SESEC V
China Standardisation Newsletter

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Seconded European Standardisation Expert in China
(SESEC)

Index

Takeaways

SESEC China-EU Standardization Roundtable and Chinese New Year Reception

To show appreciation to the Chinese standardization community for their support over the years, SESEC organized the China-EU Standardization Roundtable and Chinese New Year Reception on January 31. Over 60 delegates from the EU, the Chinese government, industries, and standardization bodies participated in the meeting. The event was presided over by Dr. Betty Xu, Director of SESEC. The Roundtable discussion began with opening remarks from the European representative, Mr. Frank Schmiedel, the first counsellor of the Internal Market, Industry, Entrepreneurship, and SMEs (DG GROW) of the Delegation of the European Union to China, and Mr. Li Dongfang, level II division rank official from the International Cooperation Department of the Standardization Administration of China. Following the remarks, eight speakers were invited to deliver their keynote speeches on their work in standardization.

Top 10 Standardization Events in China

Looking back at the past year, prominent achievements have been made in China's standardization field with the promulgation and implementation of policies and administrative measures on standardization and quality work. Remarkable progress has also been made in the development, revision and management of Chinese standards at various levels, together with the great efforts of experts who contributed their expertise to make Chinese standards more harmonized and applicable. At the end of 2023, an online voting was organized by China Standardization Press through its WeChat official account to select the top 10 major events, 10 outstanding figures, and 10 popular standards in 2023. The four-day campaign attracted the extensive participation of both standardizers and the public, reaching a record high of nearly 220,000 times of reading.

China Releases the Key Points for the National Standardization Work in 2024

On February 19, 2024, the Standardization Administration of China (SAC) released the *Key Points for National Standardization Work in 2024* (hereinafter referred to as the Key Points). This document holds great significance as China aims to further implement the National Standardization Development Outline (hereinafter referred to as the Outline) and achieve its development goals by 2025. The Key Points consist of six major areas of action, outlining a total of 90 specific tasks. Notably, two of the six areas of action focus on opening up and international cooperation.

China and Uzbekistan Sign a Protocol on Standardization Cooperation

On January 24, China's Minister of the State Administration for Market Regulation (SAMR), Mr. Luo Wen and the Minister of Investment, Industry and Trade of the Republic of Uzbekistan Laziz Kudratov signed the *Protocol on Cooperation in the field of Standardization*. According to the document, China and Uzbekistan pledge to enhance cooperation in exchanging standard information and conducting endeavors to enhance standardization capacities.

China Released the Automotive Chip Standardization System Construction Guidelines

On January 8, 2024, China's Ministry of Industry and Information Technology released the *Guidelines for the Construction of the National Automotive Chip Standardization System* (hereinafter referred to as the Guidelines). The Guidelines are the result of the collective efforts of over 200 experts from more than 60 enterprises, research institutes and universities, absorbing opinions from various segments of the industry. The goal set by the Guidelines is to develop more than 30 automotive chip standards of importance by 2025, meeting the basic requirements for product security, reliable application and pilot trials; the target increases to over 70 standards by 2030.

China Revises the AI Standards System

On January 17, 2024, China's Ministry of Industry and Information Technology (MIIT) released the *Guidelines for the Construction of a Comprehensive Standardization System for the National Artificial Intelligence Industry (revision for comment)*. The document, hereinafter referred to as the Guidelines, proposes to accelerate the formation of a standards system to promote the high-quality development of the artificial intelligence industry. In practice, the Guidelines represent an improved version of the previous guidelines, which were issued in 2020 and are currently in force. The deadline for submitting public comments was January 31, 2024.

WAA: Informa Tech 2024 Barcelona Roundtable Concludes Successfully

On the afternoon of February 28, 2024, amidst the Mobile World Congress (MWC) event, a roundtable forum organized by the World WLAN Applications Alliance (WAA), in partnership with Informa Tech, drew to a successful close. This roundtable was not only WAA's first international seminar held overseas, but also a deep exploration and cooperative opportunity regarding the development direction of the Wi-Fi industry. From enhancing security to promoting sustainability, the meeting focused on the most topical issues, gathering industry elites to contribute their strategies for building a safer, greener digital future. The outcomes of the meeting were significant, with delegates expressing profound insights into these two fields.

China Highlights Data Security in the Industrial Sector

On February 26, the Ministry of Industry and Information Technology of China unveiled the *Implementation Plan for Improving Data Security Capabilities in the Industrial Sector (2024-2026*) (hereinafter referred to as the Implementation Plan). This strategic initiative is crafted in response to evolving legislative and regulatory mandates concerning data security within the industrial domain. Structured into three core components—general mandates, pivotal tasks, and auxiliary measures—the Implementation Plan endeavors to fortify data security within the industrial sector by delineating specific responsibilities for various stakeholders, including industrial entities, regulatory bodies, and data security service providers.

China Releases Guidelines on Standards System for Carbon Peak and Neutrality in Industrial Sector

To facilitate China's carbon peak and neutrality goals, the Ministry of Industry and Information Technology (MIIT) organized relevant industrial associations, research institutions, and standardization technical committees to develop the *Guidelines on Construction of the Standards System for Carbon Peak and Neutrality in the Industrial Sector*. The Guidelines puts forward the framework of the standards system, and provides the development direction of key standards, which will effectively integrate the existing standards system for industrial energy conservation and comprehensive utilization, and the green manufacturing standards system. By accelerating the development of standards, and continuously improving the standards system, it is expected to turn the development of industrial sector into a low-carbon or zero-carbon model.

China Updates the Policy for Key Energy-Using Products

On February 7, 2024, China's National Development and Reform Commission, Ministry of Industry and Information Technology, the Ministry of Finance, the Ministry of Housing and Urban-Rural Development, the State Administration for Market Regulation, and the National Energy Administration jointly released the *Notice on the release of Advanced Energy Efficiency Levels, Energy-efficient Levels and Access Levels of Key Energy-Using Products and Equipment (2024 edition)*. The Notice is composed of six main tasks and the annex. The annex identified specific key products, energy-efficiency indicators, units, classification, levels and referencing standards.

SESEC and Supported Events

1. SESEC China-EU Standardization Roundtable and Chinese New Year Reception

#Standardization Event

To show appreciation to the Chinese standardization community for their support over the years, SESEC organized the China-EU Standardization Roundtable and Chinese New Year Reception on January 31. Over 60 delegates from the EU, the Chinese government, industries, and standardization bodies participated in the meeting. The event was presided over by Dr. Betty Xu, Director of SESEC.

The Roundtable discussion began with opening remarks from the European representative, Mr. Frank Schmiedel, the first counsellor of the Internal Market, Industry, Entrepreneurship, and SMEs (DG GROW) of the Delegation of the European Union to China, and Mr. Li Dongfang, level II division rank official from the International Cooperation Department of the Standardization Administration of China. Following the remarks, eight speakers were invited to deliver their keynote speeches on their work in standardization.

- Frank Schmiedel updated the latest progress regarding the implementation EU standardization strategy;
- Li Dongfang gave an introduction to the international standardization work of China;
- M Ester Cañada Amela, Advocacy and Working Group Coordinator of Standardization and Conformity Assessment Working Group of European Chamber of Commerce in China(EUCCC), introduced the key points of EUCCC position paper on China Conformity Assessment and Standardization;
- Yang Shuwei, level IV division rank official of Consumer Products Department of National Certification and Accreditation Administration (CNCA), introduced the development of China's green product certification and labeling System;
- June Zhang, head of Technical Regulation, Standardisation and Quality Management of SIEMENS China and EUCCC SCA WG Chair,introduced the topic of Digital Product Passport in her speech titled "EU Digital Product Passport - A Glance from an Enterprise";
- Liu Donghua, researcher of National Library of Standards of China National Institute of Standardization (CNIS), introduced the development of standards' digitalization in China;
- Niu Huiting, project advisor of SPEAC project, introduced the Safety Non-food Consumer Products in the EU and China (SPEAC) Project;
- Yu Limei, director of Evaluation Department III of the National Center of Standards Evaluation of State Administration for Market Regulation (SAMR) gave a brief introduction of the National Center of Standards Evaluation, SAMR.

This meeting marked the resumption of SESEC's reception since 2019. Representatives from various standardization parties came together to exchange their experiences and gain a better understanding of each other's work. It is believed that the meeting has set a positive tone for Sino-EU standardization exchanges in 2024. Dr. Betty Xu, director of SESEC, emphasized the importance of the exchange between China and Europe as a foundation for cooperation. She expressed her gratitude to all the representatives for attending the meeting and looked forward to further discussions and exchanges in the new year. In the meantime, SESEC will continue to support the standardization exchange between China and the EU.

Horizontal Actions

2. China Assigns Key Tasks for Certification Accreditation Inspection and Testing in 2024

#Certification #Accreditation #Inspection #Testing

On January 12, 2024, the National Certification and Accreditation Administration (CNCA) held the 2024 National Work Conference on Certification, Accreditation, Inspection and Testing. The conference, which took place in Beijing, reviewed the work in 2023 and assigned the key tasks for 2024. Mr. Pu Chun, Vice Minister of State Administration for Market Regulation and newly-appointed Director of CNCA attended the conference and presented the work report.

The conference outlined key tasks to carry out in 2024, related to certification, accreditation, inspection and testing. The following is a brief introduction of each task.

