical committees will be clarified, and the informatization standards system framework will be researched and released. The list of key standards in the informatization field will be continuously updated and improved, promoting the coordination and alignment of general information technology standards with informatization application standards across various industries and sectors.

Improving the management system: (the state) will establish a robust mechanism for coordinating and resolving major disputes in the formulation and implementation of informatization standards, removing field limitations, and avoiding issues such as duplicate standard projects, gaps in standards, content overlap, and inconsistent metrics. (the state) will also strengthen guidance and supervision of informatization standards work for departments, industries, localities, associations, and enterprises, encourage standard innovation, and further emphasize the important role of the market in the formulation and implementation of informatization standards. Additionally, (the state) will promote the conversion of advanced and applicable association standards and enterprise standards into national standards.

Strengthen standards application: (China will) establish and improve the mechanism for citing standards in regulations, increasing the efforts of developing supporting standards for policy implementation and actively applying relevant informatization standards when drafting and revising regulations and policy documents. (China will) promote the deep implementation and application of informatization standards in activities such as certification, inspection, government procurement, bidding, and project cost management. Furthermore, (China will) advance macroeconomic regulation, industrial promotion, industry management, market access, and quality supervision based on standards.

Focus on key areas: The key areas include key IT technologies such as AI, blockchain, cloud computing, quantum information, digital infrastructure, data resource, industrial digitization, e-government, smart cities and digital villages, digital culture, and green development.

Facilitate international cooperation: The plan underscores China's commitment to deepen standardization international cooperation, active participation in international standardization efforts, as well as facilitation of coordinated development of domestic and international standards.

Enhance basic capability: The plan stresses the government will strengthen the coordination between industry application standards and general technical standards for informatization, and support qualified social organizations in developing advanced and leading association standards. In terms of standardization education, the plan proposes to deepen the construction of standardization courses and encourage universities and vocational schools to offer courses related to standardization, accelerating the cultivation of knowledgeable, technical, and innovative talent. In terms of standards digitalization, the plan requires (relevant technical organizations) to i) conduct foundational research on the theories and methods of standards digitization, establish a comprehensive system for the digital expression and application of standards; ii) make breakthrough on key technologies such as machine-readable standards, open-source standards, and the digital validation of standards; iii) accelerate the structural and digital transformation of existing standards.

To ensure effective implementation, the plan calls for coordinated efforts among various government departments, industry associations, and standardization bodies. It includes provisions for policy support, funding, and public awareness campaigns to promote the development and application of informatization standards.

Overall, this plan is similar to other standardization policy documents, aiming to develop advanced technology standards and contribute Chinese "solutions and wisdoms"to international platforms. However, some of the proposed measures remain controversial and uncertain. For example, the plan suggests promoting the deep implementation and application of informatization standards in activities such as certification, inspection, government procurement, bidding, and project cost management, which may create potential market barriers. The plan also proposes converting advanced and applicable association standards, and even enterprise standards, into national standards, which could further increase the compliance burden on businesses. The plan supports Chinese enterprises, cooperative platforms, and social organizations in participating in the development of international standards, and aims to convert Chinese advanced technologies and standards into international standards. How this will be achieved in the current context where channels for participating in international standardization are controlled by government-led standardization organizations remains to be seen. The plan suggests promoting the simultaneous development of patents and international standards, which may imply that China intends to embed patents into international standards, potentially leading to trade disputes.

As China advances its informatization standards system, the global landscape will experience increased collaboration and competition. This will drive innovation on one hand and reshape the current standardization landscape on the other.

The translation of the document can be found in Annex.

12. SAC/TC260 Cybersecurity Standard Week in 2024

Cybersecurity

From June 12 to 15, 2024, the first annual edition of the Standard Week organized by China's National Cybersecurity Standardization Technical Committee (hereinafter referred to as the SAC/TC260) was successfully held in Nanchang, Jiangxi province. The event encompassed a plenary meeting, 5 thematic forums, 2 training sessions, and working group meetings. The Standard Week is a major event in the field of cybersecurity, gathering numerous Chinese stakeholders to learn about the latest cybersecurity standardization topics and trends, and discuss specific cybersecurity standards. The attendees included SAC/TC260, governmental officials from Cyberspace Administration of China and the Ministry of Industry and Information Technology, as well as the industrial representatives in this field. Below is a summary of the key takeaways from this Standard Week:

Statistics: To date, SAC/TC260 has published 389 national standards covering the protection of critical information infrastructure, cybersecurity products, data security, etc. Internationally, SAC/TC260, as the mirroring organization of ISO/IEC JTC1/SC27, led the development of 59 international standards, accounting for 17% of the standards published by ISO/IEC JTC1/SC27. During the Standard Week, the working groups discussed 46 to-be-initiated

standard projects, and promoted more than 50 standard projects currently under development.

Structural adjustment: SAC/TC260 has transferred its work in Special Working Group for Big Data Standards (SWG-BDS) under WG8, a newly established working group dedicated to standards development in the field of data security and personal information protection. In addition, another working group has been established, namely SWG-ETS (Special Working Group for Emerging Technology Standards). The SWG-ETS will focus on the standardization of emerging technologies, including artificial intelligence, quantum computing, blockchain, and cloud computing. Its work will build on instructions of relevant national policies or legislation.

Artificial intelligence:

- Generative AI:three national standards are being developed, namely: *Basic security requirements for generative artificial intelligence services*, *Generative artificial intelligence data annotation security specification*, and *Security specification for generative artificial intelligence pre-training and fine-tuning data*.
- Standard system:SAC/TC260 has initiated the drafting of a standard system for AI security. Currently, three rounds of comments solicitation have been completed. Still, the standard system is in a preliminary stage, therefore SAC/TC260 welcomes the industry to actively provide inputs and contributions, with the aim of identifying the most urgent standards.

Quantum technology: Experts that participated in the meeting raised concerns about the threat that quantum computing in the post-quantum era and advised to devoting more efforts to this field. Currently, quantum-related standard development is discussed in WG5 and SWG-ETS. In particular, two international standards were discussed in the working group meeting, which will be adopted in China as identical versions:

- *ISO/IEC 23837-1 Information security — Security requirements, test and evaluation methods for quantum key distribution Part 1: Requirements*
- *ISO/IEC 23837-2 Information security — Security requirements, test and evaluation methods for quantum key distribution Part 2: Evaluation and testing methods*

Data security protection:

- *Data security technology — Requirements for data security protection*. This standard, currently being developed by WG8, aims to support China's classified and graded data security protection mechanism, complementing *GB/T 43697-2024 Data security technology — Rules for data classification and grading*, while integrating *Information security technology — Security requirements for processing of key data* by extending its requirements to core data and general data. Such a broad scope poses a challenge to the objective of the standard, which is to provide practical and comprehensive guidance for various industries.
- Standards grading. To assist stakeholders to navigate among countless standards and clarify the role of each standard (and their specific articles), WG8 has classified all data security and personal information protection standards into three different levels: the basics, the advanced, and the excellent. The standards that directly support the legal obligations of the relevant stakeholders and reflect the baseline of data security are graded as the basics; whereas the other two levels represent higher level requirements. The full framework translation is provided in the annex of this newsletter.

