SESEC V
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Seconded European standardisation Expert in China
(SESEC)

Index

Takeaways

SESEC Participates in China's First World Automobile Standards and Innovation Conference

From 27 to 29 November 2023, the China Automotive Technology and Research Center (CATARC) hosted the inaugural World Automobile Standards and Innovation Conference in Shenzhen. SESEC expert, Dr. Betty Xu, was invited to attend the conference and deliver a presentation during the international dialogue on sustainable development. Specifically, in the presentation titled "EU's Vision for Implementing the SDGs", Dr. Xu outlined the EU's green transition goals and the Green Deal policy portfolio.

SESEC Roundtable on Fostering Awareness and Enhancing Understanding on Sustainability

On 17 November, SESEC hosted its second roundtable of 2023, centered on the theme of sustainability. The primary objective of the roundtable, which was organized in hybrid format, was to increase the awareness and understanding of recent developments in sustainability policies, regulations, standards, and good practices. Approximately 30 researchers and standardization experts from EU and US industries and Chinese research institutes attended. Together, they engaged in a robust discussion, sharing their knowledge and expertise across a broad range of topics within the realm of sustainability.

Annual Meeting of Sino-German Standardization Cooperation Commission

The annual meeting of Sino-German Standardization Cooperation Commission was held virtually on November 10. Tian Shihong, Vice Minister of SAMR and Administrator of SAC, attended and presided over the meeting. More than 80 representatives attended the meeting, including Christoph Winterhalter, Chairman of the Executive Board of DIN, Michael Teigeler, Managing Director of DKE, heads of relevant departments in the Federal Ministry for Economic Affairs and Climate Action in Germany, as well as other representatives from standardization research institutes, technical bodies and enterprises in the two countries.

China Revises Rules on Sector Standards Management

On December 20, 2023, the State Administration for Market Regulation (SAMR) released an revised version of the *Administrative Measures for Sector Standards*. Sector standards are of significant importance in China This revised document is dedicated to regulate the sector standards in China. The essential content of the document includes the scope of standard formulation, the relationship between sector standards and national standards, patent disposal within sector standards, the adoption of international standards, foreign participation in sector standard formulation, and the transparency of sector standards. The Administrative Measures will enter into force from June 1, 2024.

SAC/TC260 Held the Second "Standard Week" of 2023

From 1 to 4 November 2023, the National Information Security Standardization Technical Committee (SAC/TC260) held its second "Standard Week" of 2023 in Wuhan, Hubei Province. This edition of the Standard Week comprised a plenary session, four thematic seminars, as well as the meetings of six working groups under TC260 on cryptography, identification and authorization, security assessment, communications, security management, and big data security. All these sessions focused on promoting the development of standards for AI security.

China's Recent Progress and Vision on 6G Standards and Technology

On December 5, 2023, China hosted the Global 6G Development Conference, a joint effort of the Chinese IMT-2030 (6G) Promotion Group, the China Institute of Communications, and the Liangjiang New Area Administrative Committee of Chongqing Province. The Chinese IMT-2030 (6G) Promotion Group was established in 2019 to advance 6G technology, standards, and international cooperation, and to conduct 6G technological experiments.

WAA Develops Standards to Improve WLAN Network Experience in Typical Scenarios

In the recently released *White Paper on High-quality WLAN Network Construction in Typical Enterprise Scenarios*, the World Wireless Local Area Network (WLAN) Application Alliance (WAA), a Huawei-led international standards development organization, disclosed its recent standardization activities.

China Updates 'General Principles for Green Product Assessment'

On October 18, 2023, the National Environmental Management Standardization Technical Committee issued a public call for comments on the revised General principles for green product assessment, with a deadline set for feedback on December 18, 2023.

China Adopts ISO Standard for Product Carbon Footprint Calculation

The National Environmental Management Standardization Technical Committee (SAC/TC207) and the National Carbon Emission Management Standardization Technical Committee (SAC/TC548) are currently seeking opinions on the national standard Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (Draft for Comments). The deadline to submit comments is 6 January 2024. This standard is a non-identical adoption of the international standard "*ISO 14067:2018 Greenhouse gases-Carbon footprint of products-Requirements and guidelines for quantification*". Its purpose is to address the lack in China of localized unified standards for product carbon footprint quantification.

China to Establish a Certification System for Product Carbon Footprint

On 13 November, the National Development and Reform Commission (NDRC), the Ministry of Industry and Information Technology (MIIT), the State Administration for Market Regulation (SAMR), the Ministry of Housing and Urban-Rural Development (MoHURD) and the Ministry of Transport (MOT) jointly issued the *Opinions on Accelerating the Establishment of a Product Carbon Footprint Management System*.

China Refines Rules for the Grading Certification of Green Building Materials

On December 22, 2023, China's National Certification and Accreditation Administration (CNCA) released the revised version of the *General Rules for Implementing the Green Building Materials Products Grading Certification*. The General Rules, which came into force on January 1, 2024, are an upgrade of the previous version issued by CNCA in 2020.

SESEC and Supported Events

1. SESEC Participates in China's First World Automobile Standards and Innovation Conference

#Automobile

From 27 to 29 November 2023, the China Automotive Technology and Research Center (CATARC) hosted the inaugural World Automobile Standards and Innovation Conference in Shenzhen.

The conference comprised a general assembly, international dialogues on sustainable development, strategy and policy, and seven symposia covering: vulnerable road user protection intelligent and connected vehicles; electric vehicle battery safety; automotive cyber and data security; low carbon development; unmanned vehicle; and foreign expert advisory group discussions.

During the conference, global industry and standardisation experts engaged in discussions on technical standards, regulations, standardisation innovation and best practices in the automobile industry. The objective was to foster international consensus on standardisation, advance collaborative research projects, promote exchanges, cooperation and mutual recognition of standards, and establish an international cooperation platform for standardisation.

SESEC expert, Dr. Betty Xu, was invited to attend the conference and deliver a presentation during the international dialogue on sustainable development. Specifically, in the presentation titled "EU's Vision for Implementing the SDGs", Dr. Xu outlined the EU's green transition goals and the Green Deal policy portfolio. Stressing the pivotal role of standards in achieving these goals and implementing the policies, she highlighted the EU's standardisation efforts, including the role of European standardisation system (ESS), CEN-CENELEC's latest strategy and work program, as well as how ESS aligns with EU policy targets and facilitates global SDG targets through efficient work mechanisms like VA, FA, and various international collaborations.

Experts from other international organizations, including the Office of the UN Resident Coordinator in China, UN Inland Transport and Sustainable Development, WHO, ISO, ANSI, and Uganda National Bureau of Standards, also joined in the dialogue, sharing their insights and best practices.

2. SESEC Roundtable on Fostering Awareness and Enhancing Understanding on Sustainability

#Sustainability

On 17 November, SESEC hosted its second roundtable of 2023, centered on the theme of sustainability. The primary objective of the roundtable, which was organized in hybrid format, was to increase the awareness and understanding of recent developments in sustainability policies, regulations, standards, and good practices. Approximately 30 researchers and standardization experts from EU and US industries and Chinese research institutes attended. Together, they engaged in a robust discussion, sharing their knowledge and expertise across a broad range of topics within the realm of sustainability.

Professor Yu Jiang, a distinguished researcher from the Institute of Science and Development at the Chinese Academy of Sciences, shared valuable insights into the underlying principles of China's recent innovation and cooperation policies. Emphasizing the continued prioritization of EU-China cooperation on the government's agenda, Professor Yu provided a comprehensive perspective on the policy dynamics shaping collaboration between the two entities.

Dr. Betty Xu, SESEC expert, offered an up-to-date overview of the latest advancements in the EU's eco-design standardization, highlighting its crucial role in supporting EU regulations. The presentation particularly showcased the ongoing efforts in the EU to align regulations and standards with sustainable design principles.

Mr. Liu Shijie, a senior zero-carbon business analyst at Envision Group, enriched the discussion with a presentation on the firm's strategy and case studies in carbon footprint calculation and audit. This contribution provided valuable insights into China's effective practices for measuring and reducing carbon footprints.

Dr. Meng Fanjing, the Chief Technology Officer of IBM China Systems Lab, took the stage to showcase the company's practices in sustainable computing. His presentation delved into the innovative approaches adopted by IBM to minimize the environmental impact of computing technologies.

The roundtable served as a vibrant platform for sharing and exchanging ideas and knowledge, exemplifying SESEC's commitment to fostering mutual understanding and collaboration between EU and Chinese stakeholders. The diverse range of topics covered and the active participation of experts underscore the importance of such an initiative in advancing sustainable practices and building bridges among global stakeholders. The event also demonstrated SESEC's pivotal role as a facilitator of informed dialogue and collaboration in the pursuit of shared sustainability goals.

3. Review of SESEC Webinars in November and December

SESEC Events

a) Quantum Standardization Development in China

China prioritizes frontier technologies as a strategic imperative for enhancing national competitiveness. As a result, the development of Quantum Information Technology (QIT) is of great significance to China, and various efforts have been put into place, ranging from national policies and project implementation to standardization. With comprehensive support from the government, China has made notable achievements and progress in the field, establishing itself as one of the leading countries in QIT development globally. To help foreign stakeholders to have a clear picture, SESEC held a SESEC V Webinar 11: Quantum Standardization Development in China. During the webinar, Dr. Betty XU introduced and analyzed key Chinese SDOs in quantum standardization and international cooperation.