- Improving the work mechanism of "unified management, joint implementation", which includes the inter-ministerial joint conference mechanism for certification and accreditation, actions for promoting quality certification, the national unified certification system, and the unified management of the qualifications of inspection and testing institutions.
- "Going global". The conference stressed the importance of international cooperation in certification and accreditation, as well as improving the currentsituation and work The aim is to establish an internationally-recognized brand in this field.
- Supporting the development of enterprises, supply chains, and counties (regions).The conference specifically called for the optimization of the service supply of certification, accreditation, inspection and testing. The purpose is to support the reduction of costs and the improvement of quality for enterprises, consolidation of supply chain, as well as the sound development of local economies.
- Improving regulatory. According to the information presented in the conference, the regulatory efficiency should be improved through sound regulatory rules, intelligent regulatory capacity building, responsible bodies of relevancy, long-term regulatory mechanisms in key areas and key links, as well as safety production regulation in certification, accreditation, inspection, and testing.
- Strengthening capabilities in certification, accreditation, inspection and testing, including the capabilities of regulatory teams, professional bodies and their personnel. In addition, advancement of the digital transition in this field is highlighted as an essential topic.
- Maximizing the benefit of certification, accreditation, inspection and testing, by improving the promotion mechanisms for result acceptance, strengthening basic research, optimizing the evaluation system, and devoting more efforts in promotion.

During the conference, the market regulatory authorities from multiple provinces and municipalities exchanged their experience and views, either in oral or written form. It is expected that full work report of 2023 will be released in the coming weeks, together with a detailed introduction of the key tasks for 2024. SESEC will keep monitoring progress and provide updates.

3. Top 10 Standardization Events in China

Standardization Event

Looking back at the past year, prominent achievements have been made in China's standardization field with the promulgation and implementation of policies and administrative measures on standardization and quality work. Remarkable progress has also been made in the development, revision and management of Chinese standards at various levels, together with the great efforts of experts who contributed their expertise to make Chinese standards more harmonized and applicable.

At the end of 2023, an online voting was organized by China Standardization Press through its WeChat official account to select the top 10 major events, 10 outstanding figures, and 10 popular standards in 2023. The four-day campaign attracted the extensive participation of both standardizers and the public, reaching a record high of nearly 220,000 times of reading. Here, the results are presented to showcase China's standardization development in 2023.

China maps out an outline to boost its quality strength

The *Outline of Boosting China's Quality Strength* was released by the Central Committee of the Communist Party of China and the State Council on February 6, 2023 to actively align with the international advanced technologies, rules and standards, and boost the national quality strength in an all-round way, providing quality support for building a modern socialist country in all respects and realizing the great rejuvenation of the Chinese nation. According to the Outline, by 2025, China will achieve initial results in increasing its quality strength by improving the economic quality and efficiency, enhancing the quality competitiveness of industries, improving the quality of products, projects and services, making more progresses in brand building, making quality infrastructure more modern and efficient, as well as improving the quality governance system. By 2035, China will have a more solid foundation of quality development, with prevailing advanced quality culture, and stronger comprehensive strength of quality and brands.

Revised Administrative Measures for National Standards put into effect

Revised by SAMR, the *Administrative Measures for National Standards* was officially put into effect on March 1, 2023. Based on the standardization practices over the past years, the document adjusts the specific scope of national standards, makes clear the work requirements on the procedures and stages of national standards development, and specifies the new requirements for the development and revision procedure, organization and management, implementation and supervision, as well as other aspects of national standards, so as to meet the increasingly growing demands for standards and raise the international level of standards. It also further strengthens the feedback and evaluation of standards implementation. The document will play a prominent role in improving the governance of national standards, reinforcing the efficiency of standardization governance, and better supporting the high-quality economic and social development with standardization.

First China Standardization Conference held in Nanjing

The first China Standardization Conference, co-hosted by China Association for Standardization, People's Government of Nanjing and Jiangsu Administration for Market Regulation, was held on March 30, 2023 at the IEC International Standards Promotion Center (Nanjing) in Nanjing, capital of East China's Jiangsu province. With "standards and a unified market" as the theme, the conference consisted of one main session, five parallel sessions and seven technical activities. All standardizers were encouraged to improve the standards system to support the market rule-making, exert the leading role of standards in stimulating the vitality of business entities, strengthen the coordination of standards to smooth the circulation of market elements, and expand the institutional opening up of standards to facilitate the interconnectivity of national and international markets. The conference is expected to serve as a platform for the standardization cooperation and communication at home and abroad, and standardization knowledge promotion.

Guidelines for standards system on carbon peak and neutrality released

The *Guidelines for Establishing the Standards System on Carbon Peak and Neutrality* was released in April 2023 by SAC and other 10 ministries and commissions such as National Development and Reform Commission and Ministry of Industry and Information Technology. The standards system on carbon peak and neutrality includes four subsystems on basic common standards, carbon reduction standards, carbon removal standards and market-oriented mechanism standards, 15 second-class subsystems, as well as 63 third-class subsystems. The document puts forward the work

priorities in four aspects: first, making concerted efforts on international standardization by taking measures such as setting up special working group and innovation team; second, enhancing international communication and cooperation especially with international organizations and Belt and Road countries; third, actively participating in international standards development; and fourth, promoting the harmonization of national and international standards.

Action plan on standardization talent cultivation released

The *Special Action Plan on Standardization Talent Cultivation (2023-2025)* was released in November 2023 by SAC, Ministry of Education, Ministry of Science and Technology, Ministry of Human Resources and Social Security, and All-China Federation of Industry and Commerce. According to the plan, efforts will be made to innovate the standardization talent cultivation mechanism, improve the education and training system for standardization talents, optimize the environment for standardization talent development, and promote the development of expert teams in a coordinated way. It sets the following goals by 2025: the national standardization talent cultivation mechanism will be professional, vocational and systematic, the cultivation pattern of valuing, educating, and introducing standardization talents will take shape, and the vocational capability evaluation mechanism of standardization talents will be initially established.

SAMR (SAC) and CAE launch a major research project on standardization

SAMR (SAC) and Chinese Academy of Engineering (CAE) launched the "Research Project on Major Issues in Implementing the Outline" on April 17, 2023. The project was designed to conduct indepth research on four main subjects within two years. To be specific, the "research on the supporting role of association standards in high-quality development" will probe into the supporting role of association standards in high-quality industrial development, and the internationalization strategy and digitalization of association standards. The "research on key issues in the standardization of environmental and social governance" will explore how to use standardization means in the aspects such as policy, standards system architecture, coordination and promotion to drive the green, low-carbon economic growth. The "research on key issues in the standardization of energy safety" will offer policy consultancy for safeguarding national energy security by means of standardization in key fields. The "research on policies and measures for institutional opening up of standards" will conduct thorough research on the implementation path and work mechanism for the institutional opening up of standards.

BDS included in the standard of ICAO for global application

The latest version of Annex 10 to the Convention on International Civil Aviation of the International Civil Aviation Organization (ICAO), which was put into effect in November 2023, included the BeiDou Navigation Satellite System (BDS) as one of the common navigation satellite systems for global civil aviation. The BDS has been independently constructed and operated by China with an eye on the needs of the national security and economic and social development. As one of the four internationally recognized navigation satellite systems, the BDS provides all-time, all-weather and high-accuracy positioning, navigation and timing services to users in more than 200 countries and regions across the world. International standardization work has provided the foundation for the global application of the BDS.

International Standardization (Chilin) Forum held in Nanjing

Focusing on the theme of "driving the transition to an all-electric society", the International Standardization (Chilin) Forum was held on June 7, 2023 in Nanjing, Jiangsu province, attracting more than 400 standardization experts from international standards organizations, China, Germany, the U.K., and other countries. The event was hosted by Nanjing Municipal People's Government, Chinese Society for Electrical Engineering, and China Huaneng Group Co., Ltd. With the support of IEC, ISO and ITU, the event was guided by SAC, German Commission for Electrical, Electronic & Information Technologies (DKE), and British Standards Institution (BSI). During the event, an initiative was unveiled to accelerate the development of international standards for all-electric society. Three IEC white papers in Chinese were released, which showcased China's latest outcomes in the participation of IEC standardization work and the development of the standards system for carbon peak and neutrality. These white papers were drafted with the concerted efforts of experts from China, Germany, France, the U.S., Japan, Italy and other countries.

IEC SEG 15 on metaverse officially established

With the leading effort of China Electronics Standardization Institute, IEC Standardization Evaluation Group 15, Metaverse, was officially established on January 12, 2023 to explore the needs for standardization and opportunities in the area of metaverse and related technologies. The tasks of the SEG 15 include investigating the needs for

standardization in the area of metaverse, taking into account current research, technology and standardization activities, and trends; recommending an initial roadmap for standardization activities in the area of metaverse; engaging at the earliest stage with IEC and ISO TC/SC/SyCs, including JTC 1, as well as with other relevant organizations such as consortia; and making further recommendations to SMB and TMB as appropriate. The SEG 15 serves as an important outcome of international standardization in the area of metaverse.