Security specifications for office devices: According to the secretariat, the *20230251-T-469 Cybersecurity technology—Security specifications for office devices* is currently in the stage for approval. The major concerns raised by foreign enterprise in China in the past regarding this standard, namely the political factors, and the compulsory requirement for the compliance with GB/T 29829, have been removed. According to European enterprises in China, the current version of the standard is acceptable and their concerns have been addressed.

In conclusion, the Standard Week provides a platform for broad discussions on cybersecurity standards, allowing relevant enterprises to share their experiences in terms of standards implementation. The focus of the next activities will be on increasing the alignment among standards, strengthening the supporting role of standards to legislation, as well as accelerating standardization of emerging technology – as emphasized by Mr. Gao Lin, Head of Cybersecurity Coordination Bureau at the Cyberspace Administration of the China, in his speech during the plenary meeting..

13. Another Step of MIIT to Manage Industrial Data Security

Industrial Data Security

Recently, China's Ministry of Industry and Information Technology (MIIT) rolled out the *Implementation Rules for Data Security Risk Assessment in the Industry and Information Technology Sectors (Trial)* (referred to as the Rules), effective from June 1, 2024. The document aims to standardize mandatory data security risk assessments concerning key and core data within these sectors. The following is takeaways of the Rules worthy of attention:

- The terms of reference. MIIT will oversee and guide data security risk assessments, and develop relevant assessment standards.
- Scope of the assessment. Entities handling key and core data must assess data security risks annually, addressing processing purposes, methods, business scenarios, security measures, and risk impacts as per national laws, industry regulations, and assessment standards.
- Potential choices of assessors. Assessments can be conducted by the entities themselves or by accredited third-party agencies.
- Report submission. Entities must mitigate identified risks promptly and submit assessment reports to local industry regulators within 10 working days post-assessment.

The MIIT is constructing the data security policy mechanism system in its competent field based on the Administrative Measures for Data Security in the Field of Industry and Information Technology (Trial). Built on that, a serious documents are released or under development. The Rules are parts of this policy system. The rest policy documents under this policy system include the identification guidelines of key data and core data, risk information reporting and sharing guidelines, preparation of emergency response to security incidents, and administrative penalty guidelines. It is expected that the with the roll out of those policy documents, MIIT will provide better and clearer support for the data protection in the filed of industry and information technology sectors.

14. China's Standardization WG on Artificial Intelligence Chip Calls for Nomination of Experts

AI Chip

In order to accelerate the standardization process of China's integrated circuits industry, the National Integrated Circuits Standardization Technical Committee (SAC/TC599) is calling for the nomination of experts to join its subordinated artificial intelligence chip working group (WG AIC).

Scope and conditions of nomination:
According to an official document released by SAC/TC599, the members of the working group should be professionals of producers, operators, users, stakeholders in the field of public interests and other relevant aspects in the field of artificial intelligence chips, and hold positions in enterprises, universities, scientific research institutes and other enterprises registered in China as legal persons. They should voluntarily join the working group and abide by the relevant regulations and engage in business in related fields. The members of the working group shall generally be experts recommended by member units or observer units of SAC/TC599.

Rights of Working Group Members:

- Voting rights on matters related to the Working Group;
- Access to the work and work plan of the Working Group, allowing to apply for or participate in the standard project of the Working Group:
- Access to working documents and information services of the Working Group, as well as publications and technical materials of the SAC/TC599;
- To participate in activities such as standard publicity and implementation training, technical exchange, product display, standard verification and application demonstration organized by the SAC/TC599 or its working group;
- To provide suggestions on the work of the SAC/TC599 or its working group.

Background information:

The SAC/TC599 is mainly responsible for the national standards development and revision in the field of the design, production and application of integrated circuit equipment, semiconductor integrated circuit, film integrated circuit and hybrid film integrated circuits, microwave integrated circuits, circuit modules, integrated circuit chips, intellectual property modules (IP core), integrated circuit micro-electromechanical systems (MEMS), and other relevant products. It corresponds to the work area of the Sub-technical Committee on Integrated Circuits, Sub-Technical Committee on Semiconductor Device Packaging, Sub-Technical Committee on Micro-electronic Mechanical System of the Technical Committee on Semiconductor Devices of the International Electrotechnical Commission (IEC/TC47/SC47A, SC47D, SC47F). The secretariat is undertaken by China Electronics Standardization Institute (CESI).

Green Transition

15. Think tank Report Released on China-EU Cooperation for Environment and Climate Projects

Environment and Climate

On May 3, 2024, a think tank report named *China-EU Cooperation on Environment and Climate: Progress and Prospects* (hereinafter referred to as "the Report") was published worldwide. The main drafters of the Report are the National Energy Conservation Center and the Institute of Science and Development of the Chinese Academy of Sciences.

The Report contains five chapters:

- Preamble
- China-EU joint efforts to build a "community of all life on Earth".
- Deepened China-EU cooperation to address climate change.
- Concrete progress in China-EU cooperation on eco-environment.
- Steady and long-term development of China-EU cooperation on environment and climate.

The goal of the Report is to comprehensively review the history of China-EU cooperation on environment and climate, summarize the main achievements, and provide a perspective for future cooperation in the field.

Specifically, the Report defines the environment and climate cooperation between China and the EU as "a new highlight, new pillar, and new engine of the China-EU comprehensive strategic partnership and China-EU cooperation". It also states that "the two sides have similar views and broad consensus on promoting green and low-carbon development, which serves as a solid foundation for cooperation. They are also highly complementary in the field of environment and climate, with excellent prospects for future cooperation."

Looking ahead, the Report calls for an enhanced China-EU green partnership, reinforced cooperation mechanisms, innovative cooperation models, as well as wider coverage and more diverse cooperation forms. The Report's underlying belief is that such cooperation will help build a "community of all life on Earth" and making the world cleaner and more prosperous..

16. Call for Comment on National Standard for GHG Emission Accounting of Cold Store Operators

GHG Emission

On May 6, 2024, China's SAC/TC119 (Refrigeration) and SAC/TC548 (Carbon Management) jointly published a call for comment on the standard draft named *Requirements of the greenhouse gas emissions accounting and reporting - Part XX: Cold store operating enterprise* (national standard project number 20220850-T-607, and hereinafter referred to as "the Standard Draft"). The deadline for submitting comments is June 30, 2024.

The Standard Draft is a newly formulated standard that specifies, for cold store operating enterprises, the accounting boundaries of greenhouse gas (GHG) emissions, measurement and monitoring requirements, accounting steps and accounting methods, data quality management, report content and format.

It is applicable to the accounting and reporting of GHG emissions of such operating enterprises. Enterprises that engage in other production activities, but have cold store as auxiliary production facilities (e.g.: as food processing plants and dairy factories etc.), can also use this standard to calculate and summarize these emissions for their cold

store emissions, while calculating and summarizing the GHG emission of other production activities in accordance with the requirements of the relevant competent authorities.