For the recording, please click the following link: https://us06web.zoom.us/rec/share/4y5WlkEuOpVWuagC2vrZd8Bj4JP2p5FwU2N3Yc2zE45-no1xZzlByWz8sdz0s3vh.hMaDhvTRfVBOzL8v
Password: 1q+h4!71
You may also find the above information on SESEC's website: https://sesec.eu/2023/news-events/events/sesec-v-webinar-11-quantum-standardization-development-in-china/

b) China's Green Product Standards and Certification Scheme

In recent years, China has made significant progress in the development of green product standardization and certification. As a key component of sustainable development, green products play a crucial role in reducing environmental impact and promoting resource conservation. To update foreign stakeholders on recent development of relevant policies, SESEC held a dedicated SESEC V Webinar 12: China's Green Product Standards and Certification Scheme. During the webinar, Dr. Betty XU provided her insights on China's green product standards and certification scheme.

For the recording, please click the following link: https://us06web.zoom.us/rec/share/O3uPOLyn9F-yDRRETjMbdZar0_oI9BfqyKbNcbVxWs6KjZUWfLgEEYCw6rh1ak92.roPjhfTSyG5I54V_
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You may also find the above information on SESEC's website: https://sesec.eu/2023/news-events/events/sesec-v-webinar-12-chinas-green-product-standards-and-certification-scheme/

Horizontal Actions

4. SAMR Deploys Key Tasks for Market Supervision in 2024

Horizontal and Policies

On 27 and 28 December 2023, SAMR convened the National Market Supervision Work Conference, reviewing the work conducted in 2023 and outlining the key tasks for 2024.

The conference emphasized that in 2023, the national market supervision system achieved eight main results. Specifically, it: i) promoted the healthy development of business entities, ii) strengthened the governance of fair competition in building a unified market across the country, iii) effectively and orderly advanced the "building of China's strength in product quality"(质 量 强 国) and the implementation of the "National Standardization Development Outline", iv) established and improved safety responsibility systems for food, drugs, industrial products, and special equipment, v) strengthened market supervision law enforcement in fields affecting people's livelihood, vi) enhanced the standardization and digitization levels of market supervision, vii) comprehensively conducted investigations and rectification of issues related to the work style within the market supervision system, and viii) actively carried out comprehensive cooperation and exchanges.

In 2024, market supervision departments will focus on improving the quality of development of business entities; vigorously promote the implementation of fair competition policies; fully leverage the roles of quality and standards to strengthen the construction of quality infrastructure; firmly safeguard the safety bottom line of food, drugs, industrial products, and special equipment; innovate regulatory methods; comprehensively advance strict, standardized, fair, and civilized law enforcement; and improve the quality of the market supervision workforce. Specifically, market supervision departments will:

- Implement various measures to enhance the quality of business entity development. Efforts will be directed towards optimizing the scale and structure, increasing activity levels, improving compliance levels, enhancing innovation and competitive capabilities, assisting in quality and efficiency improvement, and guiding the undertaking of social responsibility.
- Continue to rectify improper market competition and market intervention behaviors. SAMR will accelerate the promulgation of the "Regulations on Fair Competition Review," conduct special law enforcement actions against anti-monopoly and anti-unfair competition in fields affecting people's livelihood, refining and improving anti-monopoly and anti-unfair competition system rules, and increase publicity efforts for fair competition compliance by operators.
- Establish quality benchmarks and advanced standards. SAMR will select leading companies in the "building of China's strength in product quality", initiate major flagship projects in the construction of a strong quality chain, nurture counties, districts and towns with strong quality attributes. It will also improve technical, emission, and energy consumption standards, make breakthroughs in international standards in key and emerging areas, and implement major flagship projects of standards stabilizing supply chains.
- Promote orderly competition and innovative development in the platform economy. SAMR will optimize the environment for innovative development, guide platform companies to compete in an orderly manner, stimulate the internal dynamics of operators within platforms, and enhance the level of normalized supervision.
- Fully implement safety responsibilities for food, drugs, industrial products, and special equipment. SAMR will establish a sound food safety risk prevention and control system, strictly supervise drug safety risks, address the root causes of industrial product quality and safety, and implement the safety responsibilities of special equipment.
- Enhance the efficiency of law enforcement. SAMR will establishing a mechanism to supervise and urge the implementation of the system of "three documents and one letter" (referring to "Reminder and Urging Letter", "Interview Notice", "Investigation Notice", and "Administrative Penalty Decision – for business entity" or "Administrative Advice Letter – for administrative organ"). It will also regulate the discretionary power of

administrative penalties, improve regulatory systems and rules, strengthen the incentive and constraint role of credit, improve smart regulatory capabilities, and coordinate in handling cases and protecting consumer rights.

- Continuously deepen cooperation among local-level departments of SAMR, regions, as well as international exchanges. SAMR will actively promote innovation and internationalization in the construction of quality infrastructure, enriching cooperation measures for local-level departments and agencies, enhance regional coordination levels, and deepen international exchanges.

In summary, for 2024, SAMR will emphasize efforts to foster a fair and competitive business environment. Concurrently, SAMR will maintain its commitment to ensuring product safety, promoting innovation, and further enhancing the efficiency and effectiveness of market supervision in China. It is noteworthy that SAMR has proposed to expedite the promulgation of the "Regulations on Fair Competition Review". This document, together with others released in 2023, such as the "Provisions on Prohibiting the Abuse of Administrative Power to Exclude or Restrict Competition", the "Guidelines for the Implementation of Third-Party Evaluation in Fair Competition Review", and the "Guidelines for Enforcement Talks on Abusing Administrative Power to Exclude or Restrict Competition", will collectively establish a legal framework to safeguard against improper market intervention practices.

5. Annual Meeting of Sino-German Standardization Cooperation Commission

Standardization Cooperation

The annual meeting of Sino-German Standardization Cooperation Commission was held virtually on November 10. Tian Shihong, Vice Minister of SAMR and Administrator of SAC, attended and presided over the meeting.

More than 80 representatives attended the meeting, including Christoph Winterhalter, Chairman of the Executive Board of DIN, Michael Teigeler, Managing Director of DKE, heads of relevant departments in the Federal Ministry for Economic Affairs and Climate Action in Germany, as well as other representatives from standardization research institutes, technical bodies and enterprises in the two countries.

The participants exchanged the latest standardization policies on carbon peak and neutrality, listened to the reports on the achievements made by the Sino-German sub-working groups with regard to standardization strategies, intelligent manufacturing/Industry 4.0, electric vehicles, and intelligent connected vehicles, and carried out communications on the standardization cooperation issues of common concern.

Both sides agreed to continue to promote the standards cooperation in areas such as civil aviation, all-electric society, carbon emission reduction in agriculture, artificial intelligence in medical equipment, battery recycling, and standardization education in a broader and more practical way, providing the technical basis for their economic growth and trade cooperation.

Source: China Standardization Magazine, Supplement Issue in 2023

6. China's New Management Rules for Certification Rules

Policy and Regulations

On December 12, 2023, China's National Certification and Accreditation Administration (CNCA) issued the *Announcement on Strengthening the Management of Certification Rules (Draft for Comment)* (hereinafter referred to as the Draft). The Draft is open for public comment until January 11, 2024. According to the latest Regulations on Certification and Accreditation (Call for Comments 2023), there are two types of certification rules and schemes: (i) those promoted by the State; and (ii) those developed or adopted by certification bodies. The subject of the Draft is clearly the latter one. The draft specifies that its scope applies to "the certification rules not yet formulated by CNCA, neither independently nor in conjunction with the relevant departments of the State Council. Instead, it applies to the certification rules formulated, or authorized for implementation, by the relevant certification bodies approved in the corresponding certification field."

The Draft represents an overhaul of the currently implemented CNCA's Announcement on the Recordation of Certification Rules. Through an analysis of the objectives of the two documents, it emerges that the former highlights sound development and management, while the latter focuses on stimulating market vitality – which can be translated into less conformity obligations for certification bodies. In general, the overhaul is a response to the current development of the certification industry, which highly differs from the time when CNCA's Announcement was issued in 2015. For instance, the industry now requires for more governmental surveillance and specification to ensure the quality of the certification schemes developed or adopted by certification bodies. The essential changes introduced by the Draft and mostly concerning foreign stakeholders, are summarized below:

- **Management requirements**

The Draft puts forward obligations for the certification bodies regarding the management of the certification scheme. Specifically, the certification bodies shall establish management systems for the development, revision, demonstration, self-inspection, review, dynamic maintenance of the scheme,and form relevant documentation in the process. The Draft also introduces a detailed responsibility management mechanism for each section.

- **Content requirements**

The content requirements consist of generic requirements, special requirements for different types of certification, and other requirements. The generic requirements and other requirements are applicable to all the certification schemes developed or adopted by certification bodies; while the special requirements are only applicable to the exact type of certification indicated. For instance, all the certification schemes shall cover the application scope, technical specifications (or compulsory requirements of the technical specification or standards), competence requirements of the certification personnel, certification implementation procedures, procedures for follow-up surveillance and re-certification, requirements for certificates and marks, as well as the conditions for changing certificates status. In addition, specifically for product certification, the certification schemes shall also have specific rules for type of approval and unit partition.

- **Surveillance requirements**

Apart from do's and don'ts for certification bodies implementing surveillance requirements, the Draft also outlines responsibilities for competent governmental authorities. Specifically, these shall organize spot checks and prosecute those non-compliant certification bodies, in accordance with the Regulations on Certification and Accreditation, Measures for the Administration of Certification Institutions, and other relevant legislation. Such clarification and instruction on the governmental authorities provide a strong support for ensuring the compliance of certification bodies with the requirements indicated in the Draft.

In addition to the aforementioned aspects, the Draft also introduces changes regarding recording and filing requirements. Certification bodies will be required to take all necessary actions to comply within 60 days after the document's entry into force. Foreign stakeholders are advised to keep monitoring the progress of the Draft, and adjust accordingly as needed.