2023 Qingdao Forum on International Standardization held

With the theme of "standardization for green, low-carbon and high-quality development", the 2023 Qingdao Forum on International Standardization was held at the Qingdao International Conference Center on June 9, 2023. The event was co-hosted by SAMR (SAC) and Shandong Provincial People's Government, and organized by Qingdao Municipal Government and Shandong Administration for Market Regulation. During the event, the Qingdao Initiative: International Standards for Green, Low-Carbon and High-Quality Development was released; a MoU was signed by SAC and African Electrotechnical Standardization Commission (AFSEC); IEC Statement on Supporting Capacity Building in China was announced; and the agreement on the International Standardization Training Base (Qingdao) was signed by ISO, SAC and Qingdao Municipal Government. Besides standardization activities, five sub-forums were convened, covering the topics of standardization & ocean negative carbon emissions, standardization & new power systems (green energy), standardization & modern green port and shipping, standardization for green and low-carbon development of SCODA, as well as capacity building and creating leadership in standardization.

Source: China Standardization Magazine, issue 1 in 2024.

4. China Releases the Key Points for the National Standardization Work in 2024

#Standardization Working Plan

On February 19, 2024, the Standardization Administration of China (SAC) released the *Key Points for National Standardization Work in 2024* (hereinafter referred to as the Key Points). This document holds great significance as China aims to further implement the *National Standardization Development Outline* (hereinafter referred to as the Outline) and achieve its development goals by 2025. The Key Points consist of six major areas of action, outlining a total of 90 specific tasks. Notably, two of the six areas of action focus on opening up and international cooperation. Below is a summary of each area of action, as illustrated in the Key Points:

1. **Expanding domestic demands and promoting a new round of standards upgrading:** This area of action involves 10 specific tasks spanning various industries, with a focus on safety, industrial upgrading, digital transformation, green and sustainable development, and standards for products catering to the elderly, as well as those encouraging consumption..

2. **Fostering new advantages in international competition and cooperation in the field of standardization:** A total of 10 tasks are listed in this area of action, including:

- Engagement in the management of ISO, IEC, and ITU, and contribution to their strategic implementation framework, assessment framework, and roadmap;
- Revision of China's Measures of Participation in ISO and IEC International Standardization Activities;
- Extensive participation of stakeholders in the activities of international professional standards organizations;
- Establishment of new international technical institutes for cultural heritage protection and digital marketing;
- Development of international standards proposals in key industries, including climate change, financial services, digital economy, new energy, aerospace, shipbuilding, and traditional Chinese medicine;
- Nurturing and registration of new batch of experts in international standard organizations, focusing on key and emerging technology areas such as carbon peak and carbon neutrality, artificial intelligence, quantum technology, etc.;
- Initiation of international exchange and cooperation projects for standardization capacity-building, targeting countries and regions in Central Asia, South Asia, Africa, or members of Association of Southeast Asian Nations (ASEAN);

- Communication and exchange over standards, including improving the Standard Information Platform Contributed By the Belt and Road Countries, and promoting the acceptance of and cooperation over Chinese and foreign standards in the field of electric vehicles, agriculture, power industries, etc.;
- Organization of high-level events, such as the Hongqiao International Economic Forum: Parallel Session on International Cooperation on Standards.

3. **Promoting standards in support of supply chain resilience:** This area of action covers 14 tasks aimed at constructing the modern industrial system and increasing the resilience of supply chains in China. More specifically, these tasks involve not only standards development but also the establishment of corresponding standards systems. Various industries are targeted in this area for supply chain resilience, such as information and communication technologies, rare earth industry, additive manufacturing, etc.

4. **Improving the standards system, and enhancing the implementation and application of standards to support the construction of a unified national market:** Different types of standards are referenced, including national standards, sector standards, and local standards. To maximize the role of the standards in supporting the formation of a unified national market, the tasks in this area of action mainly involve:

- Managing and developing standards of different industries, in a way that provides unified foundation and effective guidance for compliance;
- Developing standards to support information sharing.

5. **Building an open economic system with a higher level of opening-up, and steadily expand the institutional opening-up of standards:** The focus of this area of action is on aligning standardization efforts with international standards and cooperating with foreign countries on standards development. This cooperation extends beyond the geographical and organizational scope of the second area of action, and includes actors such as the EU, northeastern Asian countries, Germany, France, the UK, the US, Russia, as well as countries in the Arab region, Asia, and Africa. During this process, existing cooperation frameworks will be fully leveraged, such as the Asia-Pacific Economic Cooperation, the Shanghai Cooperation Organization, and BRICS.

6. **Enhancing the development and influence of standardization:** The objective of this area of action is to promote the high-quality development of standardization, strengthen its foundation, and expand its influence. It encompasses a wide range of fields, including standards management, digitalization, SDOs (Standard Development Organizations) management, professional training, and standards promotion. A total of 28 tasks, accounting for 31% of the overall task allocation, are dedicated to this objective.

In summary, the Key Points address, in a comprehensive manner, various aspects of standardization. The message conveyed through these Key Points is clear: To fully leverage the role of standardization in supporting China's economic development. Additionally, active participation in international standardization activities and collaboration with foreign actors on standards are also highly emphasized. For the translation, please see the annex.

5. China Revises Administrative Measures on Standardization for Agriculture and Rural Areas

#Agriculture and Rural Areas

To give full play to the fundamental and leading role of standardization in the modernization drive of agriculture and rural areas, China's State Administration for Market Regulation recently released the revised *Administrative Measures on Standardization for Agriculture and Rural Areas*, which will be officially put into effect on July 1, 2024.

According to the new tasks and requirements of the standardization work for agriculture and rural areas, the document expands the scope of the standardization work, defines the special requirements for standards development, focuses on the innovative application of standards implementation methods, and strengthen the modernization drive of agriculture and rural areas by standardization means.

The revised document includes the following main contents and highlights:

- First, it expands the applicable scope from agriculture to agriculture and rural areas, specifies the definitions and scopes of the standards for agriculture and rural areas, and includes the technical requirements on infrastructure, environment and public services of rural areas, rural governance and other fields in the standardization work for agriculture and rural areas.
- Second, it defines the requirements on standards development for agriculture and rural areas with the focus on solving the outstanding common problems, improving the quality and efficiency of agricultural products, raising the governance capability of rural areas, and protecting the ecological environment.
- Third, it specifies the scopes of national and local standards for agriculture and rural areas, and stipulates that no local standards shall be developed for the quality and testing methods of agricultural inputs and general agricultural products in principle. Social organizations are encouraged to develop association standards according to the market demands and innovative development needs. Relevant departments are encouraged to participate in international standardization activities, and enhance the consistency of Chinese standards and international standards.
- Fourth, it highlights the innovation of standards implementation methods, and stipulates that the administrative department for standardization and related administrative departments take the informatization and other measures to strengthen the publicity of standards and promote the application of standards for agriculture and rural areas according to local conditions. The standards for agriculture and rural areas are encouraged in the policy making in agriculture and other industries, agricultural technology promotion, agricultural product quality and safety supervision, rural construction and other work.

It also stipulates the specific requirements such as carrying out the standardization pilot and demonstration work for agriculture and rural areas, establishing service platforms, integrating and applying quality infrastructure, and facilitating the development of standardization services for agriculture and rural areas. In the next step, SAMR will make more efforts to strengthen the publicity, establish and improve the coordination mechanism of standardization work for agriculture and rural areas, implement standardization means to regulate agricultural production, and improve the living environment and rural governance, striving to create a good, fair environment for the development of agriculture and rural areas with standards and regulations.

Source: www.sac.gov.cn

6. Guidelines for the Establishment of Chinese National Standard Projects in 2024

#National Standards

On January 12, 2024, the Standardization Administration of China (SAC) issued the *Guidelines on the Establishment of National Standard Projects in 2024* (referred to as the Guidelines). With ongoing standardization reforms, China is transitioning from a government-led development model to one driven by both government and market forces. To boost market actors' involvement in standardization, China has raised the threshold for developing government-led standards (national compulsory and recommended standards) to reduce unnecessary market interference. The Guidelines clarify China's stance on national standard development and lay the groundwork for future national standardization efforts.

The document includes five sections: general requirements, key areas for national standardization, project application requirements, relevant application materials, and contact information for national standards (samples) development or revision. Here are the key takeaways from the Guidelines:

1. Institutional opening-up in standardization:

- Convergence with international standards: The Guidelines promote converting international standards into national ones and developing international and national standards simultaneously based on the same draft to align Chinese and international standards.
- Foreign-language translation of national standards: Besides convergence with international standards, the Guidelines emphasize translating national standards into foreign languages to promote Chinese standards globally. It requires translating all national compulsory standards not converted from international standards, in principle.

2. Standardization areas: The Guidelines identify key areas for national standardization (reference materials) and detail SAC's encouragement for national standard development in these areas. These key areas include consumption products, equipment manufacturing, materials, emerging technology, new-energy, energy conservation and pollution reduction, green and low carbon, agricultural and rural areas, modern service, safety and emergency, administrative management and social services, as well as national reference materials.

3. Requirements for national compulsory standard development: The Guidelines stress that national compulsory standards should strictly focus on safety, public health, and environmental protection. These standards must be formulated based on a clear legal basis and implemented under governmental authority surveillance to handle non-compliance cases based on relevant legislation.

4. The significance of a standardized system. Among the application materials is a comprehensive standard system table, outlining the blueprint for standardization in the forthcoming years. It is strongly advised for international stakeholders to closely monitor the standards system within pertinent industries as outlined by governmental authorities. These insights can offer valuable foresight into forthcoming national standards.