The Standard Draft also contains five annexes providing data and informative contents for the emission calculation. These include, for example, the templates for reporting and data quality control plans, GWP value of common refrigerant GHGs. The main GHGs within its scope are carbon dioxide (CO2), hydrofluorocarbons (HFCs) and hydrochlorofluorocarbons (HCFCs). The Standard Draft does not directly adopt any international standard, but the calculation methods used are referenced from the following international documents:

- *The Guidelines for National Greenhouse Gas Inventories, issued by the Intergovernmental Panelon Climate Change (IPCC)*
- *The Greenhouse Gas Protocol, issued by the World Resources Institute(WRI) and the World Business Council for Sustainable Development (WBCSD).*

China's standard series on "Requirements of the greenhouse gas emissions accounting and reporting" are currently assigned under the GB/T 32151 series, in which also covers the "Requirements of the carbon emissions accounting and reporting". Within the standard series, each part targets the carbon or GHG emission activities within specific sectors. The national TC in charge of the specific sector is, generally, the main drafter and management body of each part, but with the active collaboration and support of SAC/TC548 (Carbon Management). As China is making significant efforts to achieve its carbon peak and carbon neutrality goals, more standards under this series are expected to be drafted or revised.

17. China Sets Standard for Traction Battery Design to Promote Echelon Utilization

Traction Battery

The National Technical Committee of Auto Standardization (SAC/TC114) is soliciting opinions on the recommended national standard *Recovery of Traction Battery Used in Electric Vehicle — Echelon Use — Part 5: Battery Design Guide for Echelon Use* (Draft for Comments). The deadline for submitting comments is set for 10 July, 2024.

As new energy vehicles in the Chinese market gradually enter the retirement phase, retired batteries can still meet the requirements for various echelon (secondary) uses, such as in low-speed electric vehicles, as backup power source for telecommunication base stations, and in electrical energy storage. However, issues arise in these echelon uses because the design of power batteries originally did not consider end-of-life applications in terms of materials, structure, and interfaces. This results in challenges in disassembling retired batteries, barriers to their secondary use, or complex and costly processes, thus hindering the development of the secondary use industry and leading to wastage of resources and energy.

This standard aims to resolve these issues by establishing terms and definitions, general requirements, and design requirements for the echelon use of vehicle power batteries. It applies to the design of new traction battery cells, modules, and battery packs.

To date, China has developed over ten national and sector standards in the area of power battery echelon utilization. Among these, the first four parts of this standard have already been issued, addressing residual energy testing, dismantling requirements, echelon use requirements, and product labeling, respectively. These standards will provide strong support for the implementation of relevant government policies and regulations, including the *14th Five-Year Plan for Industrial Green Development*, the *Administrative Measures for Comprehensive Utilization of New Energy Vehicle Power Batteries*, the *Interim Administrative Provisions on Traceability, Recycling and Utilization of New Energy Vehicle Power Batteries*, the *Notice on the Launch of the Encoding and Filing System of Vehicle Power Battery*, and the *New Energy Vehicle Industry Development Plan (2021-2035)*.

Since, to date, there are no international standards currently specifically addressing the design of power batteries for echelon use, this standard will be the first of its kind in the field. The technical solutions included in the standard, such as battery pack structural design, control algorithm development, and monitoring and diagnostic technologies, may serve as a reference for other countries in developing similar standards in the future.

18. Mandatory Standard Draft Revised at China RoHS Working Meeting

#RoHS

On May 28, 2024, SAC/TC297/SC3 organized a working meeting in Shenyang, Liaoning province, to discuss the draft of the national mandatory standard project for China RoHS, officially titled *Requirements for certain restricted substances in electrical and electronic products* (hereinafter referred to as "the Standard Draft").

Approximately 60 experts participated in the meeting. During the event, the leader of the China Electronics Standardization Institute (CESI), which hosts the SC's secretariat, emphasized the importance of the strategic direction indicated by the Ministry of Industry and Information Technology (MIIT). According to the speakers, the key focus areas highlighted by the top regulators include: enhancing the applicability and efficacy of the standard; aligning with relevant international standards; and bolstering the production and quality of environmentally friendly products.

The current iteration of the Standard Draft comprises seven chapters and four annexes. The primary objectives of the working meeting were to present the feedback gathered during internal consultations – 60 in total – and address queries from the experts within the working group. These led to minor adjustments in the current draft to improve clarity and coherence, which was then thoroughly reviewed during the meeting. Additionally, Annex C focusing on the Information System Requirements for Restricted Substances in Electrical and Electronic Products, was elevated from informative to normative status.

Recognizing the pivotal role of this standard, which is slated to replace two core standards in the China RoHS framework (i.e., GB/T 26572 for concentration limits and SJ/T 11364 for marking and labeling), meeting attendees engaged in detailed discussions on various topics including the structure, detailed requirements, quantitative criteria for conformity assessment, and specifications outlined in Annexes B and C.

The working group intends to continue gathering feedback from experts and finalize a draft for public consultation by June 28, 2024. The subsequent working meeting on this standard is scheduled for the end of September.

19. China Calls for Comment on Compulsory Standard of Energy Efficiency for Household and Similar Kitchen Appliances

Compulsory Standard # Energy Efficiency

On May 17, 2024, China's SAC/TC20 Energy Fundamentals and Management released the announcement calling for public comment on the compulsory standard of *GB XXXXX-XXXX Minimum allowable values of the energy efficiency and energy efficiency grades for household and similar kitchen appliances* (hereinafter referred to as the Standard). The Standard will replace GB 12021.6-2017, GB 39177-2020, GB 21456-2014, and GB 24849-2017, which cover the relevant energy efficiency requirements for electric rice cookers, electric pressure cookers, household induction cookers, and microwave ovens. The public opinion solicitation will end on July 15, 2024.

Small household appliances usually refer to appliances other than high-power output appliances. They are mainly divided into kitchen appliances, cleaning and nursing appliances, and other small household appliances. The statistics show that the overall market size of small home appliances in China had an upward trend from 2017 to 2022, with a compound growth rate of 8.72% in five years. Currently, about 70% of small household appliances are not covered by energy efficiency standards. The energy efficiency standard for electric rice cookers, household induction cookers, and microwave ovens has been implemented for nearly ten years, which falls short of facilitating industrial development. Therefore, the Standard will cover more types of small household kitchen appliances and provide better guidance for industrial development.

Apart from structural and editorial adjustments, the key technological changes include the following:

Application scope. The applicable environment of the rice cooker has been removed from the scope. In addition, the application scope of the Standard now covers 6 types of products: electric rice cookers, electric pressure cookers,

household induction cookers, microwave ovens, stew cookers, and stew cups, as well as electric kettles.

Terminology and definition. The terms and definitions of standby mode power, off mode power, and standard pan are deleted. The terms and definitions of standby mode, and off mode are modified and completed to provide a more precise description of the two modes. In addition, the definition of network mode has been added in this part.

Energy efficiency grades. The Standard revises the energy efficiency classification for electric rice cookers, electric pressure cookers, household induction cookers, and microwave ovens. Specifically, the number of energy efficiency levels of rice cookers is changed from 5 grades to 3 grades.

Energy efficiency indicator. The standby power is uniformly added to the energy efficiency indexas an energy efficiency indicator and is categorized into network mode and non-network mode.

Classification of household induction cookers. In the previous version of the standard dedicated to household induction cookers, this product type was classified into the original "heating units with rated power greater than 1200W" and "heating units with rated power less than or equal to 1200W". In the Standard, based on the previous version, the household induction cookers are categorized as "circular-coiled heating units with rated power greater than 1200W" and "non-circular-coiled heating units with rated power less than 1200W".