7. China Revises Rules on Sector Standards Management

#Sector Standards

On December 20, 2023, the State Administration for Market Regulation (SAMR) released an revised version of the *Administrative Measures for Sector Standards* (hereinafter referred to as the Administrative Measures). Sector standards are of significant importance in China This revised document is dedicated to regulate the sector standards in China. The essential content of the document includes the scope of standard formulation, the relationship between sector standards and national standards, patent disposal within sector standards, the adoption of international standards, foreign participation in sector standard formulation, and the transparency of sector standards. The Administrative Measures will enter into force from June 1, 2024.

Objective

- The objective of the Administrative Measures is explained mainly from the following three aspects:
- To implement the standardization reform and meet the requirements for innovation, shifting from government-led to a balanced government-market approach in standard supply. Sector standards, as one of the government-led type of standards, is further regulated in the Administrative Measures to support the transformation.
- To solve the problems and challenges faced by sector standards. At present, there are many problems in the administration of sector standards, such as the inconsistent relationship with national standards or between sector standards, the out-of-scope development of sector standards, and the belated recordation issues, etc.
- To align with the adjusted responsibilities of state organs. Since 2018, the central government has deepened the reform of state institutions, the responsibilities of departments have been adjusted. The revision of Administrative Measures emphasize that industry authorities are to be responsible for the full life cycle of sector standards (i.e. development, implementation, review, follow-up surveillance) while SAMR is to play the supporting roles, such as providing general guidance and management, as well as support to recordation and information disclosure.

Main revisions

The revision of the Administrative Measures mainly includes the following five aspects.

- Specifying the voluntary nature of sector standards, and the scope for development.
- Clarifying the roles of industry authorities and the SAMR in terms of development and management of sector standards as aforementioned.
- Standardizing the formulation and management of sector standards, and further clarifying the process of formulating sector standards and the work requirements of each stage, such as the requirements for sector standards involving patents, the adoption of international and foreign advanced standards, and the participation of foreign-invested enterprises in the formulation and revision of standards and other social concerns.
- Promoting the effective implementation of sector standards, and further clarifying the requirements for sector standards review, information feedback collection and evaluation.
- Strengthening the operational and post-operational oversight for sector standards, the establishment of supervision and spot check, self-supervision and social supervision work mechanism, and clarifying all kinds of measures for noncompliance.

Institutional opening-up

The institutional opening efforts are reflected in the Administrative Measures from two aspects:

- Standard-wise: the Administrative Measures clarify the requirements in terms of adoption of international standards or foreign standards, development of foreign versions of sector standards; (Article 16)
- Development-wise: the Administrative Measures highlight the protection of equal participation of foreign invested business to participate in the standard development/revision. (Article 13)

The important point to note is that, even though the sector standard is considered voluntary under the new Administrative Measures (Article 4), there is still a possibility that other regulations may refer the sector standards, thereby making them mandatory. In practices, the sector standards have held an equal position to national standards for a long time. In the machinery industry, for instance, numerous sector standards are currently in use and are even referenced by market access schemes, effectively becoming mandatory requirements for products, such as JB/T3244

battery reach trucks, JB/T9012 side-loading trucks, and JB/T3300 counterbalanced fork-lift trucks-testing method for whole machines. These standards are compulsory due to the fact that they are referenced in the Regulation on Safety Technology for Special Purpose Motor Vehicles in Special Fields. Therefore, foreign stakeholders are advised to monitor and even participate in the formulation of sector standards in case that they are referenced by regulations.

Digital Transition

8. China Unveils New Rules for Industrial Internet Security

Internet Security

China's Ministry of Industry and Information Technology (MIIT) has unveiled a comprehensive framework for the security classification and grading rules governing the industrial internet. In a notice issued on October 24, 2023, MIIT solicited public opinions on the Administrative Measures for Industrial Internet Security Classification and Grading (Draft for Public Comment). This initiative targets various sectors under MIIT's purview, encompassing raw materials, equipment, consumer goods, and electronic information manufacturing industries.

The proposed classification and grading system specifically targets industrial internet enterprises, classifying them into three distinct categories: those utilizing industrial internet, industrial internet platform enterprises, and industrial internet identifier resolution enterprises.

Under the proposed measures, industrial internet enterprises must conduct a self-assessment based on specified standards for security classification. Factors considered include the company's size, business scope, extent of industrial internet application, critical system importance, control over sensitive data, significance for industry development and supply chain security, as well as the potential consequences of cybersecurity incidents. After the self-assessment, enterprises will be assigned a grade, ranging from one to three, with three being the highest.

To formalize this process, industrial internet enterprises are required to register their details on the National Industrial Internet Security Classification and Grading Management Platform. This registration encompasses essential information such as company name, type, grade, contact details, and cybersecurity personnel. Additionally, these enterprises must undergo regular compliance assessments, either independently or through third-party organizations. Grade three enterprises are mandated to conduct annual assessments, while grade two enterprises must do so every two years.

MIIT plans to establish and refine a comprehensive mechanism for security inspection and evaluation of industrial internet enterprises, conducting periodic assessments. Non-compliance with the established measures, failure to fulfill network and data security obligations, posing significant security risks or experiencing security incidents, are cases that may lead to enforcement actions by the MIIT and local supervisory departments, in accordance with relevant laws such as China's Cybersecurity Law and Data Security Law.

Moreover, the document signals MIIT's intention to guide internet-connected industrial enterprises in identifying critical industrial control systems. It proposes the inclusion of distributed control systems (DCS) and similar systems in the Catalog of Critical Network Equipment, thereby requiring mandatory testing and certification.

Stakeholders and interested parties may submit comments to the proposed measures until November 22, 2023.

9. SAC/TC260 Held the Second "Standard Week" of 2023

Information Security

From 1 to 4 November 2023, the National Information Security Standardization Technical Committee (SAC/TC260) held its second "Standard Week" of 2023 in Wuhan, Hubei Province. This edition of the Standard Week comprised a plenary session, four thematic seminars, as well as the meetings of six working groups under TC260 on cryptography, identification and authorization, security assessment, communications, security management, and big data security. All these sessions focused on promoting the development of

standards for AI security. Approximately 800 participants attended the week-long event, including representatives from China's cybersecurity authority, the heads of the working groups, and members of TC260.

During the plenary session, Mr. Zhao Zeliang, the Director of TC260, emphasized the need to strengthen research and development of standards and specifications. This includes, specifically, the theoretical foundations, training mechanisms, and application models of artificial intelligence, large language models, and generative artificial intelligence. Mr Zhao also urged expedited research on security assessments and standards formulation for AI-generated codes.

Gao Lin, Director of the Cybersecurity Coordination Bureau of the Cyberspace Administration of China and Deputy Director of TC260, introduced recent AI policies and provided suggestions for their implementation, including the "Global Artificial Intelligence Governance Initiative" and the "Interim Measures for the Management of Generative Artificial Intelligence Services". Head of the Hubei Provincial Cyberspace Administration and industry experts also shared their initiatives and practices in the field of AI security.

During the four themed seminars, experts from cybersecurity-related authorities, TC260, and the industry presented China's latest developments of policies, standards, and technologies related to the security of critical information infrastructure, secure cross-border data flows, network security products and services, and cybersecurity testing platforms.

During the working group meetings, drafters of standards introduced the development of dozens of projects at various stages, including initiation, drafting, technical review, solicitation of opinions, and approval. They engaged in in-depth discussions with experts attending the meetings, aimed at boosting the development of these projects.

10. China Releases RFID Technology and Standardization Blue Paper

RFID

On November 24, 2023, during the 5th Industry Development and Technology Cooperation Seminar 2023 sponsored by the Shaanxi Provincial Department of Industry and Information Technology, the China Electronics Technology Standardization Institute (CESI) released the *Blue Paper on Radio Frequency Identification Technology and Standardization (2023)* (hereinafter referred to as the Blue Paper). Radio frequency identification (RFID) technology is a crucial component of the perception layer of the Internet of things. It provides an essential technical support for advancing the digital transformation of the industry, and for enhancing the visualization and transparency of enterprise operations and management to improve efficiency. The Blue Paper is the outcome of collaboration among 26 Chinese organizations, including RFID-related enterprises, institutions and universities.

The Blue Book comprehensively introduces:

- The current state of RFID related technologies;
- Analysis of RFIDstandardization progress in 12 typical RFID application fields, such as logistics, traffic management, retail, manufacturing, and anti-counterfeiting traceability;
- Lists of relevant international and domestic standard development organizations, the structure of the standard systems (for China's RFID standard system,see Figure 1), and the lists of relevant standards; The domestic standards mainly consist of national standards, sector standards, and local standards. A total of 203 standards are listed. Among them, 13% standards (namely, 27 standards) are in the category for RFID' s application in motor vehicles.
- Suggestions for the next steps.

In recent years, driven by the rapid advancements in electronics, communications, information technology and manufacturing, coupled with a significant reduction in the cost of electronic tags, RFID technology has entered the stage of widespread commercial application. It is now extensively used in logistics, transportation, manufacturing, asset management, retail, medical, anti-counterfeiting, and other industries. Currently, China has established a comprehensive standard system in this field, and has formulated several key technical standards, effectively meeting the needs of the country's industrial development. While different industries have formulated relevant application

standards to guide the application and promotion of RFID technology in their respective domains, the continuous evolution of RFID technology and the expanding array of application scenarios necessitate ongoing standardization efforts. As a result, the demand for standardization will continue to grow.