5. Specific time constraints allocated to various types of standard projects (as indicated in the table below). Additionally, expedited procedures, known as fast-track procedures, are permissible for the standardization of emerging technologies or urgently demanded new products with significant market consumption potential.

Types of standards	**Types of actions**	**Projects duration requirements**
National compulsory standards	Development	Less or equal to 24 months
National compulsory standards	Revision	Less or equal to 18 months
National recommended standards	Development	Less or equal to 18 months
International standards adopted by national standards	Revision and adoption	Less or equal to 16 months
National standards	Foreign-language translation	Less or equal to 12 months
National standards	Foreign-language translation implemented simultaneously with the development or revision projects	Within 90 days after the standards are approved for publishing

6. Access to governmental authorities. The Guidelines provide contact details including names, email addresses, postal addresses, and office phone numbers of relevant individuals. Stakeholders are encouraged to engage with them for inquiries regarding national standard projects, sample projects, or translations of national standards into foreign languages.

In summary, the Guidelines serve as a crucial point of reference for stakeholders involved in drafting national standards or monitoring industry trends. Moreover, they underscore the pivotal role of the standards system in guiding the formulation and revision of national standards in the immediate future. Ultimately, efforts towards institutional openness in national standards are anticipated to foster alignment with international community regulations.

7. China and Uzbekistan Sign a Protocol on Standardization Cooperation

#Standardization Cooperation

On January 24, 2024, China's Minister of the State Administration for Market Regulation (SAMR), Mr. Luo Wen and the Minister of Investment, Industry and Trade of the Republic of Uzbekistan Laziz Kudratov signed the *Protocol on Cooperation in the field of Standardization*. According to the document, China and Uzbekistan pledge to enhance cooperation in exchanging standard information and conducting endeavors to enhance standardization capacities.

This document is among the 15 documents signed between China and Uzbekistan under the witness of the heads of two countries: President Xi Jinping of China and President Shavkat Mirziyoyev of Uzbekistan. The two leaders held talks at the Great Hall of the People in Beijing.

8. China Releases Measures for Administration of Sector Standards for Transport Industry

#Transport #Sector Standards

In February 2024, China's Ministry of Transport released the *Measures for Administration of Sector Standards for Transport Industry* (hereinafter referred to as the Measures), which came into effect on March 1, 2024. In order to better understand the content of the Measures and effectively carry out the implementation work, China released the official interpretation as follows:

1. Background and Significance

Standards, as the technical basis for economic and social activities, are an important component of the national quality infrastructure. High-quality supply of standards is an important guarantee for the high-quality development of the transportation industry. The Measures will strengthen the standardization management of the whole process of transport sector standards and enhance the quality and efficiency of the supply of sector standards. It is of great significance for improving the transport standardization policy and institutional system and enhancing the management level of sector standards.

2. Main Contents

The Measures consists of 41 articles, including general principles, project establishment, organization and formulation, approval and publication, implementation and supervision, and appendices. The main contents are as follows:

General principles: It clarifies the purpose, basis, scope of application, and organizational management of the Measures. It stipulates that the technical requirements of sector standards shall not be lower than the relevant requirements of mandatory national standards and shall be coordinated with relevant national and sector standards. The Measures prohibit the stipulation of qualifications, certifications, accreditation, approvals, registrations, appraisals, regulatory subjects, and responsibilities in sector standards, as well as the use of sector standards to hinder the free circulation of goods and services and other behaviors that exclude or restrict market competition. In addition, it also stipulates the procedures for formulating sector standards and the division of responsibilities of organizational management institutions.

Project establishment: It specifies requirements for standard system, collection of sector standard plan projects, application conditions, project establishment evaluation, project completion period, as well as project adjustment and extension management. It explicitly encourages the conversion of local standards and association standards that have been well implemented and meet the needs and scope of sector standard formulation into sector standards. It requires that the general completion period of sector standard plan projects shall not exceed 18 months.

Organization and formulation: It specifies that an implementation plan or work outline should be prepared after the plan project is issued. It also gives the relevant provisions on the drafting of standards, solicitation of opinions, review and other stages of work, as well as on associated patents, and the adoption of international standards. The Measures require sector standards generally do not involve patents. If patents are necessary to be involved, they should be essential to the implementation of the standard, and should be implemented in accordance with the

relevant administrative provisions.

Approval and publication: It specifies requirements for approval, coding, publication, printing, record filing, publication, filing, fast-track procedures, and amendment sheets. It stipulates that the Ministry of Transport shall establish and improve a standardized information system covering project establishment, drafting, solicitation of opinions, review, approval, and publication. The Ministry should also strengthen the public release of standard formulation information and social supervision, and promote the public release of sector standards through the standardization information system.

Implementation and supervision: It stipulates requirements for standard substitution and conversion, promotion, feedback and evaluation of implementation information, interpretation and daily management, pilot projects, and reevaluation. It clarifies that a reasonable transition period may be left between the publication and implementation of sector standards. During the transition period, the original sector standards or new sector standards may be chosen for implementation. After the implementation of new sector standards, the original sector standards are simultaneously abolished. It encourages the implementation of transportation standardization pilot demonstrations and promotion work for experience sharing.

Appendices: It stipulates supplementary provisions for entrusted management of national standards, engineering construction standards, foreign language versions of standards, etc.

In conclusion, the Measures are an important initiative to strengthen the management of transport sector standards. By clarifying the regulations for sector standards, it is possible to improve the quality of sector standards and are expected to further enhance the quality and efficiency of the transport industry's development. This demonstrates China's commitment of creating a supportive standardization environment for the transport industry, thereby promoting the high-quality development of China's transport industry.

9. China Calls for Comment on Provisions on IEC Conformity Assessment System Participation Management

#Regulations

On January 26, 2024, the State Administration for Market Regulation of China unveiled the *Provisions on the Management of Participation in the Activities of the International Electrotechnical Commission's Conformity Assessment System (Draft for Comment)* (hereinafter referred to as the Provisions). The public consultation period concluded on February 26, 2024. The primary objective of these provisions is to enhance the oversight of China's involvement in the International Electrotechnical Commission (IEC) conformity assessment system activities. The scope of management covers various entities, including the competent authority (namely, the National Certification and Accreditation Administration), certification bodies, inspection and testing bodies, as well as other relevant technical entities and personnel.

The International Electrotechnical Commission (IEC) operates four conformity assessment systems, namely the IECQ, IECEE, IECEx, and IECRE. China's formal representation within the IECRE system in 2014 marked its comprehensive engagement in all four IEC mutual recognition conformity assessment systems. Prior to the introduction of the Provisions, management requirements for participation in IEC conformity assessment activities are scattered in multiple documents, including Certification and Accreditation International Peer Reviewers Recommendation and Post Management Measures, Regulations on the Management of Participation in the Activities of International Organizations for Certification and Accreditation (Trial), Certification and Accreditation International and Regional Organizations Post Management Provisions (Trial). As outlined in Article 31 of the Provisions, the relevant provisions within these documents concerning the management of IEC conformity assessment activities will be superseded upon the Provisions' enforcement.

The Provisions consist of eight chapters, encompassing general regulations, participation in the IEC conformity assessment system, posts or part-time posts in the system, attendance at related conferences, organization of international conferences within China, voting procedures/budget requirements/notification, and supplementary articles. These regulations delineate the responsibilities of competent authorities, as well as the prerequisites for engaging in various activities, such as

joining the IEC conformity assessment system, assuming roles, attending or hosting conferences, voting, making proposals, and issuing notifications. The Provisions apply to a range of stakeholders subject to their provisions.

Throughout the public consultation phase, a total of 13 comments were received. In the subsequent phase, based on the feedback received, the Provisions will undergo revisions and enhancements in accordance with procedural requirements. Subsequent actions will be undertaken to advance the relevant initiatives accordingly.

Digital Transition

10. China Released the Automotive Chip Standardization System Construction Guidelines

#Automotive Chip

On January 8, 2024, China's Ministry of Industry and Information Technology released the *Guidelines for the Construction of the National Automotive Chip Standardization System* (hereinafter referred to as the Guidelines). The Guidelines are the result of the collective efforts of over 200 experts from more than 60 enterprises, research institutes and universities, absorbing opinions from various segments of the industry. The goal set by the Guidelines is to develop more than 30 automotive chip standards of importance by 2025, meeting the basic requirements for product security, reliable application and pilot trials; the target increases to over 70 standards by 2030.

Background

Automotive chips, as the core components of vehicles' electric systems, are essential for the transformation and upgrading of the automotive industry. Yet, the application scenario of automotive chips make them significantly different from other types of chips, as they have higher requirements in terms of adaptation to the environment, reliability, and security. On the other hand, according to ICwise (a provider of market research and advisory services specializing on the semiconductor and electronics industry), China has set clear goals for substituting the major types of automotive chips with domestically-made chips, within three years. For instance, for the automotive industry, over 50% of computing chips installed onboard must be produced domestically by 2025; overall, the substitution rate for different types of chips range from 40% to 55%.