Testing methods. The Standard has improved the energy efficiency testing methods. Specifically,

- the standby power test is added to the energy efficiency test method of rice cookers, electric pressure cookers, andhousehold induction cookers;
- The preparation steps before the thermal efficiency test are refined.
- The wind speed is specified in the test condition.
- The content requirements of experimental control device settings for energy efficiency testing of electric pressure cookers are added.
- The operating parameters of the calculation method for the thermal efficiency of the household induction cookerare modified.
- The initial conditions for measuring the energy consumption of microwave ovens are modified.
- The unique content of theoff-mode power test for the microwave oven is removed and changed to a unified expression of the off-mode power test for the microwave oven.

According to the drafting notes published alongside the standard draft for comment, it is recommended that this standard be formally enforced one year after the date of publication. According to the *Measures for the Administration of Compulsory National Standards*, enterprises may choose whether to implement this standard after the standard is distributed and implemented. This the second round of public opinion solicitation and will last until the mid of July. It is suggested to stay updated with this compulsory standard, which will directly influence market access and the draft has been notified in accordance with the *TBT Agreement of the World Trade Organization*.

20. Updates of China's WG on Recovery of Traction Battery Used in Electric Vehicle Activities

#Traction Battery

To encourage the industry to further participate in the standardization work of recovery of traction batteries used in electric vehicles, the Sub-technical Committee on Electric Vehicles of the Road Vehicle Technical Committees (SAC/TC114/SC27) plans to hold a series of activities to commemorate the 10th anniversary of the establishment of the Working Group on Recovery of Traction Batter Used in Electric Vehicle (hereinafter referred to as the Working Group) and expands the working group membership. The specific notice is as follows:

I. Commemorative activities for the 10th anniversary of the Working Group

The celebration activities of the 10th anniversary of the Working Group will involve the specific activities below:

- Discussion and exchange on the standard system of recovery of traction batteryies used in electric vehicles;
- Introduction of recovery policies and regulations at home and abroad;
- Visiting the recovery factory of traction battery used in electric vehicles;
- Recognition of outstanding member units and personnel of the Working Group.

II. Expansion of the Working Group membership

To further implement the *Guiding Opinions on Accelerating the Establishment and Improvement of a Green, Low-Carbon and Circular Development Economic System*, the Working Group intends to comprehensively engage relevant stakeholders in the field of new energy vehicle traction battery recovery. The Working Group released the notice calling for membership applications.

Qualifications requirements for experts nominated by potential membership applicants:

- Engagement in the field of recovery technology or standardization of traction battery used in vehicles;
- Possession of abundant knowledge in both theory and practice;
- Familiar with standardization work
- Possession of senior professional titles or above,
- Capable of actively participating in the activities of the standard working group, and performing the duties and obligations of the working group members.

Introduction of the Working Group:

Since the formal establishment in 2014 of the Working Group, it has supported the SAC/TC114/SC27 to release the three editions of the *China Electric Vehicle Standardization Work Roadmap* and formulated a total of 11 national and sector standards, including *GB/T 33598 Recovery of traction battery used in electric vehicle—Recycling*, *GB/T 34015 Recovery of traction battery used in electric vehicle—Echelon use, GB/T 38698 Recovery of traction battery used in electric vehicle — Management specification, GB/T 44132 Recovery of traction battery used in electric vehicle — General requirements, QC/T 1156 Recycling of traction batteries used in electric vehicle—Dismantling specification*.
For more information, please visit: http://www.catarc.org.cn/xinwen/show-4780.html

21. China Calls for Comment on Initiating Seven Energy Efficiency Standards

Energy Efficiency

On June 17, 2024, the Standardization Administration of China (SAC) published seven compulsory standards proposals on minimum allowable values of energy efficiency and energy efficiency grades for public comments on official initiation. All these 7 standard proposals are raised by SAC who will then mandate SAC/TC20 (Energy Fundamentals and Management) to carry out the rest of the development work. Meanwhile, the China National Institute of Standardization will be in charge of translating these standards to English once it is finished, which means that both Chinese and English versions of the standards will be available. Below is a brief introduction to all seven standard proposals:

Minimum allowable values of energy efficiency and energy efficiency grades for crystalline silicon photovoltaic modules and photovoltaic inverters

The standard specifies the energy efficiency limit value, energy efficiency grades, test method and technical requirements of crystalline silicon photovoltaic modules and photovoltaic inverters. The standard applies to monocrystalline silicon photovoltaic modules and polycrystalline silicon photovoltaic modules, as well as photovoltaic inverters for photovoltaic power stations. The main technical contents will include scope, normative reference documents, terms and definitions, energy efficiency grades, minimum allowable values of energy efficiency, and testing methods.

Minimum allowable values of energy efficiency and energy efficiency grades for data storage devices

The standard aims to help related data storage equipment products to improve energy efficiency, and further unify the energy consumption test methods of related products and equipment to maintain the consistency of test results data. This standard will specify energy efficiency test methods and energy efficiency grade evaluation of storage devices in data centers. There are three energy efficiency indicators: IOPS/W, GB/W, and additional points of energy saving performance. The main technical contents will include terms and definitions, abbreviations, technical requirements (grades and minimum allowable values), testing and calculation methods, testing requirements (testing environment requirements, testing instruments and equipment requirements, data storage device setup requirements, testing steps).

Minimum allowable values of the energy efficiency and energy efficiency grades for dehumidifiers

According to the statistics published by SAC, the purchase of dehumidifiers will continue to grow in China, which necessitates efforts to promote the energy efficiency of this product. The standard specifies the minimum allowable values of the energy efficiency, energy efficiency grades, energy efficiency calculation and testing methods. The standard applies to dehumidifiers that use vapor-compression cycle refrigeration for dehumidification.

Minimum allowable values of energy efficiency and energy efficiency grades for floor cleaning appliances

This standard specifies the minimum allowable values of energy efficiency, energy efficiency grades and energy efficiency testing methods for floor cleaning appliances. This standard applies to the test and evaluation of energy efficiency of AC or DC-powered vacuum cleaners and cleaning robots with a rated voltage of not more than 250V in a single phase and used by non-professionals at homes, in shops and similar places such as schools. This standard does not apply to vehicle-mounted vacuum cleaners, vacuum cleaners specially used for cleaning clothes and other special purposes, water-suction vacuum cleaners, floor/carpet cleaners, floor washers, vacuuming floor polishing machines, water-suction cleaning robots, industrial vacuum cleaners and cleaning robots.

Minimum allowable values of energy efficiency and energy efficiency grades for centrifugal pump units for fresh water

This standard specifies the minimum allowable values of energy efficiency, energy efficiency grades and energy efficiency testing methods of centrifugal pump units for fresh water. This standard applies to single-stage and single-suction centrifugal pumps, single-stage and double-suction centrifugal pumps, inline centrifugal pumps, multistage centrifugal pumps, and light multi-stage centrifugal pumps. This document does not apply to non-metallic pumps and seal-less rotodynamic pumps.

Minimum allowable values of energy efficiency and energy efficiency grades for fiber lasers

This standard specifies the energy efficiency grades, minimum allowable values of energy efficiency, energy-saving evaluation value and testing method of fiber lasers. This standard applies to fiber lasers with rated power ≤10KW. The main technical contents will include terms and definitions, technical requirements (energy efficiency grades, minimum allowable values), and testing methods.

Minimum allowable values of the energy efficiency and energy efficiency grades for medical, laboratory and similar refrigerating appliance

This standard specifies the minimum allowable values of energy efficiency, energy efficiency grades, energy efficiency calculation and testing methods for refrigerators for medical, laboratory and similar purposes.