For the next steps, the CESI lists 5 suggestions for the further standardization work:

- Contributing to standardization work of ISO/IEC JTC1/SC31;
- Advancing standard system based on technological evolution;
- Promoting the implementation of self-developed standard and application;
- Strengthening the research and development of standards for applications;
- Constructing the platform for certification and testing to meet the needs generated from technological evolution and applications.

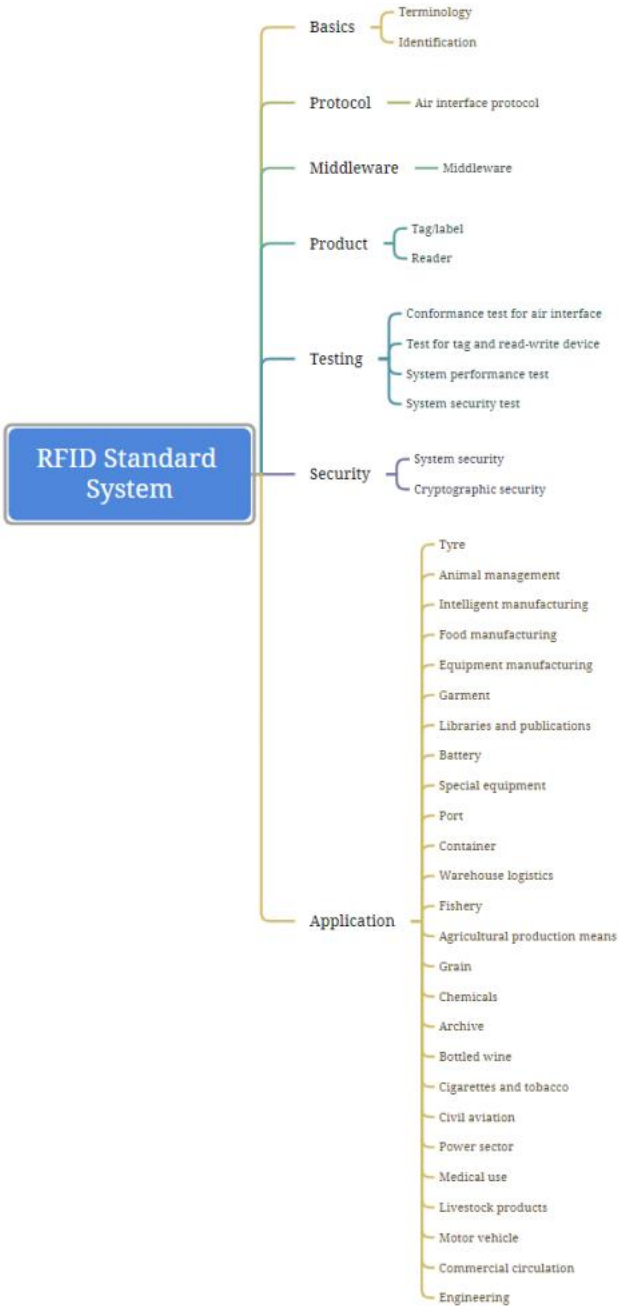

Figure 1. China's RFID Standard System

11. China's Recent Progress and Vision on 6G Standards and Technology

6G

On December 5, 2023, China hosted the Global 6G Development Conference, a joint effort of the Chinese IMT-2030 (6G) Promotion Group, the China Institute of Communications, and the Liangjiang New Area Administrative Committee of Chongqing Province. The Chinese IMT-2030 (6G) Promotion Group was established in 2019 to advance 6G technology, standards, and international cooperation, and to conduct 6G technological experiments.

During the conference, Ms. Wang Zhiqing, president of the IMT-2030 (6G) Promotion Group, was interviewed by China Central Television (CCTV) journalists about the recent progress and the vision for 6G. Below are the key takeaways from the interview:

- The expected time of 6G commercialization is around 2030, with standardization work commencing in 2025.
- The three main scenarios for 6G application include the integration of communication and sensing, integration of communication and Artificial Intelligence, and ubiquitous internet of things.
- 6G connectivity will expand beyond human beings to include AI agents such as robots and the meta-universe.
- The service objects of 6G will consist of societymanagement, social governance, and AI agents.
- Base stations will be upgraded to provide support for communication and sensing. Examples include traffic sensing, which will facilitate traffic management and generate new business opportunities.
- Current 6G development involves technological experiments and research in system architecture and technical solutions, laying the foundation for future advancements.

In addition to the above key takeaways, the Global 6G Development Conference showcased recent research achievements of the IMT-2030 (6G) Promotion Group. These mainly include the formulation of two white papers:

1. White Paper on 6G Network Architecture: from a Systematic Perspective: This white paper provides a comprehensive analysis of the network architecture for 6G systems, offering insights into the design principles and network capabilities.
2. White Paper on Design Principles and Typical Features of 6G Wireless Systems: This white paper proposed the functions and operational characteristics, as well as design principles of 6G wireless systems, on the basis of 6G deployment and network needs.

Furthermore, in 2023, China made significant contributions to the International Telecommunication Union (ITU)'s Recommendation Framework for IMT-2030 (Global 6G Vision) by putting forward five types of 6G usage scenarios and fourteen capabilities, which have been incorporated into ITU's framework. These contributions demonstrate China's proactive approach towards 6G development, encompassing both technological advancements and standardization efforts.

12. China's Report on Evaluation Index of Digital Government Standardization Construction Released

Digital Government

Hosted by the State Information Center, Shandong Provincial Big Data Bureau, and Qingdao Municipal People's Government, the 2023 China Smart Cities Development & Innovation Summit (CSCDIS) assembled over 1,500 representatives from ministries, universities, institutions, local authorities, etc., on November 24-25 in Qingdao, East China's Shandong province.

During the summit, China National Institute of Standardization (CNIS) released the Report on Evaluation Index of Digital Government Standardization Construction. It is the third consecutive year that CNIS has released the "Digital Standardization Index" report. The report is the first of its kind in China to systematically measure the supporting role of standardization in the construction of digital government, which adopts objective data on the position of a third party.

By constructing a comprehensive and systematic index

system and combining text big data mining with traditional evaluation methods, the "Digital Standardization Index" assesses the standardization work of provincial digital governments across the country. The overall "Digital Standardization Index" of China is 77.1, which shows an obvious increase compared with the previous two years. Guangdong, Shandong and Zhejiang rank the top three for three consecutive years, followed by Beijing, Guizhou, Shanghai, Jiangsu, Fujian, Sichuan and Shanxi.

In February this year, the Overall Plan for the Construction of Digital China was released, which puts forward the requirements for establishing the technical standards system, developing guidelines for digital standards, and accelerating the development and revision of application standards for digital transformation of various industries and industrial integrated development.

According to the report, local governments have deepened the understanding of standardization in the digital government construction, and standardization has plays a fundamental, supporting role in promoting the orderly circulation of data, stabilizing new technical regulations, connecting system platforms, and promoting simple, convenient and high-quality services.

Source: China Standardization Magazine, Supplement Issue in 2023

13. MIIT Formulates Penalty Guidelines for Data Security Violations

Data Security

On 23 November 2023, the Ministry of Industry and Information Technology (MIIT) initiated the solicitation of opinions on the *Administrative Penalty Discretion Guidelines for Data Security in the Industrial and Information Fields (Trial)* (hereinafter referred to as the Guidelines). The document further refines the provisions of penalties related to the Data Security Law, establishes an administrative penalty authority system for data security in the industries within MIIT's jurisdiction, standardizes the scale of administrative penalties for data security, and guides industry regulatory authorities in carrying out administrative penalties for data security. The deadline for feedback is 23 December 2023. More specifically, the Guidelines explicitly define the scope of the locations where data security violations occur, encompassing the place of residence, network access points, and other relevant areas. Dispute resolution methods are proposed for jurisdiction at different levels, including supervisory jurisdiction, territorial jurisdiction, transfer jurisdiction, and cross-jurisdiction. The document also indicates that the same data security violation by data processors in the industrial and information fields should not be subject to administrative penalties more than twice.

Using the Data Security Law as a benchmark, the Guidelines outline three categories of triggering conditions for illegal acts: (i) failure to fulfill data security protection obligations; (ii) illegally providing data to overseas entities; and (iii) non-cooperation with supervision activities. Taking into account factors such as data level and quantity, harm to public interest, direct economic losses, and scope of impact, the document classifies the severity of data security violations into three tiers of light, medium, and serious circumstances. It clearly defines the discretion steps such as non-punishment, lenient punishment, mitigated punishment, and severe punishment, detailing the applicable conditions for each administrative penalty.

Regarding cross-border data transfers, a matter of widespread concern to overseas stakeholders, the Guidelines state that providing industrial and information data stored in China to foreign industrial, telecommunications, and radio law enforcement agencies without the prior approval of MIIT constitutes one of the situations of illegally providing data overseas. Furthermore, if the data transfer involves key data or core data, or exceeds 10 million generic data, it is considered a moderately serious circumstance; if it involves key data or core data processed by two or more data processors, or exceeds 100 million generic data, it is deemed a serious circumstance. Regulatory authorities will determine the degree of the penalty to be imposed based on the severity of the circumstances, violation records, subjective or passive involvement, and cooperation with supervision. Alongside the Guidelines, the Administrative Penalty Discretion Benchmark for Data Security in the Industrial and Information Fields was also released. The document lists 14 illegal acts and establishes specific standards for penalties corresponding to each level of discretion for every violation.

14. WAA Develops Standards to Improve WLAN Network Experience in Typical Scenarios

WLAN

In the recently released White Paper on High-quality WLAN Network Construction in Typical Enterprise Scenarios, the World Wireless Local Area Network (WLAN) Application Alliance (WAA), a Huawei-led international standards development organization, disclosed its recent standardization activities.