Importance of standards system

During an interview with Chinese media, Mr. Yuan Chengyin, the General Manager of the National New Energy Vehicle Technology Innovation Center and Secretary General of the China Automotive Chip Industry Innovation Strategic Alliance (i.e., the main organization supporting the drafting of the Guidelines), indicated that "the introduction of the standard system provides reference for the application of independently developed chips installed onboard. This does not only helping China's automotive chip industry to define the basic framework, but also the relevant enterprises to reduce costs and increase efficiency. In the past, the absence of a standards system for automotive chips meant that reference could be made only to foreign standards. In practice, this means that Chinese enterprises might be compliant with standards which may be out of date, or even not necessarily the most suitable for China's application scenarios".

The Guidelines aim to guide the development of standards in China, potentially impacting international standard development in the future. The secretariat of SAC/TC 114/SC34 has confirmed that the standards for automotive chips will not mandate the use of domestically produced chips. However, some stakeholders firmly believe that the Guidelines are aimed at promoting the independent development of automotive chips in China. This stems from the idea that enterprises along the supply chain may adjust their practices based on domestically developed standards, which could in turn pose challenges for foreign chips to enter the Chinese market at lower prices or relying on international standards.

Modifications

The Guidelines were revised after a previous draft for comments was released in March 2023. Apart from editorial changes and adjustments made in the body text, the final version:

Removes the requirement for establishing a co-working group for automotive chips involving several relevant national technical committees;

Removes the standard list attached in the end, which might be due to the fact that the majority of the standards previously indicated arestill at a very preliminary stage of development.

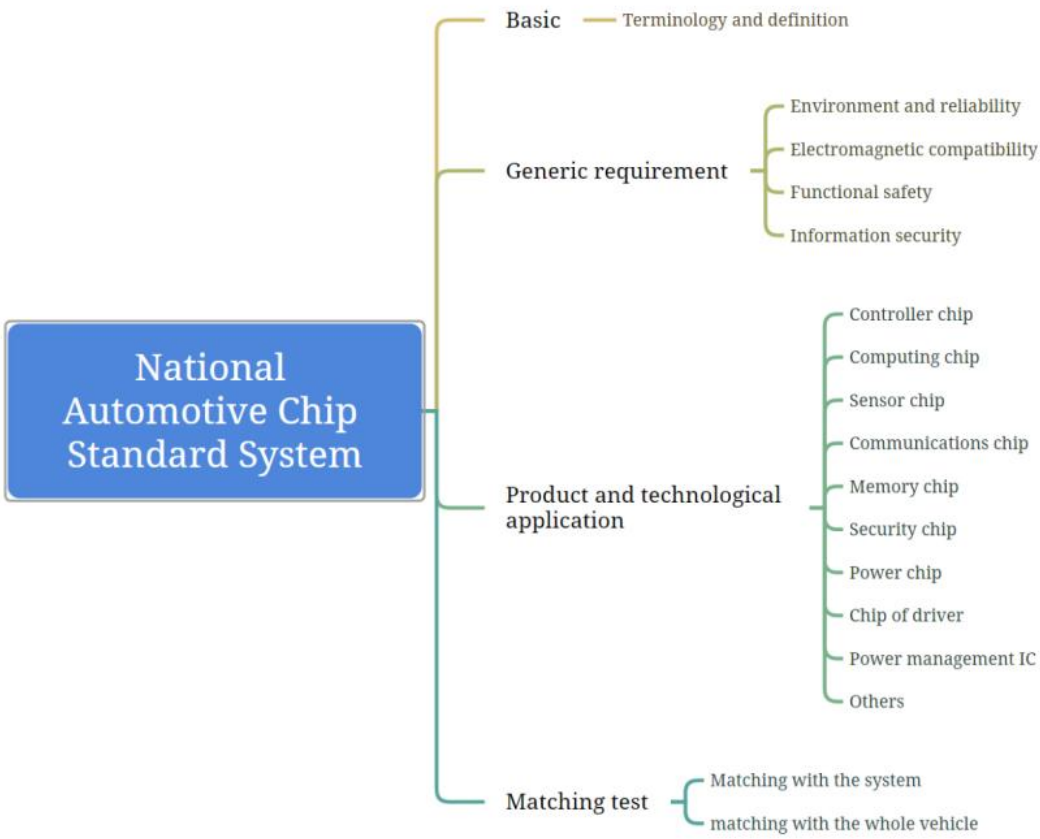
Technical committees involved

The Guidelines reiterate the importance of deepening international exchanges and cooperation in UN/WP.29 as well as ISO and IEC. In addition, as the previous list of standards attached was removed, foreign stakeholders are recommended to closely track the dynamics of three specific technical committees, namely TC599 on Integrated Circuits, TC114 on Road Vehicle, and TC78 on Semiconductor Devices. These are expected to be the main platforms for the development of automotive chips standards. At the same time, technical committees on communication, information technology and Beidou Satellite Navigation will also be involved.

The China Automotive Technology and Research Center, which hosts the secretariat of TC 114, has established the Automotive Chips Standard Researching Group, thanks to joint efforts with other TCs such as TC114/SC15 on Electrical Equipment, TC114/SC27 on Electric Vehicles, TC114/SC29 on Automotive Electronics EMC, and TC114/SC34 on Intelligent and Connected Vehicle. In 2022, three standard drafting groups were established, each focusing on specific standardization topics. At the governmental level, a joint working group has been established by officials from MIIT's Manufacturing Industry No. 1 Bureau, the Department of Science and Technology, and the Department of Electronic Information.

In conclusion, the Guidelines reflect China's efforts to developing its own automotive chips, with the aim to support the development of domestic industries and gradually replace foreign supplies. Relevant technical committees and working groups have been established for this purpose. Therefore, foreign stakeholders are strongly recommended to keep tracking the dynamics of their activities, as well as the alignment or differences between China's standards and international ones.

Figure 1. National Automotive Chip Standard System



11. Standardization Technical Subcommittee on Brain-computer Interfaces Set up

#Brain-computer

Brain-computer interface technology has become the key engine to boost scientific and technological development, attracting global attention. In 2022, the ISO/IEC JTC 1/SC 43, Brain-computer interfaces, was set up, the chair and secretariat of which are undertaken by China.

To integrate international and domestic standardization work in this field, SAC announced the establishment of SAC/TC 28/SC 43 on brain-computer interfaces on December 18, 2023, as the counterpart of ISO/IEC JTC 1/SC 43. The working scope of SAC/TC 28/SC 43 includes the revision and development of standards for fundamental and key technology, system, equipment, product testing and evaluation, ethics, and other aspects of brain-computer interfaces, the secretariat of which is held by China Electronics Standardization Institute (CESI).

The subcommittee has 50 members. The chair of the subcommittee is Wu Chaohui, Academician of Chinese Academy of Sciences. The vice chairs are Fan Kefeng, Director of Information Technology Research Center, CESI, and Prof. Ming Dong, Vice President of Tianjin University. The secretary-general and deputy secretary-general of its secretariat are respectively assumed by Yu Yuntao, Senior Engineer from CESI, and Pan Gang, Deputy Executive Director of National Key Laboratory of Brain-computer Intelligence in Zhejiang University.

In the future, the subcommittee is expected to promote the research, proposal and drafting of national standards on brain-computer interfaces, establish and improve the standards system, and lead the high-quality development of the industry via standards.

Source: China Standardization Magazine, issue 1 in 2024.

12. China Revises the AI Standards System

#AI

On January 17, 2024, China's Ministry of Industry and Information Technology (MIIT) released the *Guidelines for the Construction of a Comprehensive Standardization System for the National Artificial Intelligence Industry (revision for comment)*. The document, hereinafter referred to as the Guidelines, proposes to accelerate the formation of a standards system to promote the high-quality development of the artificial intelligence industry. In practice, the Guidelines represent an improved version of the previous guidelines, which were issued in 2020 and are currently in force. The deadline for submitting public comments was January 31, 2024.

Background

In recent years, China's AI industry has achieved rapid development in technological innovation, product creation and industrial application. The market size is huge. With the rapid development of new technologies, exemplified by large-scale models, the AI industry presents new characteristics such as breakthroughs of a batch of innovative technologies, mature and extensive applications in various industries, and deep coordination and cooperation networks at international level. The revised version of the Guidelines reflects China's commitment to further improve the AI industry's standard system.

Objectives

The Guidelines propose that, by 2026, more than 60% of generic and key technologies, as well as application development projects, will generate standards; while the interaction between standards and scientific and technological innovation in the industry will continue to improve. Simultaneously, more than 50 new national and sector standards are planned to be formulated, supported by an enhanced standards system aimed at facilitating the high-quality development of the AI industry. Additional quantitative indicators include the aim to have over 1,000 enterprises effectively promoting and implementing AI standards, while also enhancing the innovation and development capabilities of standard service enterprises. At the international level, China will participate in the formulation of more than 20 international standards, and promote the globalization of the AI industry.