22. China Established Carbon Footprint Accounting System for Lithium Battery Standards

Lithium Battery

China recently unveiled its new carbon footprint accounting system tailored specifically for lithium batteries. This system, officially referred to as "the Accounting System," was introduced on June 13 and aims to assist enterprises in accurately assessing carbon reduction opportunities across all stages of a product's lifecycle. It also seeks to guide businesses towards adopting energy-saving and carbon reduction technologies.

Under the guidance of the Ministry of Industry and Information Technology (MIIT), the Accounting System was developed in collaboration with over 100 entities including prominent Chinese universities, key lithium battery manufacturers, and relevant industry associations. This initiative marks China's inaugural subsector-specific carbon footprint accounting system.
Key components of the Accounting System include:

Carbon footprint accounting method: A comprehensive approach that tracks material flow, energy consumption, and waste emissions throughout the entire lifecycle of lithium batteries. This method defines basic production processes, establishes input-output relationships, and outlines the carbon footprint boundaries.

Standard system: A set of more than 70 planned standards, including technical requirements for evaluating the carbon footprint of lithium-ion cells and batteries. These standards aim to ensure consistency and accuracy in carbon footprint assessments within the lithium battery sector.

Background database: Version 1.0 of the database encompasses 210 data points related to lithium battery production, covering major components such as electrode materials, electrolytes, and packaging. This database, sourced entirely from China, accounts for over 95% of the total carbon emissions associated with lithium battery manufacturing.

Accounting platform construction: The development of a dedicated platform enables enterprises to conduct comprehensive carbon footprint accounting. This platform supports data collection from suppliers, online submission, traceability, analysis of carbon reduction potential, and generation of carbon footprint reports.

The implementation of this system is expected to significantly impact enterprises operating or manufacturing in China. However, multinational corporations may face challenges due to differences between this system and international standards, particularly those in developed regions like the EU. Ensuring compliance with both local and international standards may require additional attention and effort. Overall, China's new carbon footprint accounting system for lithium batteries represents a proactive step towards environmental sustainability and industrial transparency within the sector.

23. China's Implementation Plan for Carbon Footprint Management

Carbon Footprint

On June 4, 15 national ministries of China, including the Ministry of Ecology and Environment (MEE) and the National Development and Reform Commission (NDRC) etc., jointly issued the *Implementation Plan for Constructing Carbon Footprint Management* (hereinafter referred to as "the Implementation Plan"). And in early June, the MEE responded to the press to provide further explanation on this document, demonstrating its significance.

The Implementation Plan consists of 4 chapters which lay out specific targets and missions to construct the country's carbon footprint management system. The legal basis of this document is the *Working Guidance for Carbon Peak and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*, *Opinions on Comprehensively Building a Beautiful China, and the Action Plan for Carbon Peak Before 2030*.

The key takeaways include:

Key purpose: fulfill the tasks set in the 3 aforementioned documents, which are: establish standards, certification and labeling systems for green and low-carbon products; explore the establishment of full-life-cycle carbon footprint standards for key products; establish a carbon footprint management system.

Main objectives:

- by 2027, establish a preliminary management system for carbon footprint; issue general national accounting standards that are aligned with international counterparts; formulate about 100 standards on accounting rules for key products.
- by 2030, further optimize the carbon footprint management system, making it applicable to more scenarios; formulate about 200 standards on accounting rules for key products.

Key mission: assigned 22 key missions in 4 grand categories (establish a sound carbon footprint management system, build a multi-party work pattern for carbon footprint, promote international mutual trust in product carbon footprint rules, and continue to strengthen product carbon footprint capacity building)

Coverage: almost 20 sectors and 19 national departments are involved to complete the missions listed in the Implementation Plan.

Stakeholders: besides the regulators, research institutions, industry associations, enterprises and other relevant parties are all encouraged to participate in constructing the management system.

Next steps: MEE will coordinate with other relevant national ministries to push forward the listed missions while keep up with international and domestic major related topics and status; further responsibility allocation will be set and a task force may be established to ensure practical progress of the Implementation Plan; expand public knowledge and understanding on carbon footprint, promote excellent practice, and improve public awareness, while technical training, policy explanations, and supportive technical services shall also be organized to enhance overall working level.

For foreign stakeholders, considering the document's direct connection with China's carbon peak and neutrality goals, further specific actions will definitely be related to business activities, manufacturing, product requirements, etc. In such case, it is necessary to at least keep track of the future updates of the system construction, and those regarding the specific sectors.

Others

24. Current Status of Mandatory Standards for Personal Protective Equipment in China

Personal Protective Equipment

On June Personal protective equipment (also known as labor protection supplies) is essential for safeguarding workers' personal safety and occupational health. It plays a crucial role in ensuring protection against accidents and external injuries during the production process and other daily activities.

As of May 2024, the State Administration for Market Regulation (the Standardization Administration of China) has published seven mandatory national standards on personal protective equipment. Four of these standards have already been implemented, namely:

- *Specification for Personal Protective Equipment Part 1: General Principles*
- *Specification for Personal Protective Equipment Part 2: Oil, Chemical, and Natural Gas*
- *Specification for Personal Protective Equipment Part 3: Metallurgy, Non-Ferrous*
- *Specification for Personal Protective Equipment Part 4: Non-Coal Mines*

The remaining three standards will come into effect on January 1, 2025, namely:

- *Specification for Personal Protective Equipment Part 5: Building Materials*
- *Specification for Personal Protective Equipment Part 6: Power*
- *Specification for Personal Protective Equipment Part 7: Electronics*

These standards define the general principles, procedures, management, and technical requirements for the provision and disposal of personal protective equipment. They focus on the safety production needs of high-risk key industries such as oil, chemical, natural gas, metallurgy, non-ferrous metals, non-coal mining, building materials, power, and electronics. The standards detail common operational scenarios involving flammable and explosive tasks, inhalable dust, confined spaces, high-altitude tasks, and electrical tasks, along with the potential hazards present in different industries and job types. Additionally, they specify the recommended maximum replacement intervals for personal protective equipment for various job types, aiming to ensure the health and safety of workers in key industries.

In November 2021, the Standardization Administration of China, in collaboration with the Ministry of Emergency Management, initiated a three-year special action plan to enhance the standardization of personal protective equipment. This initiative required the formulation and publication of a series of mandatory national standards for personal protective equipment. These seven standards have filled gaps in the standardization of personal protective equipment provision and management in China, providing technical guidance for enterprises to fully identify and assess workplace hazards, guiding various production and business units to legally equip workers with personal protective equipment, and support regulatory bodies in conducting safety production law enforcement inspections

25. China Medical Device Standards Management Annual Report (2023)

Medical Device

The National Medical Products Administration (NMPA) published the *Medical Device Standards Management Annual Report (2023)* (hereinafter referred to as the Report). The Report presented the updates of the development of medical device standards in the past year. The NMPA translated the contents of the Report as below.

I. Data overview of medical device standards

(i) Release data on formulation and revision plan of medical device standards

1. Formulation and revision plan of national standards. In 2023, the Standardization Administration approved and issued 52 national standard projects for medical devices, which were divided into formulation projects (34, 65.4%) and revision projects (18, 34.6%) according to the formulation and revision of standards; they were divided into mandatory standard projects (4, 7.7%), recommended standard projects (46, 88.5%), and guiding technical document projects (2, 3.8%) according to the nature of the standards.