WAA has been mainly conducting two projects for typical enterprise scenarios: the Testing and Certification Project for Office Park Scenarios and the Industrial WLAN Communication Working Group.

The Testing and Certification Project for Office Park Scenarios aims to identify KQI indicators and performance indicators for office park scenarios by analyzing their business and scenario features. Based on the specific performance indicators and corresponding testing methods of a given scenario, it will develop a "testing and certification standard for office park scenario" to facilitate an office park scenario client establishing its WLAN network.

The Industrial WLAN Communication Working Group is currently focusing on defining business requirements and scenario characteristics within the scope of intelligent manufacturing. In the near future, the working group will release corresponding testing and certification standards.

Apart from the above, WAA is currently engaged in the Network-Terminal Collaboration Technology Standards Project, which primarily addresses two issues in collaborative interaction between network-side devices and terminal devices. Firstly, roaming optimization: When terminals move among multiple AP devices, differing roaming decision logic can result in slow roaming switching or laggy terminals when conflicting decisions occur. Secondly, Quality of Service (QoS) assurance: As WiFi protocol bears increasingly diverse and complex services, including latency-sensitive services like interactive gaming and XR/VR, the latency directly impacts user experience. The lack of a unified negotiation mechanism between AP and STA currently leads to user experience problems, such as lagging and disconnection when some terminal-side network information is absent. Based on these discussions, the Network-Terminal Collaboration Technology Standards Project aims to elevate user experience by coordinating AP and STA through protocols, achieving air interface performance akin to cellular technology.

In addition to the ongoing projects and working groups mentioned above, WAA also plans to develop a series of testing and certification projects in typical enterprise scenarios such as education and healthcare. These initiatives aim to provide standards for users in network construction and device selection.

More information about WAA can be found at: https://sesec.eu/2022/news-events/news/china-to-set-standards-for-wlan/

Green Transition

15. China Updates 'General Principles for Green Product Assessment'

Environmental Standards

October 18, 2023, the National Environmental Management Standardization Technical Committee issued a public call for comments on the revised *General principles for green product assessment*, with a deadline set for feedback on December 18, 2023.

This standard plays a pivotal role in China's green product assessment scheme. It was initiated in 2016 with the issuance of the "*Opinions on Establishing a Unified System for Green Product Standards, Certification, and Labeling*" by the State Council. This initiative aimed to integrate China's green product standards, certification, and labeling. Specifically, it proposed a unified system for green products based on "one category, one standard, one list, one certification, and one label". In response, the Standardization Administration of China (SAC) established the National Green Product Evaluation Standardization Group in 2016 to coordinate and advance the standardization of green products.

Consequently, in 2017, the national standard *GB/T 33761-2017 General principles for green product assessment* was finalized. It unified the concept of green products and establishing standardized assessment methods and criteria. The standard also underscored the adherence of green products to the entire life cycle principle and green leadership, solidifying the standard's leading position in the industry. The standard stipulated that the proportion of green products should generally not exceed 5% of comparable products. Green products were required to meet both the basic requirements set by the standard and the assessment criteria for the four major attributes: resources, energy, environment, and quality.

The recent introduction of China's national Carbon Peak and Neutrality strategy has put forth new and higher requirements for the standardization work of green product assessment, along with other policies such as the *National Standardization Development Outline* and the *Implementation Plan for Promoting Green Consumption*. Therefore, GB/T 33761-2017 needs to be revised to align with the new requirements. It aims to do so by enhancing the consideration of low-carbon attributes in the standard, fulfilling the demands for expanding the supply of green products, and improving the standard based on the development of green product assessment standards for specific product categories, thereby enhancing the scientific and guiding nature of the standard.

Compared to the old version of the standard currently in force, the proposed revised text of GB/T 33761-2017 incorporates "Low Carbon Attribute Indicators" and relevant requirements, "Encouraging Requirements" indicators and relevant requirements, "Product Carbon Reduction Report Framework and Requirements," as well as "Product Carbon Footprint Quantification Method and Declaration Report Framework."

16. COP28 in Dubai: China's Standardization's Contribution to Climate Goals

Climate Change

On December 4, 2023, during the 28th United Nations Climate Change Conference (COP28) in the Dubai, United Arab Emirates, China hosted the side event "Standardization Contributes to Meeting Climate Goals". Over 60 participants attended the conference, including representatives from the International Organization for Standardization (ISO), national standardization bodies, media, research institutions, and industry professionals. Keynote speeches were delivered by Mr. Xiao Han, Director-General of the Standards Innovation Management Department of the State Administration for Market Regulation (SAMR); Mr. Sun Zhen, Level I Bureau Rank Official of the Climate Change Response Department of the Ministry of Ecology and Environment (MEE); and Ms. Noelia Garcia Nebra, Head of Sustainability, in charge of advancing ISO's commitment to the UN SDGs.

During the meeting, representatives from SAMR and the China National Institute of Standardization introduced China's relevant standardization policy mechanisms and key tasks to be carried out as part of the country's efforts to achieve carbon peak and carbon neutrality. Mr. Sun Zhen also introduced the progress of China's efforts in mitigating and adapting to climate change, and in pushing forward the construction of the national carbon market. Representatives from standardization bodies in Germany, the United Kingdom, Singapore, and other countries, shared their experiences and best practices in promoting standardization as part of the response to climate change, engaging in discussion with representatives from the industry. Ms. Noelia Garcia Nebra introduced ISO's efforts, achievements, and visions in addressing climate change, as well as the important role of ISO standards in translating climate commitments into concrete actions.

The conference brought together stakeholders from various countries and bodies, and provided a platform for exchanging and sharing green and decarbonization transition policies, standardization applications, as well as practical cases and experience. The conference provided insights into China's standardization policies, actions, and achievements in tackling climate change, while facilitating communication and cooperation among domestic and international standardization bodies in the field of climate change.

17. China Adopts ISO Standard for Product Carbon Footprint Calculation

Carbon Footprint

The National Environmental Management Standardization Technical Committee (SAC/TC207) and the National Carbon Emission Management Standardization Technical Committee (SAC/TC548) are currently seeking opinions on the national standard *Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (Draft for Comments)*. The deadline to submit comments is 6 January 2024.

This standard is a non-identical adoption of the international standard "ISO 14067:2018 Greenhouse gases-Carbon footprint of products-Requirements and guidelines for quantification". Its purpose is to address the lack in China of localized unified standards for product carbon footprint quantification.

In comparison to ISO 14067:2018, the main modifications made in this standard include:

- Replacing the international standards referenced in ISO 14067:2018, with corresponding national standards in China – for instance ISO 14040:2006 was replaced with GB/T 24040-2008. Reference to the latest international standards is maintained if there is no corresponding national standard in China.
- Adding terms and definitions such as "intermediate product", "product flow", "energy flow", "emissions", "input", "output", "allocation", "information module", "uncertainty analysis", "Type III environmental declaration", and "communication of footprint information". The aim is to facilitate understanding of the methods for quantifying product carbon footprint.
- Adding requirements for the compilation of "Carbon Footprint of a Product- Product Category Rules (CFP–PCR)", providing a reference for the formulation of product category rules in specific domains.
- Adding product carbon footprint calculation formulas and reference values for Global Warming Potential (GWP) in the impact assessment of product carbon footprints, thus facilitating understanding of quantification methods.
- Adding a template for product carbon footprint research reports, providing a reference for the preparation of specific reports.
- Adding requirements for product carbon footprint declaration or information exchange (according to GB/T 24025 or ISO 14026), providing a reference for product carbon footprint self-declaration or third-party verification.

In the latest policy documents, such as the "National Standardization Development Outline", the "Implementation Plan for Establishing a Comprehensive Carbon Peak and Carbon Neutrality Measurement System", the "Implementation Plan for Accelerating the Establishment of a Unified and Standardized Carbon Emission Accounting System", the "Guidelines for the Construction of Carbon Peak and Carbon Neutrality Standards System", and the "Opinions on Accelerating the Establishment of Product Carbon Footprint Management System". China has put forward requirements for the development of standards for carbon emission verification and accounting. It can be anticipated that this standard will provide strong support for the implementation of these policies, while laying the groundwork for the upcoming certification of product carbon footprints.

18. China to Establish a Certification System for Product Carbon Footprint

Carbon Emission

On 13 November, the National Development and Reform Commission (NDRC), the Ministry of Industry and Information Technology (MIIT), the State Administration for Market Regulation (SAMR), the Ministry of Housing and Urban-Rural Development (MoHURD) and the Ministry of Transport (MOT) jointly issued the *Opinions on Accelerating the Establishment of a Product Carbon Footprint Management System*.

The document indicates that a unified and standardized product carbon labeling certification system will be established at the national level. The aim is to provide guidance to enterprises in energy conservation and carbon reduction, by clearly labeling the quantitative information of a product's carbon footprint. NDRC, in conjunction with SAMR, MIIT, MoHURD, MOT and other government departments, will further research and formulate management methods for product carbon labeling certification, clarifying the scope of application, label styles, certification processes, and management requirements. Enterprises are encouraged to actively participate in the product carbon labeling certification and use carbon labels on products, packaging, advertisements, and other locations.