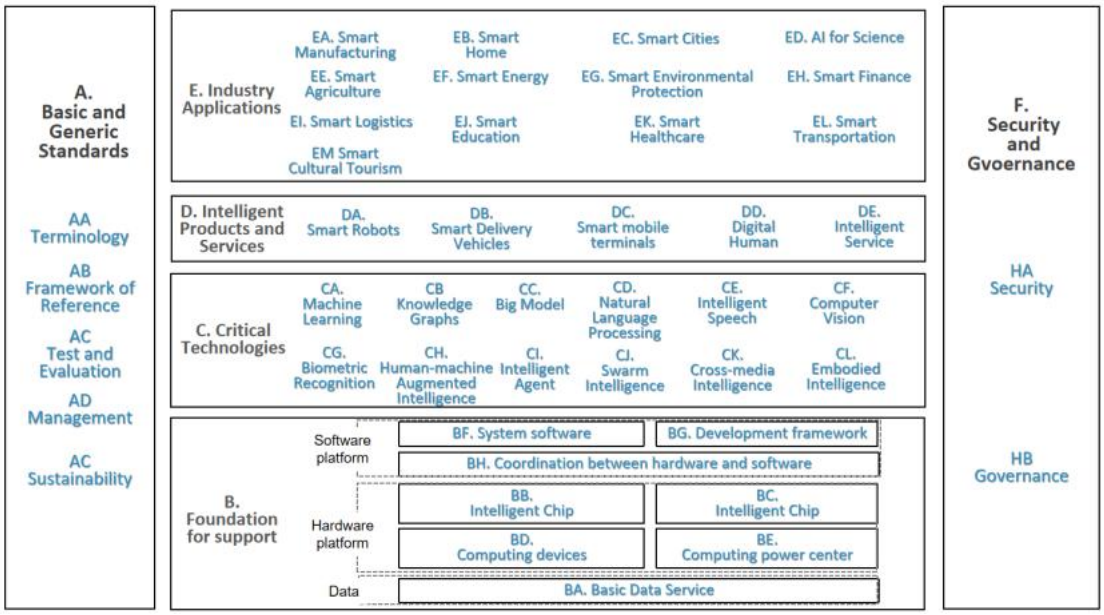
Content and Alteration

The standards system of artificial intelligence includes six parts (please refer to Figure 1): basic and generic standards, foundation for support, critical technologies, intelligent products and services, industry applications, and security/governance. The major changes compared with the previous version currently in force take place in the parts 'foundation for support' and 'critical technologies'. More specifically:

The part 'foundation for support' integrates two previously distinct parts: basic software and hardware platforms, and foundational technology and products.

The part 'critical technologies' extend the list of critical AI technology from 5 to 12. The list currently include: machine learning, knowledge graph, big model, natural language processing, intelligent speech, computer vision, biometric recognition, human-machine augmented intelligence, intelligent agent, swarm intelligence, cross-media intelligence, embodied intelligence.

Figure 1. National Artificial Intelligence Standard System



13. Meeting on Standards for Product Circularity Data Exchange in APEC Region Held in China

#Product Circularity Data Exchange

Hosted by CNIS, the meeting on the sharing and analysis of standards for product circularity data exchange in the APEC region was held in Beijing on December 6-7 in hybrid forms.

The APEC is the important economic cooperation forum and the intergovernmental cooperation organization at the highest level in the Asia-Pacific region. Supported by the APEC Sub-Committee on Standards and Conformance (SCSC) and SAMR, experts were invited to give keynote speeches to share their experience, who were from ISO/TC 323 on circular economy and APEC economies, including Thailand, Chile, the U.S., Japan, Singapore, and Malaysia. Wang Yuhan, Deputy Director of International Cooperation Department of SAMR, and Catherine Chevauché, Chair of ISO/TC 323, attended and addressed the meeting.

Focusing on relevant standards for product circularity data exchange in the APEC region, the participants held indepth discussions on issues such as how to improve the exchange efficiency of product circular data among APEC economies. Keynote speeches were made by Jérôme Petry, Convenor of ISO/TC 323/WG 5, Witchuda Daud, Director of National Metal and Materials Technology Center in Thailand, Jean-Pierre Doussoulin, Professor of Austral University of Chile, Douglas Mulhall, Researcher from Delft University of Technology.

China has attached great importance to standardization research and innovation. SAMR has been vigorously supporting the international cooperation on standardization, which is an important way to stimulate creativity and strengthen communication. Directed by SAMR, CNIS expands standardization dialogues under the mechanisms such as APEC, to deepen communication with regional standardization organizations. Following the global trends of green, low-carbon and circular development, CNIS will enhance the cooperation in the area of international standardization and offer its wisdom to realize global sustainable development goals.

Source: China Standardization Magazine, issue 1 in 2024

14. A Forward-Looking Exploration of Wi-Fi: WAA - Informa Tech 2024 Barcelona Roundtable Concludes Successfully

#Wi-Fi #WAA

Barcelona, Spain--(Newsfile Corp. - March 4, 2024) - On the afternoon of February 28, 2024, amidst the Mobile World Congress (MWC) event, a roundtable forum organized by the World WLAN Applications Alliance (WAA), in partnership with Informa Tech, drew to a successful close. The forum, sponsored by Huawei as the diamond sponsor, with Changeself Technology (Shenzhen) Co., Ltd. and TÜV Rheinland as bronze sponsors, focused on the theme of "Creating a Secure and Sustainable Home Wi-Fi Network." Representatives from numerous industry units, including WAA, Informa Tech, Huawei, Changeself Technology, TÜV Rheinland, ABI Research, Wireless Broadband Alliance (WBA), ZTE, British Standards Institution (BSI), SoftAtHome, Alliance for Internet of Things Innovation (AIOTI), VMware, and others (listed in no particular order), convened in Barcelona. They collectively discussed the three major issues of Wi-Fi: performance and experience, security, and sustainability. The seminar was moderated by Michael Philpott, the research director of Omdia. WAA Secretary-General Yang Tao delivered an opening speech for the meeting.

Before the roundtable discussion commenced, Michael Philpott initiated the topic with a preparatory talk. He spoke about the lag between the evolution of home broadband services and changes in home terminal devices, which has led to the home network becoming a bottleneck in extending network capabilities to home terminals. Changing this situation requires not only attention to improvements in hardware technology but also intelligent service platforms that monitor and analyze network conditions and facilitate richer integration of third-party applications - keys to enhancing the home network experience. Besides the dimension of experience, the aspects of security and sustainability should not be overlooked. Providing a secure network will benefit ISPs in better protecting privacy and addressing cybersecurity threats. Building sustainability positions operators for the future, fostering a sense of responsibility that can enhance their brand value.

Thomas Li, Huawei's Chief Scientist of Standards, delivered a speech about WAA's sustainable development. He shared several research directions that WAA will focus on in the future, including: 1. Optimized Joint Source-Channel Coding (JSCC) for lower latency and channel protection; 2. Quantum Time Flip (QTF)-based wave-level signatures against cyber attack; 3. AI-based frequency hopping for interference cancelation; 4. AI-based Listen Before Talk (LBT) design for congestion relief; 5. AI-based Channel State Information (CSI) compression for computational complexity decreasing. Thomas emphasized that in order to ensure these cutting-edge technological research directions proceed smoothly, it is necessary to build a well-functioning foundation. Besides traditional salons and seminars, a technology sharing resource pool mechanism is also of vital importance.

The first roundtable discussion focused on how to significantly improve the performance of home and campus networks. Tiago Rodrigues, CEO of the WBA, highlighted the richness and diversity of the Wi-Fi industry ecosystem. Currently, there are over 600 million Wi-Fi networks and more than 18 billion Wi-Fi-capable terminal devices worldwide. Georgios Karagiannis, WG Standardization Chair of AIOTI, suggested that the WAA should build consensus among different stakeholders through the working group approach, aggregating capabilities, fostering communication and collaboration, and thereby constructing an ecosystem. Focus should be on how to lead, build, connect, and inspire collaboration to tackle challenges and explore technologies. He also advocated for the use of IT deployments to lower the barriers to global collaboration. Zhang Jinlin, Changeself Technology R&D Director, highly praised WAA's contributions to Wi-Fi experience assessment and testing, and also proposed specific testing suggestions, including: 1. Wi-Fi simulation based on real environments; 2. Wi-Fi capability modeling; 3. Traffic simulation; 4. Interference testing. David Mudd, Global Head of Digital Trust Assurance of BSI, emphasized the importance of AI in improving network security and experience. He noted that the use of AI and machine learning could significantly enhance network diagnostics and anomaly detection, thereby improving security measures and user experience. Moreover, Mudd stressed the role of standards in ensuring that these technologies are implemented in a way that is interoperable and that maintains user trust. Vinod Joseph, APAC Field CTO at VMware, discussed the potential of virtualization in Wi-Fi networks, emphasizing how virtual network functions (VNFs) and software-defined networking (SDN) can lead to more agile and flexible networks. He also highlighted the importance of edge computing in reducing latency and improving the performance of real-time applications. Lionel Gremeau, Product and Market Director at SoftAtHome, shared insights into the development of smart home ecosystems, stressing the importance of Wi-Fi in connecting various smart home devices and providing users with a seamless experience. He also noted the potential for Wi-Fi to act as a platform for new services and applications in the home. Shi Hao, WAA Deputy Secretary-General, believes that home and campus scenarios are complex, with a multitude of technological options available. He advocates for various standards organizations to collaborate closely to address issues related to performance and user experience. He indicated that WAA had already initiated such efforts last year and plans to continue expanding the scope of collaboration this year. WAA Secretary-General Yang Tao expressed his gratitude for everyone's suggestions, stating that last year WAA had established specialized groups responsible for improving terminal performance and user experience. He looks forward to these groups making even more significant contributions in 2024. WAA is one of the members in the international standards-setting community and in 2023, it established the Technology Standards Community (TSC), which is open to the public, and are forming a close relationship with organizations such as the ITU.