2. Formulation and revision plan of industry standards. In 2023, China NMPA approved and issued 117 industry standard projects for medical devices, which were divided into formulation projects (57, 48.7%) and revision projects (60, 51.3%) according to the formulation and revision of standards; they were divided into mandatory standard projects (15, 12.8%) and recommended standard projects (102, 87.2%) according to the nature of the standards, of which 22 enterprise-led standard projects (18.8%).

(ii) Data on issuance of approval of medical device standards

1. National standards. In 2023, the Standardization Administration approved and released 28 national standard projects for medical devices, which were divided into formulation projects (13, 46.4%) and revision projects (15, 53.6%) according to the formulation and revision of standards; they were divided into mandatory standard projects (5, 17.9%), recommended standard projects (21, 75.0%), and guiding technical document projects (2, 7.1%) according to the nature of the standards.

2. Industry standards. China NMPA approved and released 131 industry standard projects for medical devices, which were divided into formulation projects (68, 51.9%) and revision projects (63, 48.1%) according to the formulation and revision of standards; they were divided into mandatory standard projects (33, 25.2%) and recommended standard projects (98, 74.8%) according to the nature of the. 14 amendments to medical device industry standards were released.

(iii) Data on current medical device standards

1. Overall data on standards

As of December 31, 2023, China has a total of 1974 currently effective medical device standards, including 271 national standards and 1703 industry standards. From 2019 to 2023, the number of national and industry standards has shown a steady upward trend year by year.

2. Data on standard category

According to the statistics of standardized objects, there were 330 basic standards (16.7%), 51 management standards (2.6%), 480 method standards (24.3%), and 1113 product standards (56.4%) in the currently effective medical device standards. In 2023, 25 basic standards (15.7%), 7 management standards (4.4%), 36 method standards (22.6%), and 91 product standards (57.3%) were issued.

According to the classification statistics specified in the Chinese Classification for Standards, the currently effective medical device standards comprehensively covered all technical fields of medical devices, mainly focusing on C44 Medical laboratory equipment (14.3%), C30 Medical apparatus and devices in general (11.3%), C35 Orthopedic devices (10.8%), and C31 General and microsurgical devices (10.4%). In 2023, the published standards covered 16 standard categories such as C30 Medical apparatus and devices in general, C33 Stomatologic device, equipment and material, etc. Medical apparatus and devices in general hold the distinction of having the largest number of published standards, accounting for 20.9% of the published standards in that year.

(iv) Data on standard technical organizations

In 2023, the Standardization Administration established the National Standardization Working Group for Medical Protective Devices (SAC/SWG30), China NMPA approved the establishment of the Standardized Technical Authorized Organization for Reliability and Maintainability of Medical Devices (SMD/TU009) and the Standardized Technical Authorized Organization for Oral Digitized Medical Devices (SMD/TU010), and approved the preparations for the establishment of the Standardized Technical Authorized Organization for the Standardization of Medical Device Packaging. As of December 31, 2023, there were a total of 38 medical device standard technical organizations, including 13 general standardization committees (TCs), 13 subcommittees for standards (SCs), 2 standardization working groups, and 10 technical authorized organizations.

II. Focus on medical device standards

(i) Solid foundation of standard system

In 2023, China NMPA took several measures to further standardize the approval and release of medical device standards. These efforts included the revision and issuance of the Working Rules for the Approval and Release of Medical Device Standards, as well as the organization of the Center for Medical Device Standardization Administration to formulate and issue the Principles for Determining National and Industry Standards for Medical Devices and Principles for Determining Mandatory Standards for Medical Devices to clarify the level and scope of standards. Additionally, China NMPA formulated and issued the Working Rules for the Evaluation of Medical Device Standard Implementation and the Feedback and Processing Mechanism for Medical Device Standard Opinions to solve the "problems faced in the final actual implementation" during standard implementation. Furthermore, China NMPA issued the Guidelines for Enterprises to Lead the Drafting of Recommended Industry Standards for Medical Devices (Trial) to outline the responsibilities and requirements for enterprises to take the lead in standard formulation and revision, with the goal of promoting the high-quality development of medical devices.

(ii) Constructing a three-dimensional support structure for the standard organization system

According to the counterparts with the International Organization for Standardization, China NMPA has taken steps to establish the National Technical Committee on Quality Management and General Requirements for Medical Device of Standardization Administration of China to set up the Working Group for Connectors for Liquid and Gas with Small Aperture and Liquid Receiver Delivery System for Medical Devices, and organized the National Technical Committee for Standardization of Surgical Implants and Orthopedic Devices to set up the Working Group for Additive Manufacturing of Implantable Devices, the Working Group for Ceramic Implantation, the Working Group for Implantation of Metallic Materials, and the Working Group for Implantation of Polymer Materials, etc., basically building up a three-dimensional structure of the standard organization system of medical devices with horizontal (general standardization committee, working group, authorized organization) to the edge, vertical (subcommittees for standards) to the end, vertical (standardization committee directly under the working group) support.

(iii) Establishing technical reserves for epidemic prevention and control standards in the new phase

In 2023, China NMPA paid close attention to the prevention and control of monkeypox virus, and organized the project application for the national standard of Quality Evaluation Requirements for Monkeypox Virus Nucleic Acid Detection Kits to regulate the production and quality control of monkeypox virus nucleic acid detection kits. China NMPA organized and carried out the translation of five national standards, including *Quality Evaluation Requirements for COVID-19 Nucleic Acid Detection Kits*, *Quality Evaluation Requirements for COVID-19 Antibody Detection Kits, Quality Evaluation Requirements for COVID-19 IgG Antibody Detection Kits, Quality Evaluation Requirements for COVID-19 Antigen Detection Kits, and Quality Evaluation Requirements for COVID-19 IgM Antibody Detection Kits*.

(iv) Comprehensive completion of the assessment and evaluation of the dual coverage of the standardization committee

(v) Enterprise-led industry standard formulation and revision continues to gain momentum

China NMPA launched an initiative to encourage enterprises to take the lead in drafting industry standards for medical devices. In 2023, the Guidelines for Enterprises to Lead the Drafting of Recommended Industry Standards for Medical Devices (Trial) were issued. As a result, 22 enterprise-led standard formulation and revision tasks were issued, marking the initial establishment of an enterprise-led, standardization committee-guided work mode in the medical device industry.

(vi) Standardizing the promotion of standard review and implementation evaluation

In 2023, China NMPA further strengthened the requirements for standard review and accelerated the construction of the standard implementation evaluation system. China NMPA completed the review of 942 current medical device standards and put forward the conclusions of the review; organized and executed an evaluation of the implementation of 45 typical standards, culminating in a detailed report on the implementation evaluation.

(vii) Establishing a mechanism for updating standards with rapid linkage to international standards

For international standards that are deemed appropriate for adaptation to China's unique national circumstances, we will closely monitor their development, conduct thorough research, and undertake synchronized transformations, ideally within a two-year window following the publication of the international standards. In 2023, a total of 66 international standards were incorporated into national and industrial standards for medical devices, while 86 project plans for adapting international standards to China's national and industrial standards were approved and issued. As a result, the consistency level of international standards for medical devices exceeded 90%.