To support the implementation of this certification scheme, the document proposes the formulation of standards for calculating product carbon footprints. By 2025, China will introduce around 50 carbon footprint calculation rules and standards for key products at the national level; by 2030, the number is expected to reach 200. Specifically:

- SAMR, in collaboration with NDRC, will expedite the formulation of national standards for the basic elements of product carbon footprint calculation. These will specify the boundaries, calculation methods, data quality requirements, and traceability requirements for product carbon footprint calculations.
- NDRC will identify key products for prioritized formulation of calculation standards.
- Industry regulators, such as MIIT, MoHURD, MOT, and the Ministry of Agriculture and Rural Affairs, will collaborate with industry associations, leading enterprises and research institutions to research and formulate association standards for calculating the carbon footprint of key products. Once the time is ripe, these association standards can be adopted by government as national standards or sector standards.
- Industry regulatory departments, in coordination with NDRC and SAMR, will issue a list of recognized standards, providing unified rules for enterprises and institutions to follow.

Regarding the alignment and mutual recognition with international standards, the document states that China will adhere to the principle of independence while enhancing communication and coordination with international counterparts, actively participating in the revision of international standards related to carbon footprints, and promoting alignment and mutual recognition of carbon footprint calculation rules and certification results with major trading partners. At the same time, China will monitor international organizations and major economies' management systems related to carbon footprints, certification rules, and implementation effects, and convert relevant international standards into national or sector standards in line with China's actual conditions. With the date set for achieving the carbon peak approaching, China faces increasing pressure to reduce carbon emissions. It is foreseeable that this certification system will play a crucial role in China's efforts to control and reduce carbon emissions, potentially becoming a de facto mandatory admission requirement. On the other hand, the emphasis on independence may lead to differences between China's calculation standards and their international counterparts, potentially posing a new challenge for overseas companies entering the Chinese market.

19. China Establishes Green and Low-carbon Standards System for the Communications Industry

Communications Industry # Green and Low-Carbon

On December 14, 2023, China's Ministry of Industry and Information Technology (MIIT) published the Guidelines for Establishing the Green and Low-carbon Standards System for the Communications Industry (2023 Version) (hereinafter referred to as the Guidelines). The Guidelines are aimed at facilitating the green and low-carbon development of the communications industry via standardization. These are in line with a series of development policies previously issued by MIIT, including the 14th Five-Year Plan for the Development of Information and Communication Industry, Action Plan for Green and Low-carbon Development of the Information and Communication Industry (2022-2025), as well as the 14th Five-Year Plan for Industrial Green Development.

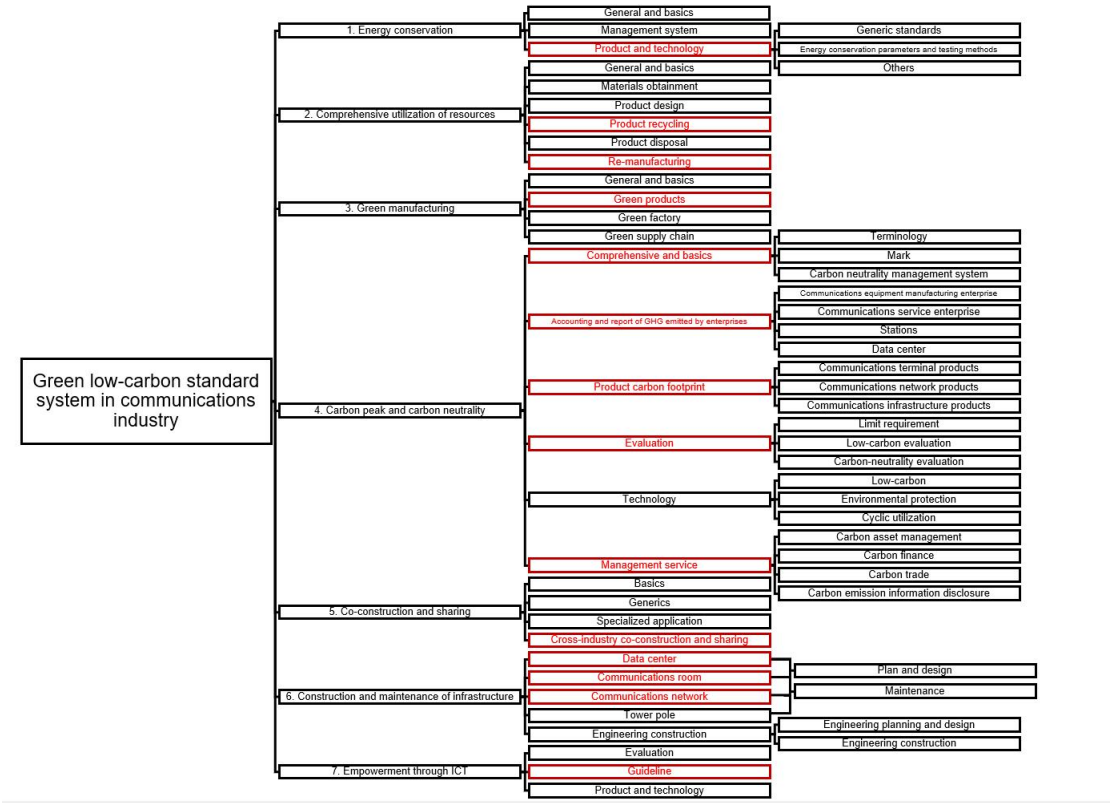

Figure 1 Green and Low-Carbon Standard System in Communications Industry

The Guidelines mainly comprises six parts: general requirements, rationale of the standards system (see figure 1), detailed introduction of the system, organizational implementation, list of standards (both those currently in-force as well as those under development/revision), and priorities. Specifically:

- General requirements: The quantitative goal is to complete, by 2025, the development or revision of over 50 relevant standards.
- Rationale: the development of the standards system has taken into account other standards systems already established, such as those for energy conservation and comprehensive utilization of resources, green manufacturing, and carbon peak and carbon neutrality.
- Detailed introduction: for each sub-category, the standards system enumerates the possible standards of relevancy.
- List of standards: A total of 132 standards are listed, including national standards, sector standards, and association standards.
- Priorities: A total of 14 aspects are identified as priorities, these are highlighted in red in figure 1 above.

20. China Issues Call for Comments on the Photovoltaic Standard System

Photovoltaic

On December 19, 2023, the Ministry of Industry and Information Technology (MIIT) released the Comprehensive Standardization Technical System for Solar Photovoltaic Industry (2023 version) (hereinafter referred to as the Draft) for public comments. The deadline for submitting comments closed on 2 January 2024. The photovoltaic industry is positioned by the Chinese government as one of the essential emerging industries where standardization plays a critical role, according to the Implementation Plan for the Leading Engineering of Standardization in New Industries (2023-2035).

The document is composed of five parts:

- Overview of the photovoltaic industry development
- General requirements
- Standard system (refer to figure 1)
- Priorities
- List of standards

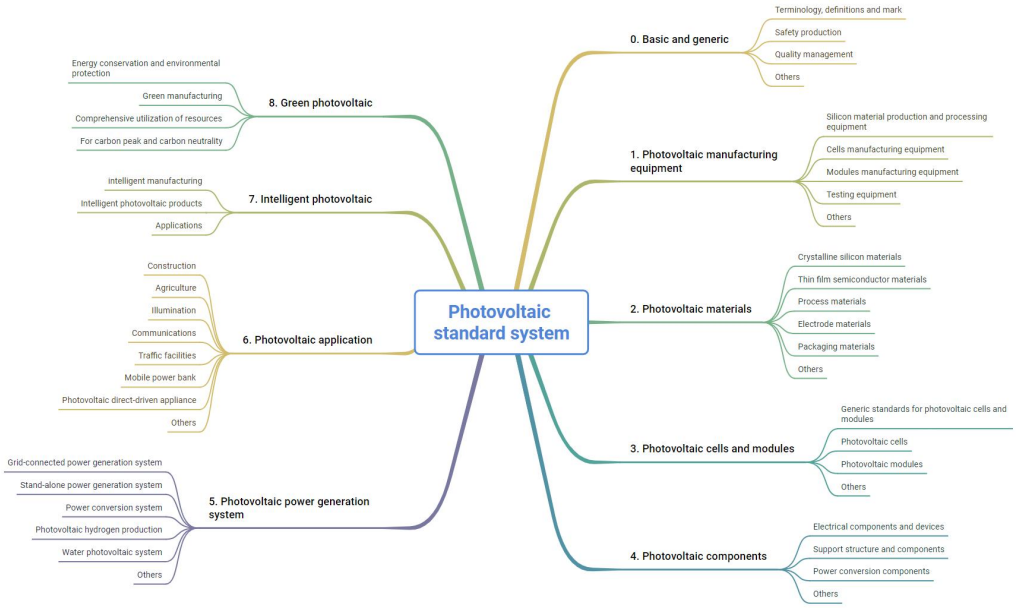

Figure 1: Photovoltaic Standard System

In addition to constantly improving the standard system, the document sets quantitative goals for photovoltaic standardization work. Specifically, the document sets a target to develop over 40 new national and sector standards by 2025. During this process, support will also be provided for association standards.

Sub-category	In-force	Among the in-forcing standards		Under development	To be developed	To be researched	In total
		Being revised	Planned revision				
Basic and generic	22	0	3	1	1	7	31
Photovoltaic manufacturing equipment	6	0	0	9	1	19	35
Photovoltaic materials	97	1	1	18	11	30	156

Photovoltaic cells and modules	49	10	11	36	24	29	138
Photovoltaic components	46	3	1	18	9	24	97
Photovoltaic power generation system	98	9	3	24	7	24	153
Photovoltaic application	48	1	0	4	0	27	79
Intelligent photovoltaic	2	1	0	14	0	25	41
Green photovoltaic	18	2	0	20	1	27	66
In total	386	27	19	144	54	212	796

Table 1: Statistics of Chinese Photovoltaic Standards

The document also provides a statistical overview of current photovoltaic standards (see the **Table 1**), covering those in-force, under development, to be developed, or to be researched. With a few adjustments, the statistics broadly match the list of standards attached in the draft. A total of 796 standards are involved, including national standards (both recommended and compulsory), sector standards and association standards. It is noteworthy that, in the list, certain IEC international standards are identified as standard projects to be researched, signaling a possible conversion into domestic standards in the future.