The topic for the second roundtable discussion was: "Maximizing consumer engagement by enhancing security." The discussion was vigorous with participants debating the significant challenges and key elements of constructing a comprehensive security framework, how to balance customer experience with privacy and security, achieving the optimal business model for secure services, and how WAA can advance the global standardization of this field. Vinod Joseph addressed the need for standardization and industry integration, questioning whether every device in a home with many endpoints should be upgraded for security purposes or if the focus should be on upgrading home gateways. He also discussed the selection of firewalls from different manufacturers and the necessity for AI to provide personalized services rather than a one-size-fits-all approach, especially for devices that have high network performance demands, where a balance between security and performance is crucial. All of these issues call for organizations like WAA and related standard-setting bodies to jointly develop standards and build a healthy ecosystem. David Mudd highlighted three points: 1. Security needs to be considered globally, with differentiated control methods across different layers and domains while ensuring default security. 2. There are cultural differences in the understanding of privacy

and security. 3. The operation of AI needs to be regulated and ensure process transparency. Thomas Li argued that security design must be based on the scenario; home and industrial scenarios are vastly different. In choosing solutions that balance performance and security, it is essential to ensure lightweight implementations. He used Post-Quantum Cryptography (PQC) as an example of how to cleverly balance the relationship between the two in specific solutions. Tiago Rodrigues spoke about the challenges of ensuring security in complex current scenarios, including different types of users, devices, applications, services, and even varying regulatory and legislative frameworks across different regions and countries. On one hand, we recognize the complexity of the 'forest,' but on the other hand, we must also care for each individual 'tree.' We need to view issues from an end-to-end perspective while also being pragmatic, or we will face difficulties. Lionel Gremeau also highlighted three points: 1. The same device being used by different users necessitates considering privacy isolation between them. 2. The security construction of the home gateway should be a focal point. 3. Security issues in the operator's network can lead to network collapses, which will also affect the user experience. Senior Analyst Andrew Spivey from ABI Research explored security from a business model perspective. He suggested that operators could offer service packages based on security features, with complex work completed in the background and a simplified interface for the user end.

The release of the White Paper on the Sustainability of the Wi-Fi Industry (hereinafter referred to as the "White Paper") undoubtedly became the highlight of this event. The White Paper Release Ceremony was attended by notable figures including Andrew Spivey, Senior Analyst at ABI Research; Bin Gan, Vice President of Huawei and Head of the Standard & Industry Development Department; Yang Tao, Secretary-General of WAA; Jay Yang, Vice President, Electronic and Electrical Products Services Division, Greater China of TÜV Rheinland; Fan Xu, VP of Huawei's Optical Access Network Product Line; Li Tian, Head of Standard Strategy at ZTE Communications; and Jinlin Zhang, R&D Director of Changeself Technology(Shenzhen)Co., Ltd.

The White Paper, jointly authored by WAA's Green Energy Efficiency Working Group and ABI, offers critical guidance and analysis on the sustainable development of the Wi-Fi industry for the first time. By considering the policy environment, industry practices, and technological advancements of different regions comprehensively, it enables us to have a clearer understanding of the challenges and opportunities faced by the industry in terms of energy efficiency and environmental protection. The White Paper not only identifies the issues but also proposes a series of practical improvement measures and emphasizes the importance of unified standards and regulation.

Following the release ceremony, Andrew Spivey gave a brief interpretation of the White Paper. He mentioned the disparate policies, legal regulations, and industry practices related to the sustainability of the Wi-Fi industry across different regions, noting the fragmented nature, lack of unified standards, and insufficient regulatory and enforcement efforts, making it challenging to form a consistent driving force. To better understand the status quo, Andrew provided baseline data on the energy consumption of Wi-Fi-related broadband infrastructure equipment. He conducted a detailed assessment of the power consumption of CPE processors, memory, Ethernet interfaces, and Bluetooth modules, and offered several technical suggestions for improving energy efficiency.

During the subsequent roundtable discussion on Wi-Fi sustainability, the guests engaged in a robust interaction based on the content of the White Paper. Lionel Gremeau stated that the industry should collaborate to disclose power consumption data for CPEs. Sleep modes combined with AI could significantly reduce the power consumption of CPEs. David Mudd added that AI's better role depends on learning from massive data and that AI's application should not be considered solely from a micro or strategic perspective, thus the deployment point for AI should not be the home gateway, but rather the data center. Georgios Karagiannis emphasized that WAA should establish rules as well as quantitative methods and metrics so that a common language can be used to compare the power consumption differences of different solutions, ultimately fostering the goal of environmentally friendly design. Yang Jiajie also agreed on the necessity of a unified calculation of carbon footprints and carbon emissions. He hoped that WAA would assist in building an industry database to ensure the consistency of carbon metrics. Zhang Jinlin shared Changeself Technology's best practices in calculating energy consumption data but also expressed concern about how to ensure fairness and objectivity in assessing the scale of green energy.

At the end of the seminar, Bin Gan, Vice President of Huawei, gave a closing statement. He expressed gratitude for the creative and inspiring discussions from many industry members and partners during the meeting. Through the sharing and collision of ideas, challenges were identified, solutions explored, and the

path forward was outlined. He firmly believed that with innovation and collaboration throughout the ecosystem, WAA's vision of "providing the best wireless local area network experience for the digital world" could be realized. The roundtable concluded successfully in an atmosphere of joint cooperation and in-depth discussion. This roundtable was not only WAA's first international seminar held overseas, but also a deep exploration and cooperative opportunity regarding the development direction of the Wi-Fi industry. From enhancing security to promoting sustainability, the meeting focused on the most topical issues, gathering industry elites to contribute their strategies for building a safer, greener digital future. The outcomes of the meeting were significant, with delegates expressing profound insights into these two fields.

Source: www.nasdaq.com

15. China Highlights Data Security in the Industrial Sector

#Data Security #Industrial Sector

On February 26, 2024, the Ministry of Industry and Information Technology of China unveiled the *Implementation Plan for Improving Data Security Capabilities in the Industrial Sector (2024-2026)* (hereinafter referred to as the Implementation Plan). This strategic initiative is crafted in response to evolving legislative and regulatory mandates concerning data security within the industrial domain. Structured into three core components—general mandates, pivotal tasks, and auxiliary measures — the Implementation Plan endeavors to fortify data security within the industrial sector by delineating specific responsibilities for various stakeholders, including industrial entities, regulatory bodies, and data security service providers. Here's a condensed overview tailored for international stakeholders:

1. End-of-2026 Objectives:

- Heightened Enterprise Awareness: The plan advocates for the dissemination of data security requirements among sizable enterprises across diverse industrial realms.
- Securing Key Enterprises: A focal point is to safeguard data integrity for key enterprises and those whose scales surpass predefined thresholds. This entails implementing classified and graded data protection measures for over 45,000 enterprises, particularly targeting the top 10% of industrial enterprises above designated size in the provinces (autonomous regions and municipalities), calculated by their annual turnover.
- Standards Formulation: A commitment is made to formulate comprehensive standards and conclude best practices, encompassing over 100 national, sector, or association standards, along with cataloging 200 exemplary cases across ten pivotal industries.
- Capacity Building: Prioritizing education and training initiatives, the aim is to empower more than 30,000 individuals and 5,000 professionals in data security practices.

2. Key Tasks:

- For Industrial Enterprises: Emphasizing responsibility, the plan mandates that enterprises, especially those handling critical data, assume primary accountability for data management. Regulators will collaborate in defining data categories and providing guidance on protective measures.
- For Regulators: Regulatory bodies are tasked with bolstering surveillance capabilities through standardization efforts, dedicated actions, emergency preparedness, platform development, toolkit creation, and workforce augmentation.
- For Data Security Providers: Ensuring the availability of effective products and services to meet industrial data security demands is highlighted.

3. Auxiliary measures: Government initiatives encompass coordination among diverse administrative tiers, resource allocation, ongoing evaluations, as well as public outreach and guidance efforts.

As per the Implementation Plan, data security requisites may vary for different industrial entities, data types, and operational scenarios. Key enterprises are slated for heightened scrutiny and more stringent risk mitigation protocols. Consequently, international stakeholders are advised to closely monitor forthcoming standards and official directives from the Chinese government to align with evolving data security mandates.

Green Transition

16. China Releases Guidelines on Standards System for Carbon Peak and Neutrality in Industrial Sector

#Carbon Peak and Neutrality #Industrial Sector

To facilitate China's carbon peak and neutrality goals, the Ministry of Industry and Information Technology (MIIT) organized relevant industrial associations, research institutions, and standardization technical committees to develop the *Guidelines on Construction of the Standards System for Carbon Peak and Neutrality in the Industrial Sector*.

The Guidelines puts forward the framework of the standards system, and provides the development direction of key standards, which will effectively integrate the existing standards system for industrial energy conservation and comprehensive utilization, and the green manufacturing standards system. By accelerating the development of standards, and continuously improving the standards system, it is expected to turn the development of industrial sector into a low-carbon or zero-carbon model. To boost the development of the standards system, the Guidelines highlights some principles.

First, overall planning will be carried out to cover all relevant fields of industrial low-carbon transition, plan the standards system from various dimensions including manufacturing process, technological development, life cycle, and industrial chains, and comprehensively consider carbon emissions of products, enterprises, industrial parks, supply chains and other levels. Also, efforts should be made to coordinate with existing standards systems.