(viii) Accelerating the internationalization of medical device standards

In 2023, the international standard Aerosol bacterial retention test method for air-inlet filter on administration devices (standard No. ISO 24072:2023), which was developed by China, was officially released. Additionally, the international standard proposal Artificial intelligence enabled medical devices - Computer assisted analysis software for pulmonary images - Algorithm performance test methods (Project No. IEC 63524 ED1) was successfully established. Furthermore, six international standards were formulated and revised and the transformation of nine medical device standards into foreign languages has been progressing steadily. China's expertise in the field was recognized with the election of two Chinese experts as the Chairman of IEC SC 62B and the Vice-Chairman of IEC TC62. A total of 52 international standard meetings were organized, and 129 international standard votes were cast on behalf of China to participate in counterparts with the International Organization for Standardization. Moreover, 8 new experts registered with the International Organization for Standardization were added. The internationalization of medical device standards has been moving from integration to fusion.

(ix) Creating a positive social atmosphere for standardization

(x) Consistent standard service concepts

Source: https://english.nmpa.gov.cn/2024-05/11/c_986570.htm

26. China Updates the Regulations on the Classification of Medical Devices

Medical Device

On On May 11, 2024, China's National Medical Products Administration (NMPA) released the *Announcement on Rules for the Classification of Medical Device Products* (hereinafter referred to as the Rules). The enforcement of the Rules will start from September 1, 2024.

Background

The Rules will replace the current version of the working procedures and requirements for the classification of medical devices, stipulated in Document No. 127 of 2017. In recent years, the medical device industry has developed rapidly, which presented new challenges for classifying and managing medical devices, such as for responding to the public emergency incidents. The need to further optimize the process, requirements, and efficiency of classification work has become urgent. Therefore, the NMPA organized the revision of the Rules, also aimed at supporting some of the tasks assigned in the *Opinions of the National Medical Products Administration on Further Strengthening and Improving the Classification Management of Medical Devices*, namely, enhancing the quality and efficiency of classification determination work, and promoting the innovative development of medical devices.

The Rules encompass three parts:

- The first part includes the positioning of the classification definition work, the purpose and basis of the classification work, and the responsibilities of theauthorities involved in this process.
- The second part includes principles and requirements for classification definition in other situations (such as product filing, product registration application acceptance, technical evaluation, regulatory inspection, public health emergency response, device-drug combination products, innovative medical devices, etc.).

- The third part includes principle requirements for the digitalization of classification information, guiding the classification definition of provincial medical products administrations, and refining the guiding principles of classification and dynamic adjustment of classification catalogue.

The most significant changes introduced by the Rules, compared with the Document No. 127, are summarized below:

Classifying the responsibilities of relevant governmental authorities, working procedures and processes. According to the Rules, "the NMPA shall provide medical device classification services to applicants for registration and record-filing of medical devices," explicitly defining classification determination as a service item. The Rules also elaborate on the responsibilities of classification applicants, provincial medical products administrations, the NMPA's Medical Device Standards Management Center, NMPA's Center for Medical Device Evaluation, and the Technical Committee on Medical Device Standardization, emphasizing the primary responsibility of the applicants.

Enhancing the application processes and procedures for classification determination. Firstly, new pathways for medical device classification applications have been established based on the *Regulations on the Supervision and Administration of Medical Devices and the practical classification work*. Specifically, the Rules specify different application pathways for newly-developed medical devices as well as for medical devices with unclear management category. Specifically, for the former type of medical devices, the applicant shall file application to the Medical Device Standards Management Center; whereas for the latter type, the mechanism currently in force shall continue to be implemented, namely applying to the provincial medical products administrations. In the meantime, the Rules optimize workflows and timing requirements. Additionally, special procedures for classification determination in inspection, case handling, and complaint investigation scenarios have been introduced to meet actual work demands in a more effective manner Furthermore, a communication and coordination mechanism has been established among the Medical Device Standards Management Center, the Center for Medical Device Evaluation, and provincial medical products administrations.

Standardizing the requirements for classification application materials. Firstly, the Rules have digitalized the entire process of online acceptance, processing, and notification of medical device classification applications. Secondly, detailed requirements for classification application materials are specified, including product technical requirements, draft product instructions for use, product photos or videos, conformity declarations, supporting documents, etc. Thirdly, the Rules have improved the requirements for filling the *Medical Device Classification Application Form*.

Strengthening supervision of classification implementation. The Medical Device Standards Management Center is tasked to provide guidance to provincial medical products administrations on classification management work. It may also conduct spot checks on the classification results provided by provincial authorities. Regarding regulatory hotspots, common issues, and pressing matters, the Medical Device Standards Management Center is required to refine the guiding principles for classification under the regulatory framework, establishing unified principles and criteria for product classification in relevant fields. Furthermore, the Rules define the effectiveness of classification results and the disclosure of classification information.

In conclusion, the Rules clarify the procedures and processes for relevant authorities and classification applicants in different situations. The ultimate goal is to make sure that medical devices are well classified and supervised under the legislation. This is especially because the previous system fell short in responding to public emergency situation where newly-developed effective medical devices are expected to be delivered and classified in a prompt way. The roll-out of the Rules is expected to fill this gap, while providing guidance so as to better serve the needs of the public and the medical device industry.