The document outlines the key tasks from five different perspectives, including top-design, industrial needs, stakeholders engagement, capacity building, and organizational support. The SAC/TC 90 on Solar Photovoltaic Systems, as the major standardization development body in China, recently concluded its 2023 annual working conference, which was attended by representatives from MIIT, committee members, observers, members of working groups and focus groups, standard drafting organizations, etc. The China Electronics Standardization Institute (CESI), serving as the secretariat unit of SAC/TC 90, drafted the *Framework Diagram of the Comprehensive Standardization Technical System of Solar Photovoltaic Industry in the 14th Five-Year Plan*. The current standard system in the document is developed based on the framework outlined by CESI, but providing more details regarding smart photovoltaic and green photovoltaic.

21. China Refines Rules for the Grading Certification of Green Building Materials

Green Building Materials

On December 22, 2023, China's National Certification and Accreditation Administration (CNCA) released the revised version of the *General Rules for Implementing the Green Building Materials Products Grading Certification* (hereinafter referred to as the General Rules). The General Rules, which came into force on January 1, 2024, are an upgrade of the previous version issued by CNCA in 2020.

In addition to editorial changes (such as minor corrections, alignment of wording used, refining of descriptions), the General Rules incorporate the *Green Building Materials Products Grading Certification Catalogue* (first batch) and the Referenced Standards (attached in the document as Annex 1). All the referenced standards are association standards developed by the China Association for Engineering Construction Standardization (CECS), and were released in 2019.

In the main body part, the major changes introduced by the General Rules include:

- Clarifying the relationship between the General Rules and the detailed implementation rules. In the foreword section, it is specifically required that certification bodies develop detailed implementation rules based on the General Rules and applicable evaluation standards. The certification process shall follow the instructions of both the General Rules and the detailed implementation rules.

- Specifying test report requirements for products exempt from type-inspection requirement (Clause 6.1). According to the General Rules, even if type-inspection is not required, a valid test report should be included as a part of the certification application documents. The detailed implementation rules will further determine the specific testing items and test cycles.

- Increasing flexibility regarding the requirements for audit days. In the General Rules, the number of audit days are specified for various certification activities, including materials review, on-site factory inspection, and surveillance inspection. All those requirements have been modified in the new version with increased flexibility. For instance, clause 7.1.2.2 has deleted the compulsory requirement for the increase rate of the audit days, instead only indicating that the total number of audit days generally shall not exceed three, while leaving to the discretion of involved parties the eventuality of increased rates.

- Deleting the requirement for the green evaluation conformity verification (Clause 7.2.4). The General Rules have deleted the enumeration of the on-site factory inspection items regarding the real internal control operation, including items of involved documents, records, products, personnel, equipment, etc.

- Modifying the compulsory surveillance inspection items for factory's quality assurance ability (Clause 10.2.1). The compulsory items of design/development, verification inspection, as well as testing devices and equipment inspection have been deleted, while the green building materials certificate and mark become the mandatory items.

- Streamlining the requirements for the alteration of certification scope. The supplementary inspection items have been deleted, these are expected to be determined by the implementation detailed rules.

In the next steps, the relevant certification bodies shall, according to the current General Rules, revise their detailed implementation rules of the certification of the corresponding products, and file a record with the CNCA. In addition, from January 1, 2024, the certification body shall accept the certification application and carry out certification in accordance with the requirements of the General Rules and the implementation rules. Certification certificates that had been issued before January 1, 2024, can continue to be used until their expiration, or until changes occur in terms of product, standards of relevancy, or until follow-up surveillance is carried out..

Others

22. China's First National Standard on Territorial and Spatial Planning Released

Territorial and Spatial Planning

The SAMR (SAC) recently released *GB/T 43214-2023, Code of practice for territorial and spatial planning at provincial-level, the first of its kind*, which will be implemented on January 1, 2024. Based on the Guidelines on Territorial and Spatial Planning at Provincial Level (Trial) released in 2020, the national standard summarizes and absorbs the practical experience, draw from the pilot achievements, and organically integrates various achievements and technical specifications, providing technical support for regulating the territorial and spatial planning at provincial level and its implementation and supervision.

The standard defines the top-level design and overall requirements of territorial and spatial planning at provincial level, covering the whole-domain territory and space including land and sea, urban and rural areas, as well as the aboveground and underground areas. It makes clear the positioning, tasks, and principles of making the territorial and spatial planning at provincial level, and specifies the main content including the plan making and requirements on achievements. Following the principles of integrating problem orientation and goal orientation, the standard studies and judges the risks and challenges brought by the safety, utilization and quality of space and other problems such as climate change and population change through resource and environment carrying capacity, territorial and spatial development suitability, as well as the assessment of territorial and spatial utilization and its risk. Combined with the actual conditions of different provinces, it also stipulates the overall positioning and main goals of territory and space at provincial level, and further refines the path and strategy of realizing these goals. To improve the planning in a targeted, scientific and operable way, the standard highlights the coordination in the territorial and spatial planning at provincial level.

Source: China Standardization Magazine, Supplement Issue in 2023

23. China Releases Revised National Standard on Port Logistics Service

Port Logistics Service

Ports, as important hubs of transportation and trade, play a key role in the domestic and foreign trade and the establishment of a systematic global logistics and supply chain service. With the growth of China's foreign trade logistics, the port logistics has been increasing as a large proportion of China's logistics industry.

Considering the importance of import and export trade, and with the development of land ports, national free trade zones and cross-border e-commerce in recent years, standards need to cater to the new development and demands of port logistics.

SAMR (SAC) recently released the revised national standard GB/T 28580-2023, Quality specifications for port logistics service, to further improve the quality of port logistics service.

The revised national standard puts forward requirements for the overall requirement, service content, service quality assessment, continuous improvement and other aspects of port logistics service for not only harbors but also airports and land border ports, strengthens the requirement on multimodal transport, and increases the service quality evaluation indicators such as timely delivery rate and information transfer punctuality rate.

The standard will help improve the services of domestic port logistics enterprises, and port business environment, which is of great significance for raising the international logistics efficiency, promoting the international trade facilitation, and supporting the construction of a new development paradigm.

Source: China Standardization Magazine, Supplement Issue in 2023

24. Chinese Capacity Building Center for National Technical Committees Holds the First Training

Capacity Building

The 4-day training activity commenced on November 15 at Shenzhen Technology University (SZTU), South China's Guangdong province, which was hosted by the Capacity Building Center for National Technical Committees (Shenzhen) and SZTU.

Guo Huanxin , First-class Inspector of Standards Technical Management Department of SAMR, Ruan Shuangchen, President of SZTU, Li Jun, Deputy DirectorGeneral of Shenzhen Administration for Market Regulation, Shi Shizhen, Director of Standards Division of Shenzhen Administration for Market Regulation, and Huang Manxue, Executive Dean of Quality and Standards Academy of SZTU attended the activity.

With the aim to thoroughly implement the National Standardization Development Outline and the Three-year Action Plan on Development of Talents for Market Regulation (2023-2025), the activity was attended by over 70 representatives from 62 national technical committees, which can help strengthen the building of standardization talent team, improve the training system for standardization talents, and comprehensively improve the capacity and level of national standards management.

It is the first training held by the Capacity Building Center for National Technical Committees (Shenzhen), which is composed of 15 professional standardization courses and a visit to a wellknown enterprise. The training helps attendees to understand policies, clarify ideas, enhance skills and promote work. With systematic training courses and diversified teaching methods, the attendees learned the domestic and international standardization situation, the evaluation of national standardization technical committees, the management and operation of national standardization technical committees, focuses of the development and revision of the national standards, international standardization work, etc.

The standardization technical committees should make an effort to implement the Outline, strengthen the building of standardization talent team, and improve cooperation and exchanges. SAMR will also strengthen the guidance of the training centers for the cultivation and reserve of standardization talents, said Guo Huanxin in the address.

Source: China Standardization Magazine, Supplement Issue in 2023

25. Development of Radio Interference Measurement Standardization in China

Radio Interference Measurement

Overview:

The Subcommittee for Radio Interference Measurement and Statistical Methods of the National Radio Interference Standardisation Technical Committee (SAC/TC79/SC1) mirrors IEC/CISPR/A. It is responsible for standardizing radio interference measurement instruments, auxiliary equipment, and general measurement methods. It also conducts research on sampling methods used in statistical analysis of interference measurement results, and on the relationship between interference measurement and signal reception effects. The Secretariat of SAC/TC79/SC1 is hosted by the China Electronics Standardisation Institute (CESI).

Current Standardization:

SAC/TC79/SC1 currently oversees the development and implementation of 23 national standards, 3 of which are currently in the process of revision, while 3 others are under development.