Second, the standardization work on carbon peak and neutrality will be steadily promoted, focusing on key carbon emission industries and carbon reduction processes of key products. The development and revision of urgently needed standards will be sped up.

Third, adhering to innovation-driven development and digital empowerment, enterprises will be encouraged to achieve innovations in low-carbon technology and management in the industrial sector, which will be written into latest standards for wider application.

Fourth, based on the situation of China's industrial sector, the level of Chinese low-carbon standards will be enhanced by actively learning from the basis and development trend of international standardization work in response to climate change.

According to the Guidelines, by 2025, the standards system for carbon peak and neutrality in industrial sector will initially established, with over 200 urgently needed standards developed. By 2030, a relatively complete standards system will be built, which supports the overall peaking of carbon emission in the industrial sector, and gradually changes the focus of standardization work to carbon neutrality.

Also, China will vigorously participate in the green and low-carbon standardization activities of international standards organizations such as ISO, IEC and ITU, especially the research, development and revision of standards in terms of GHG accounting and verification, low-carbon technology and equipment, GHG monitoring, as well as carbon emission management and evaluation.

Source: China Standardization Magazine, Issue No.2 in 2024

17. China Updates the Policy for Key Energy-Using Products

#Energy-Using Products

On February 7, 2024, China's National Development and Reform Commission, Ministry of Industry and Information Technology, the Ministry of Finance, the Ministry of Housing and Urban-Rural Development, the State Administration for Market Regulation, and the National Energy Administration jointly released the *Notice on the release of Advanced Energy Efficiency Levels, Energy-efficient Levels and Access Levels of Key Energy-Using Products and Equipment (2024 edition)* (hereinafter referred to as the Notice). The Notice is composed of six main tasks and the annex. The annex identified specific key products, energy-efficiency indicators, units, classification, levels and referencing standards.

The notice has been revised from its previous version, the 2022 edition, which failed to adequately address China's industrial development needs. The new edition incorporates adjustments and integrates 23 new products to align with China's commitment to energy conservation and carbon emission reduction. The main changes regarding standardization are summarized as follows:

- Clarification of recommended national standards and association standards: Energy efficiency levels are categorized into three tiers: advanced, energy-efficient, and access levels, consistent with the previous edition. Each tier is supported by specific standards requirements. Notably, products or equipment must meet the access level before entering the market, potentially leading to the adoption of recommended national standards or association standards as de facto compulsory standards equivalent to compulsory national standards. It could easily create confusions over the boundary between the compulsory national standards, recommended national standards, and association standards. To prevent the confusion, the Notice emphasizes that no energy efficiency access level shall be set for products and equipment referencing recommended national standards or association standards.
- International standardization for energy saving and carbon emission reduction. To promote the green and low-carbon consumption, the Notice encourages the engagement in formulation of international standards and promotes the mutual recognition of energy efficiency standards.
- Upgrading and supplementation of compulsory energy-efficiency standards. The Notice assigns the tasks of
  - ✓ upgrading the compulsory energy-efficiency standards for commonly-used products and equipment in industrial and commercial areas;
  - ✓ formulating compulsory energy-efficiency standards in the fields of information and communication, transportation, new types of home appliance, renewable energy resources, as well as standards for products of pumps, and system operation energy efficiency standards, such as standards of pumps, industrial fans, air compressors, etc.

In general, the Notice has been expanded to include a wider range of products and equipment, as well as more detailed and comprehensive actions to be taken. Building upon the previous version, it promotes recycling, green and low-carbon consumption, and emphasizes enforcement, surveillance, and comprehensive policy support. Foreign stakeholders are advised to stay informed about China's involvement in international standardization for energy conservation and carbon emission reduction, as well as mutual recognition in this area.

Others

18. Shanghai Urban Railway Standardization Alliance Set up

#Urban Railway

The launching meeting and the first plenary meeting of the Shanghai Urban Railway Standardization Alliance commenced in Shanghai on December 20, 2023, which is China's first local technical body for the standardization of urban railway.

At the meeting, the Implementation Plan of Shanghai Promoting Urban Railway Standardization Construction (2023-2026) was jointly released by Shanghai Municipal Transportation Commission, Shanghai Administration for Market Regulation, and Shanghai Municipal Commission of Housing and Urban-Rural Development, concentrating on standards coordination, development of key standards, research on major tasks, as well as standards connectivity in the Yangtze River Delta.

According to the plan, the overall goals are as follows: by 2026, the standards system supporting the construction and operation of urban railways in Shanghai will be formed, and a relatively complete framework of the standards system will be established; by 2030, the innovation-led urban railway standards system with Shanghai's characteristics and a mature framework will be formed. When the standards working mechanism are more complete, the standards supply will be more adequate, and the standards system will be more sound, technically supporting Shanghai in building strengths in transportation and leading the development of modern metropolitan areas.

The Yangtze River Delta has entered the critical period of coordinated and integrated regional development, and the urban railway is an important driver to construct metropolitan areas. With several railways under construction, Shanghai will integrate excellent standardization and industrial resources to form the joint force for standardization.

Relying on its technological advantages, Shanghai Urban Railway Standardization Alliance will fully play a fundamental and leading role in promoting the modernization of governance system and ability, facilitating the high-quality development of urban railway standardization.

Source: China Standardization Magazine, issue 1 in 2024

19. Plenary Meeting of SAC/TC 470 on Social Credit Held in Beijing

#Social Credit

The 2nd plenary meeting of SAC/TC 470, Social credit, was held in Beijing on December 22 in hybrid forms, with the main venue set at China National Institute of Standardization (CNIS). More than 50 members attended the meeting, who are from the Department of Finance and Credit Construction of National Development and Reform Commission, the Executive Office of Supreme People's Court, and the Insurance Business Management Center of the Ministry of Human Resources and Social Security, colleges and universities, research institutions, industrial associations, and enterprises.

Zhou Li, Researcher from the Branch of Quality Research, CNIS, reported the work of SAC/TC 470 in 2023 on behalf of the secretariat. The participants discussed in depth about the national standards to be developed in the field of social credit and the main work in 2024, concluding the key points of work in the new year.

There is still a long way to establish the standards system on social credit, and the leaders and members need to cooperate to reach a consensus. Holding the secretariat, CNIS will strengthen the communication with all departments and parties, actively pool resources, support and serve the members, and constantly improve the performance and effectiveness of research, development and implementation of social credit standards, promoting the orderly and rapid development of standardization of social credit, said Jiang Jiadong, Vice President of CNIS.

Participating members reviewed and approved the draft of two national standards for the unified social credit code information and the construction of unified social credit code platform, as well as related documents.
Source: China Standardization Magazine, issue 1 in 2024

20. China Publishes the Method for Determining the Standard Essential Patent

#SEP

On November 28, 2023, the China Intellectual Property Society (CIPS) and the China Association for Standardization (CAS) jointly released the *Association Standard Method for determining the standard essential patent (SEP) (T/CIPS 005—2023 | T/CAS 708—2023)*. Dr. Betty Xu, SESEC's director, has actively participated in the formulation process.

The Association Standard is composed of six chapters and two appendices, with the two most important sections being Chapter 4 - Determination Principles, and Chapter 5 - Determination Methods. The ultimate goal of the Association Standard is to provide guidance for SEP determination methods and processes, thus improving accuracy and efficiency while lowering the costs. For previous discussions during the kick-off meeting for this standard, please click here. The following is a summary of the most relevant takeaways for foreign stakeholders:

1. Overview. In general, the Association Standard does not involve specific sectors or fields. It is an overall guidance for determining SEPs across different industries.

2. Core concepts. The core concepts in the Association Standard are the "Elements" and the "Claims". Specifically, the "Elements" refer to the smallest or smaller technical unit that can, in a relatively independent manner, perform certain technical functions and produce technical effects in the technical scheme limited by the claims. The "Claims" refer to the part of the patent application document or patent licensing document in which the applicant or the patent holder claims the protection scope of the patent right, on the basis of the description.

3. Methodology. The Association Standard introduces core concepts and suggests a methodology for comparing elements in the claims and in the corresponding standard. The SEPs can only be determined when the identical or equivalent elements are found via comparison.

4. Identical or equivalent elements. In the Determination Principle section (specifically Chapter 4.3), two paragraphs illustrate the basic concept of "identical or equivalent elements": that is, when comparing an element of the technical solutions and the one in patent claims, these two elements shall only be deemed as identical or equivalent elements under circumstances where they include the same approach and can deliver basically the same functional results, while in the meantime, any ordinary technicians in the field without creative labor are able to associate these elements together.

In conclusion, the Association Standard reflects China's intention in guiding and regulating the essentiality check of SEP, which is similar to EU's move in legislation. Yet, the methodology presented in this Standard might fall short of meeting the needs in practice since it is too general to provide any guidance to specific industries. Therefore, there is still a long way to go before the guiding and regulation of essentiality could make an impacts on industries.

Annex 1 - SESEC Translation: Review of China's Standardization Work in 2023

Annex 2 - SESEC Translation: China Released the Notice on the Assessment and Evaluation Results of the National Standardization Technical Committee in 2023

Annex 3 - Translation by China Standardization Magazine: Key Points for the National Standardization Work in 2024

Annex 4 - SESEC's Report: Development of Mandatory Standards for Home Appliances in China

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