27. China Released the Service-oriented Manufacturing Standard System

Service-oriented Manufacturing

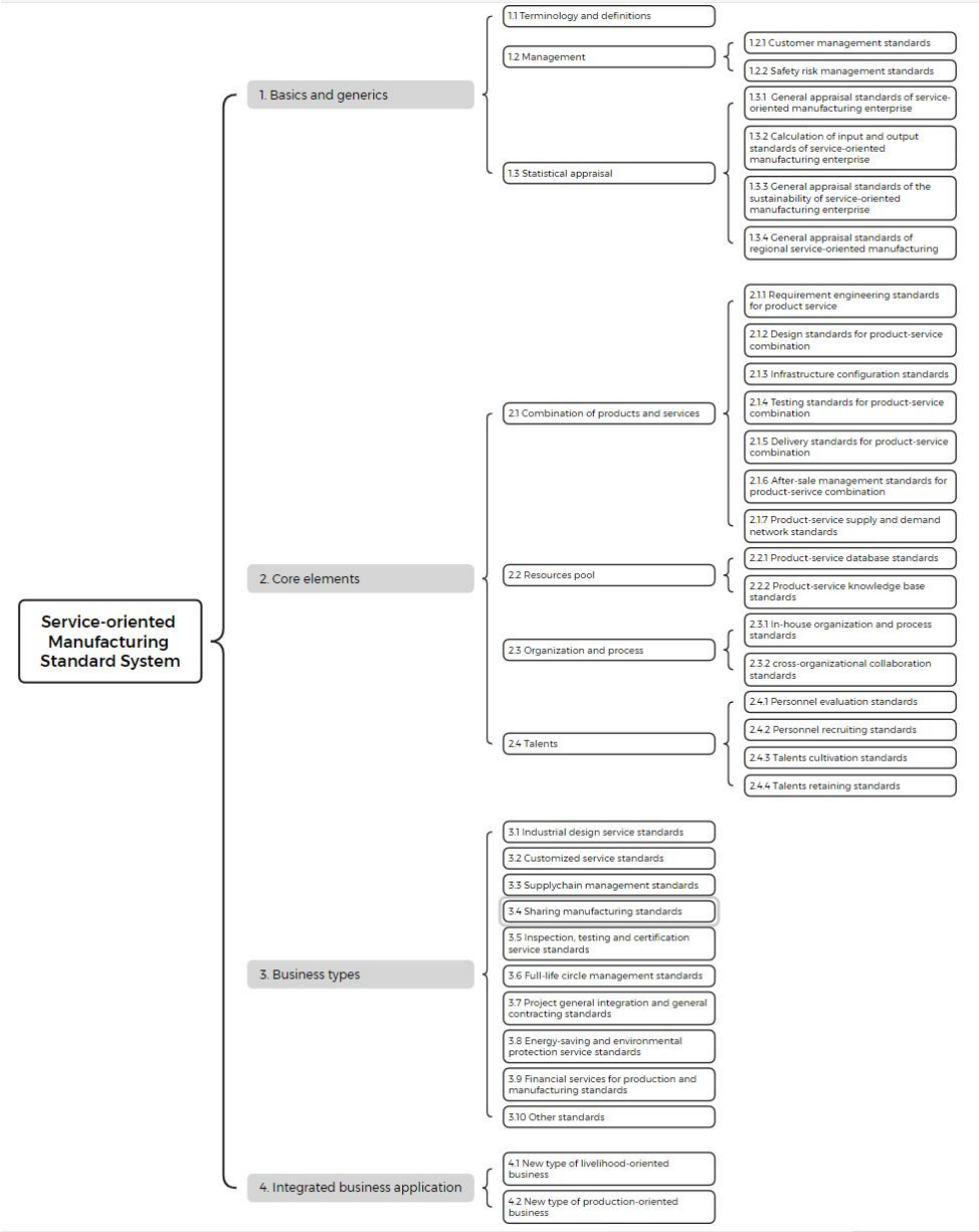
On May 22, 2024, China's Ministry of Industry and Information Technology released the *Notice on Guidelines for Constructing the Service-oriented Manufacturing Standard System* (hereinafter referred to as the Guidelines). The Guidelines are resonating with a series of national policies, including the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035, *National Standardization Development Outline, Guiding Opinions on Further Promoting the Development of Service-oriented Manufacturing*.

With the improvement of the automation and intelligence of the production process and the deepening of the complexity of large equipment, the proportion of manufacturing in the entire value chain is declining, and the value of service in this process such as R&D design, delivery, installation, maintenance and service of products is increasing. For instance, in the field of electrical equipment, some enterprises have expanded from energy equipment production to modern services such as contract energy management, providing comprehensive solutions for digital power plants. In the field of consumer goods manufacturing, some enterprises carry out crowdsourcing design, personalized customization, social marketing and other services, which greatly enhance the competitiveness of enterprises. Examples could also be observed in other industrial fields, such as construction machinery, information technology, vehicles, smart equipment, energy-saving and environmental protection, etc.

The Guidelines encompass five chapters: the introduction of service-oriented manufacturing, general requirement, rationale of the standard system, introduction of the standard system, and organizational implementation. The standard system covered by the Guidelines is presented below (figure 1). It is a three-layered tree system reflecting China's observation of the industrial needs in terms of standardization in this field. Below is a brief introduction of the four major components of the standard system.

- The basic and generic parts of standards will be used to unify concepts related to service-oriented manufacturing.
- The core elements part of standards will be used to regulate the key factors of service-oriented manufacturing to realize the efficient supply of product-service combinations.
- The business types part of standards will standardize and guide the innovation mode of service-oriented manufacturing in industrial practice.
- The integrated business application part of standards will regulate and guide the architecture, terminology definition and product-service combination content in various application scenarios of the new service-oriented manufacturing industry.

In summary, the Guidelines comprehensively cover all aspects of service-oriented manufacturing, from basics to industrial applications. However, they do not clarify the current state of standardization in this field. Understanding the current landscape of standards could require a significant workload. Additionally, standardization in this field involves multiple technical committees (TCs) as pointed out by the Guidelines, which complicates coordination and collaboration among them. Nevertheless, the release of the Guidelines underscores China's commitment to promoting the development of service-oriented manufacturing since 2015.



28. China Rolls Out 2024 Automotive Standardization Working Points

Automotive Standardization

On June 21, 2024, the Ministry of Industry and Information Technology (MIIT) rolled out the *Automotive Standardization Working Points (2024)* (hereinafter referred to as the Working Points). The Working Points encompass five major sections, including the standard systems, standardization in emerging and key areas, generic and safety standards, international standardization, and working mechanism optimization.

Background

The document is part of a series of working documents called "*Automotive Standardization Working Points*" prepared by MIIT since 2018. In the beginning, the working points were released in two separate documents focusing on two areas, namely the standardization for new energy vehicles and the intelligent connected vehicles respectively. Starting from 2021, the two documents have been integrated into one general *Automotive Standardization Work Points*, released annually (though the 2023 version is currently missing) to guide the automotive standardization work in that year. Content-wise, the working points in 2021 also expand its scope to the whole automotive-related standardization. In addition, with the release of the *National Standardization Development Outline* (hereinafter referred to as the Outline), this series of documents started to consider the whole life cycle management of standards, the implementation of standards, as well as interaction with technology, as what required by the Outline.

At present, it is the National Technical Committee of Auto Standardization (SAC/TC 114) that takes charge of automotive standardization.

Key takeaways

Standard system. The Working Points put forward the requirement for establishing the standard systems for new-energy vehicles and for carbon reduction in the automotive industry, as well as researching the technical standard systems for the fifteenth five-year plan, and for other emerging areas in the automotive industry, such as the solid battery, batter swap, AI for vehicles, etc.

Compulsory standards. The Working Points specifically highlight the release and implementation of compulsory standards regarding whole vehicle information security, software upgrading, and automated driving data recording systems, together with the formulation of compulsory standards involved with automatic emergency braking systems, combined driver assistance systems, and automotive cryptographic techniques.

Intelligent connected vehicles. Apart from the compulsory national standards stated above and the standards under development, the Working Points also include the requirement for the standards formulation in areas of information security engineering, automatic driving function simulation test methods, software upgrading engineering, data security management systems, automated parking, and terminology for automated driving test scenarios.

New-energy vehicles. The standardization requirements in areas of new-energy vehicles are mainly illustrated from the following five aspects,

- Security of electric vehicles
- Performance of traction batteries
- Technical requirement for key components
- Electricity charging efficiency
- Batter swap

Each aspect entails specific standardization areas. For example, concerning the security of electric vehicles, the Working Points call for revision of standards regarding the comprehensive safety of electric vehicles, traction battery safety requirements, and remote service and management systems for electric vehicles.

Automotive chips. Automotive chips (for electric vehicles) applicable environment and reliability, automotive chip information security standards are required to be formulated. For specific types of standards, relevant technical requirements and testing methods are required to be clarified through standards.

International cooperation. Convergence with the international community is also one of the five priorities of the automotive standardization community in 2024. The work includes adopting global standards, translating of current national standards, engaging in the United Nations' automotive technical regulations, developing universal automotive standards, and partnering with foreign countries or international organizations.

In a nutshell, the Working Points guide the current or near-future standardization work. The draft is supported by the SAC/TC114 who will follow the rest of the work accordingly. It is helpful for foreign stakeholders to examine the priorities of China's work in automotive standardization, especially because certain ones are compulsory standards.

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