Standards in the process of development:

No.	Standards	Current Status
1	GB/T Guide to the troubleshooting electromagnetic interference	Draft for Approval
2	GB/T Measurement method of antenna factor for 1m method radiated disturbance	Technical Review
3	GB/T Site validation method for anechoic chamber	Technical Review

Standards under revision:

No.	Standards	Current Status
1	GB/T 6113.102-2018 Specification for radio disturbance and immunity measuring apparatus and methods—Part 1-2:Radio disturbance and immunity measuring apparatus—Coupling devices for conducted disturbance measurements	Applying for New Project
2	GB/T 6113.106-2018 Specification for radio disturbance and immunity measuring apparatus and methods—Part 1-6: Radio disturbance and immunity measuring apparatus—EMC antenna calibration	Technical Review
3	GB/T 6113.201-2018 Specification for radio disturbance and immunity measuring apparatus and methods—Part 2-1: Methods of measurement of disturbances and immunity—Conducted disturbance measurements	Applying for New Project

International Standardisation Activities:

In 2023, SAC/TC79/SC1 participated in the voting of 10 CISPR/A standards, and provided comments on 8 of them. Furthermore, the Subcommittee also proposed a new work item, i.e. Guideline on intermediate checks of equipment for electromagnetic compatibility testing, which is based on the Chinese standard GB/Z 41634-2022; it also led the revision of 5 CISPR16 standards.

Next Year's Work Plan (2024):

SAC/TC79/SC1 plans to accomplish the following deliverable in 2024:

1. Apply to initiate the revision process for two standards:
   (1) GB/T 6113.104-2021 Specification for radio disturbance and immunity measuring apparatus and methods—Part 1-4:Radio disturbance and immunity measuring apparatus — Antennas and test sites for radiated disturbance measurements.
   (2) GB/T 6113.203-2020 Specification for radio disturbance and immunity measuring apparatus and methods—Part 2-3: Methods of measurement of disturbances and immunity—Radiated disturbance measurements.
2. Apply to initiate the standardisation project Technologies and Measures for Product Functional Safety Management related to Electromagnetic Disturbance.

3. Complete the revision of GB/T 6113.102-2018, GB/T 6113.201-2017, and the formulation of Guidelines for Statistical Process Control in Electromagnetic Compatibility Testing Laboratories.
4. Support the participation of SAC and SAC/79 in the 2024 CISPR/A Annual Meeting.
5. Organize and support SAC/79 in electromagnetic compatibility-related activities and exhibitions.
6. Continue to advance the international standardisation proposal Guideline on intermediate checks of equipment for electromagnetic compatibility testing, prepare international proposals for 2024, encourage Chinese experts participating in CISPR/A working groups to actively engage in new projects, undertake more research tasks, and genuinely participate in the development of international standards.
7. Organize the promotion of the implementation of the GB/T 6113 series of standards.
8. Establish a Functional Safety Electromagnetic Compatibility Standards Working Group to continue pre-research work on standards; regularly convene the meetings of the Shielding Efficiency Working Group for advancing pre-research work; and establish standard working groups corresponding to CISPR/A WGs.

26. China Announces Special Action Plan for Nurturing Standardization Talent

Talent Nurturing

On 7 November, SAC, in collaboration with the Ministry of Education, the Ministry of Science and Technology, the Ministry of Human Resources, and the All-China Federation of Industry and Commerce, jointly released the *Special Action Plan for Standardization Talent Development (2023-2025)*. The action plan proposes a series of measures aimed at enhancing the quantity and quality of standardization experts in China.

1. **Higher Education:** The document suggests leveraging regular higher education institutions, strengthening the construction of standardization-related majors, and refining the undergraduate curriculum for standardization engineering. It aims to promote the integration of "Major + Standardization Education" at the undergraduate and graduate levels across the country's higher education institutions.
2. **Vocational Education:** Higher vocational schools are encouraged to conduct education activities related to technical skills in the field of standardization. Support is provided for eligible vocational colleges to establish standardization technology degrees.
3. **Continuing Education:** The plan proposes upgrading education paths, from specialized programs to bachelor's degrees in standardization engineering and standardization technology. This move aims to establish a career advancement pathway for standardization practitioners and gradually implement the "degree certificate + multiple vocational skill certificates" system.
4. **Teachers:** The document emphasizes the vigorous promotion of professional training activities, including in specialized areas, to teachers, while encouraging excellent higher education institutions to establish standardization training bases for teachers.
5. **Textbooks:** Strict implementation of textbook management methods is proposed, ensuring the quality of textbooks. Increased support is provided for the development of educational materials and teaching resources for standardization professional education.
6. **Practical Application of Standardization Skills:** The document suggests relying on universities, research institutions, professional standardization organizations and associations, to establish national-level standardization talent education training bases. It also proposes organizing standardization-related professional skills competitions, establishing and improving competition rules, subject management systems, and implementing policies such as commendation and reward for competition winners and promotion of vocational skill levels.

In addition to local standardization personnel, the document also emphasizes international standardization talent development. Specifically, it suggests to:

- Extensively solicit experts in key areas for registration with international standardization organizations; enhance the selection and training of mid-to-senior management talent for international standardization organizations; conduct training focused on governance, leadership, organizational coordination abilities, international organizational appointment capabilities, diplomatic policies, language, and related aspects.

- Accelerate the formulation and implementation of policies for the management, selection and recommendation of high-end talent in international standardization; establish comprehensive competence evaluation criteria for international standardization talent; consistently organize initiatives for the selection and cultivation of young international standardization talent.

- Establish international standardization innovation teams involving technology research personnel, international standard experts, representatives from industries, and international trade representatives. These teams will track and analyze international cutting-edge technology and industrial development, formulate international standards, and train international standardization talent.

It is noteworthy that the document highlights material incentives as a means to encourage more individuals to engage in standardization work, including:

- Actively recommending standardization talents for government special allowances.
- Standardization talents meeting certain conditions enjoying current individual income tax preferential policies.
- Improving local support policies for the introduction of standardization talents, encouraging eligible local governments to provide preferential treatment in employment, housing, and settlement for standardization talents.
- Supporting research institutions, universities, and government offices in establishing systems for secondment and part-time positions for standardization talents.

27. China Calls for Comments on Lithium-ion Battery Standards System

Radio Interference Measurement

On December 6, 2023, China's Ministry of Industry and Information Technology (MIIT) solicited public comments on the *Guidelines on the Comprehensive Construction of the Standards System for Lithium-ion Battery and Cell (Draft for Comment)* (hereinafter referred to as the Draft). The deadline for submitting comments was December 20, 2023.

According to the draft, China has grown into the largest producer for lithium-ion batteries and cells. The whole industrial chain has been established – from manufacturing of critical materials and cells, to assembling batteries and manufacturing equipment. In the first half of 2023, China's lithium-ion battery industry continued to grow, with production exceeding 400 GWh, corresponding to an increase of more than 43% year-on-year. The total revenue of the lithium-ion battery industry reached 600 billion RMB. Given this context, the standardization of the industry has become increasingly important.

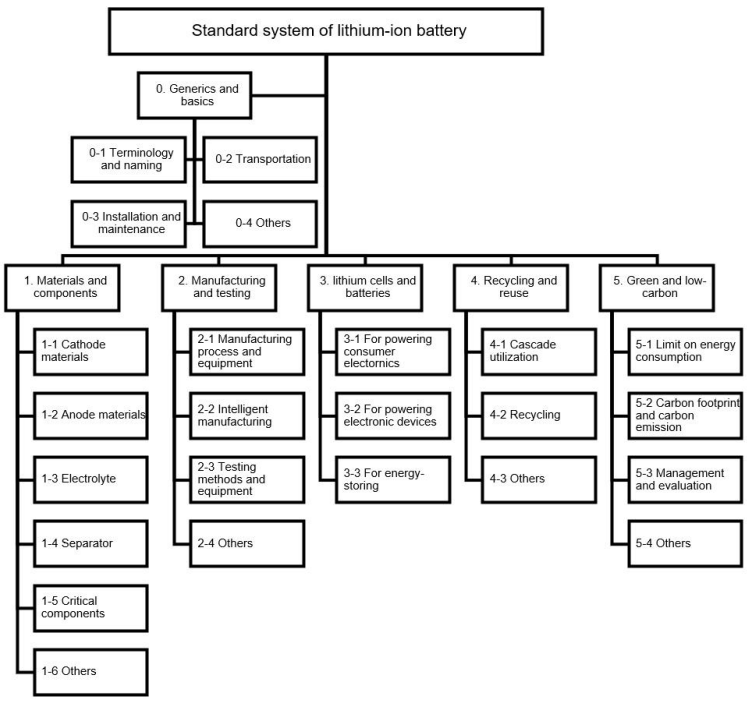

Figure 1: The Standard System of Lithium-ion Battery

To better support the standardization work, the Draft introduces the goals, the structure of the standards system, and organizational support measures. It also includes the list of the standards forming the system. The following is a summary of the key information for each part.

- **Goals**

The quantitative goal set by the Draft is to develop, or revise, 120 standards, with the year 2028 set as deadline for completing the process for basic and generic standards, and for critical products standards. In addition, the supply of standards in this area must reflect a shift, namely from being government-led to being driven by both the government and the market, and from being domestic-led to being driven by mutual conversion of domestic and international standards.

- **Standard system**

The standards system covers mainly six categories – as shown in figure 1. In addition to basic and generic standards, the standards system highlights the requirements for the lithium-ion battery industry, both in terms of quality and in terms of green and low-carbon development.

- **Organizational support**

A total of four tasks are listed in this part: (i) standardization of the whole industrial chain, (ii) standards promotion, implementation and surveillance, (iii) international cooperation, (iv) capacity building for engaging in international standardization activities. As the largest producer of the lithium-ion batteries, China's standardization plans and efforts for lithium-ion will focus on the exportation of standards and international cooperation.

- **List of standards**

A total of 542 standards are identified, including both standards already in force and standards to be developed or revised. Among them, only 13 standards are converted from international standards. All of them are either national standards or sector standards. No association standards are involved.

Annex- Translation of the Product Quality Law of the People's Republic of China (Draft for public comments): Please see the document attached.

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